UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No.: 482, 483, 484, 485, 486, 504, 505, 506, 507 & 508 of 2007

Filed by:

U. P. Power Transmission Corporation Limited
Pashchimanchal Vidyut Vitaran Nigam Limited
Dakshinanchal Vidyut Vitaran Nigam Limited
Madhyanchal Vidyut Vitaran Nigam Limited
Poorvanchal Vidyut Vitaran Nigam Limited

IN THE MATTER OF:

DETERMINATION OF ANNUAL REVENUE REQUIREMENT (ARR) FOR FY 2007-08 & FY 2008-09 AND TARIFF FOR FY 2008-09

ORDER UNDER SECTION 64 OF
THE ELECTRICITY ACT 2003
Lucknow

15th April, 2008

ORDER

Uttar Pradesh Power Transmission Corporation (UPPTCL/Transco) and the four distribution companies viz. Pashchimanchal Vidyut Vitaran Nigam Ltd., Poorvanchal Vidyut Vitaran Nigam Limited, Madhyanchal Vidyut Vitaran Nigam Limited and Dakshinanchal Vidyut Vitaran Nigam Limited (hereinafter referred to as "Licensee(s) / Discom(s)") submitted their ARR/tariff petition for FY 2007-08 on 4th October, 2007 under section 64 of the Electricity Act, 2003. The regulations state that the Distribution Licensee shall file the Aggregate Revenue Requirement (ARR)/Tariff petitions complete in all respect along with requisite fee as prescribed in the Commission's Fee and Fine Regulations on or before 30th November of each year. Accordingly, the ARR/tariff for the FY 2007-08 should have been filed by the licensees before 30th November, 2006. The filings for FY 2007-08 were therefore delayed by almost a year. Such delayed submissions of ARR/tariff filings by licensees, has almost become a way of life in the UP Power Sector.

The Commission on macro level examination of the proposals further observed that the ARR/Tariff submissions for the FY 2007-08 were not strictly in accordance with the provisions of the U.P. Electricity Regulatory Commission (Terms and Conditions for determination of Distribution Tariff) Regulations 2006 (hereinafter referred to as "Distribution Tariff Regulations") notified on 6th October 2006 and U.P. Electricity Regulatory Commission (Terms and Conditions for determination of Transmission Tariff) Regulations 2006 (hereinafter referred to as "Transmission Tariff Regulations"). Further, the filings were also not supported by audited accounts and documents pertaining to government's commitment for additional subsidy and raising of loans against government guarantee. In addition licensees had filed an appeal against the Tariff Order for the FY 2006-07 before the Appellate Tribunal of Electricity (ATE), which is pending adjudication by the ATE. Absence of key data and fluidity of the situation warranted a more cautious and systematic handling of Tariff Petitions for the FY 2007-08. It is with this objective in mind and also due to inordinate delay in filing the ARR/tariff petition for the FY 2007-08, when the new tariffs may not have come much before the expiry of financial year 2007-08, the Commission, vide order dated 19th October, 2007, to restore regulatory synchronism, directed the licensees to submit the ARR/Tariff application for the FY 2008-09 by 30th November, 2007 along with the data/information for the FY 2007-08.

In accordance with the direction of the Commission, , the licensees, under affidavit, submitted the applications for approval of Annual Revenue Requirement for the FY 2008-09 on 19th December, 2007. The filings also included the information for FY 2007-08.

Notwithstanding, the discrepancies in the petition, deficiencies in the response of the licensees and the fact that the structure of Uttar Pradesh Power Sector is still not in line with the spirit of Electricity Act, 2003 (EA 2003), the Commission, in the larger interest of consumers as well as licensees and to honour its own commitment of abiding by the statutory obligation of tariff determination, conditionally admitted the ARR/tariff petitions filed by the licensees on 25th January, 2008.

The Commission, in exercise of powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration the submissions made by the licensees, objections/suggestion received from public following the process of public hearing, based on responses received by the licensees on the issues raised by the Public, and all other relevant material, hereby issues this Order on the determination of the Annual Revenue Requirement (hereinafter referred to as "ARR") of the licensees for FY 2007-08 & FY 2008-09 and tariffs for wheeling & retail sale of electricity for the Four Discoms and transmission charges for Transmission licensee for the FY 2008-09. Other charges associated with Open Access as defined under the UPERC Open Access Regulations have also been specified in this order.

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Chapter 1. BACKGROUND AND BRIEF HISTORY

In pursuance of a reform-restructuring exercise erstwhile UPSEB was unbundled under the first reforms transfer scheme dated 14th Jan 2000, into three separate entities:

- 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.

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.

Need for further unbundling of UPPCL (responsible for both Transmission and Distribution functions) along functional lines was again felt after the enactment of the EA 2003 and four new distribution companies (hereinafter collectively referred to as 'Discoms") were created vide Uttar Pradesh Transfer of Distribution Undertaking Scheme, 2003 viz.

- Dakshinanchal Vidyut Vitaran Nigam Limited (Agra Discom),
- Madhyanchal Vidyut Vitaran Nigam Limited (Lucknow Discom),
- Pashchimanchal Vidyut Vitaran Nigam Limited (Meerut Discom) and
- Poorvanchal Vidyut Vitaran Nigam Limited (Varanasi Discom)

to undertake distribution and supply of electricity in the areas under their respective zones specified in the scheme. 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 "State Transmission Utility" under sub-section (1) of Section 27-B of the Indian Electricity Act, 1910 as notified by the State Government.

Subsequently, the Uttar Pradesh Power Transmission Corporation Limited (UPPTCL/Transco) was incorporated under the Companies Act, 1956 by making amendment in the Object and Name clause of the Uttar Pradesh Vidyut Vyapar Nigam Limited and having duly passed Special Resolution on 7th June 2006 in terms of section 21 of the Companies Act, 1956 which was originally incorporated on 31st May, 2004. 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 geographic area of Uttar Pradesh. This function was earlier entrusted 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 Filing of ARR and Tariff determination under Tariff Regulations

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

1.1.2 These regulations are applicable for the purposes of ARR filing and tariff determination, to all the distribution licensees including parallel distribution licensees within the State of Uttar Pradesh.

1.1.3 Similarly, the Transmission Tariff Regulations were notified by the Commission on 6th October, 2006 and are called as the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations-2006 (hereinafter referred to as the "Transmission Tariff Regulations") and these regulations are applicable for the purposes of ARR filing and tariff determination of the transmission licensees within the State of Uttar Pradesh.

1.1.4 The Commission in its previous Tariff order for FY 2006-07 had specified that the ARR filing and the Tariff determination process for the future years would be undertaken in accordance with the provisions of the said regulations. Accordingly, the utilities in the state have filed the ARR filing and Tariff Proposals in line with the provisions of the Regulations and the processing of the same would be undertaken by the Commission in accordance with the provisions of the Regulations.

1.1.5 As per the provisions of the Regulation, the Base year means, the first year of tariff determination under the regulations. While in this particular instance, the Commission would be undertaking the process of approval of the Annual Revenue Requirements of the Discoms and Transco for two financial years i.e. FY 2007-08 and FY 2008-09 while the Tariff determination process would be undertaken only for the FY 2008-09 under these Regulations. Hence, though the first year of tariff determination under the Regulations is FY 2008-09, FY 2007-08 would be considered as the "Base Year" for all purposes as it is the first year in which the Annual Revenue Requirements are been determined/approved as per the provisions of the Regulations.

1.2 Issues / Concerns of the Commission

1.2.1 The Commission in its previous Tariff Order for FY 2006-07 and through various other orders/communications had raised concern over many issues which have cropped up as a fall out of the provisions of the EA 2003. The Commission was of the opinion that these issues must be addressed by the utilities in order to carry out the real purpose of the reforms being undertaken in the power sector.

1.2.2 The issues deliberated by the Commission included issues related to the independence of the restructured entities, the work culture and governance in the utilities, finalisation of Annual Accounts, improvements in the operational efficiencies, distancing of government from the operations and decision making of the utilities and promotion of private investment in the sector.

1.2.3 While the utilities in their submissions submitted that steps have been initiated in this regards, there is little evidence on the ground to support their claims. To cite an instance of lack of independent functioning of the restructured entities, there was no direct representation from the Discoms for the meeting which the Commission had with the officials/representatives of the licensees with regards to various issues relating to the ARR/Tariff filings for FY 2008-09 submitted by the Licensees. The Discoms, as in the past, were represented by officials from UPPCL with no direct representation from the individual licensees. The Commission had raised concerns about the same in the past, as the same makes a mockery of the entire reform and re-structuring exercise. The licensees have however chosen to overlook the issue.

1.2.4 While the Commission has dealt with the above mentioned issues extensively in the previous tariff order for FY 2006-07, it would not again go into the detailed deliberation on the same in the present order. However, it urges the utilities to initiate concrete steps towards addressing the concerns of the Commission.

1.2.5 Apart from the issues related to the structure and working of the power sector there were certain issues arising out of the statutory provisions of the Act. These issues deliberated upon by the Commission in detail in its previous Tariff Order are listed as listed below:

- Requirement of Separate Licenses for newly created companies

- Separation of the Trading and Transmission Function
- Allocation of PPA's to the Distribution Companies
- Metering of Consumers

1.2.6 Commission in its various communications to the licensees has raised these issues repeatedly and sought the status of compliance with the statutory requirements from the licensees. However, the licensees have displayed a lackadaisical approach towards complying with the statutory requirements.

1.2.7 In response to the Commission's letter No. UPERC/Secy/D(SKS)/08-280 dated 4th January, 2008 seeking clarifications / additional information with regards to the ARR petitions filed by the Licensees, following are the responses given by the licensees as regards to the compliance with the statutory requirements

- **Requirement for Separate Licenses for the newly formed entities** - The officials/representatives of UPPCL during the discussions with the Commission had submitted that UPPTCL would be filing the application for grant of fresh license within a fortnight and that necessary instructions had been issued to all the Discoms for filing the applications. The Commission in response to the same directed the utilities to expedite the process and file the applications for grant of licenses at an early date say within month's time. However, till the date of the order there has been no action from most of the utilities in this regards. In the written response to the Commission's letter, UPPCL has once again reiterated that all the Discoms have been directed to apply for the licenses to the Commission. The Commission expresses its deep resentment over the lack of commitment from the utilities. In view of the same, the Commission directs the utilities to file the application for fresh licenses within a period of one month from the date of issue of the order.

- **Transfer Scheme for UPPTCL** - The Commission in its previous tariff order had mentioned that though UPPCL has been notified as the STU for State of Uttar Pradesh, any property of UPPCL cannot be transferred to U.P. Power Transmission Corporation Limited to function as transmission licensee unless backed by a suitable Transfer scheme of the State Government. Hence, in absence of transfer scheme, U.P. Power Transmission Corporation Limited cannot be considered as transmission licensee under the provisions of the Act. In response to the same, it was intimated by Director (Distribution), UPPCL during the meeting with the Commission and that the draft Transfer Scheme has been formulated and submitted to the GoUP for their consideration and that UPPCL is expecting that the same shall be notified by the GoUP by the end of March 2008. However, the same has not materialised. In view of the same, the Transco/UPPCL is directed to get the issue resolved expeditiously through pro-active interaction with the State Government.

- **Allocation of PPA's to the Discoms** - The Commission, vide its order dated 2nd November, 2006, had made it clear that allocation of PPAs to UPPCL, acting as a trading company, was improper and against the basic spirit of the Act. Further, as has been mentioned by the Commission in the previous orders, the Commission is of the firm view that allocation of PPAs is not only necessary for implementation of Intra-State ABT but is also a must for the independent functioning of the Distribution Companies. Further, the Allocation of PPAs will provoke the distribution licensees to think in terms of alternatives and economize their major cost i.e. power purchase. However, no concrete action has been seen on this from the utilities. UPPCL in its response to the same has submitted that all the new PPA's are being allocated to Discoms. Further, a proposal for allocation of the old PPA's to the Discoms has been submitted to the GoUP. With regards to the steps initiated for implementation of the Intra-State ABT in the state, UPPCL submitted that the work of installation of boundary meters is in progress. Accordingly, 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. 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. Compliance to the above directive is to be done within a period of one month from the date of issue of the Tariff Order.

- **Status of Appeal filed by the Utilities with the Appellate Tribunal against part of the Commission's Tariff Order for FY 2006-07** – The utilities had challenged part of the Tariff Order for FY 2006-07 issued by the Commission and hence applicability of the new Tariff structure for some of the categories was stayed. Hence, the tariff applicable in FY 2007-08 is partly based on the new tariff notified by the Commission for FY 2006-07, partly based on the tariff notified in FY 2004-05 along with the effect of the interim hike provided by the Commission in FY 2007-08. Hence, in such a situation, in order to enable the Commission to take a clear view on the future tariff structure, 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.

- **Independent operation of the State Transmission Utility** – As has been pointed out by the Commission in its previous orders, the independence of STU has paramount importance for implementation of provisions related to Open Access. In this regards, the Commission in its previous order had stated that, even if U.P. Power Transmission Corporation Limited has been declared as STU, the provision of the Section 39 (1) of the Act needs to be complied with. In absence of a Transfer Scheme and UPPTCL functioning as the subsidiary of UPPCL which is also involved in trading of power, results in violation of the third proviso of Section 41 of the Act which prohibits a Transmission Licensee from indulging in sale and purchase of power. In this regards, the utility had responded that the necessary Transfer Scheme for vesting the transmission assets of the UPPCL into Transco has been formulated and sent to the GoUP for its approval and notification. Considering the above, the Commission directs UPPCL to initiate concrete steps to get the transfer scheme notified from the State Government to vest its assets into UPPTCL which would then function independently as Government Company and would be in a position to play the role of the STU as envisaged under the Act.

Chapter 2. PROCEDURAL HISTORY

2.1 ARR Petition for FY 2007-08

2.1.1 The Licensees had submitted their ARR/Tariff petition for FY 2007-08 on 4th October 2007, i.e. in the same financial year, under section 64 of the Electricity Act, 2003 as against the provision under the tariff regulations which requires the licensees to submit the ARR/Tariff petitions latest by 30th November each year to be made applicable for the subsequent financial year.

2.1.2 The licensees also filed a petition before the Commission seeking review of certain portions of the FY 2006-07 Tariff Order issued by the Commission. On some of the issues which were held as not maintainable by the Commission under the review, the Licensees further filed an appeal with the Appellate Tribunal for Electricity of India on the same matter. The appeal filed by the licensees is still pending adjudication by the ATE.

2.1.3 In view of such delayed submission of ARR/Tariff petitions for the FY 2007-08 by the licensees and pending review (before the Commission) and appeal (before the Appellate Tribunal of Electricity), against the tariff order for the FY 2006-07 the Commission, citing the relevant section of the UPERC (Terms and Conditions for determination of Distribution Tariff) Regulations 2006, which requires the licensees to submit the ARR/Tariff petitions latest by 30th November each year had commented that:

> *"The delay in tariff submission and request for repeated time extensions has become a way of life in UP's power sector, which clearly suggests that the licensees in UP are not responding positively to the regulatory requirements thereby putting the statutory functions like tariff determination totally off mark.*
>
> *…………Accordingly, the tariff order for FY 2006-07 issued on 10th May, 2007, which has been implemented w.e.f. 14th August, 2007, is partially under challenge before both this Commission as well as Appellate Tribunal of Electricity thereby leaving the tariff structure as well as the revenue stream in a state of flux with no certainty in arriving at the gap for next year in particular and a sense of disorganization in the sector in general. Therefore, the tariff structure, as prevalent, in the State of Uttar Pradesh can hardly be termed as an integrated and composite structure since on section of categories rates of tariff order 2004-05 are in vogue in form of transitional tariff (against items for which review has been held as maintainable), for a large number of categories/sub-categories rates are already pegged at 2004-05 level as no change was desired*

vide tariff application for 2006-07 and for some categories the rates are still hanging in balance of the Appellate Tribunal of Electricity. In view of such a situation and when the ARR/tariff applications for 2008-09 is due in just a months time i.e. by 30th November, 2007, the submission of an ARR application for 2007-08 will add to insurmountable confusion."

2.1.4 Further, the Commission on micro level examination of the proposals further observed that the submissions were not strictly in accordance with the provisions of the Tariff Regulations and were not supported by audited accounts. Hence the situation prevailing at that point of time warranted a more cautious and systematic approach. It is with this objective in mind and also due to inordinate delay in filing the ARR/tariff petition for the FY 2007-08, when the new tariffs may not have come much before the expiry of financial year 2007-08 due to statutory requirements involved, the Commission, vide order dated 19th October, 2007, to restore regulatory synchronism, directed the licensees to submit the ARR/Tariff application for the FY 2008-09 by 30th November, 2007 along with the data/information for the FY 2007-08.

2.2 ARR Petition for FY 2008-09

2.2.1 The licensees filed their ARR/Tariff filing for FY 2008-09 on 19th December, 2007 and submitted that the same has been done in accordance with the methodology adopted in previous Tariff Order and the provisions of the Tariff Regulations notified by the Commission. The filing also included the information for FY 2007-08.

2.2.2 While the ARR petition submitted by the licensees for FY 2007-08 was accompanied by a Tariff Proposal along with options for bridging the revenue gap, the ARR petition submitted by the licensees for FY 2008-09 was not accompanied by the Tariff Proposal for bridging the revenue gap envisaged.

2.2.3 After receipt of the ARR/Tariff Petitions for the FY 2008-09 from the licensees, a preliminary scrutiny of the Petitions was carried out by the officers of the Commission and a detailed deficiency note was served on to the Licensees vide letter No. UPERC/Secy./ D(SKS)/08 - Lucknow dated 4th January 2008 which directed them to provide the required information by 15th January, 2007.

2.2.4 Prior to issuing the deficiency note, the Commission had a meeting with the officials/representatives of the licensees with regards to various issues relating to the ARR/Tariff filings for FY 2008-09 submitted by the Licensees.

2.3 Treatment of Revenue Gap

2.3.1 The utilities had projected a revenue gap of Rs. 5121 Crores in the ARR petition for FY 2007-08 submitted to the Commission. The tariff proposal submitted to bridge the gap is as outlined below:

Total Revenue Gap for FY 2007-08	**: Rs. 5121 Crores**
Proposed Sources to meet the Revenue Gap:	
1. Additional Revenue from proposed Tariff	: Rs 121 Crores
2. Additional subsidy from Government of UP	: Rs 2000 Crores
3. Institutional finances against Govt. repayment guarantee	: Rs 3000 Crores
Total Revenue	**: Rs 5121 Crores**

2.3.2 However, the licensees had not submitted any documents supporting the commitment from GoUP as outlined in the Tariff Proposal.

2.3.3 Hence, the most critical issue raised during the above meeting pertained to the manner in which the revenue gap in FY 2007-08 was proposed to be bridged in absence of any firm commitment by the State Government. On query by the Commission, the representatives for the licensees expressed their inability to provide any documents indicating firm commitment of the GoUP towards additional subsidy and to raise loans against government guarantee. Hence, based on the same, the tariff proposal submitted by the discoms is grossly inadequate to meet the revenue gap.

2.3.4 Subsequently, the licensees submitted a revised methodology for bridging the revenue gap for the FY 2007-08 vide letter no. 68/RAU/ARR FY 07-08 dated 15th January, 2008 which is outlined below:

Total Revenue Gap for FY 2007-08	**: Rs. 5121 Crores**
Proposed Sources to meet the Revenue Gap:	
1. Additional Revenue from proposed Tariff	: Rs 1414 Crores
2. Loans from Financial Institutions	: Rs 2390 Crores
3. Proposed additional Loans	: Rs 610 Crores
4. Savings on account of Power Purchase Cost	: Rs. 707 Crores
Total Revenue	**: Rs 5121 Crores**

2.3.5 Based on the revised proposal for bridging the gap, the Commission has remarked that as per earlier submissions the envisaged revenue gap was proposed to be funded through an additional subsidy from GoUP to the tune of Rs. 2000 Crores and institutional finances of Rs. 3000 Crores against Govt. Repayment Guarantee. Therefore it is understood that the said institutional loans are obtained due to non availability of the committed subsidy from GoUP. The Commission opined that bridging the gap by way of such loan funds amounts to meeting current requirements with long term funds, which is not a correct practise. Further such an approach is not only against the regulatory principles but also against consumer interest as it would lead to increase in costs by way of interest and repayment obligation on such loans. Secondly the extent of such working capital loans also hugely exceeds the permissible working capital limits as per the prevailing regulations. The Commission views such a management of financial resources grossly against the prudent financial practise and warns that continuation of such a practise would lead the power utilities of UP into a vicious debt trap.

2.3.6 Therefore the Commission expressed its strong reservation on the method adopted by the licensees to bridge the revenue gap and opined that the debt servicing of such loans should be directly funded by the GoUP through budgetary provisions and the same should not be included in any of the future ARR / Tariff requirements of the licensees.

2.3.7 However, in order to estimate the financial impact of such institutional funding on the ARR and Tariff computations, the licensee was directed to immediately submit the details of the loan agreements entered with the financial institutions for examination by the Commission. The licensees chose to overlook on the issue and no information has been made available to the Commission for its scrutiny.

2.3.8 Further, the Licensees have not provided any Tariff Proposal for bridging the envisaged revenue gap in FY 2008-09. The concern of the Commission in the matter was aptly conveyed to the licensee through the data deficiency note referred to above and the licensees had been directed to submit the Tariff Proposal for FY 2008-09 to comply with the requirement of the Tariff Regulations. However, the licensees have not responded in this matter.

2.4 Audited Accounts and other data gaps

2.4.1 Audited accounts are necessary for validation of the projected data submitted by the licensees in its Tariff Petition. The petitions submitted by the licensees for both the years i.e. FY 2007-08 and FY 2008-09 were not supported by either audited or provisional accounts. Commission vide the deficiency letter dated 4th January 2008 directed the utilities to submit the audited / provisional accounts for the past years within a weeks time from the date of issue of the letter. This is also a requirement as per the provisions of the Regulations.

2.4.2 In response to the same, the licensees submitted the provisional accounts for the following discoms:

Table 2-1: Summary of Provisional Annual Accounts Submitted by Discoms

Name of Discom	FY 2003-04 (Provisional)	FY 2004-05 (Provisional)	FY 2005-06 (Provisional)	FY 2006-07 (Provisional)
Agra	√	√	√	**X**
Meerut	√	√	√	√
Varanasi	**X**	√	√	√
Lucknow	√	√	√	√

2.4.3 On receipt of the Provisional Annual Accounts from the licensees and comparison of the information available in the same with the information submitted in the ARR petitions for FY 2007-08 and FY 2008-09, it was observed that there was significant variation in the costs appearing in both the documents. The Commission vide letter No. UPERC/Secy/D(SKS)/08- dated: 11th March, 2008 sought clarification from the licensees in this regards.

2.4.4 UPPCL vide letter no. 334/RAU/ARR & Tariff 2008-09 dated 14th March 2008 submitted that the financial statements of the licensees are under finalization stage. The Petition for FY 2007-08 was filed in October 2007. Subsequent to the filing, the balance sheet of FY 2003-04 of DisComs was finalized by statutory auditors. As a result, the balance sheet for subsequent years was revised. Further, the mismatch between various elements of the provisional account and petition is due to the fact that:

- **Power Purchase**: Power Purchase cost shown in ARR reflects the actual power purchase cost for which payments have been made to different generators by UPPCL. Forecast for ensuing year has been projected taking various drivers/ projection made by different generator as described in ARR. The Power Purchase Cost in the balance sheet has been charged on provisional rates as stated in FY 2004-05 tariff order and provisional Bulk supply rate as fixed by UPPCL for DisComs.

- **Sales Revenue**: Actual sales revenue has been taken by compiling monthly commercial report of every Divisional units and consolidation has been done to Discoms and then unto Consolidated Discoms as a whole.
- **Non tariff Income**: Non tariff Income provided in ARR comprises other income from retail sources and non tariff income excluding delayed payment surcharge

2.4.5 While UPPCL has provided reasons for the variations observed in the figures from the two sources, the whole purpose of seeking the Audited Annual Accounts from the licensees is lost. In effect, the Commission has no other option but to rely on the submissions made by the licensee in the ARR petitions and approve the costs.

2.4.6 As has been highlighted by the Commission in its previous Tariff Order also, the audited accounting information are important not only for truing up, but also from the point of view of correctly identifying the assets and liabilities of each of the licensees so as to enable the Commission to correctly identify and project the cost items like Operation & maintenance expenses, depreciation and interests. For this very reason the Commission has been again and again seeking the audited annual accounts from the licensees. The statutory audit for the balance sheets of Discoms in UP is pending from FY 2003-04 onwards which reflects a very sad state of affairs.

2.4.7 In fact the Commission in its previous Tariff Order for FY 2006-07 had taken a stand in line with the provisions of the regulations that the true-up exercise for the past years may only be undertaken if audited balance sheets of the companies are submitted before the issuance of the next tariff order, otherwise carrying out true-up on the basis of the submission as delayed as 2 to 3 years would certainly bring about in-coherent impacts in the tariff structure, which is not at all desirable.

2.4.8 In view of the same, the Commission once again directs the licensees to look into the matter seriously and ensure finalisation of the accounts for the past years at the earliest and ensure that the finalisation of the Annual Accounts for the future years happens within a reasonable time frame.

2.4.9 **Status of Compliance with the Commission's Directives**:

2.4.9.1 The licensee in its ARR petition for FY 2007-08 and FY 2008-09 had mentioned that the status of compliance with the Commission's directives issued as part of the previous tariff order are being complied and would be submitted shortly.

However, no action was visible in this regards from the licensee's side. The Commission on two more occasions through the deficiency letter's sent to the licensees sought information regarding the status of Compliance with the Commission's directives. However, the licensee stuck to the stand that the report is being compiled and would be submitted shortly. The status of compliance by the licensee with the Commission's directives from the previous tariff orders forms part of the tariff order. The Commission is unable to comprehend the reason for the time being taken by the licensee to provide the necessary information. This delay clearly indicates lack of a monitoring system within the licensee's organisation to keep track of the status of compliance with the directives issued by the Commission. The Licensees should look into the matter seriously and setup the necessary monitoring system within the organisation. Further, the Commission directs the licensees to henceforth report the status of compliance with the directives on a monthly basis to the Commission.

2.5 Admittance of ARR and Tariff petition of the Licensees for FY 2007-08 and FY 2008-09

2.5.1 Inspite of all the data infirmities and information gaps in the filings submitted by the Licensees, nonetheless, to carryout the statutory responsibility cast upon it by the Electricity Act 2003, the Commission took a view to conditionally admit the petition with the following observation quoted from the admittance order issued on 25th January, 2008.:

> *"……Considering all the data infirmities and information gaps it is very difficult for the Commission to admit the petitions in the present form. The Commission simply fails to understand the reasons behind the licenses inability to submit even the basic data such as latest audited/provisional accounts, documents pertaining to committed Government subsidy as well as suitable tariff proposals for bridging the revenue gap in accordance with the regulatory provisions. Nonetheless, to carryout the statutory responsibility cast upon it by the Electricity Act 2003, which empowers the Commission to carryout even suo-motto determination of ARR/tariff, the Commission conditionally admits the petition with the direction to the licensees that they shall be submitting the information as required by the Commission vide letter dated 4th January 2008 by 10th of February 2008. The Commission had in fact sought the information vide its order dated 4th January, 2008 by 15th January 2008. If the licensees fail to comply with the above direction of the Commission by the appointed date, the Commission will make suitable assumption and issue such orders as it feel appropriate under the condition."*

2.5.2 Notwithstanding the deficiencies in the response and the fact that the structure of UP power Sector is still not in line with the sprit of the Act even after passage of two years allowed by 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 cast upon it by EA 2003 in form of tariff determination conditionally admitted the petitions filed by the distribution companies.

2.5.3 Notwithstanding the admittance of the ARR and Tariff applications by the licensees, the directives given to the licensees in different orders as well as the admittance order of 25th January, 2008 remain firm and the licensees will be held responsible for non-compliance.

2.5.4 The Commission through above order dated 25th January, 2008, also directed the licensees to advertise the salient features of their ARR/Tariff petitions in the leading Hindi and English language newspapers widely circulating in their area of supply inviting the comments of the general public including electricity consumers on the ARR / Tariff Proposals for FY 2007-08 and FY 2008-09. The advertisements in this regards appeared on 31st January 2008 in five leading newspapers.

2.5.5 The licensee submitted their responses to the deficiency letters issued by the Commission vide letters dated 13th February 2008, 11th March 2008, 13th March 2008 and 19th March 2008.

2.5.6 The Commission invited suggestions from consumers and all stakeholders and conducted public hearings at Lucknow (18th February, 2008), Kanpur (20th February, 2008), Ghaziabad (21st February, 2008) and Gorakhpur (25th February, 2008). Consumer representatives, industry associations and other individual consumers participated actively in the hearing process.

Chapter 3. SUMMARY OF THE ARR FILINGS OF THE DISCOMS & TRANSCO FOR FY 2007-08 & FY 2008-09

3.1 Annual Revenue Requirement Filing

3.1.1 This chapter describes the Annual Revenue Requirement (ARR) proposals filed by the four distribution companies Dakshinanchal Vidyut Vitaran Nigam Limited (Agra Discom), Madhyanchal Vidyut Vitaran Nigam Limited (Lucknow Discom), Pashchimanchal Vidyut Vitaran Nigam Limited (Meerut Discom) and Poorvanchal Vidyut Vitaran Nigam Limited (Varanasi Discom) and transmission company viz. Uttar Pradesh Power Transmission Corporation Limited (Transco) for FY 2007-08 and FY 2008-09.

3.1.2 The information presented in this section is as it appears in the licensees filing, without removing any inconsistency, contradictions with respect to figures when compared with other parts of the filing and additional submissions made by the licensees. The analysis carried out by the Commission and the approved figures for each of the licensee for each expense head is presented in the Chapter 5 and Chapter 6.

3.1.3 The section provides for the summary of filing made by the Discoms and Transco for FY 2007-08 and FY 2008-09.

3.2 Tariff Filing of DISCOMS

3.2.1 The petitions of the Discoms are structured as follows:

- Background
- Performance Analysis of previous year filing
- Forecast of Retail Sales and Revenue Assessment
- ARR for Wheeling & Retail Supply Business for Ensuing year;
- Proposed Bulk Supply Tariff for the Ensuing Year;
- Tariff Design;
- Proposal for meeting the revenue gap;

3.2.2 The subsequent sections highlight the following elements from the licensees' filing:

- Review of UPERC Tariff order FY 2006-07;
- Efficiency improvement plans;

- Summary of the actions undertaken by UPPCL and the Discoms to comply with Commission's directives;
- Forecast of Retail Sales and Revenue Assessment;
- ARR Summary;

3.3 Review of Actual performance vis-à-vis the Tariff Order FY 2006-07

3.3.1 This section compares the actual performance of the licensees' vis-à-vis the approvals under the Tariff Order for FY 2006-07 issued on 10th May, 2007. The figures for performance of FY 2006-07 are considered from the tariff filing formats/ tariff filing of FY 2008-09.

3.3.2 **Sales Forecast** - The actual sales figures for FY 2006-07 show some variance from those approved by the Commission in the Tariff Order for FY 2006-07. On a consolidated basis considering all Discoms, the actual sales for FY 2006-07 are lower than the Commission approved figures by 9% as can be seen from the following table. The variation is mainly on account of the difference in the target loss set by the Commission and the estimated loss of the licensee. The licensees have pointed out that the categories in which the highest variation occurs are the ones that constitute relatively small proportion of the total sales. The approved and actual energy sales for FY 2006-07 for Consolidated Discoms are given in table below:

Table 3-1: Approved and Actual Energy Sales FY 2006-07 – Consolidated Discoms

(MUs)

Consumer Categories	FY 2006-07 Tariff Order	FY 2006-07 (Actual) (Unaudited)	Difference	Difference %
LMV 1:Domestic	14095	12,268	1,827	-13.0%
LMV 2:Commercial	2,510	2,315	195	-7.7%
LMV 3:Public Lamps	471	361	110	-23.4%
LMV 4:Public Institutions	1655	1,387	268	-16.2%
LMV 5:Private Tubewells	3847	3,753	94	-2.4%
LMV 6:Small & Medium Power	1669	1,587	82	-4.9%
LMV 7: Public Water Works	780	696	84	-10.8%
LMV 8:State Tubewells	1735	1,447	288	-16.6%
LMV 9: Temporary Supply	65	58	7	-10.1%
LMV10:Employees & Pensioners	143	117	26	-18.3%
HV 2:Large & Heavy Power	5577	5,350	227	-4.1%
HV 3:Railway Traction	682	635	47	-6.9%
HV 4:Lift Irrigation Works	483	533	-49	10.2%
Sub Total	**33713**	**30,508**	**3,204**	**-9.5%**
Extra State & Bulk	3025	2,916	109	-3.6%
Total	**36738**	**33,424**	**3,314**	**-9.0%**

3.3.3 The average supply hours from feeders supplying to various areas was 13.21 hours in FY 2006-07, just below the targeted 14 hours of supply. The licensee has also stated that the load forecasting methodology used by it, wherein the energy consumption was derived as a function of supply hours, has been refined and the rostering schedule was applicable to various rural feeders.

3.3.4 **Expense Items** – Considering all the Discoms on a consolidated basis, the total expenses (ARR) for FY 2006-07 based on the actual (unaudited) information shows a marginally increase of 3.6% over the approved figures. The ARR comparison for FY 2006-07 for consolidated Discoms is provided in table below:

Table 3-2: ARR Comparison for FY 2006-07 for Consolidated Discoms

(Rs. Crores)

Particulars	FY 2006-07 Tariff Order	FY 2006-07 (Actual) (Unaudited)	Difference	Difference (%)
Power Purchase Cost	10,780	10,826	(47)	0.4%
Transmission Charges	802	952	(150)	18.7%
Employee Costs	819	762	57	-6.9%
Admin & General Expenses	92	103	(11)	12.3%
Repair & Maintenance Expense	223	342	(119)	53.3%
Provision for Bad Debts	-	118	(118)	
Depreciation Expense	691	633	58	-8.4%
Interest and Finance Charges	354	450	(97)	27.4%
Capitalised Expenses	205	146	59	-28.8%
Total	**13,554**	**14,042**	**(487)**	**3.6%**

No justifications have been provided by the licensee for the variations in the actual expenses as compared to the approved expenses. The Discom-wise comparison for FY 2006-07 is provided at ANNEXURE – I.

3.3.5 **True-up** – The licensees have not submitted the audited accounts for the past years and have neither requested for any true-up of the past years. In view of the same, the Commission has not undertaken the exercise of true-up for the past years in the present order.

3.4 Efficiency Improvement Plans

3.4.1 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.

3.4.2 **Distribution Losses -** The licensees have stated that the actual overall (consolidated Discoms) T&D loss during FY 2006-07 was 30.38% as against the Commission's targeted loss of 27.40%. The reasons stated for these variations are:

- Increase in the rural supply hours as directed by the State Government;
- State of transition in the UP power sector since the dis-aggregation of UPPCL in 2003.

3.4.3 The licensees have suggested the following trajectory of loss reduction to achieve the goal of 20% aggregate T&D loss by 2012.

Table 3-3: Proposed Multi-Year Loss Targets by Discom

(In %)

Discoms	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Consolidated Discom	**30%**	**30%**	**28%**	**24%**	**23%**	**21%**	**20%**
Meerut Discom (Incl. Bulk)	31%	30%	27%	23%	22%	21%	20%
Agra Discom (Incl. Bulk)	32%	30%	28%	23%	22%	21%	20%
Lucknow Discom	26%	28%	25%	24%	23%	22%	21%
Varanasi Discom	29%	33%	30%	25%	24%	22%	21%

3.4.4 The Discom losses are based on energy received by them from UPPCL including bulk supply, and the figures for UPPCL are based on net energy received from the generators.

3.4.5 The loss trajectory provided by the licensees for the period from FY 2008-09 to FY 2011-12 is different in the ARR filings submitted for FY 2007-08 and that submitted for FY 2008-09. The Commission has considered the trajectory provided in the FY 2008-09 filing for the purposes of this order.

3.4.6 **Collection Efficiency** - The licensees have retained the collection efficiency targets for themselves as per previous year filing:

Table 3-4: Collection Efficiency Target

(In %)

Discoms	FY 2007	FY 2008	FY 2009	FY 2010
Meerut Discom	96%	96%	97%	98%
AgraDiscom	85%	89%	94%	98%
Lucknow Discom	90%	93%	95%	98%
Varanasi Discom	89%	92%	95%	98%
Consolidated Discoms	**90%**	**93%**	**95%**	**98%**

3.4.7 The Licensees has submitted that the second multi-year performance target previously specified by the Commission has been collection efficiency. With respect to ARR, the said performance criterion affects only the provision for bad and doubtful debts, which the Commission has not allowed in most recent Orders. Still, in the spirit of retaining the use of such targets for individual Discoms, as well as to provide an estimate of this very real expense item, the licensees have submitted revised collection efficiency targets as given above starting with collection efficiencies from FY 2006-07

3.4.8 The licensees have also enlisted the efficiency improvement activities being undertaken as outlined below:

- Special Drives for detecting theft of energy/unauthorized use of electricity/checking of excess load
- Special camps to collect bill amount and solve consumers' problems;
- Monitoring of Regularization of illegal connections and ledgerisation of un-ledgerised connections;
- Conducting sudden raids by Special Vigilance teams comprising of the licensees officials and police personnel to detect theft of energy/Katiya connections;
- Shifting of over head cable to undergrounding laying;
- System improvement through APDRP schemes;
- Monitoring of the NA/NR/IDF/ADF meters and changing of defective meters. In addition, efforts are being made for installing meters on distribution transformers;
- Works on the hand held billing, disconnections and reconnection activities being undertaken with help of external agencies;

3.5 Summary of the actions undertaken by Discoms to comply with Commission's directives

3.5.1 In this section, the licensees have submitted that they are in process of compiling and updating the directives and will submit the same to the Commission in due course of time.

3.6 Forecast of Retail Sales and Revenue Assessment for FY 2007-08 and FY 2008-09

3.6.1 The licensees have used the same methodology for calculating sales projection figures as was used in the last submission. The methodology used is described as under:

- For each 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 a number of category specific growth factors.

- Sub-category wise specific consumption level is then forecast based on expected growth relationships to income and price, the effect of demand side management and the 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.

3.6.2 To meet the requirement of uniform state-wide tariffs, the sales forecast is computed on a consolidated basis (all Discoms). Forecast results for each Discom are separately prepared 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. which is 20% for agriculture, 45% for commercial/services and 15% for industry has been taken into account based on historical data for FY 2007-08. Similarly for FY 2008-09 the GDP structure for UP is 20% for agriculture, 55% for commercial/services and 25% for industry has been considered. It is assumed that the UP agriculture sector will grow at annual rate of 5.2% in FY 2007-08 and 5.7% in FY 2007-08 which is slightly lower than UP's five-year plan target, but higher than the historical average, reflecting a recovery from the negative growth experienced in the sector during FY04. Corresponding growth rates for the commercial/ services sector is estimated to be 5.5% in FY 2007-08 and 8.0% in FY 2008-09. However, keeping in view the vast difference in the industrial sales growth rate of Meerut Discom and remaining Discoms higher industrial GDP growth rate of 15% has been considered for Meerut Discom whereas the corresponding figure for other Discom has been taken as 9%.

b) **Population**: It is assumed that urban and rural population will grow following historical patterns. For each Discom, urban and rural population growth rates are estimated based on 1991 and 2001 Census data. These 10-year growth rates are applied to relevant consumer data in FY 2006-07 to project consumer growth for FY 2007-08 and FY2008-09.

c) **Rural and Urban Supply Hours**: It is assumed that the average daily supply hours in rural areas will be 14 hours in FY 2006-07. Variations in urban supply hours are also introduced in the forecast. The average daily supply hours for Tehsil towns are 14, for District towns 16, for Commissionaires 20 and for MahaNagar 22 hours.

d) **Rural Electrification**: The following Discom wise rural electrification program is considered in the forecast by the licensees as per CEA norms:

Table 3-5: Discom-wise Rural Electrification Program

(No. of Villages)

S.No.	Discom	FY 2007-08 (Projection)	FY 2008-09 (Projection)
1	Meerut Discom	554	344
2	Agra Discom	944	179
3	Lucknow Discom	1629	772
4	Varanasi Discom	1580	3567
	TOTAL	**4707**	**4862**

3.6.3 The licensee has stated that FY 2005-06 consolidated CS3 reports and detailed divisional CS3 reports are reconciled and “normalized” as per the following consumption norms established in UPPCL order No.2649-CUR/L, dated 20-07-2001.

Table 3-6: Consumption Norms for Un-metered Categories

Sr. No.	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

3.6.4 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 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.

3.6.5 The Commission has tabulated the sales of all the Discoms for FY 2006-07 actuals unaudited, FY 2006-07 approved figures and the projections for FY 2007-08 and FY 2008-09 in the table below:

Table 3-7: Consolidated Discoms - Sales Actual, Approved & Projected

Consolidated Discoms	Units Sold (MU)			
	FY 2006-07	FY 2006-07	FY 2007-08	FY 2008-09
	(Actual) (Unaudited)	Tariff Order	(Projection)	(Projection)
LMV 1:Domestic	12,268	14,095	15,087	16,590
LMV 2:Commercial	2,315	2,510	2,399	2,725
LMV 3:Public Lamps	361	471	485	486
LMV 4:Public Institutions	1,387	1,655	1,783	1,874
LMV 5:Private Tubewells	3,753	3,847	3,855	4,436
LMV 6:Small & Medium Power	1,587	1,669	1,663	1,929
LMV 7: Public Water Works	696	780	797	807
LMV 8:State Tubewells	1,447	1,735	1,749	1,716
LMV 9: Temporary Supply	58	65	65	71
LMV10:Employees & Pensioners	117	143	138	145
HV 2:Large & Heavy Power	5,350	5,577	5,750	6,418
HV 3:Railway Traction	635	682	648	661
HV 4:Lift Irrigation Works	533	483	535	542
Sub Total	**30,508**	**33,713**	**34,954**	**38,402**
Extra State & Bulk	2,916	3,025	3,289	3,457
LMV - 6A	0	0	128	137
Total	**33,424**	**36,738**	**38,371**	**41,996**

Table 3-8: Lucknow Discom - Sales Actual, Approved & Projected

Lucknow Discoms	Units Sold (MU)			
	FY 2006-07	FY 2006-07	FY 2007-08	FY 2008-09
	(Actual) (Unaudited)	Tariff Order	(Projection)	(Projection)
LMV 1:Domestic	2,965	3,593	3,969	4,066
LMV 2:Commercial	487	537	671	571
LMV 3:Public Lamps	137	147	146	169
LMV 4:Public Institutions	378	444	473	488
LMV 5:Private Tubewells	520	571	670	681
LMV 6:Small & Medium Power	278	265	266	330
LMV 7: Public Water Works	164	173	175	189
LMV 8:State Tubewells	394	479	487	455
LMV 9: Temporary Supply	19	22	21	22
LMV10:Employees & Pensioners	31	37	36	38
HV 2:Large & Heavy Power	578	547	561	653
HV 3:Railway Traction	23	29	27	24
HV 4:Lift Irrigation Works	56	59	58	57
Sub Total	**6,031**	**6,903**	**7,560**	**7,742**
Extra State & Bulk	7	5	5	7
LMV - 6A	0	0	26	27
Total	**6,038**	**6,909**	**7,591**	**7,777**

Table 3-9: Meerut Discom - Sales Actual, Approved & Projected

Meerut Discoms	Units Sold (MU)			
	FY 2006-07	FY 2006-07	FY 2007-08	FY 2008-09
	(Actual) (Unaudited)	Tariff Order	(Projection)	(Projection)
LMV 1:Domestic	3,778	4,299	4,379	4,572
LMV 2:Commercial	665	706	475	779
LMV 3:Public Lamps	106	107	106	131
LMV 4:Public Institutions	253	326	350	334
LMV 5:Private Tubewells	1,507	1,534	1,560	1,712
LMV 6:Small & Medium Power	583	612	626	735
LMV 7: Public Water Works	157	174	177	183
LMV 8:State Tubewells	192	279	280	218
LMV 9: Temporary Supply	16	19	19	19
LMV10:Employees & Pensioners	33	40	39	41
HV 2:Large & Heavy Power	2,975	3,058	3,264	3,738
HV 3:Railway Traction	0	0	0	0
HV 4:Lift Irrigation Works	0	0	1	0
Sub Total	**10,265**	**11,155**	**11,276**	**12,462**
Extra State & Bulk	394	377	427	512
LMV - 6A	0	0	33	35
Total	**10,659**	**11,532**	**11,736**	**13,009**

Table 3-10: Varanasi Discom - Sales Actual, Approved & Projected

Varanasi Discoms	Units Sold (MU)			
	FY 2006-07	FY 2006-07	FY 2007-08	FY 2008-09
	(Actual) (Unaudited)	Tariff Order	(Projection)	(Projection)
LMV 1:Domestic	3,076	3,644	3,862	4,698
LMV 2:Commercial	621	614	610	735
LMV 3:Public Lamps	52	111	121	93
LMV 4:Public Institutions	427	525	570	607
LMV 5:Private Tubewells	728	815	737	928
LMV 6:Small & Medium Power	308	326	330	371
LMV 7: Public Water Works	206	228	234	239
LMV 8:State Tubewells	559	640	645	689
LMV 9: Temporary Supply	3	2	3	3
LMV10:Employees & Pensioners	27	35	33	35
HV 2:Large & Heavy Power	785	889	928	886
HV 3:Railway Traction	376	415	394	391
HV 4:Lift Irrigation Works	394	344	401	402
Sub Total	**7,561**	**8,589**	**8,868**	**10,077**
Extra State & Bulk	1	5	5	1
LMV - 6A	0	0	43	46
Total	**7,562**	**8,593**	**8,916**	**10,123**

Table 3-11: Agra Discom - Sales Actual, Approved & Projected

Agra Discoms	Units Sold (MU)			
	FY 2006-07	FY 2006-07	FY 2007-08	FY 2008-09
	(Actual) (Unaudited)	Tariff Order	(Projection)	(Projection)
LMV 1:Domestic	2,449	2,558	2,877	3,254
LMV 2:Commercial	543	652	643	640
LMV 3:Public Lamps	66	105	112	94
LMV 4:Public Institutions	329	360	390	445
LMV 5:Private Tubewells	998	927	888	1,116
LMV 6:Small & Medium Power	417	467	442	492
LMV 7: Public Water Works	169	206	210	196
LMV 8:State Tubewells	302	337	337	354
LMV 9: Temporary Supply	21	22	22	27
LMV10:Employees & Pensioners	27	31	29	31
HV 2:Large & Heavy Power	1,012	1,083	997	1,142
HV 3:Railway Traction	237	239	227	246
HV 4:Lift Irrigation Works	82	80	75	84
Sub Total	**6,651**	**7,066**	**7,249**	**8,120**
Extra State & Bulk	2,514	2,639	2,852	2,938
LMV - 6A	0	0	27	29
Total	**9,165**	**9,705**	**10,128**	**11,087**

3.6.6 Further the Commercial data as submitted by the licensees i.e. category-wise tabulation of the annual average consumers, connected load and year end retail sales on a consolidated basis for FY 2006-07, FY 2007-08 and FY 2008-09 are provided in ANNEXURE – II.

3.6.7 The licensees have stated that the Discom wise T&D loss targets discussed earlier are applied to the corresponding disaggregated sales forecast for the Discom to arrive at the estimated kWh to be delivered by UPPCL.

3.6.8 Based on the above, the energy balance for the Discoms as projected by the licensees in the petition is detailed below:

Table 3-12: Energy Balance for Discoms

Licencsee	FY 2006-07 (Actual) (Unaudited)	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Purchase Required (MU) - Net Generation			
UPPCL(Consolidated Discom)	**51101**	**56428**	**58328**
MEERUT (Incld. Bulk)	16250	17,179	17,896
AGRA (Incld. Bulk)	13993	14,866	15,253
LUCKNOW	8884	10,829	10,882
VARANASI	11974	13,554	14,298
Energy Received from Discom. (MU)			
UPPCL(Consolidated Discom)	**48010**	**53026**	**55064**
MEERUT (Incld. Bulk)	15267	16,143	16,894
AGRA (Incld. Bulk)	13147	13,970	14,399
LUCKNOW	8346	10,176	10,273
VARANASI	11250	12,737	13,498
Sales (MU)			
UPPCL(Consolidated Discom)	**33424**	**38,371**	**41,996**
MEERUT (Incld. Bulk)	10659	11,736	13,009
AGRA (Incld. Bulk)	9165	10,128	11,087
LUCKNOW	6038	7,591	7,777
VARANASI	7562	8,916	10,123
Distribution Losses (% of Energy Received)			
UPPCL(Consolidated Discom)	**30%**	**28%**	**24%**
MEERUT (Incld. Bulk)	30%	27%	23%
AGRA (Incld. Bulk)	30%	28%	23%
LUCKNOW	28%	25%	24%
VARANASI	33%	30%	25%

3.6.9 The detailed sales forecast described above combined with billing determinant information is used for assessment revenues shown for FY 2006-07 and FY 2007-08 and projected revenue on current tariff for FY 2008-09.

3.6.10 The consolidated assessment revenue for FY 2006-07 is derived based on revenue from the December 1, 2004 tariff in Tariff order dated 10th November 2004.

Table 3-13: Consolidated Discom - Assessment Revenue, Sales & Through Rate for FY 2006-07

Consumer Category	Assessment Revenue	Electricity Sales	Through Rate
	Rs. Crores	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	2344	12268	1.91
(a) Consumer getting supply as per "Rural Schedule"	*439*	*4028*	*1.09*
(b) Supply at Single Point for Bulk Loads	*13*	*42*	*3.10*
(c) Other Metered Domestic Consumers	*1892*	*8198*	*2.31*
LMV-2: Non Domestic Light, Fan & Power	801	2315	3.46
(a)Non-Domestic(Rural)	*186*	*1032*	*1.80*
(b)Non-Domestic (Urban Metered)	*615*	*1284*	*4.79*
LMV-3: Public Lamps	91	361	2.52
LMV-4: Insitutions	471	1387	3.40
LMV-5: Private Tube Wells	425	3753	1.13
LMV 6: Small and Medium Power	635	1587	4.00
LMV-7: Public Water Works	212	696	3.05
LMV-8: State Tubewells and Pumped Canals	349	1447	2.41
LMV-9: Temporary Supply	19	58	3.20
LMV-10: Departmental Employees and Pensioners	15	117	1.31
HV-2: Large and Heavy Power	2332	5350	4.36
HV-3: Railway Traction	255	635	4.01
HV-4: Lift Irrigation Works	176	533	3.30
Sub Total	**8125**	**30508**	**2.66**
Bulk & Extra State	594	2916	2.04
Total	**8719**	**33424**	**2.61**

3.6.11 Further for FY 2007-08 the revenue is derived from weighted average of effective tariff date December 1, 2004 (4.4 months), August 13, 2007 (2.9 months) and November 11, 2007 (4.7 months). The table below provides projected revenue for FY 2007-08.

Table 3-14: Consolidated Discom - Assessment Revenue, Sales & Through Rate for FY 2007-08

Consumer Category	Assessment Revenue (Rs. Crores)				Electricity Sales	Through Rate
	01/12/2004	13/08/2007	11/11/2007	Aggregated	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	3177	3397	3397	3317	15087	2.20
(a) Consumer getting supply as per"Rural Schedule"	*610*	*610*	*610*	*610*	*5572*	*1.09*
(b) Supply at Single Point for Bulk Loads	*15*	*15*	*15*	*15*	*49*	*3.11*
(c) Other Metered Domestic Consumers	*2552*	*2773*	*2773*	*2692*	*9467*	*2.84*
LMV-2:Non Domestic Light,Fan & Power	797	797	824	807	2399	3.36
(a) Non-Domestic(Rural)	*221*	*221*	*228*	*223*	*1128*	*1.98*
(b) Non-Domestic (Urban Metered)	*576*	*576*	*597*	*584*	*1272*	*4.59*
LMV-3: Public Lamps	128	111	124	122	485	2.52
LMV-4: Insitutions	617	610	612	613	1783	3.44
LMV-5: Private Tube Wells	434	434	434	434	3855	1.13
LMV 6: Small and Medium Power	724	714	726	723	1791	4.03
LMV-7: Public Water Works	263	228	230	242	797	3.03
LMV-8: S T W and Pumped Canals	433	336	341	373	1749	2.13
LMV-9: Temporary Supply	24	24	24	24	65	3.64
LMV-10: Dept.Empl. and Pensioners	18	22	24	21	138	1.53
HV-2: Large and Heavy Power	2538	2436	2450	2479	5750	4.31
HV-3: Railway Traction	262	258	260	260	648	4.02
HV-4: Lift Irrigation Works	194	193	195	194	535	3.63
Sub Total	**9609**	**9561**	**9642**	**9610**	**35082**	**2.74**
Bulk & Extra State	668	668	872	747	3,289	2.27
Total	**10278**	**10229**	**10514**	**10358**	**38371**	**2.70**

3.6.12 The revenue for FY 2008-09 is projected considering weighted average tariff from UPERC tariff order dated May 10, 2007, October 19, 2007 and November 7, 2007. The projected revenue for the FY 2008-09 is given as under:

Table 3-15: Consolidated Discom - Assessment Revenue, Sales & Through Rate for FY 2008-09

Consumer Category	Assessment Revenue	Electricity Sales	Through Rate
	Rs. Crores	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	3674	16590	2.21
(a) Consumer getting supply as per "Rural Schedule"	*675*	*6,209*	*1.09*
(b) Supply at Single Point for Bulk Loads	*16*	*51*	*3.10*
(c) Other Metered Domestic Consumers	*2983*	*10,329*	*2.89*
LMV-2: Non Domestic Light, Fan & Power	936	2725	3.43
(a)Non-Domestic(Rural)	*243*	*1231*	*1.98*
(b)Non-Domestic (Urban Metered)	*692*	*1494*	*4.63*
LMV-3: Public Lamps	147	486	3.02
LMV-4: Insitutions	649	1874	3.46
LMV-5: Private Tube Wells	503	4436	1.13
LMV 6: Small and Medium Power	835	2066	4.04
(a): Small and Medium Power for Power Loom	*54*	*137*	*3.92*
(b):Small and Medium Power	*782*	*1929*	*4.05*
LMV-7: Public Water Works	245	807	3.04
LMV-8: S T W and Pumped Canals	381	1716	2.22
LMV-9: Temporary Supply	26	71	3.66
LMV-10: Deptt. Emp. and Pensioners	23	145	1.55
HV-2: Large and Heavy Power	2769	6418	4.31
HV-3: Railway Traction	266	661	4.02
HV-4: Lift Irrigation Works	196	542	3.62
Sub Total	**10649**	**38539**	**2.76**
Bulk & Extra State	917	3457	2.65
Total	**11566**	**41996**	**2.75**

3.7 ARR for Wheeling & Retail Supply Business FY 2007-08 & FY 2008-09

3.7.1 The licensees has filed the ARR application in two parts, i.e., Wheeling function and retail function embedded in the distribution business as per the Tariff Regulation of the Hon'ble Commission. The first part deals with the Retail supply function ARR and the 2nd part deals with the wheeling function ARR separately.

3.7.2 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. The sections below would summarize the ARR proposal submitted by the licensees.

3.7.3 ARR for Retail Supply Business FY 2007-08 & FY 2008-09

3.7.4 Introduction

3.7.4.1 To meet with the requirement of uniform state-wide tariff structure, the ARR for FY 2007-08 and FY 2008-09 is submitted by Licensees both on a consolidated basis as well as individually for each Discom.

3.7.4.2 Tariff Regulations provide following components in retail supply:-

- Power purchase costs
- Transmission charges

And a proportionate allocation of the following components among Retail supply business & Wheeling business.

- SLDC charges
- Operation & Maintenance charges
- Depreciation
- Interest & Financing charges
- Bad & Doubtful Debts
- Return on Equity
- Other expenses
- Contribution to Contingency Reserve

3.7.4.3 Licensee has estimated ARR for FY 2007-08 in the ARR filing based on the un-audited annual Accounts FY 2005-06 and expenses available at the time of filling. For ARR filing for FY 2008-09, the ARR estimates are based on the actual unaudited figures for FY 2006-07 and expenses figure available till the time of filing. Explanations on major accounts heads also has been provided for derivation, along with the logic for departing from preceding year values, if applicable.

3.7.5 Power Purchase Cost

3.7.5.1 The licensees 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.

3.7.5.2 **Projected power purchase prices of UPRVUNL & UPJVNL stations** - The variable cost of power procured/to be procured by the Discoms from these power stations has been proposed for FY 2007-08 based on the March 2007 energy bills and for FY 2008-09 based on the September 2007. The fixed cost for these stations for the FY 2007-08 is considered based on the UPRUVNL tariff order dated 13.03.2007 and for FY 2008-09 the fixed cost is escalated by 6% on O&M component only.

3.7.5.3 The other fixed costs i.e. Income tax, Incentives are considered from the actual energy bills of March 2007 for FY 2007-08 and FY 2008-09.

3.7.5.4 **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:

- The variable costs of CGS thermal plants and other plants for FY 2007-08 have been considered based on the energy bills for the month of March 2007 and for FY 2008-09 have been based on the September 2007 energy bills. The variable cost considered is inclusive of Fuel Price Adjustment (FPA).
- The fixed cost for respective years has been taken from the tariff orders issued by CERC.
- The tariff for Narora Atomic Power Station has been taken as Rs. 1.92 / kWh as stated vide their letter no. NPCIL/COMML/2005-06/27 dated 3rd January 2006.
- The income –Tax, Incentives etc. have been taken from the energy bills for the month of March 2007 bills and mentioned under head ‘Other Fixed Charges’ for FY 2007-08 and FY 2008-09.
- The tariff for new power station Kahalgaon Stage II phase I have been considered to be Rs.2.59/kWh.
- The PGCIL charges for the financial year 2007-08 are estimated at Rs. 329 Crores and Rs. 346 Crores for FY 2008-09.

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 order of CERC and actual energy bills for the month of March 2007.
- Tariff for the new Hydro plants Commissioned in FY 2006-07 and to be Commissioned in FY 2008-09 has been taken as below:

Table 3-16: Tariff for New Hydro Plants

Power Station	FY 2007-08	FY 2008-09
Dulhasti	Rs.3.50/kWh	-
Tehri Stage –I	Rs.3.50/kWh	-
Tala Power	Rs.1.84/kWh	-
Vishnu Prayag	Rs.2.60/kWh	-
Parbati-II	-	Rs.3.37/kWh
Sewa-II	-	Rs.2.79/kWh
Koldam	-	Rs.2.85/kWh

- The licensees have also submitted the details of 'Other Fixed Costs' i.e. Income Tax, Incentives etc which are based on March 2007 bills.

3.7.5.5 **Power Procurement from Other Sources** - The cost of Power Procurement from other / Emergency sources is considered as Rs.4.85/kWh for FY 2007-08 and Rs.5.05/kWh for FY 2008-09.

3.7.5.6 The power purchase is done by UPPCL and is allocated to each Discom based on the quantum as required. The power purchase cost incurred by each of the Discom has been estimated based on the assumption that each Discom would have paid same average power purchase rate for the entire quantum purchased in FY 2007-08 and FY 2008-09 as applicable. Power purchase costs by each Discom, derived as described above, are summarized in table below:

Table 3-17: Power Purchase Summary for FY 2006-07, FY 2007-08 & FY 2008-09

Name of Power Station / Organisation	FY 2006-07 (Actual) (Unaudited)	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Power Procurement			
UPJVNL	1393	1,443	1,071
UPRVUNL	18916	20413	19,967
NPCIL(NAPP & RAPP)	691	912	912
NTPC	22492	23,079	23,571
NHPC	1956	2,264	2,615
EREB			
Naptha Jhakri	990	1262	1,244
Cogeneration and Biomass	846	713	1425
VishnuPrayag	837	1451	1,774
Tehri St.-I	314	1061	1645
Tala Power	37	184	184
Others/PTC	477	3648	3919

Name of Power Station / Organisation	FY 2006-07 (Actual) (Unaudited)	FY 2007-08 (Projection)	FY 2008-09 (Projection)
UI	2069		
Kanauria Chemicals (CPP)	83		
Total Power Purchase Units (MU)	**51101**	**56428**	**58328**
Power Procurement Cost			
UPJVNL	75	57	61
UPRVUNL	3441	3895	3939
NPCIL(NAPP & RAPP)	162	207	204
NTPC	4542	4947	4730
NHPC	375	476	667
EREB			
Naptha Jhakri	293	315	311
Cogeneration and Biomass	209	218	436
VishnuPrayag	180	377	354
Tehri St.-I	118	371	655
Tala Power	7	34	34
Others/PTC	258	1769	1979
UI	821		
Kanauria Chemicals (CPP)	19		
PGCIL	325	329	346
Total Power Purchase cost (Rs Crores)	**10826**	**12994**	**13714**
UPJVNL	0.54	0.40	0.57
UPRVUNL	1.82	1.91	1.97
NPCIL(NAPP & RAPP)	2.34	2.27	2.24
NTPC	2.02	2.14	2.01
NHPC	1.92	2.10	2.55
EREB			
Naptha Jhakri	2.96	2.50	2.50
Cogeneration and Biomass	2.47	3.06	3.06
VishnuPrayag	2.15	2.60	2.00
Tehri St.-I	3.76	3.50	3.98
Tala Power	1.89	1.85	1.85
Others/PTC	5.41	4.85	5.05
UI	3.97		
Kanauria Chemicals (CPP)	2.29		
PGCIL	0.12	0.12	0.12
Power Purchase Cost per Unit (Rs./kWh)	**2.12**	**2.30**	**2.35**

3.7.5.7 With the consolidated approach adopted for the current year filing, UPPCL has continued to adopt the practice of Single Buyer Single Seller (SBSS) model, wherein the purchased power cost derived from the same bulk supply tariff for Discoms should mirror the total power purchase cost resulting from the allocation of PPA's. The Discom wise power purchase cost derived with the above methodology is provided in the ANNEXURE – III. The consolidated Discoms summary for power purchase costs is given in the table below which also includes the proposed transmission charges by UPPCL.

Table 3-18: Power Purchase Costs – Consolidated Discoms

Details	Consolidated Discoms			
	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Energy Procured: Net Generation (MU)	51,101	50,603	56,428	58,329
Cost of Generation (Rs.Crores)	10,826	10,780	12,994	13,714
Energy Delivered by UPPCL TransCo (MU)	48,010	48,073	53,026	55,064
Transmission Rate (Rs/Unit)	0.198	0.167	0.191	0.231
Cost of Transmission (Rs.Crores)	952	802	1,015	1,272
Total Power Acquisition Cost from UPPCL (Rs.Crores)	**11,779**	**11,582**	**14,009**	**14,986**

3.7.5.8 The substantial increase in power purchase costs (inclusive of PGCIL charges) for FY 2007-08, projected at Rs. 12994 Crores, has been attributed to the T&D loss assumptions used, load growth and high price escalation. Similarly the power purchase cost for FY 2008-09 is Rs.13714 Crores. The PGCIL charges are embedded in the total power purchase cost of UPPCL and recovered from all the licensees.

3.7.6 Transmission and SLDC charges

3.7.6.1 Transmission charges for years in consideration are payable by licensees on the basis of actual energy received & the uniform charges to be paid by all the four Distribution Licensees. Actual energy delivered to Distribution Licensee & Transmission charges are provided by transmission Licensee. Accordingly, the total transmission charges payable by all the discoms for FY 2007-08 and FY 2008-09 are Rs.1015 Crores and Rs.1272 Crores respectively.

3.7.6.2 The charges payable to UPPTCL also include the SLDC charges, as transmission licensee is 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.

3.7.7 Provision for Bad & Doubtful Debts

3.7.7.1 The licensees submitted that provision for bad & doubtful debts are accepted accounting principle even in sector like Banking the provisioning of un-collectible dues are considered as a normal commercial practice. Therefore, licensee had maintained this is a legitimate ARR component and has submitted that bad accounts would remain regardless of whether sufficient documentary detail is available.

3.7.7.2 The licensees have projected the Collection Efficiency in FY 2007-08 to be 89% with one percentage reduction as compared to FY 2006-07 and for FY 2008-09 there is an improvement of 8% over the estimated 89% collection efficiency in FY 2007-08. Based on this collection efficiency, the bad and doubtful debts are assumed to be 2% of revenue receivables. The Discoms have submitted that they have made significant efforts to improve collection efficiency like;

- Identifying large debtors
- Developing reporting systems
- Organising camps for Redressal of consumer grievances
- One time settlement scheme (OTS)
- Franchisee system for collection and maintenance for newly electrified villages
- Handing over of revenue collection and maintenance of distribution network in rural areas to Gram Panchayats and franchises for looking after high line-losses distribution feeders
- Correction and adjustment of disputed bills

3.7.7.3 The details of bad & doubtful debts for FY 2007-08 & FY 2008-09 have been provided in table given below:

Table 3-19: Provision for bad and doubtful debts

(Rs. Crores)

Description	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Receivables from Customers as at the beginning of the year	5,094	-	5,921	6,673
Revenue billed for the year	8,719	-	10,358	11,566
Collection for the Years	7,893	-	9,605	11,037
Gross receivable from customers as at the end of the year	5,921	-	6,673	7,202
Receivables(4-5)	5,921	-	6,673	7,202
	-	-	-	-
% of provision	2%	0%	2%	2%
	-	-	-	-
Provision for bad and doubtful debts	**118**	**-**	**133**	**144**

3.7.8 Other Retail Supply Related expenses

3.7.8.1 The licensee has considered additional costs related to retail supply business as follows:

- Allocation of Interest charges of UPPCL, which arises due to market borrowing to meet out revenue gap of the Discoms. The interest portion of this market borrowing has been allocated to Discoms as per revenue gaps.
- Discount to Consumers.
- Interest on consumer's security deposit.
- The other supply expenses allocation to each Discom for FY 2007-08 & FY 2008-09 are detailed as under:

Table 3-20: Other Expenses Retail Supply Business

(Rs. Crores)

Particulars	FY 2006-07 Actual	FY 2006-07 Tariff order	FY 2007-08 Projected	FY 2008-09 Projected
Allocation of finance charges of UPPCL	4.29	8.47	74.10	97.97
Allocation of working capital interest of UPPCL	(40.36)	0	36.43	49.21
Discount to consumer &/other charges	22.43	0.50	9.25	10.35
Interest on consumer security deposit	49.22	47.10	53.79	62.46
Total	**35.58**	**56.07**	**173.57**	**219.99**

3.7.9 Other Income

3.7.9.1 Other Income for the each of the Discoms includes other miscellaneous income from retail sources, revenue support from the GoUP, excluding DPS. The other income from Retail Sources includes the miscellaneous sources from the consumers and is forecasted to grow by escalation index from FY 2006-07.

3.7.9.2 In addition to the income from retail sources, licensees have submitted that Government of Uttar Pradesh is likely to provide subsidy of Rs. 1522 Crores in FY 2007-08 and Rs. 1522 Crores in 2008-09 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.

3.7.9.3 The details of the other income for each Discoms are provided for FY 2007-08 and FY 2008-09 in the table below:

Table 3-21: Summary of Other Income – Consolidated Discom

(Rs. Crores)

Particulars	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Other Income from Retail Sources	35.76	126.00	37.62	39.56
Sub Total	**35.76**	**126.00**	**37.62**	**39.56**
GOUP Subsidy – Rural Domestic and PTW			1,522.00	1,522.00
Subtotal	**-**	**-**	**1,522.00**	**1,522.00**
Total	**35.76**	**126.00**	**1,559.62**	**1,561.56**

Note: The Commission had not approved a breakup of other income into wheeling and retail supply business in the FY 2006-07 Tariff Order. Approved no. above is the total other income approved by the Commission.

3.7.9.4 Taking into account each cost item the ARR is consolidated for each Discoms and provided as under for FY 2007-08:

Table 3-22: ARR for Retail Supply Business for FY 2007-08

(Rs. Crores)

Particulars	Agra Discom	Lucknow Discom	Meerut Discom	Varanasi Discoms	Consolidated
Cost of Power Procurement	3423.24	2493.52	3955.79	3121.23	12993.78
Transmission Charges	267.49	194.85	309.11	243.89	1015.34
Provision for Bad & Doubtful Debts	40.40	23.98	23.58	45.51	133.47
Other retail supply expenses	36.93	34.62	46.36	55.66	173.57
Aggregate Revenue Requirement (ARR)	**3768.07**	**2746.96**	**4334.83**	**3466.29**	**14316.15**
Less: Non-Tariff Income	21.66	5.19	6.90	3.87	37.62
Less: GOUP Subsidy	225.92	389.94	352.09	554.05	1522.00
Net ARR from Tariff	**3520.49**	**2351.83**	**3975.84**	**2908.37**	**12756.53**

3.7.9.5 Taking into account each cost item the ARR is consolidated for each Discoms and provided as under for FY 2008-09:

Table 3-23: ARR for Retail Supply Business for FY 2008-09

(Rs. Crores)

Particulars	Agra Discom	Lucknow Discom	Meerut Discom	Varanasi Discoms	Consolidated
Cost of Power Procurement	3586.16	2558.51	4207.64	3361.68	13713.99
Transmission Charges	332.16	237.33	390.36	311.83	1271.68
Provision for Bad & Doubtful Debts	44.04	25.94	25.97	48.09	144.04
Other retail supply expenses	44.74	45.48	57.20	72.57	219.99
Aggregate Revenue Requirement (ARR)	**4007.60**	**2867.26**	**4681.12**	**3794.17**	**15350.15**
Less: Non-Tariff Income	22.78	5.46	7.25	4.07	39.56
Less: GOUP Subsidy	225.92	389.94	352.09	554.05	1522.00
Net ARR from Tariff	**3758.90**	**2471.86**	**4321.77**	**3236.05**	**13788.58**

3.8 ARR for Wheeling Business FY 2007-08 and FY 2008-09

3.8.1 Introduction

3.8.1.1 ARR for wheeling business comprises the following components, which are computed by the licensees for FY 2007-08 & FY 2008-09 and are presented in the sections following:

- o Operation & Maintenance expenses
- o Interest & financing cost
- o Depreciation
- o Return on Equity
- o Contingency Reserve

3.8.1.2 These ARR items are detailed in the sections to follow with a summary of the explanations for estimation and reasons for deviation from the normal estimations.

3.8.2 Operation & Maintenance Expenses

3.8.2.1 Operation & maintenance expenses of licensee comprising Employee costs, Administrative & General Expenses and Repair & Maintenance expenses which are estimated by the licensee as under:

3.8.2.2 **Employee Cost** - The employee cost for FY 2007-08 have been estimated on the base figures of FY 2005-06 and actual data available for FY 2006-07 expenses and that for FY 2008-09 based on the actual data for FY 2006-07. The assumptions and estimation methodology used by the licensees to estimate the employee cost for FY 2007-08 and FY 2008-09 is described below:-

- Basic Salaries for FY 2007-08 will decrease by 5% per year for FY 2006-07. This decrease is a result of continuing staff attrition and selective hiring practices for FY 2006-07 and FY 2007-08 as GoUP has increased retirement age; projection has been made keeping in view annual increments, pay scale revision;
- FY 2008-09 the basic salary is estimated based on 5% increase due to new recruitment and 1% decrease due to retirement with over all increase of 5% due to annual increase in basic salary. For FY 2007-08 as Govt. has increased retirement age; projection has been made keeping in view annual increments, pay scale revision & induction programme;
- Dearness Allowance (DA) is estimated to be 39% for FY 2007-08 and 49% for FY 2008-09;
- Other allowance has been forecast to be 8% of basic salary for both the years;
- Likewise, Medical Expenses have been forecast to increase by inflation index per year from FY07, taking 3% as contingency for both the years;
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance for FY 2007-08 and FY 2008-09;
- Leave travel Assistance & compensation is assumed to be .01% & 0.2%of Basic Pay respectively for both the years;
- Staff welfare expenses are assumed to in same ratio as actually incurred in previous year;
- Employee Expenses Capitalized has been calculated as 15% of total Employee Costs, although the capitalization rates actually used by the Discoms in FY 2005-06 have varied. This has been forecasted due to continuous hiring practice adopted by licensee.

Based on above assumptions the employee cost estimated for each Discom is outlined in the table below:

Table 3-24: Details of Employee Costs – Consolidated Discoms

(Rs. Crores)

Details (Rs crore)	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Basic Salaries	441	-	485	530
Overtime	-	-	-	-
Dearness Allowance	129	-	189	260
Other allowances	35	-	39	42
Bonus / Ex-gratia	9	-	11	13
Medical expenses re-imbursement	4	-	4	5
Leave travel assistance	0	-	0	0
Interim Relief/ Other				
Earned leave encashment	33	-	-	12
Leave Salary contribution				
Payment under workmen's compensation Act	1	-	1	1
Staff welfare expenses	1	-	1	1
Employers Contribution for Pension & Gratuity	109	-	129	151
Employee Costs (before charge to capital)	**762**	**819**	**859**	**1,013**
Less expenses capitalized	114	123	129	152
Net employee cost	**648**	**696**	**730**	**861**

3.8.2.3 **Administration & General Expenses** - The licensee has 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 2007-08 and FY 2008-09.

3.8.2.4 The licensee is continuing to commit and keep the expenses under control and as a result has forecasted the other A&G expenses to rise by inflation index only for both the years.

3.8.2.5 Further the licensee has submitted that there is outsourcing of billing works like use of hand held machines, consumer indexing & GIS mapping of consumers in major cities across the Discoms which would be Rs. 2.5 Crores per year for each Discom.

3.8.2.6 The capitalisation rate assumed by Discoms for A&G expenses is 15%. The table below summarises the A&G expenses for Consolidated – Discoms.

Table 3-25: A&G Expenses – Consolidated Discom

(Rs. Crores)

Details (Rs crore)	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Rent, Rates & Taxes	2	-	3	3
Insurance	1	-	1	1
Telephone, Postage & Telegrams, Telex charges	4	-	5	5
Legal charges	2	-	2	2
Audit fees	0	-	0	0
Consultancy charges	0	-	0	0
Technical fees and professional charges	0	-	0	0
Conveyance and traveling	7	-	7	8
Regulatory Expenses	5	-	6	6
Electricity Charges	55	-	58	61
Other expenses	8	-	9	14
Billings and Collection Expenses	18	-	19	20
Total A&G Expenses	**103**	**92**	**109**	**120**
Capitalization	15	14	16	18
Net A&G Expenses	**87**	**78**	**93**	**102**

3.8.3 GFA balances and capital formation assumptions

3.8.3.1 The licensee has computed R&M expenses for FY 2007-08 and FY 2008-09 based on the opening balances of GFA for the respective years. The Closing balance for FY 2006-07 has been considered as the starting point for the asset formation during the years under consideration. The licensee has also submitted the following investment plan along with the funding options during both years. The investment plan for FY 2006-07, FY 2007-08 and FY 2008-09 for Consolidated Discom is given as under:

Table 3-26: Consolidated Discom Investment Plan

(Rs. Crores)

Fund/ Source		FY 2006-07 (Actual) (Unaudited)				FY 2007-08 (Projection)				FY 2008-09 (Projection)				
		Loan	Grant	Equity	Total	Loan	Grant	Equity	Total	Loan	Grant	Deposit	Equity	Total
GoUP	IBRD	-	-	-	-	-	-	-	-	-	-	-	-	-
	APDRP	-	120	-	120	-	100	-	100	-	-	-	-	-
	Rural Electrification	-	-	1,459	1,459	-	-	1,321	1,321	-	-	-	829	829
	PTV	-	25	-	25	-	100	-	100	-	-	-	-	-
	Distribution Works	-	-	-	-	-	-	-	-	-	-	-	1,629	1,629
	Others	-	36	384	419	-	-	878	878	-	-	-	160	160
RGGVY		-	-	-	-	-	-	-	-	-	-	-	1,650	1,650
NCR/ RDA	System Improvement	-	-	-	-	-	-	-	-	-	-	-	60	60
PFC	System Improvement	-	-	-	-	-	-	-	-	55	-	-	-	55
	APDRP	229	-	-	229	87	-	-	87	108	-	-	-	108
REC	APDRP	95	-	-	95	13	-	-	13	56	-	-	-	56
IDBI	System Improvement	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	System Improvement	-	397	-	397	-	426	-	426	-	-	-	-	-
	Deposit Works	-	-	-	-	-	-	-	-	-	-	250	-	250
TOTAL		**324**	**578**	**1,843**	**2,745**	**100**	**626**	**2,199**	**2,925**	**218**	**-**	**250**	**4,328**	**4,796**

3.8.3.2 The licensees have assumed capitalization of 70% of the total investments in the first year and remaining 30% in the next year. Further, the licensee has also assumed depreciation at the rate of 7.84% of opening GFA. Based on the same, the assets capitalized during FY 2006-07, FY 2007-08 and FY 2008-09 are as follows:

Table 3-27: Assets Capitalisation during FY 2006-07

(Rs. Crores)

	Balance 31-Mar-06	Invest ments	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-07
Gross Fixed Assets	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Agra	1,808				616		2,424
Lucknow	1,523				1,190		2,713
Meerut	2,846				493		3,339
Varanasi	1,902				994		2,895
Total	**8,079**	**-**	**-**	**-**	**3,293**	**-**	**11,372**
Accumulated Depreciation							
Agra	1,003					142	1,144
Lucknow	910					119	1,029
Meerut	1,552					223	1,775
Varanasi	1,020					149	1,169
Total	**4,484**	**-**	**-**	**-**	**-**	**633**	**5,118**
Work in Progress							
Agra	96	725	4	26	(616)		234
Lucknow	611	787	4	36	(1,190)		248
Meerut	131	481	4	33	(493)		155
Varanasi	439	752	4	35	(994)		238
Total	**1,277**	**2,745**	**16**	**130**	**(3,293)**	**-**	**875**

Table 3-28: Assets Capitalisation during FY 2007-08

(Rs. Crores)

	Balance 31-Mar-07	Invest ments	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-08
Gross Fixed Assets	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Agra	2,424				576		3,000
Lucknow	2,713				929		3,642
Meerut	3,339				575		3,915
Varanasi	2,895				957		3,853
Total	**11,372**	**-**	**-**	**-**	**3,037**	**-**	**14,409**
Accumulated Depreciation							
Agra	1,144					190	1,335
Lucknow	1,029					213	1,242
Meerut	1,775					262	2,037
Varanasi	1,169					227	1,396
Total	**5,118**	**-**	**-**	**-**	**-**	**892**	**6,009**
Work in Progress							
Agra	234	454	5	29	(576)		146
Lucknow	248	928	5	40	(929)		292
Meerut	155	559	5	37	(575)		180
Varanasi	238	984	4	39	(957)		308
Total	**875**	**2,925**	**18**	**145**	**(3,037)**	**-**	**927**

Table 3-29: Assets Capitalisation during FY 2008-09

(Rs. Crores)

Rs crore	Balance 31-Mar-08	Invest ments	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-09
Gross Fixed Assets	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Agra	3,000				949		3,949
Lucknow	3,642				1,352		4,994
Meerut	3,915				774		4,689
Varanasi	3,853				1,384		5,236
Total	**14,409**	**-**	**-**	**-**	**4,460**	**-**	**18,869**
Accumulated Depreciation							
Agra	1,335					235	1,335
Lucknow	1,242					286	1,242
Meerut	2,037					307	2,037
Varanasi	1,396					302	1,396
Total	**6,009**	**-**	**-**	**-**	**-**	**1,130**	**6,009**
Work in Progress							
Agra	146	1,088	25	34	(949)		344
Lucknow	292	1,451	17	47	(1,352)		454
Meerut	180	786	20	43	(774)		255
Varanasi	308	1,471	19	46	(1,384)		461
Total	**927**	**4,796**	**81**	**170**	**(4,460)**	**-**	**1,514**

3.8.4 Repair & Maintenance Expenses

3.8.4.1 The Licensees have estimated the R&M expenses as 3.25% to 3.5% of the opening GFA for Discoms for both the years.

3.8.4.2 Licensees have stated that increase in the expenses is mainly due to the facts that licensee has inherited aged, weak & inadequate distribution system and due to this age-old system the power failure are frequent and common. Unfortunately due to tight financial position and heavy cash losses, system improvement and preventive maintenance are not achieved to the expected level due to frequent breakdowns and supply interruptions.

3.8.4.3 Licensee has 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 amounts, which were so worked out by the licensees, were spread out proportionally among the sub-accounts.

3.8.4.4 Based on the above assumptions, the R&M expenses estimated by Licensees are summarized below:

Table 3-30: R&M Expenses Consolidated Discoms

(Rs. Crores)

Particulars	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Plant & Machinery	130	-	146	184
Building	4	-	5	6
Civil works	0	-	0	0
Other Expenses	-	-	-	-
Lines, Cable Network, etc	195	-	223	278
Vehicles	12	-	14	17
Furniture & Fixtures	0	-	0	0
Office equipment	0	-	0	0
Total	**342**	**223**	**387**	**485**

3.8.5 Summary of Operation & Maintenance Expenses

3.8.5.1 The individual estimation of O&M items has been summarised to arrive at the total O&M expenses as provided in table below:

Table 3-31: Summary of O&M Expenses Consolidated Discoms

(Rs. Crores)

O&M Expenses	FY 2006-07 Actual Unaudited	FY 2006-07 Approved	FY 2007-08 Projected	FY 2008-09 Projected
Employee Expenses	648	696	730	861
A&G Expenses	87	78	93	102
R&M Expenses	342	223	387	485
Total O&M Cost	**1077**	**997**	**1210**	**1449**

3.8.6 Depreciation Expenses

3.8.6.1 Depreciation expenses have been estimated by the licensee by applying a rate of 7.84% on the opening Gross Fixed Asset (GFA), which was used by the Hon'ble Commission in the FY06-07 Tariff Order. The GFA is estimated by the licensees 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 licensees on the basis of above assumption are provided in the table below:

Table 3-32: Depreciation – Discom wise

(Rs. Crores)

Particulars	Agra Discom	Lucknow Discom	Meerut Discom	Varanasi Discom	Consolidated
Closing Gross Fixed Asset					
FY 06-07 (Actual)	2,424	2,713	3,339	2,895	11,372
FY 07-08 (Projected)	3,000	3,642	3,915	3,853	14,409
FY 08-09 (Projected)	3,949	4,994	4,689	5,236	18,869
Depreciation					
FY 06-07 (Actual)	142	119	223	149	633
FY 07-08 (Projected)	190	213	262	227	892
FY 08-09 (Projected)	235	286	307	302	1,130

3.8.7 Interest & Finance Charges

3.8.7.1 The interest and finance charges submitted by the licensees are estimated based on the current schedule of long-term debt repayment and new debt requirements.

3.8.7.2 The interest and finance charges submitted by the licensees are provided in the table below:

Table 3-33: Projected Interest and Finance cost

(Rs. Crores)

Discoms	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Agra Discom	99	57	177	122
Lucknow Discom	105	71	171	133
Meerut Discom	117	81	189	142
Varanasi Discom	113	76	191	154
Total	**434**	**285**	**727**	**551**

3.8.8 Other Income

3.8.8.1 Other income estimated by the licensees includes interest on loans and advances to employee, income from fixed rate investment deposits and interest on loans and advances to licensees. The other income has been estimated to increase by inflation index to off-set effect of inflation.

3.8.8.2 The summary of other income on a consolidated basis for all Discoms is provided in table below:

Table 3-34: Summary of Other Income – Consolidated Discoms

(Rs. Crores)

Particulars	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Other Income	32.26	126.00	33.93	36.69
Sub Total	**32.26**	**126.00**	**33.93**	**36.69**

Note: The Commission had not approved a breakup of other income into wheeling and retail supply business in the FY 2006-07 Tariff Order. Approved no. above is the total other income approved by the Commission.

3.8.9 Reasonable Return/Return on Equity

3.8.9.1 Although licensee is permitted to earn a return in equity @ 16% on the equity bases, it has submitted that, to avoid any further burden on consumers it would prefer not to request for return in this ARR submission. Therefore, the licensee has estimated return on equity only for academic purpose and return on equity is proposed not to be recovered from the consumers through tariff. The return on equity estimated by the licensees on a consolidated basis for FY 2007-08 and FY 2008-09 is Rs. 689.90 Crores and Rs. 1212.10 Crores respectively.

3.8.10 Contingency Reserve

3.8.10.1 The contingency reserve creation is permitted as per the Regulation which would be up to 0.5% of opening gross fixed assets to be included in the ARR requirement of he licensee. As there is a big revenue gap between ARR and revenue forecast ,as such, this component will only enhance the Gap and create extra burden on the consumers, so for present ARR, Licensee has not claimed this component. The contingency reserve estimated on a consolidated basis for FY 2007-08 and FY 2008-09 is Rs. 56.90 Crores and Rs. 72.04 Crores respectively.

3.8.11 Summary of ARR of Wheeling Business

3.8.11.1 The above components are summarised to arrive at the ARR of the wheeling business and is provided in table below:

Table 3-35: ARR for Wheeling Business for FY 2007-08

(Rs. Crores)

Particulars	Agra Discom	Lucknow Discom	Meerut Discom	Varanasi Discoms	Consolidated
SLDC Charges	0.00	0.00	0.00	0.00	0.0
Operation & Maintenance Expenses	250.73	319.25	315.79	324.30	1210.07
Interest & Finance costs	139.86	136.82	142.14	134.84	553.66
Depreciation	190.05	212.69	261.82	226.99	891.55
Return on Equity	0.00	0.00	0.00	0.00	0.0
Contingency Reserve	0.00	0.00	0.00	0.00	0.0
Aggregate Revenue Requirement (ARR)	**580.63**	**668.75**	**719.75**	**686.13**	**2655.26**
Less: Non Tariff Income	8.81	13.06	2.97	9.10	33.94
Net ARR from Tariff	**571.82**	**655.69**	**716.78**	**677.03**	**2621.32**

3.8.11.2 Taking into account each cost item the wheeling ARR is consolidated for each Discoms and provided as under for FY 2008-09:

Table 3-36: ARR for Wheeling Business for FY 2008-09

(Rs. Crores)

Particulars	Agra Discom	Lucknow Discom	Meerut Discom	Varanasi Discoms	Consolidated
SLDC Charges	0.00	0.00	0.00	0.00	0.0
Operation & Maintenance Expenses	299.03	382.59	370.24	396.68	1448.54
Interest & Finance costs	77.37	87.62	84.98	81.19	331.16
Depreciation	235.17	285.53	306.92	302.04	1129.66
Return on Equity	0.00	0.00	0.00	0.00	0.0
Contingency Reserve	0.00	0.00	0.00	0.00	0.0
Aggregate Revenue Requirement (ARR)	**611.62**	**755.73**	**762.14**	**779.91**	**2909.40**
Less: Non Tariff Income	10.26	13.73	3.12	9.57	36.68
Net ARR from Tariff	**601.36**	**742.00**	**759.02**	**770.33**	**2872.71**

3.8.12 Consolidated ARR for Retail and Wheeling Business

3.8.12.1 The consolidated ARR & Wheeling Business for each of the Discoms as submitted by the licensees are tabulated in tables below:

Table 3-37: Discom wise ARR FY 2006-07

(Rs. Crores)

Particulars	Agra	Lucknow	Meerut	Varanasi	Consolidated
Power purchase (MU)	13,993	8,884	16,250	11,974	51,101
Power purchase cost	2,965	1,882	3,443	2,537	10,826
Transmission charges	261	166	303	223	952
Employee Costs	151	203	193	215	762
A&G Costs	24	35	23	20	103
Repair & Maintenance expense	68	75	102	97	342
Interest & Finance Charges	103	110	121	117	450
Provision for Bad & Doubtful Debts	35	21	21	42	118
Depreciation	142	119	223	149	633
Special appropriations					0
Return on Equity	0	0	0	0	0
Less Expenses Capitalised	30	40	37	39	146
Total Expenses	**3,717**	**2,571**	**4,393**	**3,361**	**14,042**
Less Other Income	29	17	9	12	68
Less GOUP subsidy	241	322	474	491	1,527
Total ARR	**3,447**	**2,232**	**3,909**	**2,858**	**12,446**
Revenue from Existing Tariffs	2,256	1,489	2,973	2,000	8,718
Remaining Gap	**1,191**	**743**	**936**	**858**	**3,728**

Table 3-38: Discom wise ARR FY 2007-08

(Rs. Crores)

Particulars	Agra	Lucknow	Meerut	Varanasi	Consolidated
Power purchase (MU)	14,866	10,829	17,179	13,554	56,428
Power purchase cost	3,423	2,494	3,956	3,121	12,994
Transmission charges	267	195	309	244	1,015
Employee Costs	169	229	219	241	859
A&G Costs	26	37	25	21	109
Repair & Maintenance expense	85	93	109	101	387
Interest & Finance Charges	181	176	193	195	746
Provision for Bad & Doubtful Debts	40	24	24	46	133
Depreciation	190	213	262	227	892
Special appropriations					0
Return on Equity	0	0	0	0	0
Less Expenses Capitalised	34	45	41	44	164
Total Expenses	**4,349**	**3,416**	**5,055**	**4,152**	**16,971**
Less Other Income	30	18	10	13	72
Less GOUP subsidy	226	390	352	554	1,522
Total ARR	**4,092**	**3,008**	**4,693**	**3,585**	**15,378**
Revenue from Existing Tariffs	2,638	1,907	3,400	2,413	10,358
Remaining Gap	**1,454**	**1,101**	**1,293**	**1,172**	**5,020**

Table 3-39: Discom wise ARR FY 2008-09

(Rs. Crores)

Particulars	Agra	Lucknow	Meerut	Varanasi	Consolidated
Power purchase (MU)	15,253	10,882	17,896	14,298	58,329
Power purchase cost	3,586	2,559	4,208	3,362	13,714
Transmission charges	332	237	390	312	1,272
Employee Costs	200	270	259	284	1,013
A&G Costs	28	40	27	24	120
Repair & Maintenance expense	105	118	127	135	485
Interest & Finance Charges	147	151	162	173	632
Provision for Bad & Doubtful Debts	44	26	26	48	144
Depreciation	235	286	307	302	1,130
Special appropriations					0
Return on Equity	0	0	0	0	0
Less Expenses Capitalised	59	64	63	65	251
Total Expenses	**4,619**	**3,623**	**5,443**	**4,574**	**18,259**
Less Other Income	33	19	10	14	76
Less GOUP subsidy	226	390	352	554	1,522
Total ARR	**4,360**	**3,214**	**5,081**	**4,006**	**16,661**
Revenue from Existing Tariffs	3,031	1,960	3,994	2,581	11,566
Remaining Gap	**1,329**	**1,254**	**1,087**	**1,425**	**5,095**

3.8.13 Tariff Proposal of FY 2007-08 and FY 2008-09

3.8.13.1 The licensees have submitted a tariff proposal for FY 2007-08 which is enclosed at ANNEXURE – IV.

3.8.13.2 The licensees have however not submitted any tariff proposal for FY 2008-09.

3.8.14 Meeting the Revenue Gap

3.8.14.1 The licensees have proposed to meet the gap in FY 2007-08 in the following manner:

Total Revenue Gap for FY 2007-08 : Rs. 5121 Crores

Proposed Sources to meet the Revenue Gap:

1. Additional Revenue from proposed Tariff : Rs 121 Crores
2. Additional subsidy from Government of UP : Rs 2000 Crores
3. Institutional finances against Govt. repayment guarantee : Rs 3000 Crores

Total Revenue : Rs 5121 Crores

3.8.14.2 The licensees have subsequently submitted a revised mechanism to meet the gap which is discussed in detail in the subsequent chapters.

3.8.14.3 For the revenue gap in FY 2008-09, the licensees have proposed that the same would be met through additional Revenue expected from Tariff proposal already submitted with ARR FY 2007-08 and additional subsidy from GoUP which is under consideration.

3.8.14.4 The licensee has also submitted that Tariff Proposal for FY 2008-09 would be submitted later on and the additional revenue would be used to meet the remaining gap. Till date no proposal is submitted by the licensees.

3.9 Tariff Filing by Transco

3.9.1 The petition of the UPPTCL for FY 2007-08 and FY 2008-09 is structured as follows:

- Background
- Transmission System – a preview
- Performance Analysis of ARR filing
- Power Wheeling and Demand Growth
- Annual Revenue Requirement (ARR) for FY 2007-08 and FY 2008-09
- Proposed Transmission Tariff and SLDC charges

3.9.2 The ARR of the licensee in this section is summarised as under:

- Performance Analysis of ARR 2007-08
    - Review of UPERC Tariff order FY 2006-07
    - Review of UPERC Provisional order FY 2007-08
    - Comparison of estimated cost and actual figures
    - Efficiency improvement plans
    - Action Plan undertaken by UPPTCL for improvement of Transmission Loss
    - Investment detail plan
    - Compliance with the Commission's directives
- ARR Summary for FY2007-08 and FY 2008-09
    - Employee Costs
    - Administration and General Expenses
    - Gross Fixed Assets (GFA) Balances and Capital Formation Assumptions
    - Repairs and Maintenance Expenses
    - Interest Expenses
    - Depreciation Expenses
    - Other Income

- Return on Equity
- Proposed Transmission charges and SLDC Charges

3.10 Review of UPERC Tariff Order FY 2006-07

3.10.1 Tariff Order for FY 2006-07 (covering all five successor companies – four Discoms and Transco) was issued by the UPERC on May 10, 2007. The salient points of the Tariff Order with respect to the Transco are as under:

3.10.1.1 Commission has approved transmission tariff of Rs. 0.167 per kWh as against the transmission tariff of Rs. 0.198 per kWh requested by UPPTCL in the tariff petition. The methodology followed by the Commission to arrive at the tariff was to divide the total Transco ARR by the energy delivered by the Transco. The transmission tariff for FY 2006-07 represented an increase of 15% over the transmission tariff of FY 2004-05

3.10.1.2 The tariff was designed to meet Transco's revenue gap. The Transco's ARR was approved at Rs.802 Crores against petition of Rs.953 Crores.

3.10.1.3 Bulk Supply Tariff approved was Rs.2.41/kWh as against Rs.2.58/kWh submitted in the petition

3.10.1.4 SLDC charges were embedded in the transmission ARR of UPPTCL.

3.11 Review of UPERC provisional Order FY 2007-08

3.11.1 The Commission issued the provisional tariff order on October 19, 2007 against the ARR filing of FY 2007-08 filed on October 4, 2007.

3.11.2 The provisional transmission tariff of Rs.0.191/kWh was approved as proposed in the filing for FY 2007-08 subject to true up. The transmission tariff for FY 2007-08 represented an increase of 14% over the transmission tariff of FY 2006-07

3.11.3 The tariff was designed to meet Transco's revenue gap. The provisional ARR of Rs.1015 Crores was accepted by Commission.

3.11.4 It is assumed by the licensee that in absence of any reference by Commission in provisional tariff order, the Bulk Supply Tariff is also approved as proposed in the petition.

3.12 Comparison of estimated costs and actual figures

3.12.1 In this section, the licensee has compared the expenses for FY 2006-07 with the corresponding figures approved by the Commission in its Tariff Order for FY 2006-07.

Table 3-40: Approved and actual expenses – Transco FY 2006-07

(Rs. Crores)

Particulars	FY 2006-07 Tariff Order	FY 2006-07 (Actual) (Unaudited)	Difference	Difference %
Net Employee Cost	182	190	(8)	4%
Net A&G Cost	23	23	0	0%
R&M Cost	59	58	1	-2%
Interest & Finance Cost	326	491	(165)	51%
Depreciation Expense	208	204	4	-2%
Return on Capital Base	21	-	21	-100%
Less: Non-Tariff Income	*16*	*13*	*3*	*-21%*
Total	**802**	**952**	**(150)**	**19%**

3.12.2 The licensee has stated that the actual figures are on higher side mainly due to an increase in the interest and finance charges. This increase is the result of a higher than originally expected proportion of loans expenses of erstwhile UPPCL being transferred to Transco.

3.13 Investments

3.13.1 The licensee has proposed to complete works costing Rs. 1551 Crores in FY 2007-08. Of this, Rs. 308.29 Crores is to be incurred on lines, Rs. 1243 Crores on sub-stations and balance on capacitor banks and R&M related works. The licensee has proposed investment of Rs. 1880 Crores in FY 2008-09 for transmission works. The investments are proposed to be funded in the debt-equity ratio of 70:30.

3.14 Compliance with Commission's Directive

3.14.1 In this section, the licensees have submitted that they are in process of compiling and updating the directives and will submit the same to the Commission in due course of time.

3.15 ARR summary for FY 2007-08 and FY 2008-09

3.15.1 In the following section, the details of cost elements mentioned earlier have been summarized along with the rationale of the proposal.

3.15.2 The total ARR of Transco comprises of the following nine components:

- Employee costs
- Administration and general expenses
- Gross Fixed Assets (GFA) Balances and Capital Formation Assumptions
- Repairs and maintenance expenses
- Interest expense
- Depreciation expense
- Other income
- Return on Equity

3.15.3 The licensee has submitted corresponding figures for actual FY 2006-07, estimates for FY 2007-08 & forecast for FY 2008-09 based on year-to-date experience for certain cost elements. For each such major account category of expenses, an explanation of the derivation is given, along with the logic for departing from past year values.

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

3.16 Employee Cost

3.16.1 The rationale for estimation of the employee cost by UPPTCL has been described in the section. The costs for FY 2007-08 have been estimated based on the base data for FY 2005-06 and the actual data for FY 2006-07. The data for FY 2008-09 is based on the actual data for FY 2006-07. The evolutions of the sub-heads of Employee Costs have been forecasted from the FY 2006-07 base data as follows:

- For FY 2007-08, the Basic Salaries, Bonus/ Ex-gratia and Other Allowances will decrease by 5% per year for FY 2006-07. This decrease is a result of continuing staff attrition and selective hiring practices in FY 2006-07. The Basic Salaries for FY08-09 is estimated based on 5% increase due to new recruitment and 1% decrease due to retirement with over all increase of 5% due to annual increase in basic salary. Further, for FY07-08 as Govt. has increased retirement age; projections for both the years have been made keeping in view annual increments, pay scale revision & induction programme;

- Dearness Allowance (DA) is estimated to be 39% for FY 2007-08 and 49% for FY 2008-09;
- Other allowance has been forecast to be 8% of basic salary for both the years;
- Likewise, Medical Expenses have been forecast to increase by 5% per year from FY08, taking 3% as contingency for both the years;
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance for FY 2007-08 and FY 2008-09;
- Leave travel Assistance & compensation are assumed to be 0.1%of Basic Pay for both the years;
- Staff welfare expenses are assumed to be in same ratio as actually incurred in previous year;
- Employee Expenses Capitalized has been taken 29% as approved by Hon'ble Commission in FY 2006-07 Tariff order.

3.16.2 The summarised employee cost has been provided in table below:

Table 3-41: Details of Employee Cost - Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Basic Salaries	154	145	169	184
Overtime	-	-	-	-
Dearness Allowance	45	42	66	90
Other allowances	12	10	14	15
Bonus / Ex-gratia	3	1	4	5
Medical expenses reimbursement	3	3	3	4
Leave travel assistance	0	0	0	0
Interim Relief/ Other		9	-	-
Earned leave encashment	11	11	-	4
Leave Salary contribution				
Payment under workmen's compensation Act	0	0	0	0
Staff welfare expenses	1	1	1	1
Employers Contribution for Pension & Gratuity	38	34	45	52
Employee Costs (before charge to capital)	**267**	**257**	**302**	**356**
Less expenses capitalized	77	75	88	103
Net employee cost	**190**	**182**	**214**	**253**

3.17 Administration & General Expenses

3.17.1 The licensee has committed to keep the expenses under control and as a result has forecasted the other A&G expenses to rise by inflation index only for both the years.

3.17.2 The A&G expenses have been estimated by the license by forecasting an increase of 5.18% per year across the heads to offset the effect of inflation. Licensee has also submitted that, as approved by the Hon'ble Commission in its last Tariff order, it has considered capitalisation of the A&G expenses at 19%.

3.17.3 Based on the above assumptions, licensee has thus estimated the A&G expenses which has been provided as under in the given table:

Table 3-42: Administration & General Expenses - Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Rent, Rates & Taxes	2	1	2	2
Insurance	0	0	0	0
Telephone, Postage & Telegrams, Telex charges	2	2	2	2
Legal charges	1	1	1	1
Audit fees	0	0	0	0
Consultancy charges	1	3	1	2
Technical fees and professional charges	0	-	0	0
Conveyance and traveling	6	5	6	7
Regulatory expenses	2	2	3	3
Electricity Charges	2	-	3	3
Other expenses	11	11	12	12
Billings and Collection Expenses	-	3	-	-
Total A&G Expenses	**28**	**28**	**30**	**31**
Capitalized	5	5	6	6
Net A&G Expenses	**23**	**23**	**24**	**25**

3.18 GFA balances and Capital Formation assumptions

3.18.1 The licensee has computed the opening balance of GFA to arrive at the R&M expenses for FY 2007-08 and FY 2008-09. The licensee has submitted the following investment plan along with the funding details and capital formation during both years. The investment plan for FY 2006-07, FY 2007-08 and FY 2008-09 is given as under:

Table 3-43: Investment Plan – Transco

(Rs. Crores)

Fund/ Source		FY 2006-07 (Actual) (Unaudited)				FY 2007-08 (Projection)				FY 2008-09 (Projection)				
		Loan	Grant	Equity	Total	Loan	Grant	Equity	Total	Loan	Grant	Deposit	Equity	Total
GoUP	IBRD	-	-	-	**-**	-	-	-	**-**	-	-	-	-	**-**
	Transmission Works	-	-	-	**-**	-	-	-	**-**	-	-	-	516	**516**
	Others	-	-	463	**463**	-	-	365	**365**	-	-	-	-	**-**
PFC & JBIC		292	-	-	**292**	380	-	-	**380**	-	-	-	-	**-**
NCR/RDA	System Improvement	30	-	-	**30**	109	-	-	**109**	60	-	-	-	**60**
PFC	System Improvement	-	-	-	**-**	-	-	-	**-**	542	-	-	-	**542**
HUDCO	System Improvement	167	-	-	**167**	163	-	-	**163**	120	-	-	-	**120**
REC	System Improvement	195	-	-	**195**	434	-	-	**434**	482	-	-	-	**482**
Others	Deposit Works	-	13	-	**13**	-	10	-	**10**	-	-	160	-	**160**
Total		**683**	**13**	**463**	**1,159**	**1,086**	**10**	**365**	**1,462**	**1,204**	**-**	**160**	**516**	**1,880**

3.18.2 Assuming capitalization of 40% of the investments proposed, expenses capitalised, interest capitalised and opening WIP and depreciation at the rate of 5.27% of opening GFA for FY 2007-08 and 5.35% for FY 2008-09, the assets capitalized during FY 2006-07, FY 2007-08 and FY 2008-09 are as follows:

Table 3-44: Assets Capitalisation - Transco

(Rs. Crores)

Details	Balance 31-Mar-06	Investments	Capitalized interest	Capitalized expenses	To GFA	Depreciation	Balance 31-Mar-07
Gross Fixed Assets	3,870				787		4,657
Accumulated Depreciation	1,613					204	1,817
Work in Progress	688	1,159	37	83	(787)		1,180
Details	**Balance 31-Mar-07**	**Investments**	**Capitalized interest**	**Capitalized expenses**	**To GFA**	**Depreciation**	**Balance 31-Mar-08**
Gross Fixed Assets	4,657				1,115		5,772
Accumulated Depreciation	1,817					245	2,062
Work in Progress	1,180	1,462	53	93	(1,115)		1,673
Details	**Balance 31-Mar-08**	**Investments**	**Capitalized interest**	**Capitalized expenses**	**To GFA**	**Depreciation**	**Balance 31-Mar-09**
Gross Fixed Assets	5,772				1,492		7,264
Accumulated Depreciation	2,062					309	2,371
Work in Progress	1,673	1,880	67	109	(1,492)		2,237

3.19 Repair & Maintenance Expenses

3.19.1 The license has estimated R&M Expenses as 1.5% of the opening GFA balances, as adopted by the Hon'ble Commission for transmission plant in previous tariff order. The amounts are spread out proportionally among the sub-accounts.

3.19.2 For R&M expenses estimation licensee has estimated the GFA opening balance based on the capital expenditure/investment made, interest and expenses capitalised and corresponding addition to fixed asset for each of the years FY 2007-08 & FY 2008-09. Based on the above assumptions the R&M expenses derived is provided in table below:

Table 3-45: Repairs & Maintenance Expenses - Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Plant & Machinery	47		57	70
Building	6		7	9
Civil works	0		0	0
Lines, Cable Network, etc	5		6	7
Furniture & Fixtures	0		0	0
Office equipment	0		0	0
Total	**58**	**59**	**70**	**87**

3.20 Summary of Operation & Maintenance Expenses

3.20.1 The individual estimation of O&M items has been summarised to arrive at the total O&M expenses as provided in table below:

Table 3-46: Summary of O&M Expenses - Transco

(Rs. Crores)

O&M Expenses	FY 2006-07 Actual Unaudited	FY 2006-07 Approved	FY 2007-08 Projected	FY 2008-09 Projected
Employee Expenses	189.73	181.64	214.21	252.70
A&G Expenses	22.73	22.80	24.05	25.24
R&M Expenses	58.04	59.31	69.86	86.58
Total O&M Cost	**270.50**	**263.75**	**308.12**	**364.52**

3.21 Depreciation Expenses

3.21.1 The licensee has estimated the depreciation expenses as 5.27% of opening GFA for FY 2007-08 and 5.35% of opening GFA for FY 2008-09. Licensee has submitted that the depreciation rate is slightly on the higher side as against used by the Hon'ble Commission in the recent order.

3.21.2 The depreciation expense claimed by the licensee for FY 2007-08 is Rs.245 Crores for FY 2007-08 and Rs.309 Crores for FY 2008-09. The opening GFA and the estimated depreciation is thus provided in table below:

Table 3-47: GFA & Depreciation – Transco

(Rs. Crores)

Particulars	FY 2007-08 Projected	FY 2008-09 Projected
Opening GFA	1816.61	2061.01
Depreciation Rate	5.27%	5.35%
Depreciation	**245.40**	**308.80**

3.22 Interest & Finance Charges

3.22.1 The interest and financing costs projected by UPPTCL for 2007-08 and FY 2008-09 are based on the current schedule of long-term debt, repayments and new debt requirements.

3.22.2 The summary of the interest and finance costs is provided in table below:

Table 3-48: Interest and Finance Charges – Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Interest and Finance Charges on Long Term Loans / Credits from the FIs/banks/organisations approved by the State Government				
NCR	3	0	8	12
World Bank Loan	15	0	15	15
P.F.C.	85	0	114	151
R E C Reschedule	0	0	10	85
REC APDRP	20	0	42	0
HUDCO	41	0	47	43
Other Loans / Allocation of UPPCL interest	356	0	0	10
Total of A	**520**	**411**	**236**	**317**
Other Interest & Finance Charges				
Other interest including OD	4	2	4	-
Finance Charges	4	7	4	18
Total of B	**7**	**9**	**8**	**18**
Grand Total Of Interest & Finance Charges: C = A + B	**528**	**420**	**244**	**335**
Less: Interest & Finance Charges Chargeble to Capital Account: D	37	95	53	67
Net Total of Interest & Fin Charges : For Revenue Account: C-D	**491**	**326**	**192**	**268**

3.22.3 A sudden drop in interest charges in FY 2007-08 over FY 2006-07 was due to short-term borrowing by UPPCL from market to meet out revenue shortfall of Discoms, whereas in FY 2007-08 only Transmission licensee's projected interest charges are shown.

3.23 Other Income

3.23.1 Other income estimated by the licensee includes interest on loans and advances to employee, income from fixed rate investment deposits and interest on loans and advances to licensees. The other income has been estimated to increase by inflation index to off-set effect of inflation. The summary of other income as submitted by UPPTCL is given as under:

Table 3-49: Summary of Other Income – Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Other income	**13**	**16**	**14**	**14**

3.24 Reasonable Return/Return on Equity

3.24.1 As per the Transmission Tariff Regulation 2006 of the Hon'ble Commission, the Return on equity is permitted for Transmission Company to an extent of 14% of the total equity base. Licensee has submitted that the transfer scheme is yet to be notified by GOUP for transfer of assets & liability due to which debt: equity for estimating return is not practical. Hence, licensee has estimated RoE on the equity inflow from GOUP up to FY 2007-08 and to be received in FY 2008-09. The estimation of RoE by UPPTCL is provided in table below:

Table 3-50: Return on Equity - Transco

(Rs. Crores)

Details	FY2007-08 (Projection)	FY2008-09 (Projection)
Opening Equity	**1,843**	**2,208**
Addition to Equity	365	516
Closing Equity	**2,208**	**2,724**
Return Computation		
Average Equity	2,026	2,466
Return on Regulatory Equity @14%	**284**	**345**

3.25 Summary of ARR of UPTransco

3.25.1 The ARR of UPTransco has been summarised in the table below as arrived at from the estimation of each component individually above.

Table 3-51: ARR of Transco

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2006-07 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
Employee Costs (net of capitalization)	190	182	214	253
A&G Costs (net of capitalization)	23	23	24	25
Repair & Maintenance Expense	58	59	70	87
Depreciation	204	208	245	309
Interest & Finance Charges	491	326	192	268
Less Other Income	13	16	14	14
Special Appropriations	-	-	-	-
Reasonable Return	-	21	284	345
Annual Revenue Requirement	**952**	**802**	**1,015**	**1,272**

3.26 Transmission Tariff & SLDC charges Proposal

3.26.1 UPTransco has submitted that the transmission tariff proposal has been based on the methodology defined in the Transmission Tariff Regulation 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.

3.26.2 The Transmission tariff has been calculated on the basis of no. of units wheeled as transmission capacities have not been allotted to Discoms. Therefore, the licensee has estimated the tariff which is provided in table below:

Table 3-52: Computation of Transmission Tariff

Details	FY2006-07 (Actual) (Unaudited)	FY2007-08 Tariff Order	FY2007-08 (Projection)	FY2008-09 (Projection)
UPPCL Transco ARR (Rs.Crs)	952.45	802.05	1,015.31	1,272.09
Total Energy Delivered (MUs)	48,010	48,073	53,026	55,064
Transmission/Open Access Tariff (Rs/kWh)	0.198	0.167	0.191	0.231

3.26.3 Further, the estimated costs of running the UPPTCL Central Load Despatch Centre in Lucknow and four regional Load Dispatch Centres at Panki, Sahupuri, Modipuram and Moradabad is summarised in this section.

3.26.4 While all cash expenses such as the employee cost, A&G and R&M has been obtained by UPPTCL from Central Load Dispatch Centre, the capital related expenditure such as the interest & finance charges, Depreciation and Return on Equity have been derived from the best available assumptions by the licensee as under:

- Depreciation expense for Transco is 75% for FY 2006-07, 80% in FY 2007-08 and 85% for FY 2008-09 of the sum of above cash expenses.
- In absence of precise information on cost of SLDC assets; an "adder" of these values has been applied to SLDC cash costs to account for SLDC depreciation expense.
- The amount of depreciation expense is thus estimated to be Rs.3.9 Crores in FY 2006-07, Rs.4.5 Crores in FY 2007-08 and Rs.5.3 Crores in FY 2008-09.
- Interest and Finance charges & other income have been similarly approximated.

3.26.5 The Licensee has submitted that this cost accounts to a maximum of 2% of the total transmission cost and any major error will not have a major impact. The SLDC charges thus arrived by UPPTCL are provided in table below:

Table 3-53: Break up of SLDC Costs

(Rs. Crores)

Details	FY2006-07 (Actual) (Unaudited)	FY2007-08 (Projection)	FY2008-09 (Projection)
Employee Costs	5	5	6
A&G Costs	0	0	1
Repair & Maintenance Expense	0	0	0
Subtotal	**5**	**6**	**6**
Depreciation	4	5	5
Interest & Finance Charges	9	4	5
Less Other Income	0	0	0
Return on Equity	0	5	6
Total SLDC Annual Revenue Requirement	**18**	**19**	**22**

Chapter 4. OBJECTIONS TO ARR FILING AND TARIFF FILING FOR FY 2007-08 & FY 2008-09

4.1 The combined reading of various provisions of Electricity Act 2003 and UPERC (Conduct of Business) Regulation shows that there is a provision in the statute which makes it mandatory to hear 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 Act i.e. "to observe transparency in its proceedings and functions" and "to ensure fair deal to consumers", has always attached paramount importance to the objections/suggestions/comments of public on the ARR/Tariffs 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 what costs that are being allowed vis-à-vis the kind of services that are being offered to them.

4.2 In order to have broad public participation and also to render transparency to the process of tariff determination, the Commission conducted four public hearing from February 18, 2008 to February 25th, 2008 at different places in the State to get the views of the various stakeholders on the proposals submitted by the licensees. The Commission has also considered various objections/suggestions/comments received from various stakeholders through post while disposing the ARR/Tariff petitions filed by the licensees.

4.3 All the objections/suggestions/comments received by the Commission from the public on the ARR filings, were forwarded to the Licensees for their response on the same. The comments of the consumers play an important role in the determination of rate design and tariff schedule as the factors like quality of electricity supply and the service levels have to be given a priority level in determination of the same. The Commission has to consider the submissions of the consumers in toto before it embarks upon the exercise of determination of tariff for a particular period. Accordingly, it is also incumbent upon the licensees to respond to individual comments not only in the capacity of a licensee but also as a petitioner. To give proper shape to such an exercise, the Commission has collated different consumer representations and categorized them issue wise for getting categorical replies from Discom. A list of the consumers, who have submitted their objections/suggestions/comments, is appended at the end of this chapter. Category wise issues along with response of Discoms against are detailed below.

General Issues:

4.4 Minimum Consumption Charges (MCG):

Consumer's objection

4.4.1 The consumers have made submissions that the minimum consumption charges (MCG) and fixed/ demand charges should not be charged simultaneously. Further as there is considerable difference between the demand and supply of electricity and minimum supply commitment is not fulfilled by the Licensees, MCG should be waived off for all categories. 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/ half yearly basis keeping in view occasional drop in demand and more so for seasonal consumers.

Licensee's Response

4.4.2 The licensees have stated that Minimum Consumption Guarantee (Charges) and fixed/demand charges are part of tariff which are levied to recover the Cost of Service (fixed + variable) by the Discom/UPPCL.

4.4.3 Guiding principle for determination of tariff has been laid in Electricity Act, 2003 which emphasizes to ensure the interest of consumers at the same time allows DisComs/UPPCL 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.

4.4.4 Furthermore, Fixed/Demand charges are levied to compensate the fixed expenses of the Corporation which have to be incurred on the installed infrastructure for supply & maintenance of power to the consumers. Fixed expense of the corporation is around 40% of the total expenses where as about only 20% of these charges are being levied as Fixed charges/Demand Charges. As regards minimum Consumption Charges as per proposed tariff for 2007-08, consumers of different categories will complete their M.C.G., if they run their connections for following number of hours per day:–

- L.M.V.-2 (Urban) 2 Hours 15 Minutes
- L.M.V.-4 (Urban) 2 Hours 30 Minutes
- L.M.V.-6 (Urban) 3 Hours 15 Minutes
- L.M.V.-7 (Rural) 4 Hours 15 Minutes

- L.M.V.-7 (Urban) 5 Hours 30 Minutes
- H.V.-2 (11 K.V.) 4 Hours 00 Minutes

4.4.5 From the above it is very clear that MCG which has been proposed is very nominal as compared to the actual supply being given. Any premises/organization/industry which is running, will definitely consume more power than MCG charges. Removal of MCG charges may only prompt the dishonest consumer for electricity theft.

4.4.6 Licensees have also referred to UPERC tariff order of FY 2003 (para 8.3) which mentions that "the prescribed minimum charges are recovered as licensee keeps in readiness the energy for consumer to the extent of **"contracted demand"**. Licensees have also submitted the copies of the tariff order of few states where M.C.G./Fixed charges are being levied.

4.4.7 The other reasons mentioned by the licensees for allowing MCG are as follows:

- The generation projects are located in the east and load centers are in the west. Hence the transmission charges increase significantly which has to be recovered by one or other means.
- With the unprecedented growth and development of the infrastructure and economy at a rate of 8 to 9 % of GDP, the inflation rate of goods and services is also growing at rate of 4-5% which is causing hike in rates of almost all items as well as cost of service to consumers.
- Removal of Minimum Consumption Charges in the tariff order of FY 2006-07 has caused loss of revenue to the Corporation. The licensee has provided a statement of EUDC, Noida where loss due to HV-2 category alone is Rs.15 crores per annum and Rs.37 Crores per annum for UPPCL as a whole.
- The power generation from the state is just 1/3rd of the total power requirement and also the hydro potential has been squeezed to negligible level.
- The obligation to supply power even when the licensee is aware of the theft and other unscrupulous practices requires cushion in the form of MCG to recover some of the cost.

4.4.8 As regards annual adjustment of MCG, the licensees have no objection if the MCG, is annually adjusted.

Commission' View

4.4.9 The Commission feels that minimum charges (MCG) are there to compensate the risk of the licensee arising out of its honoring the contractual obligation, as is also upheld by the honourable Supreme Court. The Commission has accordingly retained the concept of minimum charges in certain categories but at the same time it has done away with application of minimum charges in few of the categories / sub-categories in its previous tariff orders.

4.4.10 It is pertinent to mention here that, the Commission in previous tariff order of FY 2006-07, had removed M.C.G. from HV-2 & LMV-7. The consumers in HV-2 category are handpicked in numbers and accordingly, there is absolutely no reason why licensee cannot properly monitor and meter these consumers, with or without advanced technological interventions, who contribute significantly to its revenue stream. For LMV-7, the Commission finds no reason to continue with M.C.G. as the consumers of this category being the Government entities will never attempt fraudulent means to suppress the electricity consumption.

4.4.11 Justification for existence of both fixed charges and minimum charges are already given in tariff order of FY 2004-05 in detail. The Commission has not altered the situation.

4.4.12 The minimum charges for LMV-2 and LMV-6 was also withdrawn as rebates were given for achieving a specified load factor but the same got stayed, on account of the review petition filed by the licensees.

4.4.13 Accordingly, M.C.G. continues only in those categories where it was already in vogue. The Commission however does not agree with the forceful submission of licensee to re-impose the M.C.G. in HV-2 category on account of reasons given above. However in order to safeguard against unauthorised consumption/theft/ suppression of consumption, the Commission has already made a provision where the licensees has been directed in previous year tariff order in rate design section 8.131 which is extracted for reference as under:

> *"The application of minimum charge has also been abolished from HV-2 category i.e. large and heavy consumers. However, the licensees have been directed to prepare a monthly report on the divisional basis showing all the consumers whose load factor has fallen below 15% (108 kVAh/KVA) clearly indicating the reasons for such low load factor. A copy of the report would be submitted to the Managing Director of the licensee with a copy of the same to the vigilance cell of UPPCL and UP Electricity Regulatory Commission. A confidential report highlighting the names of the consumers involved in suspected theft (for reasons attributable to unexplained low load factor) may also be sent to the Managing Director, concerned District Magistrate and Department of Energy Government of Uttar Pradesh. The confidential report would be taken in cognizance for the purposes of preliminary verification,*

based on factual information related to load factor, even if the report is not carrying the signatures of the report sending local authority/officer. Acknowledgement against the registered dispatch of above report would be treated as sufficient proof for report having been dispatched. Above mentioned authorities shall, on the basis of above report and after preliminary verification of the load factor of the concerned consumer, in absence of suitable justification, setup enquiry against such consumers. The Managing Director of the concerned distribution company shall act as a nodal person to facilitate such enquiry and initiate further necessary action if required against such consumer."

4.5 Bill Collection

Consumer's objection

4.5.1 Many a consumer groups and associations have requested for creation of alternative mechanism for timely payment of electricity bills such as through banks, Post Offices or through internet. They have also requested for rebate/ incentives for timely payment.

Licensee's Response

4.5.2 The licensee has responded to this suggestion by submitting that Bill collection through Banks have been discussed with several National Banks but the Banks are interested in collection only in their branches. In many cities the bills are available to consumers at the site itself through Hand-Held Billing. If the consumers make payment promptly, they are not levied any surcharge. Consumers making payment after due dates are only levied late payment surcharge. This is equivalent to rebate for making timely payment.

4.5.3 Also it was stated that to enhance the collection efficiency Corporation/Discom, apart from existing arrangement for collection of revenue, has appointed input based and collection based franchisees for rural consumers. This arrangement is giving good response and will definitely improve collection efficiency in near future.

Commission' View

4.5.4 The Commission has been pursuing the licensees to explore alternative measures such as payment through internet, banks etc but it is regretted to note that the licensees have failed to take necessary corrective measures though the same could have led to increase in its revenue. It is devastative of commercial objective of the licensee that consumers are willing to pay via easy and faster modes but licensee is not taking concrete steps to enhance its revenue realisation. Such schemes are already in place in other parts of the country and it is only that U.P. licensees are not able to crack the deals. Hence the Commission directs the licensee to explore the innovative modes of payment within 6 months from the date of issue of tariff order atleast in the cities having population of more than 10 lacs. Further the licensee shall keep updated the Commission about the progress on the same on a quarterly basis.

4.5.5 The licensees can go for ATP (All Time Payment) machines for bill payment which works like ATM. The ATP machines can be launched keeping in mind the following broad aspects:

- The machines can be installed in towns/cities with population above 10 lacs
- All categories of consumers to be covered except HT consumers
- The ATP machines to have facility of barcode reading as well as manual punching of account/bill number.
- The machines need to accept both cheques and cash.
- Further the machine to accept the currency denomination starting from Rs.10 to Rs.500 notes.
- In the initial stage, licensees will have to keep specialists/outsourced person to assist the consumers to understand the procedure and facilitate their payments.
- Licensees need to ensure that proper backup of electricity is provided to these ATP machines to get good response from the consumers.

4.5.6 The Commission, on this issue of timely payment, has already clarified its view in its last few orders, 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 Discoms in future filings, the same may be considered by the Commission." The Commission stands by its above view.

4.6 Power Looms

Consumer's objection

4.6.1 There was a general concern shown by the power loom consumers on the continuation of the system of flat rate billing to power loom consumers. It was also raised that difference between 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 directive of GoUP.

Licensee's Response

4.6.2 The licensees have clarified here that the difference between actual bill based on consumption and the amount being charged on Flat rate basis, is being shown outstanding against Power Loom Consumers just for accounting purpose and is not being asked from the consumers for payment purpose.

4.6.3 Furthermore, a new Sub-Category of Power Loom LMV-6(a) is introduced under LMV-6. This specific category is introduced for Power Loom Consumers which were already running under LMV-2 and LMV-6 tariff category.

Commission' View

4.6.4 On the issue of outstanding against power loom consumers, the order of the Commission is very clear that the difference between actual bill based on the consumption and flat rate has to be indicated as subsidy and therefore any treatment to show it as an arrear against the consumer is a violation of Commission's order, even if done for accounting purposes. Accordingly the practice to show it as arrear in consumer's bill should be immediately stopped and the same should be reflected as subsidy.

4.6.5 Regarding proposal of the licensee to create a new Sub-Category of Power Loom consumers, the Commission has merged Small & Medium Power loom subcategories to form LMV-6 category. Hence there is no need of separate sub-category for Power loom consumers under LMV-6 as proposed by the licensees.

4.7 Incentive to consumer in low loss areas

Consumer's objection

4.7.1 Many consumers have requested that the licensees should take cognizance of the fact that the loss level in the region of their connections is low and should be given discount in their electricity bills and more hours of supply compared to areas with high losses. Furthermore, it was also put forward by consumers that the Commission has already provided for the same in its Tariff Order for FY 2006-07 by linking the incentives to the losses at transformer level however, the Commission has not been informed by the licensees regarding any progress on this front. It was submitted that the Commission be made aware of the progress on this front.

Licensee's Response

4.7.2 The licensee has submitted that the mechanism to provide incentive to the consumers in lower loss areas or imposing penalties in the higher loss areas is a dynamic one. There may be some consumers involved in malpractices in the lower loss area and honest consumer in the higher loss area. Hence before taking any decision all such aspect has to be taken care off.

4.7.3 As far as hour link tariff is concerned it may be noted that present tariff structure is already linked with hour of supply, that is rural supply and the urban supply.

4.7.4 Further licensees have submitted that transformer wise metering and work of calculation of transformer wise losses is in progress. Till the completion of such work it is practically difficult to differentiate supply with low loss areas and high loss areas. This may also create Law & Order problem in the state.

Commission' View

4.7.5 As regards to the incentive to consumers in low loss areas, it has been a continuing directive of the Commission since tariff order FY 2003-04 that areas having lower AT&C losses should get power for larger number of hours whereas districts with higher AT&C losses should be supplied power for lesser number of hours except in case where specific directions have been issued by Court of Law. The Commission expresses its displeasure over the licensee that after so much resentment shown by the consumers, it has not implemented this directive.

4.7.6 The Commission has also introduced an incentive 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 on electricity pole etc. The consumers shall be provided 5% discount on energy charge applicable to their respective category of consumers, provided the variation in reading of the consumer meter and check meter is less than 2%. The details are provided in the rate schedule.

4.7.7 Further the Commission has also introduced scheme wherein the consumers/ group of consumers, either of same category or of mixed category, fed through a particular distribution transformer are able to show to the licensee that the distribution losses from LT side of transformer are less than 8%, they shall be earn a rebate of 25 paise per unit on their energy charges. These schemes will also help consumers to a great extent to get the share of the benefit from loss reduction and earn incentives. More details on the same are provided in the rate schedule.

4.7.8 The other side of the story on losses is that, licensees alone are not solely responsible for higher loss levels as consumers are also partly responsible for the same. The consumers who indulge in connivance/theft of energy are directly responsible, while the honest paying consumers who do not raise their voices to complain or are apathetic are also indirectly responsible for this phenomenon. Taking into consideration all these factors and in the context of the socio-economic ethos in which the licensees have to function, it appears to the Commission that the time has now come to confront this menace of increasing T&D losses in a more direct manner. In this context, apart from above directives and also directives related to laying of ABC conductor in loss prone area and such other measures to check rampant theft, the Commission has already directed the licensees to conduct energy audit studies and segregation of technical & commercial losses. Only after tested results are available on a circle/division wise basis, Commission may, provide incentive/penalty to the consumers as the case may be for the respective loss levels in their area. 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 within on month from the date of issue of tariff order.

4.8 Poor Supply Condition

<u>Consumer's objection</u>

4.8.1 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 licensee's 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 that they are supplied with taking into consideration the quality and amount of supply that they are receiving. The consumers resented licensee's proposal to raise power tariff when they are not able to supply electricity to the minimum committed hours.

Licensee's Response

4.8.2 The utilities have submitted to this submission of the consumers by giving the following table depicting the supply condition in the State

Table 4-1: Area wise Hours of Supply

Sl. No.	Area of Supply	Hours of Supply
1.	Rural	12:50
2.	Tehshil	12:50
3.	District HQ	16:43
4.	Commissionaries	19:11
5.	Mahanagar	20:46
6.	Bundelkhand	17:21
7.	Industrial	23:51

4.8.3 Licensees stated that the minimum supply which is being ensured to rural consumers is more than 12 hours where as to offset minimum consumption guarantee or fix charges requires only 3 or 4 hours of supply. Hence, hike of tariff cannot be related with the less supply hours. To improve the efficiency and line losses corporation/Discoms have already taken various steps to minimize technical as well as non technical losses. Licensee is implementing LT less system in various towns to reduce technical losses and to strengthen and replacement of old distribution system (conductor, transformer, OCB etc).

4.8.4 The hourly linked tariff which is based on actual supply hours, critically depends on feeder wise consumer indexing (because unless there is proper indexing, application of actual supply hours would be digressed from realty) and is likely to take some more time to complete. So the same can not be implemented.

4.8.5 To minimize non technical losses, raids are being conducted to book unauthorized consumers and penalties are being imposed. Open conductor is being replaced with ABC conductor in loss making areas and other punishing action against energy theft are being taken with the help of vigilance agency as well as departmental staff.

Commission' View

4.8.6 With regards to the issue of supply condition, the Commission in its last tariff order had issued hour linked tariff for few categories but licensee instead of implementing the same, preferred to file a review petition before the Commission expressing its difficulties to implement the order, a matter which is still pending with the Commission subsequent to the stay. The licensee must initiate immediate steps to procure more power to mitigate the demand supply gap. Further, the licensees also have to undertake the necessary strengthening and R&M of the distribution networks to reduce losses which would result in higher availability of power for sale to consumers.

4.8.7 Regarding issues of resentment of the consumers for raising tariff and improving efficiency on the part of Discoms, the Commission recognises the electricity 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. Licensee has been taking measures to reduce T&D losses by implementing various schemes like laying Aerial Bunch Conductors etc but the results are far from satisfactory. Moreover the fuel prices have increased, requiring upwards revision of retail tariffs which were almost constant since FY 2004-05. So some kind of tariff hike is imperative even assuming reasonable efficiency in operating parameters of distribution licensees. In fact, the present tariff has been determined on the same loss level of 27.4% of FY 2004-05 though the licensee has claimed the tariff at the loss level of 32% and 28% for FY 2007-08 and FY 2008-09 respectively.

4.9 Security Deposit

Consumer's objection

4.9.1 It was submitted by the consumers regarding the provision of security deposit and interest to be paid by the licensee as under:

- In case of permanent disconnected cases the security deposit amount is adjusted in the final bill.
- The security deposit should be reduced to one month from two months and should exclude the amount of electricity duty
- It was generally complained by consumers that Interest on security deposit is not paid

- In view of Security Deposit equal to 2 months average billing, the consumer have requested that they should be given at least 15 days time for bill payment.

Licensee's Response

4.9.2 The licensee's submitted the following points in response to the submissions made by the consumers:

- In case of permanent disconnection, security amount is adjusted in their final bill.
- Amount of security deposit is charged as per cost data book notified by commission. However, the licensee receives the payment for the energy supplied after two months and thus the amount of security deposit should not to be reduced.
- Interest on consumer's security deposit is adjusted in consumers' bills during the month of April every year.
- Norms specified in distribution code is followed in case of bill payment.

Commission' View

4.9.3 The provisions related to security deposit are dealt in detail in Supply Code 2005 and needs to be followed in same spirit by the licensees and consumers. However if there is any individual grievance of any consumer then the same should be agitated before Consumer Grievance Redressal Forum (CGRF).

4.9.4 As mentioned by the licensee about the adjustment of security, in the month of April every year, the Commission directs the 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.

4.10 Material Procurement

Consumer's objection

4.10.1 The consumer representatives have made a submission that in spite of the Discoms having almost similar geographical profile and region there was a lot a variation in the amounts being spent by the licensees which can be seen by the fact that some discoms have spent a hundreds of Crores of rupees whereas others have spent only a few Crores of rupees for undertaking material procurement. It is difficult to fathom the reason for the same. It was submitted that till the budget for procurement of material for all the companies are not finalized at the central level, the present system of ad-hoc and unnecessary purchases would continue and whose burden would have to be borne by the consumers.

Licensee's Response

4.10.2 The licensees have submitted that the procurement of material by the DisComs depends upon its geographical conditions, no. of consumers, their connected load, no. of expected rate of new connections likely to come in the area and other proposed/expected development activities.

4.10.3 The area like Ghaziabad, Noida, Meerut, Muzzaffarnagar under the PVVNL have progressive industrial and townships development in comparison to other towns, hence will require more investment for strengthening the electrical distribution network for providing satisfactory power supply.

Commission' View

4.10.4 With regards to consumers objection on huge variance of material procurement amongst the licensees, the Commission would like to mention that it approves the Investment plan and the Repairs and Maintenance expenses to be undertaken for the period under consideration in the tariff order for each of the licensees/discoms. Thereafter the licensees need to get the material procurement plan approved from the management and incur the expenditure prudently.

4.11 Power Factor

Consumer's objection

4.11.1 The industrial consumers have made submission in respect of the power factor rebate that though there is no provision of penalty for poor power factor in case of consumer getting billed as per kVAh tariffs, the licensees are imposing penalty of 15% on them for poor power factor. It has also been pointed out that leading kVARh recorded by the TVM/TOD meters are also treated as lagging kVARh for the purposes of billing which actually penalizes the consumer even when they are helping to improve the overall power factor of the system.

Licensee's Response

4.11.2 To this the Licensees have responded by submitting that in case of kVAh billing, there is no provision of low power factor penalty.

4.11.3 As far as kVARh (leading) case is concerned, the matter is being scrutinized as at present there is no provision in the tariff schedule in respect of kVARh (leading) billing. However consumer may be advised to install dynamic reactive power compensation equipment to overcome this problem. If leading kVARh is supplied to our system by any consumer, it will increase the raise the current thereby increasing the internal losses. As such consumer supplying leading kVARh should be advised to restrict their reactive compensation to the desired level only.

Commission' View

4.11.4 The Commission's views on the power factor are very clear and dealt in detail in previous tariff order for FY 2006-07. The same is extracted below for reference :

> *"8.19 Maintaining good power factor is central to efficient consumption, which has been lent serious emphasis under Electricity Act, 2003 which makes categorical punitive provisions under section 139 and 140 in cases of wastage of electricity, even if done negligently. In order to underline the importance of power factor, the Commission has decided to make kVAh tariff essential for all consumers above 25 kW/ 25 BHP having static TVM meters installed at their premises. Further, in order to avoid double disincentive, the Commission has done away with power factor surcharge in cases covered with kVAh billing".*

Accordingly, it is clear that there is no provision of penalty on low power factor under kVAh billing.

4.11.5 As regards the issue of leading power factor, the Commission in the previous tariff order had mentioned the methodology for charging kVAh tariff in rate schedule which is extracted for reference 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 is retained in this order also with the exception of Railway Traction. The provision is clear and self-contained.

4.12 Load Factor Rebate

Consumer's objection

4.12.1 The following submissions were made by the consumers with respect to the Load Factor Rebate:

- The load factor rebate in LMV6 category should be restored as the supply based tariff is not implemented.
- Load Factor Rebate should be increased in comparison to last tariff order and the 11 KV consumers should get more incentive than 33 kV consumers as they get approx 10% less supply
- Load factor rebate should not be withheld considering arrears in respect of Additional Security Deposit, where such additional security deposit has been stayed by Hon'ble High Court in view of the fact that the licensees have not extended the offer of pre paid meter to consumers and Act 2003 provides that consumer is not obliged to pay security deposit in case of installation of pre paid meter.

Licensee's Response

4.12.2 The Licensees have responded to the above query by submitting that Load Factor Rebate for LMV-6 and HV-2 consumers may be introduced for all consumption over 540 kVAh/kVA per month @ 20%, however no rebate to be allowed below this limit.

4.12.3 Furthermore, it was submitted that load factor rebate for the consumers having arrears of Additional Security Deposit where such Additional Security Deposit has been stayed by the Honourable Court may be allowed after decision of the Honourable Court as per provision in the earlier tariff order.

Commission' View

4.12.4 The Commission in its previous tariff order had provided hourly linked tariff which had inbuilt load factor rebate. Since licensees have gone for review and the hourly linked tariff could not be implemented, Commission is now re-introducing the load factor rebate for LMV-6. The details of the same are discussed in tariff design.

4.12.5 Earlier in the tariff order of FY 2003-04, the Commission had taken a conscious decision and it stands by it. Accordingly, the Commission has again re-introduced load factor rebate in LMV-6 from a lower level to encourage efficient utilisation among LMV-6 consumers. In case of HV-2 consumers also, a lower slab has been provided so that consumers at 11 kV who get lesser supply, may also qualify for load factor rebate, if they manage their operations efficiently.

4.12.6 As regards issue of denial of load factor rebate on account of stay on arrears from the court is concerned, the Commission has made this provision so that the revenue of the licensees in the form of arrears is not blocked by consumers by way of stay from the court and simultaneously getting the benefit of rebate also. There is no change in the stand of the Commission and therefore, the same is not allowed.

4.13 Time of Day (TOD) Tariff

Consumer's objection

4.13.1 The consumers submitted that the existing system of rebate of 7.5% in off-peak hours should be continued and penalty/surcharge for peak hour consumption should also be retained at 15% in place of 20% as proposed. Furthermore, the consumers urged that the proposed 2 stage scheme should not be considered and the earlier 3 stage should be continued. At places, there was also a request from the consumers to provide a rebate of (-) 10% on off peak consumption as well as a penalty of (+) 10% for peak hour consumption.

Licensee's Response

4.13.2 The licensees have submitted that due to acute shortage of supply in U.P., there is no surplus supply even during night hours; hence provision of giving rebate during night hours is proposed to be withdrawn. Similarly there is acute shortage of supply during peak hours, hence it has been proposed in the tariff proposal for 2007-08 to increase rate from 15% to 20% as UPPCL has to purchase electricity from central pool at U.I. rates, which are very high.

4.13.3 As Commission is well aware that not only licensee but whole of northern grid is facing acute shortage of power during peak hours and licensee has to resort huge roistering to maintain grid discipline. So to curb this phenomenon, demand penalty has been increased in peak hours and it is justified.

Commission' View

4.13.4 The Commission would like to mention that T.O.D. tariff is to balance the consumption between peak and off-peak period as well as to maintain the grid stability. The Commission disagrees with the proposal of two stage T.O.D. and has retained three stage T.O.D. scheme with 7.5% rebate during off-peak period and 15% penalty on consumption during peak period. In this regard, the Commission has already deliberated this issue of T.O.D. in detail in the previous tariff order for FY 2006-07. The relevant part is reproduced below:

> *"The Commission does not have any consumption history of the consumers in the category in desired detail to assess the revenue impact of the application of TOD rates on the consumers of the category. The Commission has however, reworked the TOD structure and approves a lower premium rate of 15% during the peak hours whereas, the off peak TOD rates have been lowered from (-) 5% to (-) 7.5%. Although there was an argument thrown by the licensee that the State system does not have any significant off peak but the argument does not cut much ice as even if the State system does not have a pronounced off peak still one cannot deny its existence at regional level and licensee can always avail the benefit of purchasing cheap power in the situation through ABT mode."*

The Commission had also issued directives to licensees to submit the details with regards to above but so far licensees have not provided any details to enable the Commission to have a re-look in the matter. Hence the Commission directs the licensees again 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 the TOD rates.

<u>Category Specific:</u>

4.14 LMV – 1

<u>Consumer's objection</u>

4.14.1 The consumers with mixed load and getting a single point supply made a representation that the difference in Bulk Supply Tariff at Single point for Bulk Load is 7% which is significantly less considering the fact that transformation cost and entire network maintenance cost are borne by the consumers and the licensee makes savings in billing & collection expenses. The consumers have accordingly requested for higher reduction in the single point tariff.

4.14.2 There was also anguish among the consumers getting supply through a franchisee/colonizer. They were facing difficulties in redressal of their electricity problems as the licensee was not paying any heed and directing them to the franchisee/colonizer for solutions.

Licensee's Response

4.14.3 The Licensees have submitted that the energy charges are already subsidised wherein tariff category in question (mixed load getting supply at single point) has been reduced so as to enhance collection efficiency. Moreover as per the tariff proposal the differential of 7% is only in case of energy consumption upto 150 units per month otherwise as in case of Bulk consumers' differential is as high as 15% for the consumption above 150 units per month.

Commission' View

4.14.4 With regards to the issue of tariff of supply at single point, the Commission has accepted the licensees' proposal of tariff for Supply at single point for bulk loads, wherein the approved energy charges have been actually reduced from previous year tariff order and demand charges are increased by Rs.5/kW/Month. Hence, Commission feels that significant discount has been given for supply at single point for bulk loads and the issue is addressed accordingly. If the bulk supply tariff is compared to Non-lifeline LMV-1 consumers' tariff, then the bulk supply consumers are getting advantage of approx 70 % & approx 18% in demand charges and energy charges respectively.

4.14.5 As regards the issue of getting supply through franchisee/ coloniser is concerned, the Commission would like to mention that the provisions of Electricity Act, 2003 are very clear on this and though the area is given under franchisee, the licensee is responsible for its obligation towards consumers. Further if the consumers issues still remain unaddressed, they may approach the proper forum i.e. Consumer Grievance Redressal Forum (CGRF) and file a petition against the licensee.

4.15 LMV – 2

Consumer's objection

4.15.1 The Consumer forums in this group made a submission that there was no provision for supply at Single point for bulk loads under this proposed category.

4.15.2 Furthermore, the load for Malls, Commercial centres, etc. drop during the winters due to non – usage of ACs therefore Minimum Charges become twice of actual consumption. Hence provision should be made for having lower minimum charges during winter season.

4.15.3 There was representation made by the consumers that the voltage should also be recorded and reflected with demand in the MRI download as drop in voltage due to licensee's negligence causes demand to increase for which consumer is penalized.

Licensee's Response

4.15.4 The licensee has submitted that at present there is no separate category for single point bulk load in case of commercial consumers and Commission may consider this in tariff proposal. Moreover, minimum charges are levied to recover the infrastructure facility's cost and make energy available to cater the sanctioned load requirement of the consumer. Even if consumer may not be utilizing full load but licensee has to keep ready that much of infrastructure and energy. So there seems no reason for the licensee to lower minimum charges.

4.15.5 Furthermore, the voltage is already recoded in MRI. However low voltage can not result in increased demand as the demand is only based on multiple of current and voltage.

Commission' View

4.15.6 In view of addressing the concern of the commercial consumers and incorporating the suggestions of licensees to provide for separate category for single point for bulk loads, the Commission has decided to introduce a new category for Non-Industrial bulk loads i.e. HV-1. In this category, the non-domestic bulk power consumers with the 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 would be covered. Further 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. The details of this new category is given in rate design and rate schedule. The energy charge under this category is significantly lower than the rate under LMV-2 category. Further the rate of charge of this category is also lower than the rate of HV-2 at same 11 kV voltage level. Hence the issue of single point supply tariff for commercial consumers is addressed by Commission.

4.15.7 With respect to the issue of reduced minimum charges for malls, commercial centers during winter is concerned, the Commission would like to mention that further fine tuning with respect to reducing minimum charges is not possible without proper backup data. This will also lead to multiplicity of rates within the same category. The Commission can consider this issue in next tariff order provided the consumers can substantiate their claim with the back up and proper analysis of load drop data.

4.15.8 As regards to the issue of increase in demand due to drop in voltage and that the voltage and demand be reflected in MRI data, the Commission is satisfied with contention of the licensees that the same is already recorded in MRI and that the low voltage can not result in increased demand as the demand is only based on multiple of current and voltage. However if there are any specific cases the same may be substantiated by supporting documents and the consumer may approach the proper forum for redressal.

4.16 LMV – 6

<u>Consumer's objection</u>

4.16.1 On the proposal of the licensee to create a new sub-category of LMV-6A, there was submission by the consumers that further sub-category of LMV 6(a) should not be created and that the licensee should provide justification for creation of this new sub category. If this category is created then the GoUP should commit to provide appropriate subsidy for this category of consumers.

<u>Licensee's Response</u>

4.16.2 The licensees have submitted that Commission may consider creating new category.

<u>Commission' View</u>

4.16.3 The Commission was not satisfied by the responses of the licensees and therefore decided to continue with its earlier tariff structure for LMV-6 and has not considered licensee's proposal for creating a new sub-category for power loom consumers. Accordingly the issue gets addressed.

4.17 HV – 2

<u>Consumer's objection</u>

4.17.1 There was a submission made by the 11 kV level consumers in this category that the hike in energy charges for them was steep as compared to the 33 kV, 132 kV and higher voltage level consumers in the same category and hence the charges should be rationalised. Furthermore, in their submissions they made a strong opposition to the hike in demand charges proposed by the licensee.

4.17.2 Foundry unit owners made a submission that their using furnace for melting purpose should be treated as separate and not at par with Arc & Induction furnace. It was their contention that for the purposes of determining the contracted demand their load should be taken at 400 kVA/tonne in place of 600 kVA/tonne proposed by the licensee. Licensees were also exhorted to submit the load requirement per tonne for various kinds of furnaces and foundries, as has been directed by the Commission expressly in its tariff order 2006-07.

4.17.3 Also there was considerable discontent in consumers while making further submissions in which they vehemently opposed the tariff hike and submitted that a time frame be developed for elimination of cross subsidy in a phased manner.

4.17.4 The consumers further gave a comparative analysis with respect to other states like Uttaranchal, Haryana and Himachal Pradesh where the HV -2 tariff structure was considerably lower compared to Uttar Pradesh and if the there is further hike it would make them uncompetitive compared to the other states.

Licensee's Response

4.17.5 It was submitted by the Licensee that at present all consumers except LMV-2 category are charged lower than costs of service, even HV-2 category consumers are being subsidized. Furthermore, it was stated that the tariff policy is formulated as per EA-2003 which clearly states that utility may be allowed to charge cost of service besides ensuring the consumers interest. Present rate of charge is not at considerable variance with the rates charge in the other state for this category of consumers; however the tariff has been increased to cover average cost of service. Also, action is being taken to collect data to determine tonnage capacity of furnaces from field units and suitable action will be taken in this regard.

Commission' View

4.17.6 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 are significantly lower than what was proposed by the licensees at 11 kV voltage level. Furthermore the Commission has retained the existing

T.O.D. structure. Hence it can be concluded that Commission, has restricted the tariff for 11 kV consumers, thereby resolving their grievance.

4.17.7 With respect to the issue of foundry units tariff and load requirement study, the Commission is in agreement with consumer's submission and expresses its displeasure that so far no study on load requirement per tonne in case of Arc & Induction furnace has been undertaken by licensee on this front. Further, the consumers have also not submitted any authenticated study report to support their contentions of reducing demand per tonne. Hence Commission once again directs the licensees to comply with the previous year tariff order directive within one month from the date of the tariff order. In view of the same, Commission retains its status-quo and does not want to alter any structure till the required study report is submitted.

4.17.8 As regards to the issue of elimination of cross subsidy, the Commission agrees to the contentions of the licensees that the tariff of HV-2 category is less than the average cost of supply. The tariff rates for HV-2 category are different for consumers at different voltage levels. If load factor rebate and TOD tariffs are applied on the energy charges of HV-2 tariff, then the actual tariff comes below the average cost of service. Hence, the contention of HV-2 consumers that they are subsidising other consumers is incorrect. Further, the Commission has given a directive to the licensees for submission of cost of service study report.

4.18 Railways

Consumer's objection

4.18.1 Railways in its submission have urged that the tariff to consumer categories should be linked to category wise Cost of Supply and has demanded that the Discoms should determine category-wise Cost of Service.

4.18.2 The Railways have mentioned that the Discoms are not required to invest any additional amount to provide power to Railways as the transmission lines, sub-stations are built, maintained and operated by Railways in addition to other investment on undertaking reliability measures and providing capacitor banks for improvement of power factor. Further it was submitted that to improve power factor and in the process of supplying leading kVARh to the system during low load situations, they should not be penalised as leading kVARh is beneficial for UPPCL Discoms in reducing system losses also. The railways also stated that till the entire system is not getting into a leading power factor condition, consumers should not be penalised by considering leading kVARh for calculation purpose of power factor & kVAh. In case leading kVARh is not to be blocked, railways will have to make arrangements for providing Dynamic Reactive Power Compensation (DRPC) equipment, which is the only solution to avoid leading kVARh in different load conditions. The methodology of Dynamic Power factor compensation have losses – 16.25 W/kVARh against 2.3 W/kVARh in fixed capacitor banks and thus to conserve precious energy Dynamic Power factor compensation is not called for when UPPCL grid is operating at lagging power factor. Railways have also cited their cases from other States and have requested that lead-lag logic should not be implemented as it is against national interest, till the entire system continues to be lagging.

4.18.3 Railways have mentioned that since major investments works are carried out by them and also due to the fact that the demand charges in other States are lower than UPPCL rates, the high demand charges proposed by Discoms are not justified and should be re-visited.

4.18.4 Railways have submitted that sometimes their load fluctuates owing to various factors like supply interruptions, public agitations, accidents etc leading to bunching of trains in a particular zone, which cause maximum demand to exceed for a short span of time. It is due to such circumstances beyond the controls of railways, penalty charges at high rates are levied. The railways requested that the clause of penalty charges be withdrawn from traction tariff or else, a reasonable cushion of atleast 25% of Contract demand, be permitted over & above the contract demand for a short duration of 15 minutes before applying the clause of load violation charges.

4.18.5 The Railways have requested for incentives against timely payments as is the practise followed in other states and utilities like NTPC.

4.18.6 Railways have stated that the reliability index and performance norms are required to be defined and have proposed that there has to be linkage of the same with the Tariff.

4.18.7 Other suggestions on various issues:

- Issue of consolidated single bill to Railways;
- Alternatively, a system of payment at a flat rate based on last years consumption and reconciliation at a later stage;
- Time bound schedule for release of new connections / enhancement of load and revision of contract demand;
- Time limit of 15 days for changing defective meter to avoid recovery of average charges;

♦ Service connections for electrification of level crossing gates and railway stations to be provided within shortest possible time frame and at a reasonable cost.

Licensee's Response

4.18.8 The licensees have submitted that at present there is no provision to calculate cost of Service as the Hon'ble Commission did not approve the same submitted in previous two ARR submissions. However in tariff determination of a particular category, main considerations are load, nature of use, purpose of use, demand and quantum of energy required. As far as present tariff of railways is concern it is already less than cost of service and not at all subsidizing any other category of consumer. Hike in the tariff has been proposed to bring the tariff of railways at par with the cost of service.

4.18.9 In this matter it is to submit that even tariff of Railways is being subsidized i.e. tariff is lower than average CoS. So it is necessary to hike the tariff at least to cover average CoS. Here it may also be noted that tariff of railways has already been rationalized as the rate of demand charges as well as energy charges proposed in present tariff proposal are less than what railways has been paying upto November, 2004 (Tariff Order for FY 2004-05).

4.18.10 On various other issues raised by Railways, licensees have responded as under:

- The billing shall be done on the total simultaneous maximum demand created at all points of supply at any point of time during the month.
- Further for determination of power factor, only lag-logic shall be used and no power factor surcharge shall be levied if leading power factor is recorded (power factor measurement to be blocked at unity).
- Licensee has also submitted that for billing purpose only, import mode of energy and maximum demands shall be taken into accounts.

4.18.11 The licensees admit that though the railways have constructed their own substation and lines, UPPCL/DisComs have invested a lot of capital on creating the H.T. transmission network for railways to facilitate their supply requirement and UPPCL/Discoms also have to maintain the same. The hike in energy and demand charges has been proposed to compensate the increase in input cost of energy as well as cost of maintenance of lines and substations.

4.18.12 The licensees have submitted that the contention of railways to withdraw penalty charges on maximum demand due to fluctuations beyond their control is not acceptable. Licensees have stated that railways may evaluate their maximum demand in every eventuality and enter into the agreement for the load accordingly to avoid levy of excess demand charges.

4.18.13 Further the following points were clarified by the licensees:

- Incentive against timely payment is already structured in tariff and in proposed tariff no change has been proposed.
- The provision for supply index and performance, time bound release of new connections, replacement of defective meters are already determined by the UPERC in Electricity Supply Code (Distribution) and hence needs no separate provision in tariff.
- Railways are being given single bill for the traction supply. As far as single bill to domestic, commercial and industrial connections, it is not practical because these connections are scattered all over the state and various Distribution Divisions are issuing the bills against individual connection and accounting for energy billed under their jurisdiction. Railways may opt for getting category wise single bill for all its connections under one Distribution Division.
- UPERC has already approved "Cost Data Book" for the consumer and new service connection to railway crossing gates and stations are to be provided as per the provisions of the Code 2005 and "Cost Data Book".

Commission' View

4.18.14 With respect to the issue of category wise cost of service and to restrict rise in demand charges, the Commission would like to mention that it has extended the tariff of HV-2 category to railways and the tariff is definitely not above average cost of service. Further the National Tariff Policy mandates for achieving the objective of progressively reducing tariff and keeping it within the limit of +/- 20% of the average cost of service of electricity. The Commission has analysed the rates for railways, where average cost of service as a whole for all categories for FY 2008-09 has increased by 25% over previous year approved Cost of Service for FY 2006-07. The average cost of service for FY 2008-09 is Rs. 4.06 per unit against Rs. 3.24 per unit of FY 2006-07. As against this the demand charges for railways below 132 kV level has increased by approx 12% whereas energy charges have increased by mere 1.50% over previous year tariff order. Therefore, Commission finds it reasonable and the revision in demand charges is justified as the same is also within the limits mandated in National Tariff Policy.

4.18.15 As regards to the issue of lead-lag logic, the Commission would like to refer the provision of the rate schedule for the clarification of the same as under:

> *"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.* ***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 i.e. Railway traction and shall be treated as unity i.e. for Railway Traction lag+lead logic of the meter should not be used and lag only logic of the meter should be provided which blocks leading kVARh treating leading power factor as unity and registers instantaneous kWh as instantaneous kVAh in case of leading power factor."***

Accordingly, the issues raised by the Railways on lead-lag logic are attempted to be settled by Commission.

4.18.16 In case of issue of additional charges for maximum demand in excess of the contract demand, the Commission would like to mention that such type of fluctuating demand even though for a very short period of time, sprains the system. The Commission would like to reiterate the provision for charges for exceeding demand charges as given in previous year tariff order for FY 2006-07 that ***'Single penalty for exceeding contracted demand within 10% of the contracted demand, thereafter double penalty'***. Hence the Commission has provided some cushion for such fluctuations in demand. Further fine tuning of such specific issues of each consumers would be difficult to address.

4.18.17 The Commission on this issue of timely payment has already clarified its view in its last few orders, that the incentives for timely payment can not be provided. The Commission had stated 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 Discoms in future filings, the same may be considered by the Commission."

4.18.18 The other issues related to provision of supply index and performance, time bound release of new connection, replacement of defective meters etc are clearly provided in the Supply Code and need not be specified again in tariff order.

4.19 Bulk Supply to MES

Consumer's objection

4.19.1 The consumers have made submissions requesting to remove the ambiguity and make rules for uniform charges of electricity for MES department who supply the electricity to the entire defence installations whether situated inside cantonment area or outside cantonment area. Further it was requested to issue necessary instructions and amendment of rules to LMV-4 para 1(d) so that MES be placed under LMV-1 para 1(c) (i) (b) as usual so that two separate tariffs are not paid to KESCO.

Licensee's Response

4.19.2 KESCO has submitted that the billing of MES (mixed load) aroused after inception of 4.A.1(d) for LMV-4A tariff w.e.f. 13.08.2007 for GE/MES electricity connection situated outside cantonment area. Earlier the tariff applicable to MES/Defence installation having mixed load were under LMV-1 and LMV-4(A) category. KESCO has submitted that for installation like MES (mixed load) the applicability of tariff is different in respect of Defence installation situated within cantonment area and outside cantonment area; and hence Commission may introduce necessary provisions for the same as requested by MES.

Commission' View

4.19.3 The Commission has addressed this issue of two separate tariffs for outside cantonment area and inside cantonment area by making provision of LMV-1 tariff for MES having mixed load and the rate for Cantonments (mixed load without any restriction) and any other defence installation out side cantonments with predominantly domestic load (domestic load more than 50%). The tariff for other installations would be specifically as per the load and the voltage level to which the consumer is connected. Hence the issue of MES is addressed accordingly by the Commission.

4.20 List of Attendees

4.20.1 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 - X.

Table 4-2: List of Individuals and Organisations

List of Organisations/Consumers who have submitted objections in writing		
Sr No.	Name	Organisation and Address
1	Abhishek Srivastava	CCEA, Lucknow
2	Abhishek Srivastava	Consumer Guild, Bar Association State Commission U.P.
3	Arvind Raj Sharma,	Industrial Area Manufacture's Accociation, Ghaziabad
4	Avdhesh Kumar Verma	President, UP, Rjya Vidyut Upbhokta Parisad
5	Bhusan Steel	Sahibabad
6	Bijon Mishra	Executive Director, Voice & CCEA
7	C.L.Dhir	General Secretary, Sahibabad Industries Association, Sahibabad
8	C.P.Agrawal	Managing Director, Ghorakhpur
9	D.P.Pal	President, U.P. Vidyut Pensioner's Mandal, Lucknow
10	D.S. Rajput	President Express Garden Residents Welfare Association, Ghaziabad
11	Daljeet Singh	Prayas Energy Grup
12	Dharmendra Kumar	Advocate, Nagar Vikas Sangharsh Samiti
13	Dinesh Beri	Chairman, Young Rural Industries Association, Ghaziabad
14	District Magistrate	Sultanpur
15	Dr. Chandra Bhanu	Jagrati Walfare Socity, Lucknow
16	Dr. Kuldeep Saxena	President, Indian Medical Association, Kanpur Branch.
17	Executive Vice President	Uttar Pradesh Steels, Nara, Mansurpur, Muzaffar Nagar
18	Gaurav Mathur	Divisional Electrical Engineer (TRD) N. Railway, Lucknow
19	Harichandra Mishra	Rajendra Nagar Sector-5, Walfare Association, Sahibabad
20	Honest Consumers	Meerut
21	Iftikhar Ansari	Uttar Pradesh Power Loom cConference
22	Jahiruddin Ansari	Bunkar Coucil Tanda Distt. Ambedkar Nagar(UP)
23	K.G.Puri	S.E., EUDC, Noida
24	Kamlesh Singh	Ward Member, No. 53, Mahanagar, Allahabad
25	Kripa Sanker	Deputy Director, Indian Institute of Technplogy Kanpur
26	L.A. Khan	E.E., EUDD-II, Ghaziabad
27	Lok Kalyan & Vidhik Sakcharta Samiti	Kanpur
28	Mahendra Swarup	President, Cold Storage Association Uttar Pradesh
29	Murli Agrawal	Pilibhit Cold Storae, Pilibhit
30	N.S. Hanspal	Chairman, Energy Group, IIA
31	Navneet Jindal	Gallantt ispat Limited, Ghorakhpur
32	Omprakash	Chief Electrical Distribution Engineer, N.C. Railway, Allahabad
33	P.K. Singhal	Vice president Services, Ansla Housing Construction Ltd.

List of Organisations/Consumers who have submitted objections in writing		
Sr No.	Name	Organisation and Address
34	P.K.Maskara	President Chamber of Industries, Ghorakhpur
35	P.P Sharma	President, Raj Nagar Residents Welfare Association, Ghaziabad
36	Parmesh Kumar Mishra	Cawnpore Kapra Committee, Kanpur
37	Pradanya Phagare	Prayas Energy Grup
38	Pratap Singh	Secretary, Krishana Nagar Senior Citizen's Welfare Society, Lucknow
39	President	Federation of Muzaffarnagar Commerce & Industry
40	R.K.Jain	Secretary, Western U.P. Chamber of Commerce & Industry
41	Rajeev Agrawal	Executive Member, National Chamber of Industries & Commerce, U.P
42	Rajiv Goel	Director, Rimjhim Ltd., Kanpur
43	Rama Shanker Awasthi	301, Surabhi Deluxe Appartment, Dalibagh, Lucknow.
44	Ram Sunder	Vikas Nagar
45	Ramit Malhotra	Teri School
46	Ravi Agrawal	Civil Lines, Agra
47	Ravi Gupta	Jagriti, NGO
48	S.C. Jain	Member, Association of Steel Rolling Mills & Furnace, Muzaffar Nagar
49	S.P. Khanna	President, Janhit Manch, Lucknow
50	Shri Praksh Kharey	President, Laghu Udyoug Bharti, Kanpur
51	Sudhir Chandra Goyal	Chairman Electricity Committee, Indian Industries Association
52	Sumit Chatterjee	Dy. Manager, Sahara, India, Lucknow
53	V.K. Mittal	UP State Vice President, UP. Udyog Vyapar Pratinidhi Mandal
54	Vijay Kapoor	Chairman, Kanpur Industrial Development Co-operative Estate Ltd.
55	Vijay Mohan Singhal	Gayatri Vanee, Ghajiabad
56	Vijay Pandey	President, Kanpur Udyoug Vyapar Mandal
57	Yogesh Kr. Agrawal	Director, Global Smelters Ltd. Fazalganj, Kanpur.

Chapter 5. ANALYSIS OF DISCOMS ARR FOR FY 2007-08 & FY 2008-09

5.1 Introduction

5.1.1 The Commission has analysed the Aggregate Revenue Requirement (ARR) petitions submitted by the licensees for approval of ARR/Tariff determination of Wheeling and Retail Supply Tariffs for FY 2007-08 and FY 2008-09. The ARR as submitted by the licensees and the rationale used for the same are already discussed in the Chapter 3. A brief overview of the ARR petitions for both the years is shown in the table below:

Table 5-1: Summary of ARR petitions FY 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	FY2007-08 (Petition)	FY2008-09 (Petition)
Power Purchase Expenses (incl PGCIL charges)	12,993.78	13,713.99
Other Costs	3,977.64	4,545.01
Gross Expenditure	**16,971.42**	**18,259.00**
Add: Reasonable Return /Return on Equity	-	-
Less: Non Tariff Income	71.56	76.24
Annual Revenue Requirement (ARR)	**16,899.86**	**18,182.76**
Less: GoUP Subsidy	1,522.00	1,522.00
Net Annual Revenue Requirement (ARR)	**15,377.86**	**16,660.76**
Revenue from Existing Tariffs	**10,358.00**	**11,566.00**
Revenue Gap	**5,019.86**	**5,094.76**

5.1.2 The discoms in the original filing for FY 2007-08, dated 4th October, 2007, had envisaged a consolidated revenue gap for all the four discoms taken together of Rs. 5121 Crores. The discoms had also referred to the same gap in the response to deficiency letter issued by the Commission and had proposed a revised proposal to meet the envisaged revenue gap. However, in the ARR filing for FY 2008-09, the discoms have presented a revenue gap of Rs. 5020 Crores for the FY 2007-08 on account of changed estimate for revenue from sale of power. The Commission has considered the subsequent information submitted by the licensees.

5.1.3 However before elaborating the exercise of ARR/Tariff determination of the distribution companies, the Commission would like to mention that licensees have not submitted any tariff proposal for FY 2008-09. In their submissions, the licensee have submitted that the revenue gap for FY 2008-09 shall be met through the additional revenue from the tariff proposal submitted with ARR for FY 2007-

08, additional subsidy from GoUP (under consideration) and any additional revenue from proposed tariff for FY 2008-09 which shall be submitted before Hon'ble Commission later. The Commission would like to place on records its strong view that till date the licensees have not submitted any tariff proposal for FY 2008-09. In this context the Commission in line with its stand taken during the issue of the Tariff Order for FY 2006-07 would also like to clarify that any short fall in revenues or excess revenues will have to be adjusted against the Government support and the Commission shall not take into account any such gap for computation of tariffs in the future years.

5.1.4 As per the requirement of the UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulation 2006, the ARR of the distribution licensee has to be segregated into Wheeling and Retail Supply Business. Till complete segregation of accounts between Wheeling and Retail Supply Business, licensees were required to prepare the ARR proposals for wheeling and retail supply business based on an allocation statement prepared to the best judgement of the licensees. The elements to be allocated into wheeling and retail supply business have been determined in the Tariff Regulations. Licensees have however, not submitted the allocation statement even when specifically asked for, through the deficiency note. The licensees have deviated from the principles of allocation of expense components as specified in the Tariff Regulations and submitted the ARR as follows:

Table 5-2: Wheeling and Retail ARR petitions FY 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	Wheeling Business - ARR		Retail Business - ARR	
	FY 2007-08	FY 2008-09	FY 2007-08	FY 2008-09
Power Purchase Expenses (incl PGCIL charges)	-	-	12,993.78	13,713.99
Transmission Charges - Intra state	-	-	1,015.34	1,271.62
O & M Expenses	1,210.07	1,448.55	-	-
Interest charges	553.66	331.15	-	-
Depreciation	891.54	1,129.65	-	-
Provision for Bad & Doubtful debts	-	-	133.47	144.04
Provision for Contingency Reserve	-	-	-	-
Return on Equity	-	-	-	-
Other Expenses (Int on WC, Fin Chgs, Discount to Consumer, Int on Security Deposit)	-	-	173.57	219.99
Annual Revenue Requirement (ARR)	**2,655.27**	**2,909.35**	**14,316.16**	**15,349.64**
Less: Non Tariff Income	*33.96*	*36.69*	*37.60*	*39.55*
Less: GoUP Subsidy	-	-	*1,522.00*	*1,522.00*
Net Annual Revenue Requirement (ARR)	**2,621.31**	**2,872.66**	**12,756.56**	**13,788.09**

5.1.5 In the current chapter, the Commission has determined and approved the ARR of the licensees for FY2007-08 & FY 2008-09 and has elaborated upon the approach followed for the same in line with the Tariff Regulations.

5.2 Base Year

5.2.1 The 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.

5.2.2 Further, as per the provisions of the Regulation, the "Base year" means, the first year of tariff determination under the regulations. While in this particular instance, the Commission would be undertaking the process of approval of the Annual Revenue Requirements of the Discoms and Transco for two financial years i.e. FY 2007-08 and FY 2008-09, the Tariff determination process would be undertaken only for the FY 2008-09 under these Regulations. Hence, though the first year of tariff determination under the Regulations is FY 2008-09, FY 2007-08 would be considered as the "Base Year" for all purposes as it is the first year in which the Annual Revenue Requirements are been determined/approved as per the provisions of the Regulations.

5.2.3 For the purpose of projecting the expenses and other elements of the ARR for FY 2008-09 as per Tariff Regulations, the Commission has considered FY 2007-08 as the base year. The opening balances considered for FY 2007-08 are based on closing balances of actual unaudited/approved figures of FY 2006-07.

5.2.4 The licensee has provided the actual unaudited data for FY 2004-05, FY 2005-06 and FY 2006-07 in the tariff filing formats. However, discrepancies were observed between the information submitted in the provisional accounts and filing formats. The Commission directed the Licensee to submit the reasons for such variations. The licensees vide letter no. 334/RAU/ARR & Tariff 2008-09 dated 14th March 2008 responded to the Commission's queries in this regard. The same has been discussed in the section 2.4 of Chapter 2. In view of the licensees' submission, the Commission has taken a view and considered the information for past years available in the ARR / Tariff filing as the basis for determination of future costs.

5.2.5 The Commission has not undertaken true-up of any of the past years as the licensees have not requested for it and also the annual accounts of the licensees have not been audited from FY 2003-04 onwards. Availability of the audited annual accounts is one of the prime requirements for undertaking true-up in the true sense of the word.

5.3 Power Purchase

5.3.1 The Distribution Tariff Regulations issued by the Commission state 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. The Commission in line with the philosophy adopted in the last tariff order has opined that in view of acute power crisis prevailing in the State, the licensee shall procure all the power that becomes available to it from different sources at reasonable rates.

5.3.2 The licensees 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.

5.3.3 Subject to the assumptions considered, the licensees have drawn a merit order schedule for procuring 56,428 MUs and 58,328 MUs of power for FY 2007-08 and FY 2008-09 respectively.

5.3.4 The Commission has also run the merit order schedule for both the years considering the availability of power and monthly sales trend given by the licensee. Since there is a shortage of power in the state, Commission has approved all power purchase quantum estimated by licensees subject to Merit order despatch principles.

5.3.5 The power purchase expense is the single largest component in the ARR of a distribution company. Hence it is imperative that this element of cost is estimated with utmost care based on the most efficient way of procuring power from the generating stations through long term/short term arrangements or through bilateral purchase agreements.

5.3.6 **Power Procurement from State Generating Stations**

5.3.6.1 The State of Uttar Pradesh has got both thermal as well as hydro generating stations. The total power available to the State from the State Thermal Generating Stations is 4197 MW and that from State Hydro Stations is 526.10 MW both for FY 2007-08 and FY 2008-09. 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).

5.3.6.2 The Commission has issued separate multi-year tariff orders for the period FY 2005-06 to FY 2007-08, for UPRVUNL (order dated 13.03.2007) and UPJVNL (order dated 22.03.2007) for their different power stations.

5.3.6.3 The variable cost of power procured/to be procured by the Discoms from these power stations has been considered as proposed in the petitions for both the years.

5.3.6.4 The fixed cost for the FY 2007-08 is considered as per the tariff order dated 13.03.2007 and for FY 2008-09 the fixed cost is escalated by inflation index on O&M component only.

5.3.6.5 The other fixed costs i.e. Income tax, Incentives are allowed as submitted by the licensees for both years. A summary of approved costs of Thermal and Hydro generating stations is given in the table below:

Table 5-3: Approved Cost of Power Purchase from UPRUVNL Stations FY2007-08

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	3786	179.17	0.93	351.47	530.64
Anpara B	1000	6830	643.43	1.03	702.14	1,345.57
Harduagunj	275	693	89.69	2.52	174.61	264.30
Obra A	442	1304	113.01	1.34	175.27	288.28
Obra B	1000	3833	192.41	1.00	382.51	574.92
Panki	210	822	55.17	1.79	147.54	202.71
Parichha	220	854	56.78	1.24	106.29	163.07
Parichha Extn.	420	2291	299.64	0.99	226.08	525.72
Total	**4197**	**20413**	**1,629.30**	**1.11**	**2,265.91**	**3,895.21**

Table 5-4: Approved Cost of Power Purchase from UPRUVNL Stations FY2008-09

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	3844	182.23	0.93	356.85	539.08
Anpara B	1000	6383	647.80	1.03	656.96	1,304.76
Harduagunj	275	1054	91.65	2.50	263.94	355.59
Obra A	442	1417	115.32	1.33	188.22	303.53
Obra B	1000	2797	197.63	1.00	279.71	477.33
Panki	210	823	56.41	1.77	145.48	201.89
Parichha	220	971	57.91	1.25	121.55	179.46
Parichha Extn.	420	2678	301.68	0.99	265.83	567.51
Total	**4197**	**19968**	**1,650.63**	**1.14**	**2,278.54**	**3,929.17**

Table 5-5: Approved Cost of Power Purchase from UPJVNL Stations FY 2007-08

Source of Power	MW Available	MU Procurement	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. / kWh)	Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Khara	72	345	21.80	0.00	0.00	21.80
Matatila	30	123	3.79	0.00	0.00	3.79
Obra (Hydel)	99	250	7.10	0.00	0.00	7.10
Rihand	300	690	16.23	0.00	0.00	16.23
U.G.C. Power station	22	22	4.13	0.00	0.00	4.13
Belka & Babail	0	3	-	2.25	0.73	0.73
Sheetla	4	10	-	3.39	3.23	3.23
Total	**526**	**1443**	**53.06**		**3.96**	**57.02**

Table 5-6: Approved Cost of Power Purchase from UPJVNL Stations FY 2008-09

Source of Power	MW Available	MU Procurement	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. / kWh)	Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Khara	72	260	22.02	0.00	0.00	22.02
Matatila	30	100	3.94	0.00	0.00	3.94
Obra (Hydel)	99	175	7.38	0.00	0.00	7.38
Rihand	300	490	16.86	0.00	0.00	16.86
U.G.C. Power station	22	25	4.30	0.00	0.00	4.30
Belka & Babail	0	11	-	2.25	2.48	2.48
Sheetla	4	8	-	3.39	2.78	2.78
Total	**526**	**1069**	**54.51**		**5.25**	**59.76**

5.3.6.6 The Commission based on the information submitted by the licensees in the petition and information available in the tariff orders for state generating stations has approved Rs. 3952.24 Crores for FY 2007-08 and Rs. 3988.93 Crores for FY 2008-09 as the power purchase cost from State Power Stations.

5.3.7 Obligatory Purchase from State Co-generation Facilities

5.3.7.1 The Commission had issued the UPERC (Terms and Conditions for Supply of Power and Fixation of Tariff for sale of power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005 as effective from 28.07.2005 and unless reviewed earlier or extended by the Commission, was to remain in force for a period of five years.

5.3.7.2 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 7.5 % of their total power purchase requirement from the co-generating stations available in the State. Based on availability of such power, licensees have projected procurement of 713 MUs and 1425 MUs for FY 2007-08 and FY 2008-09 respectively.

5.3.7.3 The percentage of this power to the total power procurement is around 1.50% - 2.50% which is very less as compared to the level specified by the Commission in the regulation referred to at 5.3.7.1 above. The licensees should make all efforts to procure more power from Co-generation and renewable sources may be through competitive bidding process to promote renewable generation. The Commission has accepted the total cost of such power at Rs.218.21 Crores for FY 2007-08 and Rs.436.05 Crores for FY2008-09.

Table 5-7: Approved Power Purchase from State Co-Gen Facilities

Year	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
		(Rs. Cr.)	(Rs./ kWh)	(Rs. Cr.)	(Rs. Cr.)
FY 2007-08	713	0	3.06	218.21	218.21
FY 2008-09	1425	0	3.06	436.05	436.05

5.3.8 Power Procurement from Central Generating Stations

5.3.8.1 The power procurement from Central Generating Stations (CGS) includes power from NTPC, NHPC, NPC, Eastern Region and other Joint Ventures/IPP. The allocated share to UP from various Central Sector Plants for FY 2007-08 is as per NREB allocation w.e.f. 04.04.07 and for FY2008-09 the allocation is as per NRPC allocation w.e.f. 28.10.07 (inclusive of unallocated share also). The share of UP State in these Central Generating Stations based on allocation quota for both the years is given below:

Table 5-8: Allocated Generation Capacity to UP Discoms - CGS

Station Name	Installed Capacity (MW)	FY 2007-08 UP Share (MW)	FY 2008-09 UP Share (MW)
NTPC			
Anta	419	105	104
Auriya	663	228	226
Dadri Thermal	840	84	84
Dadri Gas	830	259	257
Rihand-I	1000	359	682
Rihand II	1000	329	0
Singrauli	2000	820	814
Tanda	440	440	440
Unchahar I	420	254	465
Unchahar II	420	143	0
Unchahar III	210	63	0
Farakka	1600	27	43
Kahalgaon	840	91	118
Talchar	1000	14	14
Kahalgaon St.II Ph.I	1000	100	112
Koldam (Hydro)	200	0	47
NHPC			
Chamera	540	110	109
Chamera-II	300	74	73
Dhauliganga	280	65	64
Salal I&II	690	48	48
Tanakpur	94	21	21
Uri	480	96	96
Dulhasti	390	94	97
Sewa-II	80	24	16
Parbati-II	400	0	80
NPC			
NAPP	440	152	151
RAPP	400	71	70
JV & IPP			
Nathpa Jhakri	1500	254	251
VishnuPrayag	400	352	352
Tala Power	1020	300	300
Tehri Hydro	1000	396	394
Co-Generation	0	0	0
Others	0	0	0

5.3.8.2 The assumptions considered by licensees for projecting the cost of power purchase from CGS thermal power generating stations are detailed out as under:

- The variable costs of CGS thermal plants and other plants for FY 2007-08 have been taken from the energy bills for the month of March 2007 and for FY 2008-09 have been taken from September 2007 energy bills. The variable cost is inclusive of Fuel Price Adjustment (FPA).
- The fixed cost has been taken from various tariff orders issued by CERC.
- The tariff for Narora Atomic Power Station has been taken as Rs. 1.92 / kWh as stated vide their letter no. NPCIL/COMML/2005-06/27 dated 3rd January 2006.
- The income –Tax, Incentives etc. have been taken from the energy bills for the month of March 2007 bills and mentioned under head 'Other Fixed Charges'.
- The tariff for new power station Kahalgaon Stage II phase I has been taken as Rs.2.59/kWh.

5.3.8.3 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 order of CERC and other fixed costs have been considered from the actual energy bills for the month of March 2007.
- Tariff for the new Hydro plants Commissioned in FY 2006-07 and to be Commissioned in FY 2008-09 has been taken as below:

Table 5-9: Tariff for New Hydro Plants

Power Station	FY 2007-08	FY 2008-09
Dulhasti	Rs.3.50/kWh	-
Tehri Stage -I	Rs.3.50/kWh	-
Tala Power	Rs.1.84/kWh	-
Vishnu Prayag	Rs.2.60/kWh	-
Parbati-II	-	Rs.3.37/kWh
Sewa-II	-	Rs.2.79/kWh
Koldam	-	Rs.2.85/kWh

5.3.8.4 Commission has considered the variable cost for NTPC power stations for both the years as per the September 2007 bills. The variable cost comprises of Energy Charges and Fuel Price Adjustment (FPA) and has been adjusted to compensate for the Inter - State Transmission losses in line with the submission by the licensees.

5.3.8.5 Similarly, the Commission has approved the variable cost for NHPC, NPC and others for both the financial years as proposed by licensees.

5.3.8.6 The Commission has considered the fixed costs for all the NTPC and NHPC power stations from the approved tariff orders issued by CERC for the period 01.04.04 to 31.03.09. Accordingly the fixed cost is computed considering capacity allocation (UP's share as per September 2007 bills) for FY 2007-08 and FY 2008-09. The fixed cost for NPC and other power stations is considered as submitted by the licensees.

5.3.8.7 The licensees have also submitted the details of 'Other Fixed Costs' i.e. Income Tax, Incentives etc for NTPC and NHPC based on March 2007 bills which are allowed for FY 2007-08 and FY 2008-09 by the Commission.

5.3.9 **Power Procurement from Other Sources**

5.3.9.1 The licensees have projected the energy procurement from other sources/emergency purchase of 3648 MUs for FY 2007-08 @ Rs.4.85/kWh and 3919 MUs for FY 2008-09 @ Rs.5.05/kWh. The cost projected is significantly higher than the average cost of power purchase of Rs. 2.24/kWh and Rs.2.29/kWh for FY 2007-08 and FY 2008-09 respectively as stated by the licensees in their submission.

5.3.9.2 The Commission has analysed the historical trend of such purchases undertaken by the licensee in the past and for the FY 2007-08 upto February 2008. Based on the same, the Commission has reassessed the rate for Power purchase from emergency sources at Rs. 4.74/kWh and Rs. 4.92/kWh for FY 2007-08 and FY 2008-09 respectively.

5.3.9.3 Further, the Commission would like to state that the licensees 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.

5.3.9.4 The Commission directs the Discoms to adopt a transparent procedure based on competitive bidding for procuring power on short term basis also.

5.3.9.5 The power purchase quantum available in MW terms from CGS is considered as per licensees' submission for projection purpose. The details of power purchase in quantum and costs are indicated in the given table for both the years:

Table 5-10: Approved Power Purchase Cost FY 2007-08

Source of Power	MW Available	MU Procurement	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. / kWh)	Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Procurement of power from State Sector Generating Stations						
Thermal Stations						
Anpara A	630	3786	179.17	0.93	351.47	530.64
Anpara B	1000	6830	643.43	1.03	702.14	1,345.57
Harduagunj	275	693	89.69	2.52	174.61	264.30
Obra A	442	1304	113.01	1.34	175.27	288.28
Obra B	1000	3833	192.41	1.00	382.51	574.92
Panki	210	822	55.17	1.79	147.54	202.71
Parichha	220	854	56.78	1.24	106.29	163.07
Parichha Extn.	420	2291	299.64	0.99	226.08	525.72
Sub total - Thermal	**4197**	**20413**	**1,629.30**	**1.11**	**2,265.91**	**3,895.21**
Per unit Avg Rate of Thermal Generation						**1.91**
Hydro Stations						
Khara	72	345	21.80	0.00	0.00	21.80
Matatila	30	123	3.79	0.00	0.00	3.79
Obra (Hydel)	99	250	7.10	0.00	0.00	7.10
Rihand	300	690	16.23	0.00	0.00	16.23
U.G.C. Power station	22	22	4.13	0.00	0.00	4.13
Belka & Babail	0	3	-	2.25	0.73	0.73
Sheetla	4	10	-	3.39	3.23	3.23
Sub total - Hydro	**526**	**1443**	**53.06**		**3.96**	**57.02**
Per unit Avg Rate from hydro generating stations						**0.40**
Procurement of power from Central Sector Generating Stations						
Chamera	110	452	48.29	0.00	0.00	48.29
Chamera-II	74	370	94.26	0.81	30.12	124.38
Dhauliganga	65	259	-	1.83	47.36	47.36
Salal I&II	48	240	5.53	0.63	15.17	20.70
Tanakpur	21	104	11.82	0.00	0.00	11.82
Uri	96	534	78.67	0.81	43.48	122.16
Dulhasti	94	226	-	3.50	79.03	79.03
Sewa-II	24	39	-	2.79	10.88	10.88
Sub-total NHPC	**533**	**2224**	**238.57**	**1.02**	**226.05**	**464.62**
Anta	105	715	35.07	2.10	150.12	185.19
Auriya	228	1678	76.41	2.07	347.55	423.95
Dadri Thermal	84	663	34.65	1.66	109.80	144.46
Dadri Gas	259	1851	111.34	2.54	470.86	582.20
Rihand-I	359	2516	195.19	0.97	244.49	439.68
Rihand II	329	2566	170.45	0.98	252.22	422.67
Singrauli	820	5613	211.68	0.86	484.31	695.99
Tanda	440	2957	259.97	1.88	555.50	815.47
Unchahar I	254	1951	133.53	1.38	269.61	403.14
Unchahar II	143	1051	63.73	1.38	144.78	208.52
Unchahar III	63	423	40.97	1.39	58.73	99.70
Farakka	27	172	18.73	1.27	21.86	40.59
Kahalgaon	91	649	45.18	1.41	91.70	136.88
Talchar	14	98	5.69	0.76	7.46	13.15
Kahalgaon St.II Ph.I	100	178	23.26	1.41	25.21	48.47
Sub-Total NTPC	**3318**	**23079**	**1,425.84**	**1.40**	**3,234.21**	**4,660.06**
NAPP	152	565	-	1.92	108.17	108.17
RAPP	71	347	-	2.83	98.33	98.33
Sub-Total NPC	**223**	**912**	**-**	**2.27**	**206.50**	**206.50**
Nathpa Jhakri	254	1262	18.40	2.35	296.34	314.74
VishnuPrayag	352	1451	34.26	2.36	342.25	376.51
Tala Power	300	184	0.00	1.84	33.86	33.86
Tehri Hydro	396	1038	0.00	3.50	363.03	363.03
Co-Generation	0	713	0.00	3.06	218.21	218.21
Others	0	3711	-	4.74	1,757.65	1,757.65
Sub-Total IPP/JV & Others	**1302**	**8358**	**52.66**	**3.60**	**3,011.34**	**3,064.00**
Grand Total of Power Purchase	**10099**	**56428**	**3,399.44**	**1.59**	**8,947.98**	**12,347.43**

Table 5-11: Approved Power Purchase Cost FY 2008-09

Source of Power	MW Available	MU Procurement	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. / kWh)	Variable Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Procurement of power from State Sector Generating Stations						
Thermal Stations						
Anpara A	630	3844	182.23	0.93	356.85	539.08
Anpara B	1000	6383	647.80	1.03	656.96	1,304.76
Harduagunj	275	1054	91.65	2.50	263.94	355.59
Obra A	442	1417	115.32	1.33	188.22	303.53
Obra B	1000	2797	197.63	1.00	279.71	477.33
Panki	210	823	56.41	1.77	145.48	201.89
Parichha	220	971	57.91	1.25	121.55	179.46
Parichha Extn.	420	2678	301.68	0.99	265.83	567.51
Sub total - Thermal	**4197**	**19968**	**1,650.63**	**1.14**	**2,278.54**	**3,929.17**
Per unit Avg Rate of Thermal Generation						**1.97**
Hydro Stations						
Khara	72	260	22.02	0.00	0.00	22.02
Matatila	30	100	3.94	0.00	0.00	3.94
Obra (Hydel)	99	175	7.38	0.00	0.00	7.38
Rihand	300	490	16.86	0.00	0.00	16.86
U.G.C. Power station	22	25	4.30	0.00	0.00	4.30
Belka & Babail	0	11	-	2.25	2.48	2.48
Sheetla	4	8	-	3.39	2.78	2.78
Sub total - Hydro	**526**	**1069**	**54.51**		**5.25**	**59.76**
Per unit Avg Rate from hydro generating stations						**0.56**
Procurement of power from Central Sector Generating Stations						
Chamera	110	452	48.90	0.85	38.52	87.42
Chamera-II	74	370	94.08	0.85	31.51	125.59
Dhauliganga	65	284	42.63	0.85	24.16	66.79
Salal I&II	48	240	5.60	0.65	15.46	21.07
Tanakpur	21	104	11.82	0.85	8.85	20.67
Uri	96	534	71.65	0.85	45.49	117.14
Dulhasti	94	466	123.40	0.85	39.70	163.10
Sewa-II	24	31	-	2.79	8.76	8.76
Parbati-II	0	63	-	3.37	21.15	21.15
Sub-total NHPC	**533**	**2544**	**398.09**	**0.92**	**233.59**	**631.68**
Anta	104	723	35.32	2.10	151.72	187.04
Auriya	226	1545	76.95	2.07	319.95	396.90
Dadri Thermal	84	633	35.07	1.66	104.81	139.88
Dadri Gas	257	1583	102.34	2.54	402.69	505.04
Rihand-I	682	2771	196.82	0.97	269.30	466.12
Rihand II	0	2389	168.82	0.98	234.82	403.64
Singrauli	814	5776	215.50	0.86	498.41	713.91
Tanda	440	2986	258.29	1.88	560.95	819.24
Unchahar I	465	1951	134.82	1.38	269.61	404.43
Unchahar II	0	1061	63.95	1.38	146.23	210.18
Unchahar III	0	472	40.06	1.39	65.53	105.58
Farakka	43	285	18.99	1.27	36.24	55.23
Kahalgaon	118	712	45.78	1.41	100.72	146.50
Talchar	14	105	5.66	0.76	7.96	13.61
Kahalgaon St.II Ph.I	112	381	44.94	1.41	53.85	98.79
Koldam (Hydro)	47	45	-	2.85	12.76	12.76
Sub-Total NTPC	**3405**	**23417**	**1,443.30**	**1.38**	**3,235.55**	**4,678.85**
NAPP	151	565	-	1.92	108.21	108.21
RAPP	70	315	-	2.76	87.04	87.04
Sub-Total NPC	**221**	**880**	**-**	**2.22**	**195.24**	**195.24**
Nathpa Jhakri	251	1244	18.40	2.35	292.52	310.92
VishnuPrayag	352	1774	182.52	0.97	171.43	353.95
Tala Power	300	184	-	1.84	33.86	33.86
Tehri Hydro	394	1645	243.27	2.50	411.39	654.66
Co-Generation	0	1425	-	3.06	436.05	436.05
Others	0	4177	-	4.92	2,055.95	2,055.95
Sub-Total IPP/JV & Others	**1296**	**10450**	**444.19**	**3.25**	**3,401.21**	**3,845.40**
Grand Total of Power Purchase	**10178**	**58328**	**3,990.72**	**1.60**	**9,349.39**	**13,340.11**

5.3.9.6 The total power purchase cost (excluding PGCIL Charges) approved by the Commission is Rs. 12347.43 Crores for FY 2007-08 and Rs. 13340.11 Crores for FY 2008-09.

5.3.9.7 The Commission in its Distribution Tariff Regulations section 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."

Commission would like to stress on the point 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 UPPCL should take due care while overdrawing power from the grid; especially when the UI rates are high. The Commission would like to caution the licensees 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 licensee would have to bear that cost for the same.

5.4 Transmission and Distribution Losses

5.4.1 The licensees have projected a distribution loss 28% for FY 2007-08 and 24% for FY 2008-09. The Transmission losses estimated by the licensees for FY 2007-08 and FY 2008-09 are 6.0% and 5.6% respectively. The aggregate losses (T&D) as estimated by the licensees work out to 32% and 28% for FY 2007-08 and FY 2008-09 respectively. These levels of losses are higher than the 27.4% T&D loss level approved by the Commission in FY 2006-07.

5.4.2 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.

5.4.3 The licensee in the FY 2006-07 ARR petition submitted that due to various constraints during transitional period of reform, the targets seem to be unrealistic and cannot be achieved. 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 in consultation with the licensees themselves. The observations of the Commission from the FY 2006-07 Tariff Order in this regards 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."***

5.4.4 The licensees have also provided a multi-year distribution loss trajectory upto FY 2011-12 with the target for distribution losses in FY 2011-12 at 20%. However, the trajectory submitted by the licensees is not supported by any concrete plan for loss reduction or rationale and is neither supported by any loss studies being undertaken by the licensees. In absence of the same, the basis of the projections is not justifiable.

5.4.5 Further, the 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 under supervision of the Commission or the study may be initiated by the Commission itself. The relevant section of the regulations states the following:

> *"3.2 Energy Loss*
> *…..3. To set the base line of distribution loss estimate, the Commission may either require the licensee to carry out proper loss estimation studies for*

assessment of technical and commercial losses under its supervision, or initiate a study itself.

4. The study shall segregate voltage-wise distribution losses into technical loss (i.e. Ohmic/Core loss in the lines, substations and equipment) and commercial loss (i.e. unaccounted energy due to metering inaccuracies/inadequacies, pilferage of energy, improper billing, no billing, unrealized revenues etc.).

5. The Commission shall based on the opening loss levels as derived from the above study, fix targets both long term and short term, for loss reduction to bring down the distribution losses (both technical and commercial) gradually within the acceptable norms of efficiency."

5.4.6 In view of the above, 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 within 6 months from the date of the issue of this tariff order. However, 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. This would ensure that the requirements of the Commission and direction in which the licensees are proceeding converge. Further, on completion of the loss estimation study, the Licensees should submit the report for perusal of the Commission.

5.4.7 The Commission would like to reiterate that, in the future, any Transmission & Distribution loss proposal of the licensees is liable to be rejected unless and until based on correct energy audit data. Obviously, to comply with such requirement licensees will have to install meters at all the interface points as well as the distribution transformers and feeders. The Licensees are directed to report the status of the metering at the above mentioned interfaces within 1 month from the date of issue of the order 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 to the Commission on a monthly basis along with reasons for deviation from the plan, if any.

5.4.8 In absence of any study being undertaken and availability of reliable base line information, the Commission has no other option but to set the loss targets for the years in consideration based on some interim basis. The Tariff Regulation also provides for such an interim measure. The relevant section of the regulations is outlined below:

"3.2 Energy Loss

6. Till such time the results of such a study become available, the Commission shall consider loss levels based on licensees proposal, the effort put in by the licensee for reducing the losses viz-a-viz desirability of such efforts, reality prevailing in the ground as well as achieved loss levels of similarly placed utilities within the State or other States. Based on the above considerations the long-term trajectory for distribution losses as specified in the first Tariff Order issued under these regulations shall be considered for determination of the ARR of the Distribution licensees for the future years.

Considering the present power deficit situation, the calculation of the financial losses due to non-achievement of Distribution Loss targets will be based on the sales not achieved due to the excess Distribution Losses. Any profit on account of over achievement of Distribution loss target shall be shared between the distribution licensee and the consumers as specified in Clause 4.11 of these regulations."

5.4.9 In view of the above, the Commission approves the Distribution losses for both FY 2007-08 and FY 2008-09 at the same level as approved in FY 2006-07. The Transmission losses are also retained at the same level as FY 2006-07 i.e. at 5%. The details of the Discom wise T&D losses are as given below:

Table 5-12: Approved T & D Losses for FY 2007-08 & FY 2008-09

	Agra	Meerut	Lucknow	Varanasi	Consolidated
Distribution Losses (%)	25.4%	18.4%	25.4%	22.8%	**23.4%**
Transmission Loss (%)	5.0%	5.0%	5.0%	5.0%	**5.0%**
T&D Loss (%)	**29.1%**	**22.4%**	**29.1%**	**26.7%**	**27.4%**

5.4.10 Further, as required under the regulations, the long-term trajectory for distribution losses has to be provided by the Commission in the first tariff order issued under the regulation. However, at present, there is no basis to determine the long term trajectory for distribution losses in absence of any data or reports. The trajectory submitted by the licensee in the ARR petition is also not backed by any concrete study or plan and is in substantial deviation from the trajectory given by the Commission earlier. In view of the same, it would not be appropriate for the Commission to determine a loss trajectory for the long-term in this order. Based on the studies to be undertaken by the Licensee for estimating the loss levels in the state, the Commission would come out with a long term trajectory for distribution losses in the next tariff order or through a separate order as deemed fit.

5.5 Energy Balance

5.5.1 The Commission has already approved the total power purchase requirement of 56428 MUs and 58328 MUs for FY2007-08 and FY2008-09 respectively. As mentioned in the above section, the Commission has considered the same loss levels for both the years.

5.5.2 Based on the approved power purchases from various sources and after applying the approved level of losses, the Commission has assessed the sales of 41745 MU for FY 2007-08 and 43152 MU for FY 2008-09 respectively. These sales estimates are higher than those estimated by the licensee on account of the lower loss levels approved by the Commission. As has been discussed previously, in view of the deficit situation in the state, the Commission has approved the entire power purchase estimated by the licensees in FY 2007-08 and FY 2008-09.

Table 5-13: Approved Energy Balance for FY 2007-08 and FY 2008-09

Particulars	FY 2007-08 Petition	FY 2007-08 Approved	FY 2008-09 Petition	FY 2008-09 Approved
Purchases Required (MUs)				
Agra	14,866	12,039	15,253	12,595
Lucknow	10,829	9,922	10,882	10,194
Meerut	17,179	18,271	17,896	18,842
Varanasi	13,554	13,028	14,298	13,391
Bulk	-	3,168	-	3,306
Sub-Total	**56,428**	**56,428**	**58,328**	**58,328**
Transmission Losses (%)				
Transmission Losses	**6.03%**	**5.00%**	**5.60%**	**5.00%**
Input into Discoms at T<>D Interface (MUs)				
Agra	13,970	11,437	14,399	11,965
Lucknow	10,176	9,426	10,273	9,684
Meerut	16,143	17,357	16,894	17,900
Varanasi	12,737	12,377	13,498	12,722
Bulk Sales to KESCO and NPCL	0	3,010	0	3,141
Sub-Total	**53,026**	**53,607**	**55,064**	**55,411**
Distribution Losses (%)				
Agra	27.5%	25.4%	23.0%	25.4%
Lucknow	25.4%	18.4%	24.3%	18.4%
Meerut	27.3%	25.4%	23.0%	25.4%
Varanasi	30.0%	22.8%	25.0%	22.8%
Sub-Total	**27.6%**	**23.4%**	**23.7%**	**23.4%**
Consumer Sales (MUs) - Excluding Bulk Sales				
Agra	10,128	8,538	11,087	8,932
Lucknow	7,591	7,696	7,777	7,907
Meerut	11,736	12,946	13,009	13,351
Varanasi	8,916	9,556	10,123	9,822
Sub-Total	**38,371**	**38,735**	**41,996**	**40,011**

5.5.3 Accordingly the Discom wise power purchase requirement and approved sales are as given in the table below:

Table 5-14: Approved Energy Requirement for FY 2007-08

(MUs)

Particulars	Meerut	Agra	Lucknow	Varanasi	Bulk	Total
Energy Sales (Excl. Bulk Supply)	12,946	8,538	7,696	9,556		**38,735**
Distribution Loss	25.4%	25.4%	18.4%	22.8%		23.4%
Energy Input to Discom (Incl. Bulk Supply)	17,357	11,437	9,426	12,377	3,010	**53,607**
Transmission Loss	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Energy Input Before Transmission	18,271	12,039	9,922	13,028	3,168	**56,428**
Power Purchase (MU)	**18,271**	**12,039**	**9,922**	**13,028**	**3,168**	**56,428**

Table 5-15: Approved Energy Requirement for FY 2008-09

(MUs)

Particulars	Meerut	Agra	Lucknow	Varanasi	Bulk	Total
Energy Sales (Excl. Bulk Supply)	13,351	8,932	7,907	9,822		**40,011**
Distribution Loss	25.4%	25.4%	18.4%	22.8%		23.4%
Energy Input to Discom (Incl. Bulk Supply)	17,900	11,965	9,684	12,722	3,141	**55,411**
Transmission Loss	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Energy Input Before Transmission	18,842	12,595	10,194	13,391	3,306	**58,328**
Power Purchase (MU)	**18,842**	**12,595**	**10,194**	**13,391**	**3,306**	**58,328**

5.5.4 Based on the above approved energy requirement the Discom wise and category wise approved sales for FY 2007-08 and FY 2008-09 is given below:

Table 5-16: Approved Sales for FY 2007-08

Summary FY 2007-08	Sales (Approved) - (MU)				
	Meerut	Agra	Lucknow	Varanasi	Total
LMV 1: Domestic Light, Fan and Power	4,850	3,247	3,829	3,924	**15,850**
LMV 2: Non-Domestic Light, Fan and Power	848	728	644	824	**3,043**
LMV 3: Public Lamps	126	87	167	62	**442**
LMV 4: Public/Private Institutions	307	430	481	577	**1,795**
LMV 5: Private Tubewells	1,804	1,224	632	870	**4,531**
LMV 6: Small and Medium Power	719	514	358	383	**1,975**
LMV 7: Public Water Works	198	209	199	267	**873**
LMV 8: State Tubewells	239	377	484	688	**1,789**
LMV 9: Temporary Supply	22	25	24	3	**74**
LMV 10: Department Employees/Pensioners	40	32	38	33	**144**
HV 2: Large and Heavy Power	3,792	1,263	737	983	**6,775**
HV 3: Railway Traction	0	276	29	449	**754**
HV 4: Lift Irrigation Works	0	106	65	494	**665**
Sub-Total	**12,946**	**8,518**	**7,689**	**9,555**	**38,708**
Bulk and Extra Supply	394	2,635	7	1	**3,037**
Total	**13,340**	**11,153**	**7,696**	**9,556**	**41,745**

Table 5-17: Approved Sales for FY 2008-09

Summary FY 2008-09	Sales (Approved) - (MU)				
	Meerut	Agra	Lucknow	Varanasi	Total
LMV 1: Domestic Light, Fan and Power	5,086	3,520	3,948	4,055	**16,608**
LMV 2: Non-Domestic Light, Fan and Power	856	765	672	851	**3,144**
LMV 3: Public Lamps	124	93	168	61	**446**
LMV 4: Public/Private Institutions	305	463	503	641	**1,912**
LMV 5: Private Tubewells	1,775	1,235	631	855	**4,496**
LMV 6: Small and Medium Power	722	511	374	384	**1,990**
LMV 7: Public Water Works	205	213	201	284	**903**
LMV 8: State Tubewells	241	387	476	694	**1,798**
LMV 9: Temporary Supply	25	26	24	3	**77**
LMV 10: Department Employees/Pensioners	40	32	39	34	**145**
HV 2: Large and Heavy Power	3,972	1,294	772	1,011	**7,048**
HV 3: Railway Traction	0	265	28	441	**734**
HV 4: Lift Irrigation Works	1	111	63	508	**682**
Sub-Total	**13,351**	**8,914**	**7,899**	**9,821**	**39,985**
Bulk and Extra Supply	394	2,764	7	1	**3,167**
Total	**13,745**	**11,678**	**7,907**	**9,822**	**43,152**

5.6 Annual Revenue Requirement for FY 2007-08 and FY 2008-09 for DISCOMS

The Commission has analysed all the components of the Aggregate Revenue Requirement (ARR) submitted by the licensees to provide suitable values for each component, for each year under consideration. As per the UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulations 2006 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. However for approving the O&M expenses for ensuing year, the Tariff Regulations has provided formula of an escalation Index which is mentioned below before analysing the other cost elements.

5.7 Escalation Index

5.7.1 The Commission has suggested formulation of an escalation index linked to WPI and CPI as notified by the Central Government for different years in its UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006. As per above 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 4.16% for approving the ARR for FY 2008-09 over the base year i.e. FY 2007-08. These indices would be used to estimate the Operation and Maintenance expenses. The working of the inflation index is given in the table below:

Table 5-18: Inflation Index for FY2008-09

Month	Wholesale Price Index			Consumer Price Index		
	2006	2007	2008	2006	2007	2008
Jan	196	209	0	119	127	134
Feb	196	209	0	119	128	0
Mar	197	210	0	119	127	0
Apr	199	212	0	120	128	0
May	201	212	0	121	129	0
Jun	203	212	0	123	130	0
Jul	204	214	0	124	132	0
Aug	205	214	0	124	133	0
Sep	208	215	0	125	133	0
Oct	209	215	0	127	134	0
Nov	209	216	0	127	134	0
Dec	208	0	0	127	134	0
Average	**203**	**195**	**0**	**123**	**131**	**134**
Inflation			**3.25%**			**5.51%**
Weighted Average (CPI 40%: WPI 60%)						**4.16%**

WPI - http://eaindustry.nic.in CPI - http://labourbureau.nic.in/indtab.html

5.8 Power Purchase

5.8.1 The power purchase quantum as well as costs approved by the Commission for FY 2007-08 and FY 2008-09 has already been discussed under section 5.3 above.

The Commission has approved Rs. 12347.43 Crores for FY 2007-08 and Rs. 13340.11 Crores for FY 2008-09 excluding PGCIL charges.

5.9 Transmission & SLDC Charges

5.9.1 Inter State Transmission Charges

5.9.1.1 The inter-state transmission charges payable by the licensees to PGCIL as projected by the licensees for FY 2007-08 is Rs.329 Crores and for FY 2008-09 are Rs.346 Crores. The Commission accepts the transmission charges payable to PGCIL as filed by the licensees for both the years.

5.9.2 Intra State Transmission Charges

5.9.3 The intra-state transmission charges approved by the Commission are Rs. 0.19/kWh for FY 2007-08 and Rs. 0.22/kWh for FY 2008-09. Based on the same, the estimated transmission charges payable by the discoms for FY 2007-08 are Rs. 1025.39 Crores (inclusive of charges payable on behalf of the M/s KESCO and M/s NPCL). In case of FY 2008-09, the estimated transmission charges payable by the Discoms for power purchase for sale to retail consumers (excluding sale to M/s KESCO and M/s NPCL) is Rs. 1127.38 Crores. The SLDC charges are embedded in the intra-state transmission costs approved by the Commission for both the years. M/s KESCO, M/s NPCL and all the 4 Discoms shall pay the transmission charges payable directly to UPPTCL at the above mentioned rate based on the monthly billing by UPPTCL. The details regarding the approval of the Transmission ARR is dealt with in the subsequent chapter.

5.10 O&M Expenses

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

5.10.2 The regulation 4.3 of the Distribution Tariff Regulation issued by the Commission 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).."*

5.10.3 The regulation also provides for bringing the O&M expenses of the utilities to an efficient level i.e. in equivalence to the similarly placed utilities. The regulation also provides for the Commission to fix up norms based on circuit kilometers 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.

5.10.4 However, the Commission is of the 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. This study also has to be backed by audited information for the past which needs to be made available by the licensees. Only then the true picture if the trend in the O&M expenses may emerge. Till any such norm for O&M expenditure is determined, the Commission is considering the individual elements of O&M expenditure based on the past trend for the base year FY 2007-08 and for FY 2008-09 based on inflation linked increases. In addition to the approval of the cost for the years in consideration based on CAGR for past and escalation based on inflationary indices, an additional O&M expenses @ 2.5% of the additions to GFA during the previous year are being allowed for FY 2008-09.

5.10.5 **Employee Expenses**

5.10.5.1 The employee expenses for the FY 2007-08 have been forecasted by the licensees on FY 2005-06 provisional balance sheet and expenses for FY2008-09 are based on FY 2006-07 actual unaudited accounts. The assumption made by the licensees for forecasting the employee expenses are detailed out as under:

- Basic Salaries for FY09 is estimated based on 5% increase due to new recruitment and 1% decrease due to retirement with over all increase of 5% due to annual increase in basic salary. For FY08 as Govt. has increased retirement age; projection has been made keeping in view annual increments, pay scale revision & induction programme.
- Dearness Allowance (DA) is estimated to be 29.25% for FY2007-08 and 49 % for FY2008-09
- 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 are assumed to be .01% & 0.2%of Basic Pay respectively.
- Staff welfare expenses are assumed to in same ratio as actually incurred in FY08.
- Employee Expenses Capitalized has been calculated as 15% of total Employee Costs, although the capitalization rates actually used by the DisComs in FY06 have varied. This has been forecasted due to continuous hiring practice adopted by licensee.

5.10.5.2 As discussed in the preceding section 5.10.4, the Commission is contemplating approval of the elements of the O&M expenses based on past trends and future estimation linked to inflationary hike. Based on the above mentioned provision, in absence of Discom-wise information for last 5 years, the Commission has considered past trend of last three years of actual unaudited data provided in filing formats to arrive at a CAGR growth of 6.4%. The gross employee cost for the "Base year" (FY 2007-08) has been arrived at by applying this escalation rate over the actual unaudited cost for FY 2006-07. Further, the employee cost for FY 2008-09 has been estimated by applying an escalation factor of 4.16% (inflation index) over the cost approved for FY 2007-08. The Commission thus approves the gross employee cost of Rs.810.77 Crores and Rs.866.76 Crores for FY 2007-08 and FY 2008-09 respectively. As mentioned in section 5.10.4, the Commission has allowed an additional 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. 22.30 Crores for FY 2008-09 and is included in gross employee expenses mentioned above.

5.10.5.3 Further, the Licensees have capitalized Employee expenses @ 15% of the total employee expenses. In this context the Commission would like to reiterate that the licensees need to have a clear policy of capitalization of salaries & wages and suggests that the licensees appoint a reputed firm to suggest an appropriate policy on capitalization of salaries & wages.

5.10.5.4 A comparison of the capitalised employee expenses allowed by various regulatory commissions in other states shows that the capitalisation % used for projection by the licensees in U.P. is much higher than that observed in other states. The Comparative table of capitalisation amount and percentage for other states/private utilities is as given below:

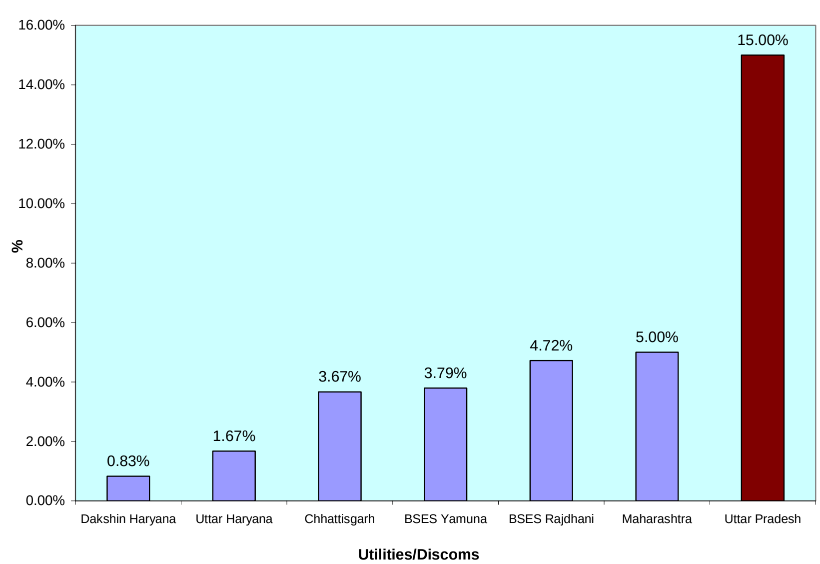
Table 5-19: Summary of employee expenses capitalisation

Utility/Discom	Employee Expenses		
	Gross Expenses (Rs.Crs)	Capitalisation Amount (Rs.Crs)	Capitalisation %
Dakshin Haryana	203.87	1.69	0.83%
Uttar Haryana	303.46	5.08	1.67%
Chhattisgarh	408.04	14.96	3.67%
BSES Yamuna	111.52	4.23	3.79%
BSES Rajdhani	143.30	6.76	4.72%
Maharashtra	1,655.17	82.76	5.00%
Uttar Pradesh	866.76	130.01	15.00%

Source: SERC Tariff orders FY 2007-08

5.10.5.5 The graphical representation of the above mentioned information is as under:

Figure 1: Employee Capitalisation - Other States



5.10.5.6 Though the capitalisation % is higher, for the purposes of this tariff order, Commission has accepted the same. This is consistent with the approach adopted by the Commission in its last Tariff Order for FY 2004-05 and FY 2006-07. The approved net employee expense (after capitalization) accordingly becomes Rs. 689.15 Crores for FY 2007-08 and Rs. 736.75 Crores for FY 2008-09.

Table 5-20: Approved Employee Expenses for FY 2007-08

(Rs. Crores)

Discom	Employee Expenses - FY 2007-08					
	Petitioner			Commission		
	Gross Employee Expenses	Employee Expenses Capitalized	Net Employee Expenses	Gross Employee Expenses	Employee Expenses Capitalized	Net Employee Expenses
Agra	169.47	25.42	144.05	160.13	24.02	136.11
Lucknow	229.26	34.39	194.87	215.98	32.40	183.59
Meerut	219.24	32.89	186.36	205.85	30.88	174.97
Varanasi	241.00	36.15	204.85	228.80	34.32	194.48
Total	**858.97**	**128.85**	**730.13**	**810.77**	**121.61**	**689.15**

Table 5-21: Approved Employee Expenses for FY 2008-09

(Rs. Crores)

Discom	Employee Expenses - FY 2008-09					
	Petitioner			Commission		
	Gross Employee Expenses	Employee Expenses Capitalized	Net Employee Expenses	Gross Employee Expenses	Employee Expenses Capitalized	Net Employee Expenses
Agra	199.97	29.99	169.98	171.71	25.76	145.95
Lucknow	270.47	40.57	229.90	230.97	34.65	196.32
Meerut	258.58	38.79	219.79	219.05	32.86	186.19
Varanasi	284.36	42.65	241.71	245.04	36.76	208.29
Total	**1,013.38**	**152.00**	**861.38**	**866.76**	**130.01**	**736.75**

5.10.5.7 The Commission in the previous tariff order had directed the licensees to undertake a fresh actuarial valuation study. The study being adopted for the purposes of estimating employers' contribution towards pension and gratuity are outdated and therefore require revalidation. The Commission is once again disappointed with the licensee's delaying attitude and directs the licensees to submit the study report within six months from the date of issue of the tariff order. However, the licensees are 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.

5.10.6 Administration and General Expenses (A & G Expenses)

5.10.6.1 The expense figures submitted under this head by the licensees are based on provisional accounts of the respective licensees for FY 2006-07. The licensees have submitted that A&G expenses are forecasted to increase by only inflation index per year to offset the effect of inflation.

5.10.6.2 The Commission observes that the major element in the A&G expense is electricity expenses forming roughly 50% of the cost. The second element forming 15-18% is the billing and collection expenses which the licensees have submitted are on account of outsourcing activities. The growth seen in these elements is very steep over the years and may not continue at the same rate in the future years.

5.10.6.3 The Commission approved the gross A&G expenses for the "Base year" (FY 2007-08) by applying an escalation rate, arrived at by considering the CAGR after smoothening the impact of one time expenses for the past, over the actual unaudited cost for FY 2006-07. The gross A&G cost for FY 2008-09 has been approved by considering a normative increase linked to inflation indices over the cost approved for FY 2007-08.

5.10.6.4 Hence, for the purpose of this Tariff Order, the Commission has calculated growth based on last three years actual unaudited data and averaging out the high cost elements like electricity expenses, billing and collection expenses, regulatory expenses and fees and subscription. Based on the same, the assessed CAGR for the period is 8.95%. This growth rate is applied over the FY 2006-07 actual unaudited expenses for approving FY 2007-08 expenses which is the "Base Year".

5.10.6.5 The expenses for FY 2008-09 are approved with an increase of 4.16% over the "Base Year "expenses to offset the inflationary impact.

5.10.6.6 The Commission thus approves A&G expenses (before capitalization) of Rs. 112.13 Crores as against Rs. 108.82 Crores projected by the licensees for FY 2007-08 and Rs. 119.89 Crores against Rs. 119.76 Crores for FY 2008-09. As mentioned in section 5.10.4, the Commission has allowed an additional O&M expenses @ 2.5% of the additions to assets during the previous year. Portion of the same is allocated to the A&G expenses which is Rs. 3.10 Crores for FY 2008-09 and is included in gross A&G expenses mentioned above.

5.10.6.7 For the purposes of this tariff order, capitalization @15% of the total A&G expenses as proposed by the licensees has been accepted by the Commission.

This is consistent with the approach adopted by the Commission in its last Tariff Order for FY 2004-05 and FY 2006-07.

5.10.6.8 The Commission thus approves the net A&G expenses (after capitalisation) of Rs. 95.31 Crores as against Rs.92.50 Crores projected by the licensees for FY 2007-08 and Rs. 101.91 Crores against Rs. 101.79 Crores proposed by the licensees for FY 2008-09. The discom wise approved cost for FY 2007-08 and FY 2008-09 is provided in the table below:

Table 5-22: Approved A&G expenses for FY 2008-09

(Rs. Crores)

Discom	A&G Expenses - FY 2007-08					
	Petitioner			Commission		
	Gross A&G Expenses	A&G Expenses Capitalized	Net A&G Expenses	Gross A&G Expenses	A&G Expenses Capitalized	Net A&G Expenses
Agra	25.70	3.85	21.85	26.49	3.97	22.51
Lucknow	37.22	5.58	31.64	38.39	5.76	32.63
Meerut	24.60	3.69	20.91	25.34	3.80	21.54
Varanasi	21.30	3.19	18.10	21.92	3.29	18.63
Total	**108.82**	**16.32**	**92.50**	**112.13**	**16.82**	**95.31**

Table 5-23: Approved A&G expenses for FY 2008-09

(Rs. Crores)

Discom	A&G Expenses - FY 2008-09					
	Petitioner			Commission		
	Gross A&G Expenses	A&G Expenses Capitalized	Net A&G Expenses	Gross A&G Expenses	A&G Expenses Capitalized	Net A&G Expenses
Agra	28.39	4.26	24.13	28.40	4.26	24.14
Lucknow	40.37	6.06	34.31	41.05	6.16	34.90
Meerut	27.33	4.10	23.23	26.96	4.04	22.92
Varanasi	23.67	3.55	20.12	23.47	3.52	19.95
Total	**119.76**	**17.97**	**101.79**	**119.89**	**17.98**	**101.91**

5.10.7 Repairs and Maintenance (R&M) Expenses

5.10.7.1 The Lucknow Discom and Meerut Discom have estimated the R&M expenses for FY 2007-08 and FY 2008-09 as 3.5% of opening GFA while Varanasi Discom and Agra Discom have estimated it as 3.25% of opening GFA for distribution assets in the corresponding year. This was also the methodology adopted by the Commission in the previous tariff order(s).

5.10.7.2 The Commission in its previous tariff order had approved the R&M expenses as 2.50% of opening GFA. However the Commission has observed that there is a major rise of 64% in the total expenditure for FY 2006-07 over FY 2005-06 on account of Plant and Machinery and Lines, Cables Network etc. The Licensees have reasoned that the sudden increase in the costs is on account of increase in capital expenditure, resulting in additional assets. Moreover inadequate maintenance due to wants of funds caused frequent tripping and power failure, resulting in discontent among consumers which further affected the revenue realization. Hence it was essential to provide sufficient funds for R&M activities.

5.10.7.3 However, the Commission is of the opinion that the rise is substantial and cannot be used as the basis for approval of the future costs. Further, as discussed under section 5.10.4, the Commission would be adopting the methodology of approving the costs based on past trends which have to be determined after excluding any abnormal variation during the preceding years. In absence of any information regarding any such specific abnormal variation, the Commission has computed the growth over the past three years considering Commission's approved figure for FY 2006-07 instead of actual unaudited and approved expenses for FY 2006-07. The cost for FY 2007-08 which is the "Base Year" has been derived by escalating the Commission's approved figure for FY 2006-07 using the derived growth rate.

5.10.7.4 The expenses for FY 2008-09 are approved with an increase of 4.16% over the "Base Year" expenses to offset the inflationary impact. As mentioned in section 5.10.4, the Commission has allowed an additional 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. 6.74 Crores for FY 2008-09 and is included in gross R&M expenses mentioned above.

Table 5-24: Approved R&M Expense for FY 2007-08 and FY 2008-09

(Rs. Crores)

Discom	FY 2007-08		FY 2008-09	
	Petitioner	Approved	Petitioner	Approved
Agra	84.84	51.34	104.97	55.05
Lucknow	92.73	56.85	118.35	60.79
Meerut	108.53	79.38	127.22	84.47
Varanasi	101.34	60.81	134.83	65.12
Total	**387.45**	**248.38**	**485.37**	**265.44**

5.10.7.5 The Commission considers repairs & maintenance expenses as critical and this approval for the expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudency check with regards to the spending in R&M works over the year.

5.10.8 **O&M Expenses on additions to assets during the year**

5.10.8.1 In addition to the employee, A&G and R&M expenses approved by the Commission in preceding paragraphs, the regulations provide for additional O&M expenses on additions to assets during the year. The regulation 4.3 (3) of the Tariff Regulations is reproduced below:

> *"…..(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). "*

5.10.8.2 Based on the above, the approved additional O&M expenses for FY 2008-09 are Rs. 32.14 Crores. 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.

5.10.9 **Summary of the O&M Expenses for the Discoms**

5.10.9.1 Based on the above, the net approved O&M expenses is Rs. 1032.84 Crores and Rs. 1104.10 Crores for FY 2007-08 and FY 2008-09 respectively. The O&M expenses for FY 2008-09 are inclusive of additional expenses of Rs. 32.14 Crores.

5.10.9.2 The licensees should make efforts to bring down the O&M expenses to an efficient level i.e. in equivalence with similarly placed efficient utilities.

5.10.9.3 Further, the Commission is of the view that licensees should try to bring efficiency into the system, thereby, reducing the burden of inefficiencies onto the consumers of UP state. The Commission also 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.

5.10.9.4 The Commission expects the licensees to improve its performance considering the repetitive nature of O&M works and introduction of new technologies. The Commission may review the base year cost in the future based on availability of audited information and justifications for taking up the expenses.

5.11 GFA balances and Capital Formation assumptions

5.11.1 The Commission in its last tariff order for the FY 2006-07 had approved the gross fixed assets (GFA) of Rs. 9772.56 Crores as on 31st March 2007 for the Discoms together. However, as per the provisional accounts for FY 2006-07, the closing GFA is Rs. 11371.68 Crores which is accepted by the Commission for the purpose of this tariff order. However, the same would be subject to changes at the time of true-up for the year based on audited accounts.

5.11.2 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 2006-07 will be subject to true-up once audited accounts are finalized.

5.11.3 The Commission has scrutinized the investment plan and assets capitalization as submitted by the Discoms. The licensees have considered investments of Rs. 2925.50 Crores in FY 2007-08 and Rs.4796.40 Crores in FY2008-09 for consolidated Discoms which include works under various schemes like RGGVY/ Rural Electrification, APDRP, distribution works and others. However, the licensees have not submitted any details of the activities to be undertaken under the broad heads identified in investment plans. Without the necessary information made available to it, the Commission is not in a position to undertake prudence check as far as the investment plan in concerned.

5.11.4 Based on the information available, the Commission has not considered investments to the extent funded by grants (Rs. 626.48 Crores for FY 2007-08), as they are not eligible for depreciation as per the Accounting Standard – 12 for "Accounting for Government Grants" issued by the Institute of Chartered Accountants of India.

5.11.5 The investments proposed under APDRP & System Improvements for FY 2007-08 and FY 2008-09 are approved as proposed by licensees.

5.11.6 The investments proposed to be carried out under Deposit works for FY 2008-09 amounting to Rs.250 Crores are also approved by the Commission.

5.11.7 The licensees have proposed investments under Rural Electrification & RGGVY for FY 2007-08 and FY 2008-09 amounting to Rs.1329 Crores and Rs.2479 Crores respectively to be funded through equity. The licensee has 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 licensees under the said schemes to be funded through equity and the rest is assumed to be funded through Central Government Subsidy.

5.11.8 Similarly licensees have also proposed investments under distribution works of Rs. 1629.40 Crores for FY 2008-09 to be carried out through 100% equity funding. However no information regarding activities envisaged to be carried out under the said schemes have been mentioned. In absence of any detailed information, the Commission is not in a position to do a prudence check of the investments proposed. However in view of the fact that the licensee has to undertake investments to strengthen infrastructure network and bring down the losses, the Commission has approved 50% of the investments proposed on an ad hoc basis with normative debt-equity ratio instead of full equity funding for both the years. The prudence check with regards to actual amount spent under the said head will be undertaken at the time of true up.

5.11.9 The licensees have also projected investments funded through equity to the extent of Rs. 878.00 Crores and Rs.160.00 Crores for FY 2007-08 and FY 2008-09 respectively under the "**Others**" category of investments for which no details have been submitted. As per the stand taken earlier to facilitate the licensees to undertake capital investment works for system improvements the Commission has approved the investments proposed under the said head with normative debt-equity ratio instead of full equity for both the years.

5.11.10 The Commission has thus approved investment schemes of Rs. 1110.12 Crores for FY 2007-08 and Rs.1750.60 Crores for FY 2008-09 on the best judgement basis. The details of the same are outlined in the following table:

Table 5-25: Approved Capitalisation of Investments for FY 2007-08

(Rs. Crores)

Discoms	Investments (Petition) (a)	Approved Investments (b)	Expenses Capitalisation (c)	Interest Capitalisation (d)	Total Investments (e = b+c+d)	70% of Total Investments (f = e * 70%)	Opening WIP (g)	Total Capitalisation (h = f+g)
Agra	454.06	252.26	27.99	17.04	297.30	208.11	84.22	292.33
Lucknow	928.17	297.99	38.16	17.73	353.88	247.71	98.62	346.33
Meerut	558.81	239.59	34.68	17.67	291.93	204.35	75.72	280.07
Varanasi	984.45	320.28	37.61	16.74	374.62	262.23	104.48	366.71
Total	**2,925.50**	**1,110.12**	**138.43**	**69.18**	**1,317.73**	**922.41**	**363.03**	**1,285.44**

5.11.11 The details of approved Work-in-progress for FY 2007-08 considered in the capitalisation of Investments above are given below:

Table 5-26: Approved WIP for FY 2007-08

(Rs. Crores)

Discoms	Opening WIP as on 01.04.07	Investments	Capitalized		Total Investments	Transferred to GFA (Op. WIP + 70% of Total Investment)	Closing WIP as on 31.03.08
			Expenses	Interest			
Agra	84.22	252.26	27.99	17.04	297.30	292.33	89.19
Lucknow	98.62	297.99	38.16	17.73	353.88	346.33	106.16
Meerut	75.72	239.59	34.68	17.67	291.93	280.07	87.58
Varanasi	104.48	320.28	37.61	16.74	374.62	366.71	112.39
Total	**363.03**	**1,110.12**	**138.43**	**69.18**	**1,317.73**	**1,285.44**	**395.32**

5.11.12 The Commission has considered total investments (including capitalized expenses and interest) of Rs. 1317.73 Crores for FY 2007-08. The licensees have considered capitalization of investments for GFA purpose as the sum of opening WIP and 70% of the investments made during the year, expenses capitalized and interest capitalized (70% of total investments). This approach has been accepted by the Commission and as illustrated in the above table, total capitalization of Rs. 1285.44 Crores has been approved by it for consolidated Discoms for FY 2007-08.

5.11.13 Considering the total capitalization approved by the Commission for FY 2007-08 as above, the capital formation for the Discoms is as following:

Table 5-27: Approved GFA & Depreciation for FY2007-08

(Rs. Crores)

	Depr. Rate (a)	Opening as on 01.04.07 - As per Actuals (b)	Opening Accumulated Depreciation (c)	Opening Net Fixed Assets (d)	Addition to GFA during the year (e)	Depr. on Op GFA + Addn. during the year (f = b*a + e*a/2)	Closing Accumulated Depreciation (g = c+f)	Closing GFA (h = b+e)	Closing NFA (I = h-g)
Agra	7.84%	2,424.05	1,144.47	1,279.57	292.33	201.50	1,345.98	2,716.37	1,370.40
Lucknow	7.84%	2,712.84	1,029.22	1,683.62	346.33	226.26	1,255.49	3,059.17	1,803.68
Meerut	7.84%	3,339.50	1,775.19	1,564.31	280.07	272.80	2,047.98	3,619.57	1,571.58
Varanasi	7.84%	2,895.30	1,168.66	1,726.64	366.71	241.37	1,410.03	3,262.01	1,851.98
Total	**7.84%**	**11,371.68**	**5,117.55**	**6,254.13**	**1,285.44**	**941.93**	**6,059.48**	**12,657.12**	**6,597.65**

5.11.14 Similar methodology has been followed by the Commission for estimating the capital formation for the Discoms for FY 2008-09. The Commission has thus approved investments of Rs. 1750.60 Crores for FY 2008-09. This is represented in the following table:

Table 5-28: Approved Capitalisation of Investments for FY2008-09

(Rs. Crores)

Discoms	Investments (Petition) (a)	Approved Investments (b)	Expenses Capitalisation (c)	Interest Capitalisation (d)	Total Investments (e = b+c+d)	70% of Total Investments (f = e * 70%)	Opening WIP (g)	Total Capitalisation (h = f+g)
Agra	1,087.98	457.53	30.02	21.58	509.12	356.39	89.19	445.58
Lucknow	1,450.87	446.72	40.80	22.35	509.87	356.91	106.16	463.07
Meerut	786.19	398.78	36.90	22.44	458.12	320.68	87.58	408.26
Varanasi	1,471.36	447.57	40.28	21.47	509.32	356.52	112.39	468.91
Total	**4,796.40**	**1,750.60**	**148.00**	**87.84**	**1,986.43**	**1,390.50**	**395.32**	**1,785.82**

5.11.15 Considering the opening WIP, investment plans, expenses capitalized and interest capitalized approved by the Commission for FY 2008-09, total assets capitalization of Rs. 1785.82 Crores has been approved by the Commission for consolidated Discoms for the corresponding year.

5.11.16 The CWIP for FY 2008-09 is summarized in the following table:

Table 5-29: Approved WIP for FY2008-09

(Rs. Crores)

Discoms	Opening WIP as on 01.04.08	Investments	Capitalized		Total Investments	Transferred to GFA (Op. WIP + 70% of Total Investment)	Closing WIP as on 31.03.09
			Expenses	Interest			
Agra	89.19	457.53	30.02	21.58	509.12	445.58	152.74
Lucknow	106.16	446.72	40.80	22.35	509.87	463.07	152.96
Meerut	87.58	398.78	36.90	22.44	458.12	408.26	137.44
Varanasi	112.39	447.57	40.28	21.47	509.32	468.91	152.80
Total	**395.32**	**1,750.60**	**148.00**	**87.84**	**1,986.43**	**1,785.82**	**595.93**

5.11.17 Considering the total capitalization approved by the Commission for FY 2008-09 as discussed above, the projected asset capitalization for the Discoms approved by the Commission is as following:

Table 5-30: Approved GFA & Depreciation for FY2008-09

(Rs. Crores)

Gross Fixed Assets and Depreciation: FY 2008-09									
Discom	Depr. Rate (a)	Opening as on 01.04.08 (b)	Opening Accumulated Depreciation (c)	Opening Net Fixed Assets (d)	Addition to GFA during the year (e)	Depr. on Op GFA + Addn. during the year (f = b*a + e*a/2)	Closing Accumulated Depreciation (g = c+f)	Closing GFA (h = b+e)	Closing NFA (I = h-g)
Agra	7.84%	2,716.37	1,345.98	1,370.40	445.58	230.43	1,576.41	3,161.95	1,585.54
Lucknow	7.84%	3,059.17	1,255.49	1,803.68	463.07	257.99	1,513.48	3,522.24	2,008.77
Meerut	7.84%	3,619.57	2,047.98	1,571.58	408.26	299.78	2,347.76	4,027.83	1,680.07
Varanasi	7.84%	3,262.01	1,410.03	1,851.98	468.91	274.12	1,684.15	3,730.92	2,046.77
Total	**7.84%**	**12,657.12**	**6,059.48**	**6,597.65**	**1,785.82**	**1,062.32**	**7,121.80**	**14,442.94**	**7,321.14**

5.11.18 The Commission would like to mention herewith that licensees have not been following the Distribution Tariff Regulation 2006 in true spirit. There are various procedures and information which need to be adhered to approve the investments to be undertaken during the ensuing year. The regulation 4.5 Capital Investment Plan of the Distribution Tariff Regulations provides for various compliances for submission of Investment plan.

5.11.19 The Commission directs the licensees to submit the investment plan for next year filing strictly in accordance with Distribution Tariff Regulation failing which no investments would be approved in future. As regards to the investments approved for FY 2007-08 and FY 2008-09, the Commission directs the licensees to submit the necessary information required under the Distribution Tariff

Regulations approved by the Commission within two months from the issue of this tariff order, failing which, the Commission is likely to reverse the approvals given for the years under consideration and the effect of the same may be adjusted in the next tariff determination process.

5.12 Depreciation Expense

5.12.1 The Commission in its Distribution Tariff Regulation has specified the methodology for the computation of depreciation. The regulation also has specified the rates to be used for the purpose of computation of the depreciation charged during the year.

5.12.2 As has been the case for last two tariff orders, on account of lack of details of fixed assets register, the Commission had assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset. In absence of any additional information in the current filing also, for the purposes of this order also the Commission is compelled to continue with the practice of adopting weighted average depreciation rates.

5.12.3 The licensee 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. However, the tariff regulation also provide for charging depreciation on a pro-rata basis on assets capitalised during the year. The relevant portion of Regulation 4.9 of the Distribution Tariff Regulation is reproduced below:

"4.9 Depreciation:

1. *For the purposes of tariff, depreciation shall be computed in the following manner, namely:*
    a. *The value base for the purpose of depreciation shall be the historical cost as provided in the Fixed Assets Register, excluding consumer contribution or capital subsidy/grant utilized for capitalization of the assets…….*
    e. *Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis."*

5.12.4 The Commission has allowed the depreciation to be charged during the year in accordance to 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.

5.12.5 As mentioned earlier, the opening GFA considered for FY 2007-08 is as per the actual unaudited figures of FY 2006-07. Hence based on the same and using the above specified weighted average depreciation rate of 7.84%, the Commission approves depreciation expense of Rs. 941.93 Crores for FY 2007-08 and Rs. 1062.32 Crores for FY 2008-09 for consolidated Discoms. The detailed calculations is provided at section 5.11.13 and section 5.11.17 of the present order.

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

5.12.7 Hence, the Commission reiterates its direction to the licensees to ensure that they maintain proper and detailed fixed assets registers 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 within two months from the date of issue of tariff order.

5.13 Interest and Financing Cost

5.13.1 The Commission has computed the interest and finance charges for FY 2007-08 and FY 2008-09 based on the approved investment plan for Discoms. The Commission has considered a debt:equity ratio of 70:30 in case of schemes proposed under "Distribution" works and "other" schemes. The approved investment under the RGGVY scheme has been considered under equity funding as proposed by the licensee and investment under the APDRP scheme is partly funded through loan and partly through grant in the proportion of 50:50 as proposed by the licensee.

5.13.2 A debt-equity ratio of 70:30 has been considered for investment under various other plans, in consonance with the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006.

5.13.3 The licensees in its investment plan for FY 2007-08 and FY 2008-09 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. The relevant extract of the Regulation 4.8 (Treatment of Interest Costs) of the Tariff Regulation is as under:

"……(d) The Distribution Licensee shall furnish the project-wise details for fresh loans proposed to be raised in the ensuing financial year

i. Name of the Project
ii. Scheduled Commercial operation date (COD)
iii. Total Project Cost
iv. Total Loan amount
v. Rate of Interest
vi. Terms of Repayment"

5.13.4 In absence of these details, the Commission has considered the actual unaudited closing balance of loans for FY 2006-07 as the opening balance for FY 2007-08. The interest rates for the existing loans are retained as submitted by the licensees for both the years. In case of new loans, the rate of interest as submitted by the licensee has been accepted.

5.13.5 As far as the new loans taken/to be taken based on the approved investment plans are concerned, the licensee has 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. Based on the same, the Commission approves Rs. 300.77 Crores for FY 2007-08 and Rs. 381.90 Crores for FY 2008-09 as interest on long term debt. Out of the approved interest on long term debt for FY 2007-08, Rs. 256.11 Crores is interest on account of existing debt and Rs. 44.66 Crores on account of new loans. Similarly for FY 2008-09, the interest on account of existing debt is Rs. 246.74 Crores and Rs. 135.15 Crores on account of new loans.

5.13.6 In addition to the interest on long term loans, the licensees 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;

5.13.7 ***Interest on Working Capital:***

5.13.7.1 The tariff regulations provides for normative interest on working capital based on the principles outlined in the Distribution Tariff Regulations. The licensees are eligible for interest on working capital worked out on this basis.

5.13.7.2 The Distribution Tariff Regulation 4.8 (2) (b) specifies the rate of interest allowed on working capital borrowings as bank rate specified by RBI for the relevant year plus a margin decided by Commission. The Commission has benchmarked the rate of interest for working capital borrowings against the short-term Prime Lending Rate of State Bank of India which is 12.5% per annum presently in order to reflect the realistic market condition. In view of the same, the rate on interest on working capital allowed by the Commission is @12.50% per annum (RBI rate 6% + Margin 6.50%). Any change in the rate during the year will be considered at the time of true-up.

5.13.7.3 Further the interest on the existing short term loans has been approved by the Commission at Rs. 218.65 Crores for FY 2007-08 and Rs. 62.88 Crores for FY 2008-09.

5.13.7.4 Further, the interest on account of working capital and finance charges of UPPCL allocated to the Discoms is not approved as the discoms have been already provided interest on working capital to take care of their short term requirements for 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. The Discoms are eligible only for interest cost on account of normative working capital.

5.13.7.5 The licensees have also claimed other interest charges on account of Over draft. The same has been disallowed as the discoms have been allowed interest on normative working capital.

5.13.7.6 The computation of interest on working capital at consolidated level for FY 2007-08 and FY 2008-09 is given below:

Table 5-31: Approved Interest on Working Capital FY 2007-08

(Rs. Crores)

S.No.	Item	FY 2007-08		FY 2008-09	
		Petition	Commission	Petition	Commission
1	One month's O & M Expenses	398.10	84.95	484.34	90.51
2	One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	20.32	20.32	33.31	33.31
3	Receivables equivalent to 60 days average billing on consumers	1,110.41	1,904.03	1,200.37	2,509.56
	Gross Total	**1,528.83**	**2,009.30**	**1,718.01**	**2,633.38**
Less:		-	-	-	-
4	Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	-	931.97	-	1,057.98
	Net Working Capital	**1,528.83**	**1,077.33**	**1,718.01**	**1,575.40**
		-	-	-	-
	Rate of Interest for Working Capital	-	12.50%	-	12.50%
	Interest on Working Capital	**-**	**134.67**	**-**	**196.92**

5.13.8 **Discount to Consumers:**

5.13.8.1 The Licensee has claimed an expenditure on account of the discount offered to consumers to the tune of Rs. 9.25 Crores in FY 2007-08 and Rs. 10.35 Crores in FY 2008-09. 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 at levels proposed by the Licensees.

5.13.9 **Interest on Consumer Security Deposits:**

5.13.9.1 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 Computation of the same is given below:

Table 5-32: Interest on Security Deposits FY2007-08 & FY2008-09

(Rs. Crores)

S. No.	Item	FY 2007-08		FY 2008-09	
		Petition	Commission	Petition	Commission
1	Opening Balance for Security Deposit	896.43	896.43	967.51	967.51
2	Additions During the Year	71.08	71.08	180.94	180.94
3	**Closing Balance for Security Deposit**	**967.51**	**967.51**	**1,148.45**	**1,148.45**
		-	-	-	-
4	Rate of Interest	6.00%	6.00%	6.00%	6.00%
		-	-	-	-
5	**Interest Paid / Payable on Security Deposit**	**53.79**	**53.79**	**58.05**	**58.05**

5.13.10 **Finance Charges**

5.13.10.1 In the context of other interest and finance charges, the Commission has approved cost of raising finance as 1% of the loan drawals for the year. This is in line with the methodology followed by the Commission in its last Tariff Order for FY 2006-07. Accordingly the Commission has approved Rs. 7.15 Crores and Rs. 9.00 Crores as finance charges for FY 2007-08 and FY 2008-09 respectively.

5.13.11 Other interest and finance charges (comprising of discount to consumers, interest on security deposit and finance charges) as proposed and approved by the Commission discom-wise are given in the table below:

Table 5-33: Approved Other Interest & Finance Charges for FY 2007-08 & FY 2008-09

(Rs. Crores)

FY 2007-08	Meerut		Agra		Lucknow		Varanasi		Consolidated	
	Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved
Other charges	33.93	3.18	36.03	4.82	34.22	4.32	43.58	4.07	147.76	16.40
Interest to consumers on Security Deposits @ Bank Rate	20.65	20.65	7.84	7.84	6.34	6.34	18.96	18.96	53.79	53.79
Total	**54.59**	**23.84**	**43.86**	**12.66**	**40.56**	**10.66**	**62.54**	**23.03**	**201.54**	**70.18**
FY 2008-09	Meerut		Agra		Lucknow		Varanasi		Consolidated	
	Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved
Other charges	35.19	4.11	37.76	5.46	39.39	5.07	51.72	4.71	164.05	19.35
Interest to consumers on Security Deposits @ Bank Rate	23.92	21.91	8.67	8.22	7.42	7.15	22.46	20.76	62.46	58.05
Total	**59.11**	**26.02**	**46.42**	**13.68**	**46.81**	**12.22**	**74.18**	**25.48**	**226.51**	**77.40**

5.13.12 The approved interest charges on long term loans have been capitalized at the rate of 23%, consistent with the methodology followed by the Commission in the last Tariff Order for FY 2006-07. 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 2007-08 and FY 2008-09 are Rs.655.09 Crores and Rs.631.27 Crores respectively. The discom-wise interest charges allowed for FY 2007-08 and FY 2008-09 are given as under:

Table 5-34: Approved Interest Charges FY 2007-08

(Rs. Crores)

Particulars	Meerut	Agra	Lucknow	Varanasi	Total
Interest on Existing Loans	66.01	62.92	66.16	61.01	256.11
Interest on New Loans	10.79	11.18	10.93	11.76	44.66
Total of I	**76.81**	**74.10**	**77.10**	**72.77**	**300.77**
Interest on Working Capital Loans	39.92	46.76	31.13	16.85	134.67
Interest on Existing Short Term Loans	58.71	56.80	51.13	52.02	218.65
Total of II	**98.63**	**103.55**	**82.26**	**68.87**	**353.32**
Total of A : I + II	**175.44**	**177.66**	**159.36**	**141.63**	**654.09**
Other Interest & Finance Charges	23.84	12.66	10.66	23.03	70.18
Total of B	**23.84**	**12.66**	**10.66**	**23.03**	**70.18**
Grand Total Of Interest & Finance Charges:**C = A + B**	199.27	190.31	170.02	164.66	724.27
Less: Interest & Finance Charges Chargeble to Capital Account: **D**	17.67	17.04	17.73	16.74	69.18
Net Total Of Interest & Finance Charges : For Revenue Account: C-D	**181.61**	**173.27**	**152.29**	**147.93**	**655.09**

Table 5-35: Approved Interest Charges FY 2008-09

(Rs. Crores)

Particulars	Meerut	Agra	Lucknow	Varanasi	Total
Interest on Existing Loans	63.69	60.52	64.02	58.51	246.74
Interest on New Loans	33.86	33.30	33.16	34.84	135.15
Total of I	**97.55**	**93.82**	**97.18**	**93.34**	**381.90**
Interest on Working Capital Loans	59.52	64.53	43.10	29.76	196.92
Interest on Existing Short Term Loans	16.88	16.33	14.70	14.96	62.88
Total of II	**76.41**	**80.87**	**57.81**	**44.72**	**259.81**
Total of A : I + II	**173.96**	**174.69**	**154.99**	**138.06**	**641.70**
Other Interest & Finance Charges	26.02	13.68	12.22	25.48	77.40
Total of B	**26.02**	**13.68**	**12.22**	**25.48**	**77.40**
Grand Total Of Interest & Finance Charges:**C = A + B**	199.98	188.37	167.21	163.54	719.11
Less: Interest & Finance Charges Chargeble to Capital Account: **D**	22.44	21.58	22.35	21.47	87.84
Net Total Of Interest & Finance Charges : For Revenue Account: C-D	**177.55**	**166.80**	**144.86**	**142.07**	**631.27**

5.14 Provision for bad and doubtful debts

5.14.1 Treatment of bad debts has been an area for concern, on which there has always been a difference of opinion between the licensees and the Commission in the past.

5.14.2 The Tariff Regulations provide for expenses under Bad & Doubtful Debts to the extent of 2 % of the revenue receivables. However, the licensee has to actually identify and write-off the bad debts as per a transparent policy approved by the Commission. The section 4.4 of the tariff regulations in this regard is reproduced below:

> *"4.4 Bad and Doubtful Debts:*
> *Bad and Doubtful Debts shall be allowed as a legitimate business expense with the ceiling limit of 2% of the revenue receivables provided the distribution licensee actually identifies and writes off bad debts as per the transparent policy approved by the Commission. In case there is any recovery of bad debts already written off, the recovered bad debt will be treated as other income."*

5.14.3 In the tariff order for the FY 2006-07, the Commission has pointed out that it is not averse to allowing some provision for bad and doubtful debts in the course of normal operations of the Utility. However such provisioning needs to backed up with processes to identify consumers who are not paying and then making adequate attempts to collect from such consumers.

5.14.4 In all its past orders the Commission has emphasized that, in the absence of a clear policy and procedure for identifying and writing off the receivables, the provisioning for bad and doubtful debts can not be allowed. The Commission has repeatedly emphasized the need for conducting such investigation and write-off periodically. Unless this basic requirement is adhered to, it is not feasible for the Commission to permit fresh provisions.

5.14.5 In the ARR for FY 2007-08 and FY 2008-09, the licensees have proposed Bad and Doubtful debts @2% of revenue receivables to the tune of Rs.133.47 Crores and 144.04 Crores respectively.

5.14.6 The Commission in the data deficiency letter to the utilities had sought clarification regarding policy for writing off bad-debts. In absence of any such clear cut policy, the Commission disallows the provision for bad and doubtful debts for the FY 2007-08 and FY 2008-09.

5.14.7 The Commission hereby directs the licensees to form a clear policy as defined in UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006.

5.15 Other Income

5.15.1 As per the licensee, '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.

5.15.2 Accordingly, other income from retail sources has been projected by the licensees at Rs. 37.62 Crores and Rs.39.56 Crores for FY 2007-08 respectively. 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 licensees have projected a non-tariff income of Rs. 33.94 Crores for FY 2007-08 and Rs.36.68 Crores for FY2008-09. The total other income from retail sources and non-tariff income for FY 2007-08 is Rs. 71.56 Crores and for FY 2008-09 is Rs. 76.24 Crores.

5.15.3 The Commission has accepted the total Other Income projected by each Licensee at the levels submitted in the petition. The details of the same are tabulated below:

Table 5-36: Approved Other Income for FY 2007-08 and FY 2008-09

(Rs. Crores)

Discoms	FY 2007-08		FY 2008-09	
	Petitioner	Approved	Petitioner	Approved
Agra	30.47	30.47	33.04	33.04
Lucknow	18.25	18.25	19.19	19.19
Meerut	9.87	9.87	10.37	10.37
Varanasi	12.97	12.97	13.64	13.64
Total	**71.56**	**71.56**	**76.24**	**76.24**

5.16 Return on Equity

5.16.1 The licensees have not asked for any return on equity for the year under review. The licensees have stated that they did not want to burden the consumers by proposing return on equity. The Licensees have also referred to the rationale provided by the Commission in its Tariff Order for FY 2006-07 for providing zero return.

5.16.2 Based on the request from the licensees and the rationale provided in the previous Tariff order for FY 2006-07, the Commission has not considered the returns in the computation of ARR of Discoms, as the same has not been asked for.

5.17 Contribution to Contingency Reserve

5.17.1 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.

5.17.2 Further, the licensee in its submission has submitted that as there is a substantial revenue gap between ARR and revenue forecast, and in case the licensee claims this component, it will only go to enhance the already large gap and create extra burden on the consumers. In view of the same, the licensee has not claimed any amount under the said component in the present ARR filing.

5.17.3 Commission accepts the view of the Licensee. The estimated amount on account of Contribution to Contingency Reserve for representation purpose only is tabulated below for reference:

Table 5-37: Estimated Amount for Contribution to Contingency Reserve

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Op. Bal of GFA	11,371.68	11,371.68	14,408.81	12,657.12
Contribution	0.5%	0.5%	0.5%	0.5%
Contribution to Contingency Reserve	**56.86**	**56.86**	**72.04**	**63.29**

5.18 GoUP Subsidy Support for Rural Consumers & PTW categories

5.18.1 The licensees in the ARR petition for FY 2007-08 and FY 2008-09 have submitted that the GoUP has agreed to provide a subsidy of Rs.1522 Crores in each year towards subsidized Tariffs for Rural Domestic and PTW categories. The Commission had directed the licensees to submit commitment letter from GoUP in this regards. However, no correspondence / supporting document from the Government was submitted in support of the same.

5.18.2 Further, in the reply to the data deficiency note seeking information regarding the subsidy commitment from GoUP, UPPCL has mentioned that the subsidy committed is Rs.1822 Crores for FY 2007-08 and Rs.1532 Crores for FY 2008-09 as against Rs. 1522 as submitted in the ARR petition.

5.18.3 The Commission has accepted the claim of the Licensees for the purpose of the tariff order. Hence, the Commission approves a subsidy support towards subsidized Tariffs for Rural Domestic and PTW categories to an extent of Rs.1822 Crores for FY 2007-08 and Rs.1532 Crores for FY 2008-09 as submitted by the Licensees.

5.18.4 The Subsidy commitment for revenue gap is allocated among the Discoms in the ratio of the Discom-wise number of rural un-metered consumers and PTW consumers in line with methodology submitted by the licensee.

5.19 True Up and Special Appropriations

5.19.1 As per the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006,

> *"Subject to other provisions of these regulations, the ARR determined by the commission for any financial year shall be trued up on the basis of actual financial and operational results. Any deficit or surplus arising out of such true up shall be adjusted while determining the tariff for the subsequent years.*
>
> *Provided that the Commission may allow higher expenditure actually incurred by the licensee in any financial year on account of non controllable factors i.e. factors beyond the control of licensee after due verification of such expenses and prudence check."*

5.19.2 Accordingly, the Commission has in principle accepted the philosophy of truing up however, the same needs to be done keeping in view the overall proposal of the licensee. Further, the exercise of true-up carries no significance in absence of audited accounts as such a true-up without firm base line figures would remain merely an academic exercise. Further, as per the view taken by the Commission in the previous Tariff Order for FY 2006-07, the true-up exercise may only be undertaken by the Commission, if the audited balance sheet of the companies are submitted before the issuance of next tariff order otherwise, carrying out true up on the basis of a submission as delayed as 2 to 3 years would certainly bring about in-coherent impacts in the tariff structure, which is not at all desirable. Further, in line with the philosophy for True-up advocated by the Commission and as mentioned in the previous Tariff Order, the Licensees have already forfeited their right to claim any true-up arising out of the actuals for the FY 2004-05 and FY 2005-06 on account of submission of a Tariff Proposal with no proposed hike in FY 2006-07.

5.19.3 In view of the above, the licensees are directed to look into the matter and hasten the finalisation and audit of the annual accounts for the past years. Further, it would be in the interest of the licensees themselves if they can instil a discipline within the organisation ensuring that the Annual Accounts for the financial year are finalised and audited within the shortest possible time frame. This would also enable the licensees to claim legitimate expenses incurred by them on operations through the true-up mechanism.

5.20 Fuel Cost Adjustment

5.20.1 The regulation 6.9 of the Distribution Tariff regulations provides for recovery of changes in fuel cost through tariff in the form of Fuel Surcharge computed as per the formula specified in the UPERC (Conduct of Business) Regulation, 2004.

5.20.2 The fuel cost revision as per the formula includes fuel related expenses, including variations in mix of power purchase.

5.20.3 Under the said regulation, the Commission has also provided that the Distribution licensee may submit to the Commission a methodology/formula for automatic quarterly adjustment of fuel cost. The commission may however suitably modify/ change the proposed formula or adopt a different formula/ procedure for the assessment of fuel surcharge if it considers it to be more appropriate.

5.20.4 The Commission in the past in the commercial interest of the licensee has directed the licensees to submit the Fuel Surcharge formula so as to enable automatic recovery of the changes in the fuel cost. However, it is very strange that the licensee have not submitted any petition as regards to automatic recovery of changes in fuel cost for approval of the Commission.

5.20.5 Provision of FAC 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 is improved but also the consumers are not burdened with the accumulated financial burden at the end of the year in subsequent tariff filings.

5.20.6 However non-implementation of such an important order reflects the apathy of the licensees in implementing even those orders of the Commission that are actually meant to help the licensee in recovering the legitimate costs automatically through a set system. This also helps in improving the cash flow of the licensees.

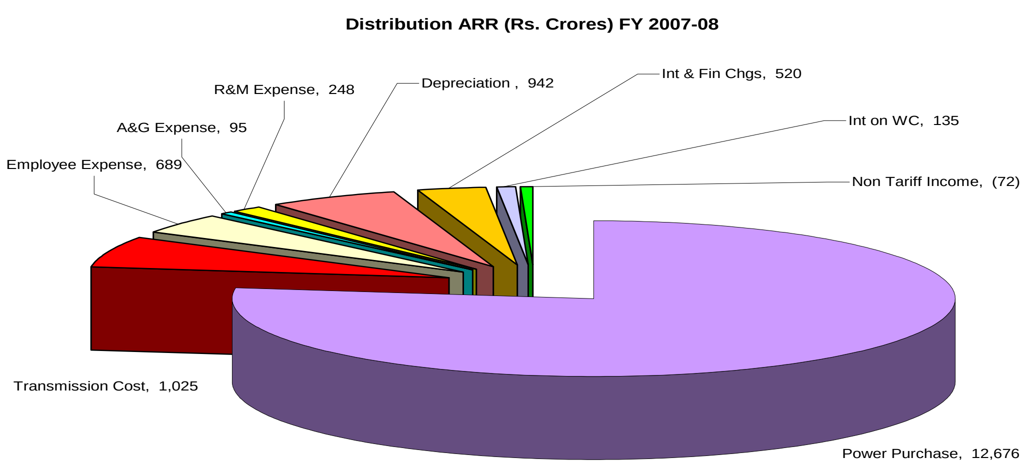
5.20.7 In view of the same, the Commission once again directs the licensees to submit a methodology and formula for automatic recovery of the Fuel Cost changes for the approval of the Commission within two months from the date of issue of the order. Non-compliance of this directive may debar the licensee from claiming any variation of fuel cost from the approved costs in the Tariff order during the true-up exercise.

5.21 Approved ARR Summary - Discoms

5.21.1 In the preceding sections, the Commission has detailed out expenses under various heads as per the licensees' petition, as well as those approved by the Commission. Based on the same, the approved ARR for consolidated Discoms is Rs.16260.13 Crores for FY 2007-08 and Rs.17534.94 Crores for FY 2008-09. The details are provided at ANNEXURE – V.

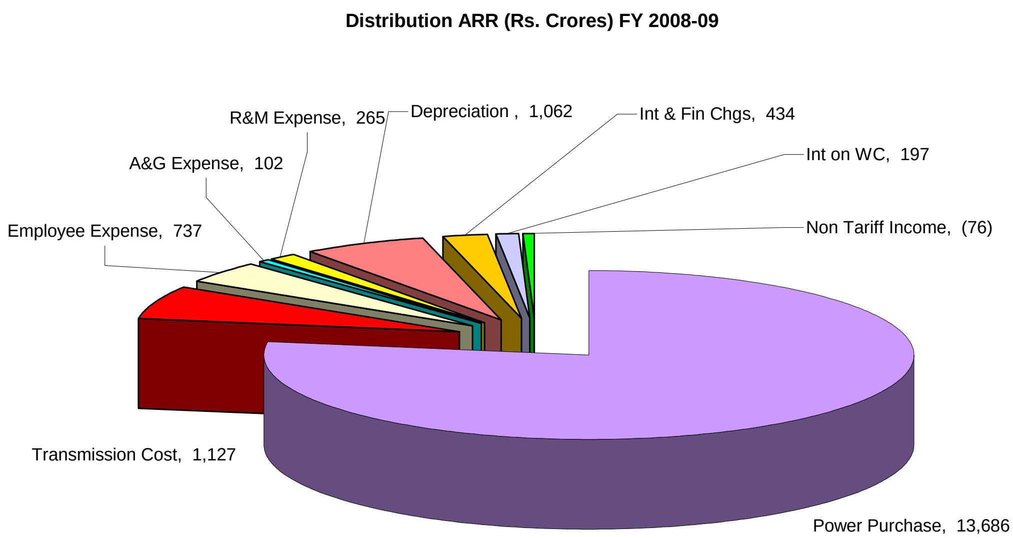
5.21.2 The component wise ARR for FY 2007-08 and FY 2008-09 are presented in the table pie- chart below:

Figure 2: Composition of ARR for FY 2007-08



<u>Total approved consolidated ARR for FY 2007-08 is Rs. 16260.13 Crores</u>

Figure 3: Composition of ARR for FY 2008-09



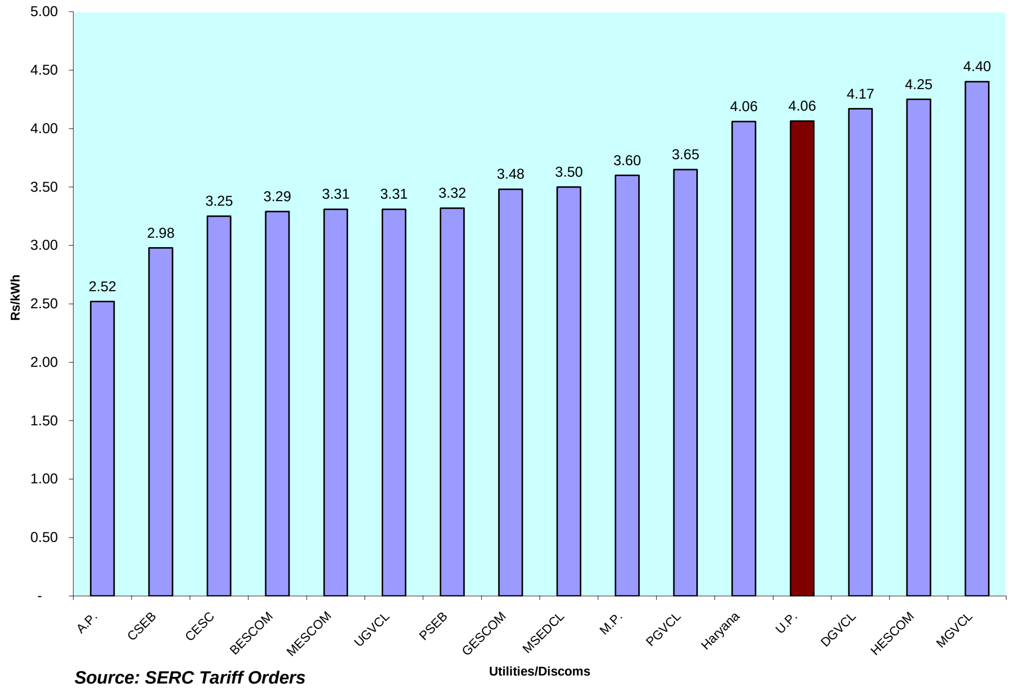
Total approved consolidated ARR for FY 2008-09 is Rs. 17534.94 Crores

5.22 Cost of Supply

5.22.1 Based on the approved ARR, the average cost of supply works out to Rs.3.90 per unit for FY 2007-08 and Rs.4.06 per unit for FY 2008-09 as against projected average cost of supply of Rs.4.33 per unit for FY 2008-09.

5.22.2 This average cost of supply of U.P. Discoms for FY 2008-09 is high compared to the cost of service of other states. The chart below shows the comparison of average cost of service between various discoms/licensees for FY 2007-08.

Figure 4: Average Cost of Supply (Rs./kWh) of various states



5.23 Wheeling and Retail Supply

5.23.1 As per UPERC Tariff Regulations 2006, The Annual Expenditure of the distribution licensee shall comprise of the following components:

(a) Power Purchase Cost Only
(b) Transmission Charge

For Retail Supply Business

(c) SLDC Charges
(d) Operation & Maintenance Expense
(e) Depreciation
(f) Interest & Financing Costs
(g) Bad and Doubtful Debts
(h) Return on Equity
(i) Taxes on Income
(j) Other expense
(k) Contribution to Contingency Reserve

As per proportionate allocation towards Wheeling and Retail Supply Business

5.23.2 The above given Expenditure (c to k) have to be proportionately allocated towards both Wheeling & Retail Supply Business, whereas the licensees have not proportionately allocated the expenses in both wheeling and retail supply business in their petition.

5.23.3 In absence of any separation for wheeling and retail expenses, the Commission has adopted the basis of allocation of the expenses in line with the allocation methodology used by the other states and in the best judgement of the Commission.

5.23.4 The allocation of approved ARR into Wheeling and Retail Supply for FY 2007-08 and FY 2008-09 based on Commission's best estimate is given in the table below:

Table 5-38: Wheeling & Retail Supply ARR

(Rs. Crores)

Allocation of UPPCL ARR for FY07-08 and FY08-09 into Wires & Supply Business								
Particulars	**Allocation %**		**Allocation FY 2007-08**			**Allocation FY 2008-09**		
	Wheeling	**Supply**	**Wheeling**	**Supply**	**Total**	**Wheeling**	**Supply**	**Total**
Power Purchase Expenses (incl PGCIL charges)	0.0%	100.0%	-	12,676	**12,676**	-	13,686	**13,686**
Transmission Charges - Intra state	0.0%	100.0%	-	1,025	**1,025**	-	1,127	**1,127**
Employee cost	60.0%	40.0%	486	324	**811**	520	347	**867**
A&G expenses	40.0%	60.0%	45	67	**112**	48	72	**120**
R&M expenses	90.0%	10.0%	224	25	**248**	239	27	**265**
Interest charges	90.0%	10.0%	652	72	**724**	647	72	**719**
Depreciation	90.0%	10.0%	848	94	**942**	956	106	**1,062**
Gross Expenditure			***2,254***	***14,285***	***16,539***	***2,410***	***15,437***	***17,847***
Expense capitalization					**-**			**-**
Employee cost capitalized	60.0%	40.0%	73	49	**122**	78	52	**130**
Interest capitalized	90.0%	10.0%	62	7	**69**	79	9	**88**
A&G expenses capitalized	40.0%	60.0%	7	10	**17**	7	11	**18**
Net Expenditure			***2,112***	***14,219***	***16,332***	***2,246***	***15,365***	***17,611***
Special Appropriations					**-**			**-**
Provision for Bad & Doubtful debts	0.0%	100.0%	-	-	**-**	-	-	**-**
Provision for Contingency Reserve	0.0%	100.0%	-	-	**-**	-	-	**-**
Prior Period Adjustments	0.0%	100.0%	-	-	**-**	-	-	**-**
Total net expenditure with provisions			***2,112***	***14,219***	***16,332***	***2,246***	***15,365***	***17,611***
Add: Reasonable Return / Return on Equity	90.0%	10.0%	-	-	**-**	-	-	**-**
Less: Non Tariff Income	0.0%	100.0%	-	72	**72**	-	76	**76**
	0.0%	100.0%						
Annual Revenue Requirement (ARR)			**2,112**	**14,148**	**16,260**	**2,246**	**15,289**	**17,535**

5.23.5 Therefore the commission directs the licensees to submit the expenses with a proportionate allocation towards wheeling and retail supply business in the next ARR filing.

5.24 Bulk Supply Tariff

5.24.1 The Commission, unlike previous year tariff order for FY 2006-07, has computed the Bulk Supply Tariff based on only the Power Purchase Cost and the total sales to the Discoms.

5.24.2 **The transmission charges payable by the licensees for the use of the intra-state transmission network to transmit energy has been calculated separately and would be payable directly to the transmission licensee i.e. UPPTCL by all the licensees including M/s KESCO and M/s NPCL.**

5.24.3 The payments would have to be done on a monthly basis. The Transmission Licensee in consultation with the Distribution Licensees shall formulate a detailed procedure for the billing for the transmission charges to the distribution licensees and submit the same for the approval of the Commission within one month from the date of issue of the tariff order.

5.24.4 Till the procedure is formulated and approved by the Commission, the Transmission licensee may raise the monthly bill based on the energy supplied to each discom. The Discoms would have to make the payments within 7 days from the receipt of the invoice from the Transmission Company.

5.24.5 The bulk supply tariff computed by the Commission for FY 2007-08 and FY 2008-09 is provided as under:

Table 5-39: Approved Bulk Supply Tariff for FY 2007-08 and FY 2008-09

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Power Purchase Expenses incl PGCIL charges (Rs. Crore)	12,993.78	12,676.43	13,713.99	13,686.11
Sales to Discoms (MU)	53,026	53,607	55,064	55,411
Bulk Supply Tariff (Rs./kWh)	**2.45**	**2.36**	**2.49**	**2.47**

5.24.6 However, the bulk supply tariff payable by M/s KESCO and M/s NPCL shall be at the existing rates till the new Bulk Supply Tariff for the respective licensees is issued by the Commission. On issue of the said tariff, the revised approved Bulk Supply Tariff shall be payable by the said licensees and adjustments to the any previous billing done in the financial year starting 1st April 2008 shall be reconciled and settled amongst the licensees.

Chapter 6. ANALYSIS OF TRANSCO ARR FOR FY 2007-08 & FY 2008-09

6.1 Introduction

6.1.1 The Commission has analysed the Aggregate Revenue Requirement (ARR) petition submitted by the Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) for approval of ARR/Tariff application for FY 2007-08 and FY 2008-09. The ARR as submitted by the licensee and the rationale used for the same are already discussed in the Chapter 3. A brief overview of the ARR petitions for both the years is shown in the table below:

Table 6-1: Summary of ARR petitions FY 2007-08 and FY 2008-09

(Rs. Crores)

Details	FY2007-08 (Projection)	FY2008-09 (Projection)
Employee Costs (net of capitalization)	214.21	252.70
A&G Costs	24.05	25.24
Repair & Maintenance Expense	69.86	86.58
Depreciation	245.40	308.80
Interest & Finance Charges	191.81	267.80
Less Other Income	13.61	14.33
Special Appropriations	-	-
Reasonable Return	283.59	345.30
Annual Revenue Requirement	**1,015.31**	**1,272.09**

6.1.2 In the current chapter, the Commission has determined and approved the ARR of the licensee for FY 2007-08 & FY 2008-09 and has elaborated upon the approach followed for the same in line with the Tariff Regulations.

6.2 Base Year

6.2.1 The 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.

6.2.2 For the purpose of projecting the expenses and other elements of the ARR for FY 2008-09 as per Transmission Tariff Regulations, the Commission has considered FY 2007-08 as the base year. The opening balances considered for FY 2007-08 are based on closing balances of actual unaudited/approved figures of FY 2006-07.

6.2.3 The licensee has provided the actual unaudited data for FY 2004-05, FY 2005-06 and FY 2006-07 in the tariff filing formats.

6.2.4 Further, in response to the data deficiency letter issued by the Commission, the licensee submitted that the separate accounts of UPPTCL have not been prepared in absence of a Transfer Scheme to transfer the transmission assets of UPPCL to UPPTCL. However, the Annual accounts of UPPCL for FY 2003-04, FY 2004-05 and FY 2006-07 have been submitted. In view of the submission of the licensee, the Commission has taken a view and considered the information for past years available in the ARR / Tariff filing as the basis for determination of future costs.

6.2.5 The Commission has not undertaken true-up of any of the past years as the licensee has not requested for it. Availability of the audited annual accounts is one of the prime requirements for undertaking true-up in the true sense of the word. In absence of the same, no true-up has been considered.

6.3 Transmission Losses

6.3.1 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.

6.3.2 The licensee in the petition for FY 2006-07 had mentioned the transmission losses to be 5%, though no rationale or justification had been provided. The Commission had approved the same. The Transmission losses estimated by the licensees for FY 2007-08 and FY 2008-09 are 6.0% and 5.6% respectively which are higher than the level specified by the licensee in the FY 2006-07 petition.

6.3.3 In view of the same, the Commission had sought justification for the higher loss levels than those mentioned in the FY 2006-07 ARR Petition and the Tariff Order. This level of losses is also much higher than the losses in the Inter-State transmission system. In response the licensee has mentioned that Transmission losses as submitted in ARR are net of import i.e. it also included losses in inter - state transmission lines.

6.3.4 Further, the 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 under supervision of the Commission or the study may be initiated by the Commission itself. The relevant section of the regulations states the following:

"6. To set the base line of transmission loss estimate, the Commission may either require the licensee to carry out proper loss estimation studies under its supervision, or initiate a study itself.
7. The Commission shall approve a realistic loss target for the year under review based on the opening loss levels from the above study and/or licensee's filing, submissions and objections raised by the stakeholders."

6.3.5 In this regards, the Commission had directed the licensee 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 licensee submitted that the study on transmission losses would be submitted to the Commission shortly.

6.3.6 The Commission based on the above submission of the licensee directs him to submit the report on the study of transmission losses within three months from the date of issue of the tariff order.

6.3.7 The Commission would like to reiterate that, in the future, any Transmission & Distribution loss proposal of the licensees will be liable to be rejected unless and until based on correct energy audit data.

6.3.8 In absence of any study being undertaken and availability of reliable base line information, the Commission has no other option but to set the loss targets for the years in consideration based on some interim basis.

6.3.9 In view of the stand taken by the Commission while determination of the Distribution Loss, a transmission loss of 5% is approved for both the years in consideration i.e. FY 2007-08 and FY 2008-09. Commission has maintained the loss levels at par with the loss levels approved in the FY 2006-07 Tariff Order.

6.4 Components of ARR and analysis of each component

6.4.1 The Commission has analysed all the components of the Aggregate Revenue Requirement (ARR) submitted by the licensee to provide suitable values for each component, for each year under consideration. As per the UPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations 2006 the ARR includes the following components:

a) Operation & Maintenance Expenses
   - Employee Expenses
   - Administration & General Expenses
   - Repairs and Maintenance Expenses

b) Interest Expenses
   - Loan Capital
   - Working Capital

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

6.4.2 Based on the ARR submission and Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006; the Commission has analysed each component of the ARR and accordingly approved each of the component along with the justification for the same. However before discussing on approval of O&M expenses for ensuing year, the Tariff Regulations has provided formula of an escalation Index which is mentioned below along with working of the same.

6.5 Escalation Index

6.5.1 The Commission has suggested formulation of an escalation index linked to WPI and CPI as notified by the Central Government for different years in its UPERC (Terms and Conditions of Transmission Tariff) Regulations, 2006. As per above 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 4.16% for approving the ARR for FY 2008-09 over the base year i.e. FY 2007-08. The working of the inflation index is given in the table below:

Table 6-2: Inflation Index for FY 2008-09

Month	Wholesale Price Index			Consumer Price Index		
	2006	2007	2008	2006	2007	2008
Jan	196	209	0	119	127	134
Feb	196	209	0	119	128	0
Mar	197	210	0	119	127	0
Apr	199	212	0	120	128	0
May	201	212	0	121	129	0
Jun	203	212	0	123	130	0
Jul	204	214	0	124	132	0
Aug	205	214	0	124	133	0
Sep	208	215	0	125	133	0
Oct	209	215	0	127	134	0
Nov	209	216	0	127	134	0
Dec	208	0	0	127	134	0
Average	**203**	**195**	**0**	**123**	**131**	**134**
Inflation			**3.25%**			**5.51%**
Weighted Average (CPI 40%: WPI 60%)						**4.16%**

WPI - http://eaindustry.nic.in *CPI - http://labourbureau.nic.in/indtab.html*

6.6 O&M Expenses

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

6.6.2 The regulation 4.2 of the Transmission Tariff Regulation 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."*

6.6.3 The regulation also provides for bringing the O&M expenses of the utilities to an efficient level i.e. in equivalence to the similarly placed utilities. The regulation also provides for the Commission to fix up norms based on circuit kilometers 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.

6.6.4 However, the Commission is of the 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. This study also has to be backed by audited information for the past which needs to be made available by the licensees. Only then the true picture of the trend in the O&M expenses may emerge. Till any such norm for O&M expenditure is determined, the Commission is considering the individual elements of O&M expenditure based on the past trends for FY 2007-08 and escalation linked growth in FY 2008-09. In addition to the approval of the cost for the years in consideration based on CAGR for past and escalation based on inflationary indices, additional O&M expenses @ 2.5% of the additions to GFA during the previous year are being allowed for FY 2008-09.

6.6.5 **Employee Expenses**

6.6.5.1 The employee cost for FY 2007-08 has been estimated on base figures of FY 2005-06 and actual data available of FY 2006-07 expenses. The expenses for FY 2008-09 are forecasted from FY 2006-07 base data. The assumption made by the licensees for forecasting the employee expenses are detailed out as under:

- Basic Salaries for FY 2007-08 will decrease by 5% per year for FY 2006-07. This decrease is a result of continuing staff attrition and selective hiring practices for FY 2006-07 and FY 2007-08 as GoUP has increased retirement age; projection has been made keeping in view annual increments, pay scale revision.
- FY 2008-09 the basic salary is estimated based on 5% increase due to new recruitment and 1% decrease due to retirement with over all increase of 5% due to annual increase in basic salary. For FY07-08 as Govt. has increased retirement age; projection has been made keeping in view annual increments, pay scale revision & induction programme.
- Dearness Allowance (DA) is estimated to be 39% for FY 2007-08 and 49% for FY 2008-09.

- Other allowance has been forecast to be 8% of basic salary for both the years.
- Likewise, Medical Expenses have been forecast to increase by inflation index per year from FY 2006-07, taking 3% as contingency for both the years.
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance for FY 2007-08 and FY 2008-09.
- Leave travel Assistance & compensation is assumed to be 0.1% & 0.2%of Basic Pay respectively for both the years.
- Staff welfare expenses are assumed to in same ratio as actually incurred in previous year.
- Employee Expenses Capitalized has been calculated as 29% of total Employee Costs, as approved by the Commission in the FY 2006-07 Tariff Order.

6.6.5.2 As discussed in the preceding section 6.6.4, the Commission is contemplating approval of the elements of the O&M expenses based on past trends and future estimates based on inflationary increase. Based on the above mentioned provision, in absence of information for last 5 years, the Commission has considered past trend of last three years of actual unaudited data provided in filing formats to arrive at a CAGR growth of 7.3%. The gross employee cost for the "Base year" (FY 2007-08) has been arrived at by applying this CAGR over the actual unaudited cost for FY 2006-07. Further, the employee cost for FY 2008-09 has been estimated by applying an escalation factor of 4.16% (inflation index) over the cost approved for FY 2007-08. The Commission thus approves the gross employee cost of Rs.286.73 Crores and Rs.316.99 Crores for FY 2007-08 and FY 2008-09 respectively. As mentioned in section 6.6.4, the Commission has allowed an additional 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. 18.34 Crores for FY 2008-09 and is included in gross employee expenses mentioned above.

6.6.5.3 Further, the Licensees have capitalized Employee expenses @ 29% of the total employee expenses. The Commission would like to mention that the same is very high and needs to be backed up proper study and a clear cut policy. In this context the Commission would like to reiterate that the licensees need to have a clear policy of capitalization of salaries & wages and suggests that the licensees appoint a reputed firm to suggest an appropriate policy on capitalization of salaries & wages.

6.6.5.4 For the purposes of this tariff order, capitalization @29% of the total employee expenses has been accepted by the Commission. This is consistent with the approach adopted by the Commission in its last Tariff Order for FY 2004-05 and FY 2006-07. The approved net employee expense (after capitalization) accordingly is Rs. 203.58 Crores for FY 2007-08 and Rs.225.06 Crores for FY 2008-09.

Table 6-3: Approved Employee Expense for FY 2007-08

(Rs. Crores)

Employees Expenses - FY 2007-08 (Rs Crores)		
Particulars	Petitioner	Commission
Basic Salaries	168.90	-
Dearness Allowance	65.87	-
Other allowances	13.51	-
Bonus/Ex-gratia	3.91	-
Medical expenses reimbursement	3.15	-
Leave travel assistance	0.15	-
Earned leave encashment	-	-
Payment under workmen's compensation act	0.08	-
Staff welfare expenses	1.36	-
Employers contribution for pension and gratuity	44.79	-
Employee Costs (before charge to capital)	**301.72**	**286.73**
Expenses Capitalized	87.51	83.15
Net Employee Cost	**214.21**	**203.58**

Table 6-4: Approved Employee Expense for FY 2008-09

(Rs. Crores)

Employees Expenses - FY 2008-09 (Rs Crores)		
Particulars	Petitioner	Commission
Basic Salaries	184.44	-
Dearness Allowance	90.37	-
Other allowances	14.76	-
Bonus/Ex-gratia	4.58	-
Medical expenses reimbursement	3.58	-
Leave travel assistance	0.18	-
Earned leave encashment	4.01	-
Payment under workmen's compensation act	0.09	-
Staff welfare expenses	1.48	-
Employers contribution for pension and gratuity	52.43	-
Employee Costs (before charge to capital)	**355.92**	**316.99**
Expenses Capitalized	103.22	91.93
Net Employee Cost	**252.70**	**225.06**

6.6.5.5 The Commission in the previous tariff order had directed the licensee to undertake a fresh actuarial valuation study. The study being adopted for the purposes of estimating employers' contribution towards pension and gratuity are outdated and therefore require revalidation. The Commission is once again disappointed with the licensee's delaying attitude and directs the licensee to submit the study report within six months from the date of tariff order. However, the licensee is 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.

6.6.6 Administration and General Expenses

6.6.6.1 The expense figures submitted under this head by the licensee are based on provisional accounts of the licensee for FY 2006-07. The licensees have submitted that A&G expenses are forecast to increase by only 5.18% per year across the board to offset the effect of inflation. Other expenses which comprises printing & stationary expenses, advertisement expenses, water charges, interface metering system and IT related expenses are taken as actually incurred by licensee in FY 07 and same has been forecasted to increase only by 5.18% in FY 2008-09 over FY 2007-08.

6.6.6.2 The Commission has calculated growth based on last three years actual unaudited data. The assessed CAGR over the period is 12.40% which is reasonably high and hence the Commission has allowed the growth linked to inflation and allowed an escalation of 4.16% over the FY 2006-07 expenses for FY 2007-08 which is the "Base year" and for FY 2008-09 over the approved FY 2007-08 expenses to offset the inflationary increase.

6.6.6.3 The Commission thus approves A&G expense (before capitalization) of Rs. 29.24 Crores as against Rs. 29.69 Crores projected by the licensees for FY 2007-08 and Rs. 32.32 Crores against Rs. 31.16 Crores for FY 2008-09. As mentioned in section 6.6.4, the Commission has allowed an additional O&M expenses @ 2.5% of the additions to the assets during the previous year. The allocation of the same to A&G expenses is Rs. 1.87 Crores for FY 2008-09 and is included in gross A&G expenses mentioned above.

6.6.6.4 For the purposes of this tariff order, capitalization @19% of the total A&G expenses as proposed by the Licensee has been accepted by the Commission. This is consistent with the approach adopted by the Commission in its last Tariff Order for FY 2004-05 and FY2006-07.

6.6.6.5 The Commission thus approves the net A&G expenses (after capitalisation) of Rs. 23.68 Crores as against Rs. 24.05 Crores projected by the licensees for FY 2007-08 and Rs.26.18 Crores against Rs.25.24 Crores proposed by the Licensees for FY 2008-09.

Table 6-5: Approved A&G Expense for FY 2007-08

(Rs. Crores)

Particulars	Petitioner	Commission
Rent, Rates & Taxes	2.29	-
Insurance	0.12	-
Telephone, Postage & Telegrams, Telex charges	1.99	-
Legal charges	0.71	-
Audit fees	0.08	-
Consultancy charges	1.46	-
Technical fees and professional charges	0.03	-
Conveyance and traveling	6.21	-
Regulatory expenses	2.66	-
Electricity Charges	2.60	-
Other expenses	11.54	-
Total	**29.69**	**29.24**
Expenses Capitalized	5.64	5.55
Total	**24.05**	**23.68**

Table 6-6: Approved A&G Expenses for FY 2008-09

(Rs. Crores)

Particulars	Petitioner	Commission
Rent, Rates & Taxes	2.40	-
Insurance	0.12	-
Telephone, Postage & Telegrams, Telex charges	2.09	-
Legal charges	0.74	-
Audit fees	0.09	-
Consultancy charges	1.54	-
Technical fees and professional charges	0.03	-
Conveyance and traveling	6.53	-
Regulatory expenses	2.75	-
Electricity Charges	2.73	-
Other expenses	12.13	1.87
Total	**31.16**	**32.32**
Expenses Capitalized	5.92	6.14
Total	**25.24**	**26.18**

6.6.7 Repairs and Maintenance (R&M) Expenses

6.6.8 The licensee has estimated the R&M expenses for FY 2007-08 and FY 2008-09 as 1.5% of opening gross fixed assets for transmission assets in the corresponding year. This was also as per the methodology adopted by the Commission in the previous tariff order (s).

6.6.9 The Commission has observed that there is an abnormal growth over last three years. The CAGR observed over this period is 23% which is very high by any standards. The highest growth in terms of quantum is observed in the Plant and Machinery.

6.6.10 However, the Commission is of the opinion that the rise is substantial and cannot be used as the basis for approval of the future costs. Further, as discussed under section 6.6.4 , the Commission would be adopting the methodology of approving the costs based on past trends which have to be determined after excluding any abnormal variation during the preceding years. In absence of any information regarding any such specific abnormal variation, the Commission has computed the cost for FY 2007-08 which is the “Base Year” by escalating the actual unaudited expenses for FY 2006-07 using the inflationary index of 4.16%.

6.6.10.1 Further, the expenses for FY 2008-09 are approved with an increase of 4.16% over the “Base Year “expenses to offset the inflationary impact. The Commission thus approves the R&M cost of Rs. 60.45 Crores and Rs. 66.83 Crores for FY 2007-08 and FY 2008-09 respectively. As mentioned in section 6.6.4, the Commission has allowed an additional 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. 3.87 Crores for FY 2008-09 and is included in gross R&M expenses mentioned above.

6.6.10.2 The Commission considers repairs & maintenance expenses as critical and this approval for the expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudency check with regards to the spending in R&M works over the year.

6.6.11 **O&M Expenses on additions to assets during the year**

6.6.11.1 In addition to the employee, A&G and R&M expenses approved by the Commission in preceding paragraphs, the Transmission Tariff Regulations provide for additional O&M expenses on additions to assets during the year. The regulation 4.2 (3) of the Tariff Regulations is reproduced below:

> *“…..(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. "

6.6.11.2 Based on the above, the approved additional O&M expenses for FY 2008-09 are Rs. 24.08 Crores. 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.

6.6.12 **Summary of the O&M Expenses for the Transco**

6.6.12.1 Based on the above, the approved O&M expense for FY 2007-08 is Rs. 287.71 Crores and that for FY 2008-09 inclusive of the allocation for additional O&M expenses is Rs. 318.07 Crores respectively.

6.6.12.2 The licensee should make efforts to bring down the O&M expenses to an efficient level i.e. in equivalence with similarly placed efficient utilities.

6.6.12.3 Thus in consideration of the above, the Commission is of the view that licensees should try to bring efficiency into the system, thereby, reducing the burden of inefficiencies onto the consumers of UP state. The Commission also 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.

6.6.12.4 The Commission expects the licensees to improve its performance considering the repetitive nature of O&M works and introduction of new technologies. The Commission may review the base year cost in the future based on availability of audited information and justifications for taking up the expenses.

6.7 GFA balances and Capital Formation assumptions

6.7.1 The Commission in its last tariff order for the FY 2006-07 had approved the gross fixed assets (GFA) of Rs. 4789 Crores as on 31st March 2007. As per the provisional accounts for the FY 2006-07, the closing GFA is Rs. 4657 Crores which is considered by the Commission for the purpose of this tariff order. However, the same would be subject to changes at the time of true-up for the year based on audited accounts.

6.7.2 The Commission would like to state that since the figures are based on the filing formats, the variation in GFA between the Commission approved figures and the actual expenses incurred for FY 2006-07 will be subject to true-up once audited accounts are finalized.

6.7.3 The Commission has scrutinized the investment plan and assets capitalization plan as submitted by UPPTCL. The licensee has projected investments worth Rs.1461.54 Crores in FY 2007-08 and Rs. 1880 Crores in FY 2008-09. The licensee has submitted information of each scheme to be undertaken with details such as Name of Substation/Line & Bay and their capacity/length, estimated cost and proposed expenditure for the year with expected period of completion.

6.7.4 UPPTCL has estimated a total investment of Rs. 1551.22 Crores in FY 2007-08 and has submitted scheme-wise investment plan. However, for the purposes for calculation of related expenses, capital formation, etc. the licensee has proposed Rs. 1461.54 Crores worth of investments in place of Rs. 1551.22 Crores to be incurred during the year. The same amount is also mentioned in the FY 2008-09 ARR petition. Hence, the Commission has taken a view and considered Rs. 1461.54 Crores for the purpose of scrutiny and approval process for FY 2007-08.

6.7.5 Similarly, the licensee has submitted investment schemes worth Rs. 5553 Crores for approval, out of which Rs.1880 Crores is proposed to be incurred in FY 2008-09.

6.7.6 As per the stand taken by the Commission in previous tariff filings also, the Commission has not considered investments to the extent funded by grants (Rs. 10.31 Crores for FY 2007-08), as they are not eligible for depreciation as per the Accounting Standard –12 for "Accounting for Government Grants" issued by the Institute of Chartered Accountants of India.

6.7.7 Further, the Commission has observed that the investments planned by the licensee are substantially large than those previously approved by the Commission. Also licensee has not provided cost-benefit analysis details for the proposed investments to be undertaken for both the years. 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 2007-08 and 60% for FY 2008-09 only and if the licensee 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.

6.7.8 The investments proposed to be carried out under Deposit works for FY 2008-09 amounting to Rs. 159.53 Crores are also allowed by the Commission.

6.7.9 The Commission has thus approved investments of Rs. 1015.86 Crores for FY 2007-08 and Rs. 1191.81 Crores for FY 2008-09. UPPTCL has considered capitalization of investments as 40% of the sum of opening WIP, approved investments made during the year, expenses capitalized and interest capitalized. This approach has been accepted by the Commission and total capitalization of Rs. 963.15 Crores for FY 2007-08 and Rs. 1118.54 Crores for FY 2008-09 has been approved.

6.7.10 The details of approved Work-in-progress for FY 2007-08 and FY 2008-09 considered in the capitalisation of Investments are also provided in the table below:

Table 6-7: Approved Capitalisation of Investments for 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Opening WIP	1,180.27	1,252.82	1,672.58	1,444.72
Investment	1,461.53	1,015.86	1,880.00	1,191.81
Expenses Capitalised	93.14	88.71	109.14	98.07
Interest Capitalised	52.69	50.49	67.24	61.74
Total	**2,787.64**	**2,407.87**	**3,728.96**	**2,796.34**
Capitalisation	1,115.06	963.15	1,491.59	1,118.54
Closing WIP	**1,672.58**	**1,444.72**	**2,237.38**	**1,677.81**

6.7.11 Considering the total capitalization approved by the Commission for FY 2007-08 and FY 2008-09 as above, the closing GFA for UPPTCL is Rs.5620.12 Crores and Rs.6783.65 Crores respectively. The details of opening and closing GFA are provided in subsequent section of depreciation.

6.7.12 The Commission would like to mention herewith that licensee has not been following the Transmission Tariff Regulation in true spirit. There are various procedures and information which need to be adhered to approve the investments for the ensuing year. The section 3.6 Capital Investment Plan of the Transmission Tariff Regulations provides for various compliances for submission of Investment plan.

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. 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, failing which, the Commission is likely to reverse the approvals given for the years under consideration and the effect of the same may be adjusted in the next tariff determination process.

6.8 Depreciation Expense

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

6.8.2 As has been the case for last two tariff orders, on account of lack of details of fixed assets register, the Commission had assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset. In absence of any additional information in the current filing also, for the purposes of this order also the Commission is compelled to continue with the practice of adopting weighted average depreciation rates.

6.8.3 The licensee 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. However, the tariff regulation also provide for charging depreciation on a pro-rata basis on assets capitalised during the year. The relevant portion of Regulation 4.3 of the Transmission Tariff Regulation is reproduced below:

"4.3 Depreciation:

1. *For the purposes of tariff, depreciation shall be computed in the following manner, namely:*
    - a. *The value base for the purpose of depreciation shall be the historical cost as provided in the Fixed Assets Register, excluding consumer contribution or capital subsidy/grant utilized for capitalization of the assets……..*
    - e. *Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.."*

6.8.4 The Commission has allowed the depreciation to be charged during the year in accordance to 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, the opening GFA considered for FY 2007-08 is based on the actual unaudited figures of FY 2006-07. Based on the above specified weighted average depreciation rate of 5.27%, the Commission approves depreciation expense of Rs. 270.80 Crores for FY 2007-08 and Rs. 325.65 Crores for FY 2008-09. The details of the same are provided in the table below:

Table 6-8: Approved GFA for FY 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Opening Balance	4,656.97	4,656.97	5,772.10	5,620.12
Addition	1,115.06	963.15	1,491.59	1,118.54
Adjustments	-	-	-	-
Closing	**5,772.03**	**5,620.12**	**7,263.69**	**6,738.65**
Rate of Depreciation	**5.27%**	**5.27%**	**5.35%**	**5.27%**
Opening Accumulated Depreciation	1,816.61	1,816.61	2,062.01	2,087.41
Depreciation	**245.40**	**270.80**	**308.80**	**325.65**
Closing Accumulated Depreciation	2,062.01	2,087.41	2,370.81	2,413.07

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

6.8.6 Hence, the Commission reiterates its direction to the licensees to ensure that they maintain proper and detailed fixed assets registers 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 within two months from the date of issue of tariff order.

6.9 Interest and Finance Cost

6.9.1 The Commission has computed the interest and finance charges for FY 2007-08 and FY 2008-09 based on the approved investment plan for UPPTCL. This has already been discussed in the section 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.

6.9.2 The licensees in its investment plan for FY 2007-08 and FY 2008-09 have only submitted information of source-wise debt funding under major heads only. The project wise details for fresh loans as mandated in the Transmission Tariff

Regulations is not provided by the licensees. The relevant extract of the Regulation 4.4 (Treatment of Interest Costs) of the Tariff Regulation is as under:

"……(d) The Transmission Licensee shall furnish the project-wise details for fresh loans proposed to be raised in the ensuing financial year

i. Name of the Project
ii. Scheduled COD
iii. Total Project Cost
iv. Total Loan amount
v. Rate of Interest
vi. Terms of Repayment"

6.9.3 In absence of these details, the Commission has considered the actual unaudited closing balance of loans for FY 2006-07 as the opening balance for FY 2007-08. The interest rates for the existing loans are retained as submitted by the licensees for both the years. In case of new loans, the rate of interest as provided by the licensee has been accepted.

6.9.4 As far as the new loans taken/to be taken based on the approved investment plans are concerned, the licensee has 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. Based on the same, the Commission approves Rs. 219.50 Crores for FY 2007-08 and Rs. 268.44 Crores for FY 2008-09 as interest on long term debt. Out of this, the interest on account of existing loans is Rs. 180.41 Crores and Rs. 39.10 Crores for new loans for FY 2007-08. Similarly, the interest on account of existing loans is Rs. 151.70 Crores and Rs. 116.74 on account of new loans for FY 2008-09.

6.9.5 In addition to the interest on long term loans, the licensees have also projected other interest expenses under the following heads:

- Interest on OD
- Finance Charges

6.9.6 ***Interest on Working Capital:***

6.9.6.1 The Transmission tariff regulations provides for normative interest on working capital based on the methodology outlined in the regulations. The licensees are eligible for interest on working capital worked out on methodology specified in the regulations.

6.9.6.2 The Transmission Tariff Regulation 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 Commission. Accordingly the rate on interest on working capital considered by the Commission is @12.50% per annum (RBI rate 6% + Margin 6.50%) which is also equal to SBI PLR.

6.9.6.3 The Commission based on the same approves an interest on Working Capital of Rs. 25.63 Crores and Rs. 29.84 Crores for FY 2007-08 and FY 2008-09 respectively.

6.9.6.4 The licensee has also claimed other interest charges on account of Over Draft. The same has been disallowed as the Transco have been allowed interest on normative working capital.

6.9.6.5 The computation of interest on working capital at consolidated level for FY2007-08 and FY2008-09 is given below:

Table 6-9: Approved Interest on Working Capital for FY 2007-08 & FY 2008-09

(Rs. Crores)

S. No.	Item	FY 2007-08		FY 2008-09	
		Petition	Commission	Petition	Commission
1	One month's O & M Expenses	33.44	23.98	39.47	26.51
2	One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	10.15	10.15	13.06	13.06
3	Receivables equivalent to 60 days average billing on consumers	-	170.90	-	199.19
	Gross Total	**43.59**	**205.02**	**52.53**	**238.75**
Less:		-	-	-	-
4	Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	-	-	-	-
	Net Working Capital	**43.59**	**205.02**	**52.53**	**238.75**
		-	-	-	-
	Rate of Interest for Working Capital	0.00%	12.50%	0.00%	12.50%
	Interest on Working Capital	**-**	**25.63**	**-**	**29.84**

6.9.7 In the context of other interest and finance charges, the Commission has approved cost of raising finance as 1% of the loan drawals for the year. This is in line with the methodology followed by the Commission in its last Tariff Order for FY 2006-07. Accordingly the Commission has approved Rs. 7.60 Crores and Rs. 7.23 Crores as finance charges for FY 2007-08 and FY 2008-09 respectively.

6.9.8 Other interest and finance charges as approved by the Commission are thus, as given below:

Table 6-10: Approved Other Interest & Finance Charges for FY 2007-08 & FY 2008-09

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Other Charges	8.24	7.60	18.37	7.23
Total	**8.24**	**7.60**	**18.37**	**7.23**

6.9.9 The Approved interest charges on long term loans have been capitalized at the rate of 23%, consistent with the methodology followed by the Commission in the last Tariff Order for FY 2006-07. 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 2007-08 and FY 2008-09 are Rs.202.25 Crores and Rs.243.77 Crores respectively.

Table 6-11: Approved Interest Charges FY 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Interest on Existing Loans	236.26	180.41	316.68	151.70
Interest on New Loans	-	39.10	-	116.74
Total of I	**236.26**	**219.50**	**316.68**	**268.44**
Interest on Working Capital Loans	-	25.63	-	29.84
Total of II	**-**	**25.63**	**-**	**29.84**
Total of A : I + II	**236.26**	**245.13**	**316.68**	**298.28**
Other Interest & Finance Charges	8.24	7.60	18.37	7.23
Total of B	**8.24**	**7.60**	**18.37**	**7.23**
Grand Total Of Interest & Finance Charges:**C = A + B**	244.50	252.73	335.04	305.51
Less: Interest & Finance Charges Chargeble to Capital Account: **D**	52.69	50.49	67.24	61.74
Net Total Of Interest & Finance Charges : For Revenue Account: C-D	**191.81**	**202.25**	**267.80**	**243.77**

6.10 Other Income

6.10.1 As per the licensee, 'other income' includes non-tariff income from interest on loans and advances to employees and income from fixed rate investment deposits and interest on loans and advances to licensees. Accordingly, UPPTCL has projected a non-tariff income of Rs. 13.61 Crores for FY 2007-08 and Rs. 14.33 Crores for FY 2008-09.

6.10.2 The Commission has accepted Other Income projected by each Licensee at the levels submitted in the petition.

6.11 Return on Equity

6.11.1 The Commission in its previous tariff order had computed capital base for the UPPCL as per the Sixth Schedule of the Electricity Supply Act, 1948. Post the issue of Transmission Tariff Regulations 2006, the same has been replaced with Return on Equity (RoE). The Regulation 4.6 of Transmission Tariff Regulations 2006 provides for RoE @14% on equity base. The relevant extract of the regulations are as under:

> *"1. Return on equity shall @14%, on the equity base determined in accordance with Regulation 3.9 of these regulations.*
> *2. Equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the prevailing exchange rate.*
> *3. The premium raised by the transmission licensee while issuing share capital and investment of internal resources created out of free reserves, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such share capital, premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system and forms part of the approved financial package.*
> *4. Return on equity shall be chargeable from the first year of operation. In case of infusion of equity during the year, return on equity shall be charged on pro-rata basis".*

6.11.2 For the purpose of determining the opening level of equity for Transco, the Commission through its data deficiency letter had directed the licensee to submit the detailed computation for determining the opening equity for FY 2007-08 supported by financial statements. In response to the same, the licensee had submitted that in absence of notification of the transfer scheme, no separate annual accounts are available for UPPTCL. In view of the same, the estimated opening equity for FY 2007-08 is as estimated below:

Table 6-12 Closing Equity as on 31.03.07 – Estimation by the Licensee

(Rs. Crores)

Entity	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	Total
UPPCL Equity from GoUP	3,611	798	120	205	5,667	940	534	2,429	**14,305**
UP Transco	1,264	-	-	-	-	45	150	384	**1,843**

6.11.3 In absence of any substantial and verifiable information, the Commission while undertaking analysis for allowance of return on equity has considered opening levels of equity for FY 2007-08 based on the closing levels of unaudited actual nos. for the year FY 2006-07 as provided by the licensee. The licensee is directed to submit the information regarding the basis used for computation of the Opening Equity as given in the table above, the detailed working on a year to year basis and supporting financial statements used for the same. Based on the additions in equity as approved by the Commission, the approved Return on Equity is Rs.278.24 Crores and Rs.321.96 Crores for FY 2007-08 and FY 2008-9 respectively.

Table 6-13 Approved Reasonable Rate of Return for FY 2007-08 and FY 2008-09

(Rs. Crores)

Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Regulatory Equity at the beginning of the year	1,842.97	1,842.97	2,208.34	2,131.91
Capitalised Assets during the year	365.37	963.15	516.14	1,118.54
Equity portion of expenditure on Capitalised Assets	-	288.94	-	335.56
Regulatory Equity at the end of the year	2,208.34	2,806.12	2,724.48	3,250.45
Return Computation				
Return on Regulatory Equity at the beginning of the year	2,025.65	258.02	2,466.41	298.47
Return on Equity portion of capital expenditure on Capitalised Assets	-	20.23	-	23.49
Total Return on Regulatory Equity	**2,025.65**	**278.24**	**2,466.41**	**321.96**

6.12 Summary of Aggregate Revenue Requirement for Transco

6.12.1 In the preceding sections, the Commission has detailed expenses under various heads as per the Licensee' petition, as well as those approved by the Commission. A summary of the expenses under different heads as approved by the Commission for FY 2007-08 and FY 2008-09 is provided below:

Table 6-14 Approved ARR Transco for FY 2007-08 and FY 2008-09

(Rs. Crores)

Details	FY 2007-08		FY 2008-09	
	Petition	Approved	Petition	Approved
Employee Costs (net of capitalization)	214.21	203.58	252.70	225.06
A&G Costs (net of capitalization)	24.05	23.68	25.24	26.18
Repair & Maintenance Expense	69.86	60.45	86.58	66.83
Depreciation	245.40	270.80	308.80	325.65
Interest & Finance Charges	191.81	202.25	267.80	243.77
Less Other Income	13.61	13.61	14.33	14.33
Special Appropriations	-	-	-	-
Reasonable Return	283.59	278.24	345.30	321.96
Annual Revenue Requirement	**1,015.31**	**1,025.39**	**1,272.09**	**1,195.12**

6.13 SLDC Charges

6.13.1 UPPTCL has provided separate cost estimates for its SLDC Charges in the filings for FY 2007-08 and FY 2008-09 and the Commission has approved the same. However, these costs are already embedded in the transmission cost submitted by the licensee. The Commission hereby directs the 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.

Table 6-15: Approved SLDC Charges for FY 2007-08 and FY 2008-09

(Rs. Crores)

Details	FY2007-08	FY2008-09
	Approved	Approved
Employee Costs (net of capitalization)	5.0	5.5
A&G Costs	0.4	0.5
Repair & Maintenance Expense	0.3	0.3
Depreciation	4.5	5.3
Interest & Finance Charges	3.5	4.6
Less Other Income	(0.3)	(0.2)
Reasonable Return	5.2	5.9
Annual Revenue Requirement	**18.7**	**21.8**

6.14 Transmission Charges

6.14.1 The transmission tariff regulations provide for capacity (MW) based transmission charges. But as mentioned in the last tariff order, there are 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. However, in line with the new CERC Open Access Regulations 2008 which now caters only to the short term open access customers and wherein the emphasis is now on scheduling rather than on reservation of transmission and distribution capacity, the above charges are also determined based on the total energy delivered to the distribution licensees.

6.14.2 Based on the above mentioned methodology, the Transmission Charges payable by all the licensees in the state in the state are as given below:

Table 6-16 Approved Transmission Charges for FY 2008-09

(Rs. Crores)

Details	Units	FY 2008-09
		Approved
Net Approved Transmission ARR	Rs. Crores	1,195.12
Energy delivered to distribution licensee	MU	55,411
Transmission Charges	Rs./kWh	0.22

6.14.3 The Commission thus approves a transmission tariff of Rs. 0.222/Kwh for FY 2008-09. The transmission charges for FY 2007-08 based on the ARR approved by the Commission work out to Rs. 0.19/kWh. The transmission tariff approved by the Commission in FY 2006-07 Tariff Order was Rs.0.167/unit. The transmission tariff for FY 2007-08 and FY 2008-09 thus represents an increase of 12% and 15% over the transmission tariff for FY 2006-07.

6.14.4 The transmission charges are payable by all the discoms including M/s KESCO and M/s NPCL as determined above and would be payable directly to the transmission licensee i.e. UPPTCL by all the licensees.

6.14.5 The payments would have to be done on a monthly basis. The Transmission Licensee in consultation with the Distribution Licensees shall formulate a detailed procedure for the billing for the transmission charges to the distribution licensees in line with the provisions of the Open Access Regulations and submit the same for the approval of the Commission.

6.14.6 Till the procedure is formulated and approved by the Commission, the UPPTCL may raise the bills for recovering the Transmission charges from the distribution licensees in line with the procedure adopted by the distribution licensees for recovering the revenue on account of Bulk Supply from M/s KESCO and M/s NPCL.

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 within one month from the date of issue of the tariff order.

Chapter 7. OPEN ACCESS CHARGES

7.1 Background

7.1.1 The UPERC has issued the Open Access Regulations, 2004 on 7th June, 2005 to facilitate the open access transactions in the State as per the requirement under the Electricity Act 2003.

7.1.2 Further, to determine the various applicable charges for Open Access so as to facilitate its implementation within the State of Uttar Pradesh, the Commission had issued an Approach Paper on "Determination of Various Charges for Open Access including Cross-Subsidy Surcharge and Additional Surcharge" and vide public notice dated 4th October, 2007 invited comments from all the stakeholders and public at large on the paper.

7.1.3 Based on the comments received on the paper, various charges related to Open Access are being approved by the Commission vide the present order. Each cost is computed in the succeeding paragraphs.

7.2 Open Access Charges - Transmission Charges

7.2.1 As specified earlier, the approved transmission charges for FY 2008-09 for use of UPPTCL network for transmitting power is Rs. 022/kWh.

7.2.2 Further, the Commission in order to encourage the Open Access transactions in the state has further tried to segregate the transmission charges payable by customers seeking Open Access based on the voltage levels at which they are connected to the grid. However, in absence of voltage level wise break-up of expenses and asset details, the Commission has for the purpose of the present order 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.

Table 7-1: Approved Voltage level Transmission Open Access Charges for FY 2008-09

Details	Units	FY 2008-09 (Approved)	
		Long Term	Short Term
Connected at 132 kV Voltage Level	Rs./kWh	0.22	0.05
Connected above 132 kV Voltage Level	Rs./kWh	0.16	0.04

7.2.3 The short term open access charges are 25% of the long term open access charges.

7.2.4 In addition to the payment of transmission Open Access charges, the customers seeking Open Access also has to bear the transmission losses in kind. The Commission has been seeking voltage level loss data from the utility but the same has not been forth-coming. In view of the same, the Commission has ruled that the transmission losses applicable on the transmission open access transactions would be 5% for the purpose of the present order irrespective of the voltage levels at which the consumers are connected to the grid.

7.2.5 The payments for the open access transactions shall have to be done in line with the provisions of the Open Access Regulation issued by the Commission.

7.2.6 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 licensees.

7.3 Wheeling Charges

7.3.1 Clause 2.1 (2) & (3) of the Terms and Conditions for determination of 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 Business takes place, ARR proposals for Wheeling and Retail Supply Business shall be prepared based on an allocation statement to the best judgment of the distribution licensee.

7.3.2 The licensees have submitted the segregation of the distribution ARR into Retail Supply and Wheeling Function. However, the same is not in line with the methodology prescribed in the regulation. In view of the same, the Commission in its best judgement has segregated the approved ARR for Discoms into wheeling function and retail function wherein Rs. 2246 Crores is allocated to wheeling function and Rs. 15289 Crores to supply function.

7.3.3 Based on the same, the wheeling charges for FY 2008-09 are Rs. 0.56/kWh. The details of the same are as given below:

Table 7-2: Approved Wheeling Charges for FY 2008-09

Details	Units	FY 2008-09
		Approved
Net Approved Distribution (Wheeling Function) ARR	Rs. Crores	2,245.94
Retail Sales by Licensees	MU	40,011
Wheeling Charges	Rs./kWh	0.56

7.3.4 The Commission in order to encourage the Open Access transactions in the state has further tried to segregate the wheeling charges payable by customers 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 for the purpose of the present order considered an interim allocation of costs at various voltage levels and approved the following distribution charges payable by all Open Access customers based on the voltage level at which they are connected with the distribution network. The charges have been worked out on the assumption that the wheeling expenses for the wheeling energy 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. This is based on the best judgement of the Commission.

Table 7-3: Approved Voltage Level Wheeling Charges for FY 2008-09

Details	Units	FY 2008-09 (Approved)	
		Long Term	Short Term
Connected at 11 kV Voltage Level	Rs./kWh	0.45	0.11
Connected above 11 kV Voltage Level	Rs./kWh	0.28	0.07

7.3.5 The wheeling charges for the short term distribution open access users are 25% of Long Term Charges.

7.3.6 In addition to the payment of Distribution Open Access charges (wheeling charges), the customers seeking Open Access also has 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 forth-coming. 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.

7.3.7 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 upto 132 kV would be in the range of 7% to 8%. Hence, the Commission rules that the wheeling loss applicable for open access transactions entailing drawal at 11 kV voltage level is 8%, and that for drawal at voltages above 11 kV voltage level shall be 7%.

7.3.8 The payment of the wheeling charges to the discoms would be done as per the procedure outlined in the Open Access Regulations or will have to be formulated by the Discoms and approved by the Commission.

7.3.9 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 licensees.

7.3.10 The wheeling charges determined above shall not be payable if the open access consumer is availing supply directly from the state transmission network.

7.4 Cross Subsidy Surcharge

7.4.1 The cross-subsidy surcharge for eligible open access consumers will be **zero** as per the computation based on the methodology prescribed by the Commission in the Open Access regulations.

7.4.2 However, the impact of migration of consumers from the network of the incumbent distribution licensee at its impact 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.

7.5 Additional Surcharge

7.5.1 For the present, additional surcharge is determined to be zero.

7.6 Other Charges

7.6.1 The recently finalized Open Access Regulations 2008 by CERC specify that:

"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."

7.6.2 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 Section 62 of the Electricity Act 2003, read with Section 24 of the Uttar Pradesh Electricity Reform Act sets out the overall principles for the Commission to determine the final tariffs to all categories of consumers defined and differentiated according to consumers load factor, power factor, voltage, total consumption of energy during any specified period or the time at which supply is required or the geographical position of any area, nature of supply and the purpose for which the supply is required. The overall mandate of the statutory legislations to the Commission is to adopt factors that will encourage efficiency, economical use of the resources, good performance, optimum investments and observance of the conditions of the license.

8.2 The linkage of tariffs to cost of service and elimination of cross-subsidies is an important feature of the Electricity Act, 2003. Section 61(G) of the Electricity Act, 2003 states that the tariffs should progressively reflect the cost of supply and it also requires the Commission to reduce cross subsidies within a timeframe specified by it. The need for progressive reduction of cross subsidies has also been underlined in sections 39, 40 and 42 of the Electricity Act, 2003. The tariff policy, however, argues for adoption of average cost of supply, which should be taken as reference point for fixing the tariff bands for different categories.

8.3 Cost of service studies are meant to provide the Licensees and the Commission with an appropriate tool for alignment of costs and charges. There are three basic approaches to cost of service computation i.e., Embedded Cost of Service, Marginal Cost of Service, and Average Cost of Service.

8.4 The embedded cost approach, allocates the total revenue requirement to the various categories of consumers based on an analysis of the embedded or historic costs of the utility. In such an analysis, the test year's revenue requirement is allocated to classes of service or tariff schedules based on an assortment of allocation factors. These factors can be computed from the contributions of the classes to the total demand on the peak day of the utility, the kilowatt-hours purchased by each class as a percent of total sales, the number of consumers in the class, etc. Embedded cost approach, therefore adopts the historical costs and allocates them to various categories of consumers depending on extent of asset usage, time of use and the other costs involved in providing electricity services to the consumers and to that extent, does not send appropriate price signals for costs involved in providing for future consumption at future costs.

8.5 Marginal costs adopt future costs instead of historical costs for determining the costs in supplying electricity to various consumer categories. Long run incremental costs (LRIC), a marginal cost approach, reflect the cost of expanding the system efficiently to satisfy the load forecast of very long time horizon. The concept of the long run incremental costs is embedded in integrated resource planning and generally over a long term duration, is reflective of the least costs required to meet the planned level of load at a defined horizon. Whenever, returns to scale are present, LRIC would result in insufficient revenue and requires corresponding adjustments to bring it to future average costs. The beneficial efficiency impact of LRIC is well established in economic theory.

8.6 Embedded cost studies are generally easier to undertake since they use historical data and rely less on projections, as compared to marginal cost studies. In the present environment, the Commission would have preferred to use cateory-wise embedded cost approach for cost of service determination for each category. However the Commission notes with regret that UPPCL has not been able to furnish basic embedded cost details in-spite of several directions being provided by the Commission in this regard. Under these circumstances the Commission can at best, continue with an average cost approach for tariff determination.

8.7 The Average Cost approach simply considers the overall revenue allowance and divides the same by the units proposed to be sold. This method is simple, but also has deficiencies in providing price signals since the averaging of costs removes distinctions in the costs that may be involved in serving individual categories in view of time varying nature of costs of producing and delivering electricity. However, the Commission has no option but to follow the average cost of supply as the reference point for assessing cross-subsidies embedded in a category tariff.

8.8 Apart from alignment with the category cost to serve, the supply arrangements and tariff design also need to send additional cost signals wherever the implementation framework allows for such tariffs to be administered. Thus, time differentiated tariffs and Demand Side Management (DSM) measures can promote efficient consumption of electricity by sending price signals to the consumers. The Commission recognizes the impact of good tariff design in promoting efficient consumption. Poorly designed tariffs can result in wasteful consumption of electricity, particularly in categories that are supplied at rates lower than the cost to serve (or the cost of substitute sources of supply).

8.9 Before discussing salient aspects of the current order and its tariff design, it would be prudent to re-produce section 62(3) of the Electricity Act, 2003, which provides the framework for tariff design, while ensuring its consistency with the principles laid down under section 61 of Electricity Act, 2003 as well as national electricity policy and tariff policy :

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

8.10 As is obvious from the previous paragraph and from the reference of rate schedules of previous years that while determining the tariffs for various years, the Commission used the distinguishing parameters of load factor, power factor, voltage level, nature of supply & purpose and also geographical position of consumers while specifying the tariffs for different category of consumers. Accordingly, the Commission in its current order has gone on to apply the already utilized factors in a more focused manner keeping in view the ground realities specially related with the power supply availability in various parts of the State.

8.11 Since the tariff order for 2000-01 the Commission has embarked upon the task of progressive rationalization of tariff structures. The Commission introduced two-part tariff structures for all metered categories in 2000-01 and further rationalized the fixed charge component in 2001-02. In that year the Commission also introduced kVAh billing for high voltage consumers to encourage them to improve power factor. In the order for 2002-03 the Commission provided rate incentives for un-metered consumers to install meters, and provided several other incentives like rebates for single point supply to residential colonies. Fixed charges and energy charges were rebalanced further to bring them closer to actual costs. Further rebates for high-energy consumption by industrial consumers were also enhanced. In the Order for FY 2003-04, the Commission introduced load-factor rebate to Small & Medium Industries (LMV-6), while enlarging the scope of the rebate for Large & Heavy Power (HV-2) consumers. The Commission believed that the consumption levels of such consumers could be improved further for the benefit of the Licensee and the consumer by provision of suitable rebates. The scope of kVAh and load-factor based billing was broadened to cover loads above 50 kW in categories of non-domestic (LMV-2) and institutions (LMV-4). An option of migration to HV-2 was also provided to all loads above 50kW in LMV-2, LMV-4 and LMV-6 category. The Commission also did away with the rebate for timely payment of bills for all categories. In the tariff order 2004-05, the Commission focused its efforts on simplifying the rate structure by reducing the number of sub-categories and rate differences, while ensuring that the tariff in general moves towards cost of supply. An attempt was made to create bands in a manner so that high voltage consumers and consumers involved in commercial activities formed two distinct bands above cost of service thereby clearly depicting the bands of subsidizing categories. All consumption related to public utilities, where profit was not an objective, was aligned in one band and the tariffs for this band were moved to reflect the average cost of service. A very significant aspect of the order 2004-05 was to do away with the concept of separate tariff for restricted and unrestricted consumption in small and medium industry category thereby abolishing an intrusive regulation of these consumers in view of large scale power rostering across the State. Further, the rate of charge under rate schedule for HV-2 consumers was merged with the urban rate of charge on 33 kV & above voltages as all these feeders emanate form 132 kV sub- station and were free from application of rural schedule or other associated power cut problems. In view of considerable and discriminatory power rostering across State, which has affected business and other related activities during normal hours, consumers from various sections of the society have strongly represented before the Commission that the tariff should be linked to hours of supply, the Commission has accordingly linked the tariffs to hours of supply in its tariff order for the financial year 2006-07. However, licensees citing implementation issues with respect to implementation of hour linked tariffs filed a review before the Commission. Based on submissions made by the licensees the Commission stayed implementation of hour linked tariffs. The other area plaguing the power sector is the improper accounting of the energy due to un-metered supply. In spite of categorical provision to achieve 100/% metering under Electricity Act, 2003, large chunk of rural consumers are still un-metered in most of the States. In Uttar Pradesh also, predominant proportion of rural consumers either in domestic category (LMV-1) or in commercial (LMV-2) and pump set (LMV-5) category continue to be billed under un-metered category. To address the above issue the Commission through its tariff order for the financial year 2006-07 provided distinct tariff signals to promote metered consumption.

8.12 Another problem area which has been engaging the mind of the Commission all through has been the rampant theft of power and various malpractices adopted by the consumers of electricity to register reduced consumption. To incentivize declaration of honest consumption the Commission had introduced the concept of load factor rebate in its tariff order for the FY 2003-04 in LMV-6 and HV-2 category. The concept of load factor rebate, in a slightly different format, was further extended to consumers under LMV-1 and LMV-2 category in tariff order for the FY 2006-07. The same could however, not be implemented, as the licensees filed a review against hour linked tariffs and the same along with the inbuilt concept of load factor was stayed by the Commission in view of implementation issues raised by the licensees. The Commission in the present tariff order has introduced flat tariffs in the category, which unlike the tariff designed in the FY 2006-07 tariff order is not based on the consumption level thereby not containing the concept of load factor rebate and hence does not pass on the benefit of load factor to the consumers. Accordingly, the Commission has re-introduced the load factor rebate through the current tariff order starting at a lower level than HV-2 consumers taking into account the availability of supply to these consumers.

8.13 Further, it requires to be emphasized that while designing the rates of charge, as applicable to HV categories, and also in some LMV categories, the Commission endeavoured to create rate bands in a manner so that high voltage consumers (excluding HV-1 category) averaged across the voltage levels and consumers involved in commercial activities form two distinct band slightly above cost of serve while, all consumption related to public utilities, where profit is not an objective, have been aligned in one band and the tariffs for this band is made to reflect more or less average cost of service. The Commission has also made a conscious effort not to burden the honest consumers and accordingly, under the scheme if a consumer gives his willingness to the licensee to get installed a meter outside his premises for the purposes of metering and billing, then he would be provided a discount of 5% on energy charges applicable to them.

8.14 It is also a firm belief of the Commission that unless there is public awareness and public participation against the theft of power, the same cannot be curbed. Accordingly, to sensitize various consumer groups and individuals to participate in the drive against theft of power, the Commission, in its present tariff order, provides an additional rebate of 25 paise per unit on the energy charges to consumers fed through a particular transformer, if representative from the consumer group as nominated by the consumers connected from the transformer, is able to show to the licensee that the energy loss on power supplied through their transformer is less than 8%. As and when, approached by the representative from the consumer group it would be mandatory for the licensee to identify all the consumers connected to that particular transformer and do the consumer indexing within a period of one month. It is noteworthy that in the review petition dated 28th June, 2007 filed against the tariff order for the financial year 2006-07, Chairman, UPPCL is on affidavit that the consumer indexing for the entire State may be completed within a year. Expecting even partial progress in this matter, the Commission expects that sizeable chunk of consumers must have been indexed. Accordingly, it is presumed that the licensees are in readiness to implement this scheme immediately, if approached by consumer representative, and for remaining areas, a time of one month is given to the licensees to index the consumers of any particular transformer after the consumer representative from that transformer requests the licensee to implement the scheme. For application of the above scheme licensees shall further be required to carryout meter reading at the transformer as well as on all consumers connected to that transformer preferably on the same day or maximum within three days to have realistic determination of loss level at the transformer. In case the meter reading is carried out in more than one day than the reading at the transformer level would be taken both at the beginning and end of the exercise and then an average would be taken of these two readings for comparing with the sum of individual consumptions to arrive at the critical loss level for obtaining rebate. For the implementation of above scheme licensees shall make suitable changes in the billing software so that it could automatically assess the monthly loss level on a particular distribution transformer as and when data related to energy supplied from a particular distribution transformer (low voltage side) and energy consumed by individual consumer connected to that transformer are fed into the system. Further, the licensees are directed to submit a methodology for determination of losses and billing of such consumers to the Commission for approval within a period of one month from the date of issue of the tariff order. The rebate to the consumers, as per above scheme, on the basis of this consumption shall however be adjusted in their next month's energy bill. Bulk load consumers getting supply at single point under LMV-1 shall however, not be covered under the above scheme.

8.15 In the previous tariff order the Commission has created a provision wherein all consumers having a load of 75 kW or more and getting supply at 11 kV or above voltages (other than consumers under LMV-1 category) have to be billed as per HV-2 rate schedule. By bringing consumers with load above 75 kW & at 11 kV within the ambit of HV-2 category, the Commission had tried to ensure a better monitoring of the consumption of these consumers through TOD meters as well as application of TOD tariffs on these consumers, which would help these consumers to stagger their load in accordance with applicable charges thereby helping in reducing the system peak demand. However, the non industrial consumers who got shifted to HV-2 category, in pursuance of the above provision, have represented during the public hearings that their consumption pattern is such that there is not much possibility of shifting the loads to off peak hours and therefore, TOD tariffs should not be made applicable on them. To address the issue raised by such consumers the Commission has created a new category HV -1 in this tariff order, wherein two rates of charge have been specified: one against Commercial loads/private institution/ non domestic bulk power consumer above 75 kW load getting supply at 11 kV & above 75 kW load and another for public institutions above 75 kW load getting supply at 11 kV &

above voltages. In order to address the grievance of Commercial loads/private institution/ non domestic bulk power consumer, being billed under HV-2 rate schedule under the provisions of tariff order 2006-07, the Commission has decided to give these consumers a rebate of more than 10% on HV-2 rate of charge at 11 kV voltage level. In fact, the energy charge of this category is roughly 80 paise less then the commercial and private institutional loads under LMV categories, which more than off sets enhanced demand charge on these consumers at normal consumption level. Accordingly, the Commission has attempted to protect the interest of these consumers even after shifting them in HV category. As far as public institutions getting supply at single point and feeding multiple individuals are concerned, the rates specified for them are further below by roughly 10% considering the non-commercial nature of public institutions and operational ease for the licensee in terms of reduced effort in collection and billing activity, as applicable in case of single point supply feeding multiple individuals.

8.16 The Commission has always been cognizant of the fact that there is an urgent need for ensuring recovery of cost of service from consumers to make the sector viable, but at the same time the Commission is also aware that some minimum level of support would be required to make electricity affordable for household of very poor category as electricity is a basic minimum need and is an essential driver of economic growth and poverty alleviation. It is with this view in mind that the Commission had, for consumers with contracted load of 1 kW and consumption below 100 units per month, prescribed a lifeline rate of Rs 1.90/unit in the tariff order for the financial year 2006-07. However, during the course of public hearing, licensees have represented that in order to get the benefits of the life line rates, consumers even having significantly higher consumption i.e. more than 100 units are unscrupulously managing to register consumption below 100 units per month. The Commission has accordingly in this tariff order added one more qualifying condition for lifeline slab in terms of constructed area of the house, which should be less than 500 sq. ft. for availing the benefit of lifeline rates. As per the provisions of Tariff Order for FY 2006-07 governing the consumption under the lifeline category, any person who exceeded the prescribed limit for energy consumption per month even by a marginal quantity, the benefits under the lifeline category were withdrawn and the consumer was billed under the tariff applicable to consumers getting supply under other metered category of LMV-1 category for the entire consumption during the month. This would lead to a significant tariff shock for the consumer. Hence, to insulate such small consumers from the above mentioned tariff shock, the Commission has extended the limit for monthly consumption under the Lifeline category to 150 units per month with a slightly higher tariff of Rs. 2.50/kWh for consumption beyond 100 units and upto 150 units per month. In case the consumers under lifeline category exceeds the consumption of 150 units per month, then he will be debarred from the benefits enjoyed under the lifeline rate and his consumption right from the first unit would be charged in accordance with the rates specified for other metered domestic consumers. Accordingly, the commission has ensured that the benefit of lifeline rate is devolved to only its targeted beneficiaries and not to the consumers in better economic conditions.

8.17 For better and equitable management of demand during summer season, which is normally plagued by severe power crisis as well as large scale rostering, the Commission intends to discourage unbridled use of air conditioners by way of imposing additional charge on tonnage of air conditioners. No doubt air conditioners have become a part of life for urbanized world but at the same time it cannot be allowed at the expense of majority of consumers facing acute summer without electricity. Even if such usage is unavoidable at places then such consumers should be ready to cough-up some additional charge for availing this luxury, which can be better utilized for purchase of additional power to alleviate the agony of consumer at large. Accordingly, the Commission specifies that for all loads above 5 kW under LMV-2, LMV-4 and HV-1 (with the exception of public institutions getting supply at single point and feeding to multiple individuals i.e. consumers falling under rate of charge point 3(b) of HV-1 rate schedule.) an AC load of 1.5 tonne/5kW or actual as intimated through an affidavit, shall be charged at Rs. 150/tonne of air conditioning load over and above the bill prepared on the basis of applicable rate of charge for that category. These charges shall also apply on consumers getting billed under minimum consumption charges. The consumer not having any air conditioning load or whose actual AC load is less than the AC load derived as per 1.5tonne/kW formula, shall however be at liberty to submit an affidavit to this effect with the concerned Sub Divisional Officer (SDO)/ Divisional Officer. Based on the affidavit submitted by the consumers they shall be charged as per their actual AC load.

8.18 Keeping in line with the philosophy of discouraging non-essential consumption when large scale rostering is being resorted on essential services as well as on agricultural load in an agrarian economy, the Commission considers that the consumption of electricity for the purposes of commercial advertisement, which at times is wasteful also should be discouraged. Accordingly, the Commission has prescribed a single part tariff in the form of much higher energy charge for this kind of consumption in the current tariff order.

8.19 The Commission understands that rural domestic, commercial and PTW rates are largely subsidized and the state government is honouring its commitment towards commensurate subsidy, still in order to gradually achieve the mandate of universal metering, as given in the Act, the Commission has consciously increased the fixed charges for un-metered consumers on rural schedule under LMV-2 and the charges of corresponding metered category have been increased and brought in line with the tariff under the lifeline category under LMV-1. The Commission is of the view that though the proposed charges for the metered consumers on rural schedule under LMV-2 seem substantially higher as compared to the charges being levied currently, the present charges are very low even when compared to the charges for the lifeline category of consumers under LMV-1 which is a highly subsidised category. This is against the basic philosophy that the charges being levied for use of electricity for domestic use cannot be higher than that charged for commercial purposes. Hence, to address this discrepancy in the tariff structure and in order to avoid significant tariff shock at a single go, the Commission in the present order has aligned the rates of the metered consumers on rural schedule under LMV-2 with the tariff for lifeline category of consumers under LMV-1.

8.20 Further, in view of the poor supply position in the rural areas in the state, the Commission has not felt it appropriate to propose any changes to the tariff to consumers getting supply under the Rural Schedule of LMV-1 category.

8.21 As regards to the other metered Domestic Consumers under LMV-1 category and not falling under the definition of lifeline consumers, the Commission has introduced two consumption slab where the first slab is restricted upto 200 units consumption per month. The Commission has retained the energy charges for consumption upto this level at the existing rate thus ensuring that smaller domestic consumers are not burdened. This in effect also translates into a significant discount in view of the increasing costs. The tariff for consumption over the limit of 200 units per month will be Rs. 3.30/kWh which is a modest increase in view of the increasing costs.

8.22 The tariff for other metered consumers under LMV-2 has been increased commensurate to increases in cost and is aligned with similarly placed consumer categories.

8.23 While sticking to its basic philosophy of giving strong impetus to metering, the Commission has gone for an innovative approach in the Public Lamps category (LMV-3), wherein it had specified a flat rate even for metered category in place of the existing scheme of fixed charges and energy charges. Keeping in view the typical nature of public lamp’s operation with entire load coming at night only, it was reasoned to be more appropriate to provide flat rates for metered category as the incentive for metering becomes distinctly visible and more so because computation of flat charges is much more accurate in this case due to known hours of operation as well as implausibility of any unauthorized use in this public utility category. Accordingly, distinct difference of Rs. 200/KW/month had been provided between the un-metered and metered sub categories falling within the areas of Nagar Palika and Nagar Nigam. This approach had been adopted to improve energy accounting of the licensee thereby enabling it to optimize its power purchase requirement more so in view of rapid urbanization in the State. The flat rate for metered category was worked out on the basis of average supply availability across state at average cost to serve. Immediately after the issuance of tariff order 2006-07 containing this new tariff structure for public lamps, the licensee in their review petition challenged this provision stating that rate of charge for metered category should not be a flat one rather it should contain fixed and energy charges. The licensees, in their present tariff proposal, themselves have filed a significantly enhanced single flat rate for this category without discriminating between metered and un-metered category. This is nothing but an attempt to garner additional revenue without putting in any effort on the metering of this category, which was certainly not an objective of the Commission behind specifying flat charge for even metered category. Hence in view of the same, the Commission in the present tariff order has proposed a two part tariff structure for the consumers availing metered supply under the LMV-3 category.

8.24 The tariff's in the LMV-4 category have been upwardly revised commensurate to the increases in cost and the rates for the public institutions under the LMV-4 Category have been aligned with other public utilities viz. public water works, etc. whereas, the rates of private utilities under LMV-4 have been aligned with the rates of commercial categories. Rates for State tube-wells under LMV-8 category, although aligned with the public utility rates, have slightly lower energy charge on account of its usage for irrigational purposes.

8.25 As far as the rates for private tube well i.e. LMV-5 category is concerned, the Commission has not recommended any change in view of the GoUP subsidy committed to this category , the proposal of the licensee and its utility for agricultural purposes which is of paramount importance in the agrarian economy.

8.26 In the tariff order for the financial year 2006-07, the Commission had withdrawn the provision of minimum charges from those sub-categories, where rebates in energy charges were provided on achieving specified load factor, and also from categories where the consumers are far and few. The licensees have however strongly demanded re-imposition of minimum charges in certain categories mainly in HV-2 category substantiating that such an abolition has resulted in a huge revenue loss to them. The main argument on which the plank of MCG has been justified by the licensee is that since minimum consumption charges can be obtained on 3 to 4 hours of supply, which is much less than the supply being provided to consumer in the state therefore, there is, hardly any justification in removing the MCG. Surprisingly, this is a self negating logic because if minimum charges can be derived on 4 hours of supply than no consumer should be billed under the minimum charges unless there is complete collapse in metering system, a situation which cannot be allowed to permeate in a regulatory framework. The facts as it is also indicate that there is rampant theft of power which the licensee is not able to curb. Although licensees have annexed rate schedules of few other states, where minimum consumption charges are being levied, in order to justify their claim but then the Commission is constrained not to give a signal which may make the licensee more complacent even to properly meter the bulk consumers. Accordingly, the Commission is not inclined to re-introduce MCG for the HV category of consumers. The Commission finds absolutely no reason why licensee cannot properly monitor and meter its large and heavy consumers, with or without advanced technological interventions, who contribute significantly to its revenue stream. The Commission is also not inclined to re-introduce minimum charges on LMV-4(A) – public institutions, where there are supposedly few numbers of consumers at Sub Divisional/Divisional level and where there is not much inclination and incentive for indulging in theft of power. Similarly, in view of double metering of consumers under LMV-4(B), the Commission feels absolutely no need for specifying minimum charges. As far as the minimum charges for LMV-2 category consumers are concerned, the Commission allows the proposed minimum charges of the licensee of Rs. 300/kW/month on these consumers, which is Rs. 40/kW/month more than the existing minimum charges.

8.27 Maintaining good power factor is central to efficient consumption, which has been lent serious emphasis under Electricity Act, 2003 which makes categorical punitive provisions under section 139 and 140 in cases of wastage of electricity, even if done negligently. Accordingly, to underline the importance of power factor, the Commission had decided to make kVAh tariff essential for all consumers above 25 kW / 25 BHP having static TVM meters installed at their premises in the Tariff Order for the FY 2006-07 and had done away with power factor rebate / power factor surcharge in cases covered with kVAh billing. The Commission had however allowed a rebate of 2% to consumers who were able to maintain an average power factor of more than 0.98, as a mark of respect to real achievers. In view of representation by the licensees that KVAh based tariff itself has in built provision for rebate and penalty and therefore extra rebate of 2% should be discontinued. On the other hand, few consumer groups have demanded the eligibility limit of power factor rebate to be lowered to the previous level of tariff order 2004-05 i.e. 0.95 considering it as their natural right whereas, the tariff order 2006-07 had expressly provided that the rebate is being allowed only as a mark of respect for real achievers. In view of contradictory stands by the licensee and the consumers and also some unnecessary complications being introduced at the field level in introducing this provision, which makes its implementation rather dispute prone, the Commission sticks to technically cogent stand of disallowing double incentive by discontinuing the existing power factor rebate.

8.28 In view of representations from some large and heavy consumers that they are being billed even 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 taken 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 thereby endangering the surrounding system. The implementation of this provision went on smoothly in general consumer categories but railways, 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, was uneasy with this provision as it was being billed heavily for its leading kVAH also. While railways has submitted that they are in process to install dynamic reactive compensators but it will take couple of years considering the vastness of area accordingly, it 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. Accordingly Commission decides that till the process of installing dynamic compensators is complete for railways within the territory of Uttar Pradesh, 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 i.e. Railway traction. Therefore, the leading kVArh in case of railways need to be blocked, which will result into leading kVAh being equal to kWh for such periods.

8.29 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. Seasonal tariffs directed towards seasonal loads help these consumers in aligning their costs and revenue streams and thus can be mutually beneficial for both the utility and its consumers. In this back drop, the Commission, in its order to 2006-07, had made the seasonal tariffs more flexible and consumer friendly. The provision of minimum charges was removed from HV-2 category all together and also its application on seasonal industries under LMV-6 category during the off season. Further, the Commission had given flexibility to seasonal consumers to declare their off seasonal demand subject to a maximum of 25% and during this period, the consumer was to be billed on the basis of maximum demand recorded in the meter. Violation of the demand upper ceiling was also made less stringent as it was provided that the first violation in the season had to attract full billable demand charges and energy charges calculated at the rate 50% higher then the applicable tariff during normal period however, on second default the consumer will forfeit the benefit of seasonal rates for the entire season. The Commission retains the existing provision for the seasonal tariff as there is no representation for any change from the side of consumers and the licensee has also included this provision in his existing filing.

8.30 The Commission has retained the principle of time-differentiated tariff for HV-2 consumers. Licensees have suggested for a change in TOD structure by increasing the peak premium from 15% to 20% and removing the off peak rebate altogether. In this context, it needs to be mentioned that in the tariff order 2006-07 the Commission had reworked the TOD structure and had approved a lower premium rate of 15% from the then 20% during the peak hours whereas, the off peak TOD rates were lowered from (-)5% to (-)7.5%. After issuance of tariff order 2006-07, the licensees filed a review against the changed provision however, the Commission held that the review is not maintainable against the provision. Subsequent to the review being held not maintainable, the licensees approached Appellate Tribunal of Electricity under appeal on the issue. As the matter is still pending with the Appellate Tribunal of Electricity and the licensees have not provided the Commission any consumption history of the consumers in the category in desired detail to assess the revenue impact of TOD Application on the consumers, the Commission retains the existing provision of peak premium rate of (+)15% and the off peak rebate as (-)7.5%.

8.31 In its previous tariff order, the Commission had addressed the problem of very high meter exception on account of large number of bills being issued under Not

Accessible / Not Read (NA/NR) under the LMV-1 category by providing an incentive of Rs. 1/kW/ billing cycle to a distribution division on the basis of total contracted load of LMV-1 consumers in the division for that billing cycle, if NA/NR in the division was less than 5% of LMV-1 consumer base in the billing cycle. Although the Commission has not been informed about any progress on this front by the licensees and the Commission is not sure whether the scheme was at all implemented but the Commission is retaining this scheme as it is targeted to address the malaise of very high meter exception rate in domestic category. It is in deed disheartening that the licensees are not responsive to any progressive scheme even if it entails incentive for them. The Commission, accordingly, directs that a detailed report should be submitted before it showing the meter exception rate of domestic consumers for all the divisions of the State.

8.32 During public hearings, it was also raised that 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%. However, in this context, it requires mention that the Commission has already, in its previous tariff order, made this provision much less stringent by providing that for excess demand upto 10%, the penalty would be charged at single rate rather than earlier existing double rate.

8.33 For the consumers under LMV-1 & LMV-2, the Commission has made it mandatory that the maximum demand as recorded by the meter should be indicated in their monthly bills. The Commission has made this provision to have a realistic estimation in demand, which will be helpful for the licensee from the angle of system planning and at the same time it would insulate consumers from the intrusive overreach of the licensee.

8.34 After discussing the conceptual framework and the strategy of tariff formulation followed in the Order, it would be appropriate to summarize the salient features of the approved tariff structure:

- To prevent misuse of lifeline rates, in addition to consumption below 100 units and connected load of 1 kW, another qualifying condition of constructed area of the premises less than 500 sq. ft introduced. The consumption limit per month has now been enhanced to 150 units per month with a proposed tariff of Rs. 2.50/kWh for consumption above 100 units and upto 150 units per month. Old energy rates retained for consumption upto 100 units per month.
- Tariff for consumers getting supply under the Rural Schedule of LMV-1 have not been changed and retained at the existing levels;

- Two consumption slabs introduced for consumers getting supply under other domestic metered category of LMV-1. The energy charges for consumption upto 200 kWh per month retained at the existing level of energy charges i.e. Rs. 3.00/kWh and that for consumption over 200 kWh at Rs. 3.30/kWh. This is a significant relief in view of the increased costs in the last three years.
- Tariff of metered consumers getting supply under Rural Schedule of LMV-2 aligned with the tariff's of lifeline domestic category under LMV-1.
- Two part tariff introduced for consumers getting metered supply under the LMV-3 category.
- Religious institutions also brought in to the ambit of LMV-4(A) i.e. public institution.
- LMV-5 category tariff have been retained at existing levels.
- To incentivize declaration of honest consumption and optimise the utilisation of assets, the concept of load factor rebate has been re-introduced for consumers under LMV-6 category.
- With the objective to realistically estimate demand of consumers under LMV-1 & LMV-2 and also to prevent intrusive intervention by the licensee, the maximum demand as recorded by the meter to be indicated in the monthly bills of LMV-1 & LMV-2 consumers.
- To discourage unbridled use of air conditioners, for better and equitable management of demand during summer season, and additional flat rate of Rs. 150/tonne of actual AC load introduced on consumers with load above 5 kW under LMV-2, LMV-4, LMV-6 and HV-1 (with the exception of single point consumers feeding to multiple individuals i.e. consumers falling under point 1(c) of HV-1 rate schedule). Flat tariffs for AC loads to apply during the period April to September.
- Keeping in line with the philosophy of discouraging non-essential consumption tariffs for commercial advertisement along road side have been significantly increased.
- To incentivise honest consumers, it has been provided that if a consumer gives his consent to the licensee for metering installation of a 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%.
- To address the concerns of consumers with load above 75 kW and getting supply at high voltage, who got transferred to HV-2 category form LMV-2 & LMV-4 category in view of provisions of tariff order for the financial year

2006-07, a new category HV-1 created, wherein much reduced demand and energy charges have been specified.

- Provision of power factor rebate for maintaining power factor more than 0.98 discontinued.
- To promote public awareness and public participation against theft of power, an innovative scheme introduced, which provides that an additional rebate of 25 paise per unit on the energy charge will be provided to consumers fed through a particular transformer, if representative from the consumer group, as nominated by the consumers connected from that transformer, is able to show to the licensee that the energy loss on power supplied through that transformer is less than 8%. For the purpose of application of above scheme licensees have been asked to complete the consumer indexing within a period of one month of issuance of this tariff order and submit a methodology for determination of losses and billing of such consumers to the Commission for approval within a period of one month from the date of issue of the tariff order.

8.35 The Commission in the subsequent section briefly discusses the approved tariff for each category of consumer. The tables given for each category of consumer gives the approved rates and the broad definitions / terms & conditions applicable to each category are being covered in the rate schedule annexed with this Order.

8.36 Rate Schedule LMV-1: Domestic Light, Fan and Power

8.36.1 This schedule shall broadly apply to 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 Electric Crematoria, Mixed Loads of Registered Societies, Residential Colonies/Townships, Residential Multi-Storied Buildings with mixed loads above 50 KW (getting supply at single point), Cantonments (mixed load without any restriction) having minimum Contracted load of 500 kW and receiving supply at single point.

<u>Domestic Rural Consumers</u>

8.36.2 The tariff for consumers getting supply under the rural schedule of LMV-1 has been retained at the existing levels. The Commission, in view of the poor supply conditions existing in the rural areas have taken a considered view to retain the tariff at the existing levels. While doing so, the Commission has ensured that the incentive for metering continues to be strong. The incentive for metered consumption continues to be high and at the same time there has been absolutely no change in the rates of metered categories in view of the fact that it is a subsidized category. The average bill of the rural metered domestic consumer having 1 kW load and consuming 72 units in a month (the norm) will work out to Rs. 87, whereas an unmetered consumer will pay Rs. 110 per month. In view of the very poor supply conditions exiting in the rural areas, the implication of unmetered tariff on the consumers would continue to be higher than metered tariff. This has been done in order to provide huge incentive to metering in consonance with the statutory obligation.

8.36.3 Total revenue from this class of consumers works about Rs. 575 Crores on the tariff rates prescribed for the year 2008-09. The total projected consumption by the rural domestic category across discoms is 5234 MU in FY 2008-09. The cost associated with the supply based on average cost amounts to Rs. 2126 Crores. This deficit in recover has been met by a combination of State Government subsidy and cross subsidy by the Commission. The Commission appreciates that tariff rationalization has to be a continuing process and the present orders for this category reflect this intent of the Commission without causing a rate shock.

Registered Societies / residential colonies / Multi-storied residential complexes

8.36.4 In view of the ease of collection and the lower costs involved in single point supply, the relatively lower fixed and energy charges prevailing for the category has been retained by the Commission.

8.36.5 In view of various representations from cantonments/defence installation outside cantonments and also few clarifications sought by the licensees, it was apparent that there was some confusion at the field level in the classification of the defence installation. In order to redress the issue it is provided that all defence installations, not limited to cantonment only, would also be billed under LMV-1 category for the tariffs applicable to supply at single point provided they have predominantly domestic load. The Commission feels that the confusion in this regard is emerging on account of rigid interpretation of tariff provisions and therefore, it feels that inclusion of even general defence installations with predominantly domestic load under this sub category does not take away the ease of operation and benefit of lower cost involved in providing single point supply as long as the rate prescribed for this sub-category are not significantly less than average cost of service.

Other Metered (Urban) Domestic consumers

8.36.6 In view of the implementation issues raised by the licensees and subsequent stay granted by the Commission on the hour linked tariff structure, as provided in the tariff order 2006-07, the Commission has withdrawn the proposed concept of hour linked tariffs. The Commission in line with the submission of the licensees have introduced two consumption slabs in the category. However, the commission has raised the limit prescribed by the licensee for the first slab from 150 units per month to 200 units per month while the energy charges have been retained at the earlier levels i.e. Rs. 3.00/kWh. The consumption over 200 units per month shall be charged at Rs. 3.30/kWh. While specifying the tariff rates, the Commission has tried to balance the rates between the rates sought by the licensee and the existing rates for this category of consumers. Further, the Commission has also made a conscious effort not to burden the honest consumers and accordingly, have introduced a scheme under which if a consumer gives his willingness to the licensee to get installed a meter outside his premises for the purposes of metering and billing, then he would be given a discount of 5% on the energy charge. Further, the Commission is of the view that the revenue potential for the licensees would increase significantly by the way of reduction in distribution losses.

Life line consumers

8.36.7 It has been strenuously represented by the licensees that the provision of lifeline rate is being mis-utilized by unscrupulous consumers having consumption of more than 100 units/month and/or with actual loads more than 1 kW against a contracted load of 1 kW. The Commission has accordingly in this tariff order, in addition to qualifying conditions for lifeline rates of contracted load of 1 kW and consumption below 100 units per month, added one more qualifying condition related to the constructed area of the house. Accordingly, it has been specified that for availing the benefit of lifeline rate, the constructed area should be less than 500 sq. ft.. Having done so, the commission has ensured that the benefit of lifeline rate is devolved to only its targeted beneficiaries and not to the consumers in better economic conditions.

8.36.8 Further, the consumers have also represented with the Commission that the limit of 100 units per month is too low and that for even any marginal increases in consumption over the limit of 100 units per month, the entire benefit on account of the lifeline rates is withdrawn and the consumer is billed according to the rates of other metered domestic consumers under the category, which is a significant burden on the small consumers. In order to address the concern raised by the consumers, the Commission has extended the consumption limit under the lifeline category to 150 units with the consumption over 100 units and upto 150 units is billed at Rs. 2.50/unit. Thus the consumers have a cushion available to control their consumption and any marginal increases over 100 units per month are also billed at a relatively lower rate as compared to the rates prescribed for other metered domestic consumers under the category.

8.36.9 To realistically asses the demand of domestic consumers and to prevent intrusive intervention by the licensee the Commission has made it mandatory that the maximum demand as recorded by the meter should be essentially indicated in the monthly energy bills of consumers under this category.

8.36.10 The existing, proposed and the rates as approved by the Commission are given in the following tables:

(a) Consumers getting supply as per 'Rural Schedule'

Description	Fixed charge	Energy charge
Existing * 2006-07 rates are stayed		
i) Un-metered	Rs. 110 /connection/ month	Nil
ii) Metered	Rs. 15 /kW/ month	Rs. 1.00 / kWh
Proposed		
i) Un-metered	Rs. 110 /connection/ month	Nil
ii) Metered	Rs. 15 /kW/ month	Rs. 1.00 / kWh
Approved		
i) Un-metered	Rs. 110 /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
Existing		
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	Rs. 30.00 / kW/ Month	Rs.2.90/kWh

Description	Fixed Charge	Energy Charge
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)		
Proposed		
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)	Rs. 35.00 / kW/ Month	Rs.2.80/kWh
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 out side cantonment with predominantly domestic load (domestic lode more than 50%)	Rs. 35.00 / kW/ Month	Rs.2.80/kWh

(c) Other Metered Domestic Consumers

1. **Lifeline consumers**: Consumers with contracted load of 1 kW, energy consumption up to 150 kWh/month and constructed area less than 500 sq. ft. independent of availability of supply.

Description	Fixed Charge	Energy Charge
Existing		
Loads of 1 kW only for consumption upto 100 units/month	Rs. 50.00 / kW/ Month	Rs. 1.90/ kWh
Proposed		
Loads of 1 kW only for consumption upto 100 units/month	Rs. 50.00 / kW/ Month	Rs. 1.90/ kWh
Approved		
Loads of 1 kW only for consumption upto 150 units/month and constructed area less than 500 sq.ft.	Rs. 50.00 / kW/ Month	Rs. 1.90/ kWh for consumption upto 100 units per month
		Rs. 2.50 / kWh for consumption above 100 units per month and upto 150 units per month

2. **Others** : Other than life line consumers (i.e. consumers who do not qualify all the three criteria laid down for lifeline consumers at the same time)

Description	Consumption Range	Fixed Charge	Energy Charge
Existing (as 2006-07 rates in this regard are stayed)			
All loads	with consumption above 100 units	Rs 50.00 / kW/ Month	Rs. 3.00/unit
Proposed			
All loads	Upto 150 units /month	Rs 50.00 / kW/ Month	Rs. 3.00/unit
	More than 150 units /month	Rs 50.00 / kW/ Month	Rs. 3.30/unit
Approved			
All loads	Upto 200 units /month	Rs 60.00 / kW/ Month	Rs. 3.00/unit
	More than 200 units /month	Rs 55.00 / kW/ Month	Rs. 3.30/unit

8.36.11 The Commission had introduced an incentive scheme in the tariff order FY 2006-07 for reducing meter exception under NA/NR category in the LMV-1 consumer. According, to this scheme, If NA/NR in a division was less than 5% of LMV-1 consumer base in a billing cycle than an incentive of Rs. 1/kW per billing cycle was allowed to the concerned division on the basis of the total contracted load of LMV-1 consumers in the division for that billing cycle. The amount of incentive so given by the licensee was allowed to be recovered in the next ARR filing. So far no progress have been submitted by the licensees on the implementation of above scheme however, considering the malaise of high meter exception rate in domestic category, the Commission retains this scheme in the current tariff order and directs the licensees to submit before it division wise meter exception report for domestic consumers.

8.37 Rate Schedule LMV-2: Non-Domestic Light, Fan and Power

8.37.1 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, 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, and Power Looms with less than 5 kW load.

Non-Domestic Rural

8.37.2 For rural un-metered consumers, the fixed charges have been revised from Rs. 150/- per connection per month to Rs. 180/- per connection per month, consistent with the principle of reducing the cross-subsidies amongst categories. Similarly, for rural metered consumers, the fixed and energy charges have been revised from existing Rs. 20/kW/month and Rs. 1.30/unit respectively to Rs. 50/kW/month and Rs. 1.90 per unit respectively. The licensees have proposed fixed and energy charges for this category of consumers as Rs. 20/kW/month and Rs. 1.45/unit. The Commission has aligned the rates for the rural metered consumers with the rates proposed for lifeline consumers under LMV-1. This has been done on the basic premise that the rates for consumers using electricity for commercial purposes cannot be lower than consumers using electricity for domestic purposes and that too for lifeline category of consumers. Infact the lifeline category consumers are highly subsidised consumers. At the same time, the Commission has also attempted to reduce and rationalize the element of cross subsidy in accordance with the mandate of the Electricity Act 2003 and the Tariff Policy.

Non Domestic Urban

8.37.3 In view of the review petition filed by the licensee challenging the provision of hour linked tariffs under tariff order for the FY 2006-07 and subsequent stay granted by the Commission on this issue, the Commission has withdrawn the proposed concept of hour linked tariffs. The tariff for other metered consumers under LMV-2 has been increased commensurate to increases in cost and is aligned with similarly placed consumer categories. The Commission while specifying the tariff rates under the category, has tried to balance the rates between the rates sought by the licensee and the existing rates for this category of consumers. Hence, based on the same, the fixed charges have been increased to Rs. 100/kW/month and the energy charges are increased to Rs. 4.30/kWh. Further, the Commission has also made a conscious effort not to burden the honest consumers and accordingly, have introduced a scheme under which if a consumer gives his willingness to the licensee to get installed a meter outside his premises for the purposes of metering and billing, then he would be given a discount of 5% on the energy charge. Further, the Commission is of the view that the revenue potential for the licensees would increase significantly by the way of reduction in distribution losses.

8.37.4 To discourage non-essential consumption when large scale rostering is being resorted on essential services as well as on agricultural load in an agrarian economy, the Commission considered it appropriate that the consumption of electricity for the purposes of commercial advertisement along roadside needs to be discouraged. Accordingly, the Commission has prescribed a single part tariff in the form of much higher energy charge of Rs. 10/unit as against the energy charges of Rs. 4.30/unit, as applicable for other commercial loads, which is a significant tariff signal to discourage such consumption in the current tariff order.

8.37.5 As far as minimum charges for LMV-2 category consumers are concerned, the Commission has allowed the proposed minimum charges of the licensee of Rs. 300/kW/month on these consumers, which is Rs. 40/kW/month more than the existing minimum charges keeping in view the increases in fixed and energy charges.

8.37.6 Acknowledging large gap between demand and supply of power during summer season for better and equitable management of demand the Commission intends to discourage unbridled use of air conditioners by way of imposing additional charge on tonnage of air conditioners. By restricting AC loads during summer season the Commission attempts to at least partially assuage the agony of majority consumers facing acute summer without electricity. Accordingly, the Commission specifies that for all loads above 5 kW under an AC load of 1.5 tonne/5kW or actual as intimated through an affidavit, shall be charged at a flat rate of Rs. 150/tonne of air conditioning load over and above the bill prepared on the basis of applicable rate of charge for that category. These charges shall also apply on consumers getting billed under minimum consumption charges. The consumer not having any air conditioning load or whose actual AC load is less than the AC load derived as per 1.5tonne/kW formula, shall however be at liberty to submit an affidavit to this effect with the concerned Sub Divisional Officer (SDO)/ Divisional Officer.

8.37.7 Rebate to Power Loom consumers under this category has been continued in accordance with the Government order dated 14th June, 2006 and the Commission's order dated 11th July, 2006 subject to adherence of provision of advance subsidy.

8.37.8 The existing, proposed and the rates as approved by the Commission are given in the following tables:

(a) Consumers getting supply as per 'Rural Schedule'

Description	Fixed Charge	Energy charge	Minimum Charge
Existing (as 2006-07 rates in this regard are stayed)			
(i) Un-metered	Rs 150 / connection / month	Nil	--
(ii) Metered	Rs 20 / kW / month	Rs 1.30 per kWh	--
Proposed			
(i) Un-metered	Rs 165 / connection / month	Nil	--
(ii) Metered	Rs 20 / kW / month	Rs 1.45 per kWh	--
Approved			
(i) Un-metered	Rs 180 / connection / month	Nil	--
(ii) Metered	Rs 50 / kW / month	Rs 1.90 per 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
Existing	Not Applicable		
Proposed	Not Applicable		
Approved			
Metered	-	Rs 10 /unit	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 consumers getting supply through rural feeders but exempted from scheduled rostering / restrictions or through co-generating radial feeders in villages / towns.

Description	Fixed Charge	Energy Charge	Minimum Charge
Existing			
For All loads	Rs 80.00 / kW/ Month	Rs. 3.90/unit	Rs. 260/kW/month
Proposed			
Upto 75 units / kW / month	Rs 90.00 / kW/ Month	Rs. 4.50/unit	Rs. 300/kW/month
Approved			
For All loads	Rs 100.00 / kW/ Month	Rs. 4.30/unit	Rs. 300/kW/month

Note :

For all domestic consumers the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills.

8.38 Rate Schedule LMV –3: Public Lamps

8.38.1 This schedule shall apply to Public Lamps including Street Lighting System, Traffic Control Signals, Lighting of Public Parks etc. The street lighting in Harijan Basties and Rural Areas are also covered by this rate schedule.

8.38.2 The Commission, had been through its previous tariff orders, exhorting the Licensee to take-up metering of consumption for this category at the earliest to reduce wasteful consumption. While sticking to it basic philosophy of giving strong impetus to metering, the Commission had in the tariff order for the financial year 2006-07, gone for an innovative approach in the Public Lamps category (LMV-3), wherein it had specified a flat rate even for metered category in place of the existing scheme of fixed charges and energy charges. Keeping in view the typical nature of public lamp's operation with entire load coming at night only, it was reasoned to be more appropriate to provide flat rates for metered category as the incentive for metering becomes distinctly visible and more so because computation of flat charges is much more accurate in this case due to known hours of operation as well as implausibility of any unauthorized use in this public utility category. The flat rate for metered category was worked out on the basis of average supply availability across state at average cost to serve. Immediately after the issuance of tariff order 2006-07 containing this new tariff structure for public lamps, the licensee in their review petition challenged this provision stating that rate of charge for metered category should not be a flat one rather it should contain fixed and energy charges. The licensees, in their present tariff proposal, themselves have filed a significantly enhanced single flat rate for this category without discriminating between metered and un-metered category. This is nothing but an attempt to garner additional revenue without putting in any effort on the metering of this category, which was certainly not an objective of the Commission behind specifying flat charge for even metered category. Hence in view of the same, the Commission in the present tariff order has proposed a two part tariff structure for the consumers availing metered supply under the LMV-3 category and a flat rate for consumers availing unmetered supply. The flat rates for unmetered category have been consciously increased keeping in view the increase in cost as well as to dis-incentivise the un-metered consumption.

8.38.3 The existing, proposed and the rates as approved by the Commission are given in the following tables:

Un-metered Supply:

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
Existing			
To be billed on the basis of total connected load calculated as the summation of individual points	Rs 550 per kW or part thereof per month	Rs 875 per kW or part thereof per month	Rs 950 per kW or part thereof per month
Proposed			
To be billed on the basis of total connected load calculated as the summation of individual points	Rs 1000 per kW or part thereof per month	Rs 1250 per kW or part thereof per month	Rs 1500 per kW or part thereof per month
Approved			
To be billed on the basis of total connected load calculated as the summation of individual points	Rs 1000 per kW or part thereof per month	Rs 1250 per kW or part thereof per month	Rs 1500 per kW or part thereof per month

Metered Supply:

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
Existing			
To be billed on the basis of MRI downloads at different points of metering	Rs 450 per kW or part thereof per month	Rs 675 per kW or part thereof per month	Rs 750 per kW or part thereof per month
Proposed			
To be billed on the basis of MRI downloads at	Rs 1000 per kW or part	Rs 1250 per kW or part thereof per	Rs 1500 per kW or part

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
different points of metering	thereof per month	month	thereof per month
Approved			
To be billed on the basis of MRI downloads at different points of metering	Rs 100 per kW or part thereof per month	Rs 100 per kW or part thereof per month	Rs 100 per kW or part thereof per month
	Rs. 3.70 / kWh for all loads	Rs. 3.90/kWh for all loads	Rs. 4.10/kWh for all loads

8.39 Rate Schedule LMV– 4

8.39.1 This category has two sub-categories, viz. LMV-4 (A) (I) – light, fan and power for public institutions and LMV-4 (B) – light, fan and power for private institutions. However, in view of various representations from cantonments/defence installation outside cantonments and also few clarifications sought by the licensees, it is clarified that all defence installations even outside the cantonment limit, with loads above 50 kW and getting supply at single point with domestic load of more than 50%, which were earlier featuring in LMV-4(a) have now been moved to LMV-1 category under the rate schedule supply at single point for bulk loads. Accordingly, the applicability of LMV-4(a) in respect of defence installations stands changed to that extent.

8.39.2 Although the earlier tariff orders contained two sub categories in this rate schedule viz public institutions and private institutions, but the current proposal of the licensee merges the public and private institutions into one single category and prescribes a fixed charge of Rs. 85/kW/month and energy charge of Rs. 3.90/unit. It also requires mention that the proposal contains minimum charges also for this category in form of Rs. 300/kW/month although there was no minimum charge for this category in the tariff order 2006-07. The Commission does not agree with the proposal of the licensee as the public institution by very nature is non profit seeking whereas the private institutions are commercial in nature and accordingly, akin to LMV-2 category. In view of above, the Commission has kept distinct tariff for these two categories wherein charges for public institutions are significantly less than private institution and attempt has been made to align this rate with the average cost of serve whereas, for private institutions, the rates are almost akin to the rates as applicable for the commercial category. As far as minimum charges are concerned, the same was removed in the tariff order 2004-05 itself on the logic that there was hardly any incentive for public institutions to indulge in malpractice and thereby trying to show a suppressed consumption. Further, for private institutions, the same was removed with the introduction of the concept of double metering on these consumers. Since there is no change in the stand of the Commission on above counts accordingly, the proposal of minimum charges is not accepted.

8.39.3 The Commission has not been informed about any progress on the front of double metering in private institution consumers. The Commission believes that licensees must have accomplished this task in their own commercial interest and also the fact that the time given for the purpose was three months from the issuance of the tariff order 2006-07. Still in order to stress the point, the provision is being reproduced that the licensees will meter these consumers outside their premises along with a real time display unit within the consumer premises. The meter reading of the meter installed outside the premises of the consumer shall be used for the billing the consumer. In case the consumer disputes the reading of the outside meter on the basis of the meter within his premises, a check meter will be installed in parallel of the outside meter and the provisional billing would be done in accordance with the provisions of the applicable supply code. The meter within the premise of the consumer shall be reckoned as an instrument to facilitate the consumer in having an effective demand side management.

8.39.4 The existing, proposed and the rates as approved by the Commission are given in the following tables:

<table>
<tr><th>Description</th><th>Fixed Charge</th><th>Energy Charge</th><th>Minimum Charges</th></tr>
<tr><td colspan="4">Existing(as 2006-07 rates in this regard are stayed)</td></tr>
<tr><td>(A) For Public Institutions</td><td>Rs. 75 /kW/ month</td><td>Rs. 3.25 / kWh</td><td>-</td></tr>
<tr><td>(B) For Private Institutions</td><td>Rs. 80 /kW/ month</td><td>Rs. 3.90 / kWh</td><td>-</td></tr>
<tr><td colspan="4">Proposed</td></tr>
<tr><td>(A) For Public Institutions</td><td rowspan="2">Rs. 85 /kW/ month</td><td rowspan="2">Rs. 3.90 / kWh</td><td rowspan="2">Rs. 300/kW/month</td></tr>
<tr><td>(B) For Private Institutions</td></tr>
</table>

Description	Fixed Charge	Energy Charge	Minimum Charges
Approved			
(A) For Public Institutions	Rs. 90 /kW/ month	Rs. 4.00 / kWh	-
(B) For Private Institutions	Rs. 100 /kW/ month	Rs. 4.30 / kWh	-

8.40 Rate Schedule LMV– 5: Small Power for Private Tube Wells / Pumping Sets for Irrigation Purposes

8.40.1 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, Thrasher, Cane Crusher and Rice Huller.

8.40.2 For rural un-metered PTW consumers, the rate of charges have not been revised by the Commission in view of the fact that usage is mainly for irrigation purposes. However, while retaining the existing tariff, the Commission has ensured that the incentive for metering continues to be strong.

8.40.3 The Commission retains the differential treatment of consumers being supplied as per urban and rural schedules, in line with the strategy adopted in the previous tariff Order because of the quality of supply and service which is relatively better for urban consumers as against rural consumers. Further, the State Government has not indicated any subsidy for the urban consumers in the category.

8.40.4 The Commission in its previous Order had directed UPPCL to complete metering of urban PTW consumers as directed in previous Tariff Orders and submit a compliance report to the Commission. It is unfortunate that in spite of repeated directives the Licensees have not made any significant progress in this regard, which is for their own benefit.

8.40.5 For consumers getting supply as per Rural Schedule: The consumer shall have the option to take supply under metered category or un-metered category

8.40.6 The following table summarizes the existing, proposed and approved tariffs for the category:

(A) For consumers getting supply as per Rural Schedule: The consumer shall have the option to take supply under metered category or un-metered category

(i) Un-metered Supply

Fixed Charge	Energy Charge	Minimum Charge
Existing(as 2006-07 rates in this regard are stayed)		
Rs 75 / BHP / month	Nil	Nil
Consumer under this category will be allowed a maximum lighting load of 120 Watts.		
Proposed		
Rs 75 / BHP / month	Nil	Nil
Consumer under this category will be allowed a maximum lighting load of 120 Watts.		
Approved		
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
Existing (as 2006-07 rates in this regard are stayed)		
Rs 15 / BHP / month	0.75/ kWh	Rs 65 / BHP / month
Proposed		
Rs 15 / BHP / month	0.75/ kWh	Rs 65 / BHP / month
Approved		
Rs 15 / BHP / month	0.75/ kWh	Rs 65 / BHP / month

(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
Existing (as 2006-07 rates in this regard are stayed)		
Rs 30 / BHP / month	Rs 2.00 / kWh	Rs 130 / BHP / month
Proposed		
Rs 30 / BHP / month	Rs 2.00 / kWh	Rs 130 / BHP / month
Approved		
Rs 30 / BHP / month	Rs 2.00 / kWh	Rs 130 / BHP / month

8.41 Rate Schedule LMV– 6: Small and Medium Power

8.41.1 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.

8.41.2 The licensees had proposed a separate sub category under LMV-6 i.e. LMV-6(a) as applicable to power looms only whereas, LMV-6(b), as proposed by the licensee was to cater all LMV-6 consumers except power loom. The Commission does not find any justification in the creation of sub category when the demand charges in the two sub categories have been proposed to be same and there is only a difference of 10 paise per unit in the energy charges. In this context, it is also relevant to mention that in pursuance to the State Government order, this category is being charged on flat rate as indicated in the Government order therefore, creation of another rate line merely influences the amount of subsidy, which has no logical basis. It needs to be highlighted here that rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14th June, 2006 and the Commission's order dated 11th July, 2006 subject to adherence of provision of advance subsidy.

8.41.3 In view of the review petition filed by the licensee challenging the provision of hour linked tariffs under tariff order for the FY 2006-07 and subsequent stay granted by the Commission on this issue, the Commission has withdrawn the proposed concept of hour linked tariffs. In lieu of the hour linked tariffs, the Commission in the present order have proposed a flat tariff structure. As has been discussed previously, in line with the Commission's philosophy of linking tariff of similarly placed consumer categories, the tariff for consumers getting supply under other than rural schedule of LMV-6 has been aligned with the tariff of the consumers under the other metered consumers category of LMV-2.

8.41.4 Load factor rebate existed for consumers under the LMV-6 category prior to the tariff issued for FY 2006-07. However, in view of the load factor linked tariff structure adopted by the Commission in the Tariff Order for FY 2006-07, the same was allowed but under a different structure. In view of the fact that the Commission has proposed a flat tariff structure in the present tariff order, the Commission has re-introduced the Load Factor rebate for the consumers in the LMV-6 category.

8.41.5 The load factor shall be available for any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the rate schedule and 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. The lower consumption limit for availing the load factor rebate is 288 kVAh per kVA which represents 40% load factor and the rate of rebate in energy charges is 7.5% on the consumption over 288 kVAh per kVA per month while the upper slab starts from consumption of 504 kVAh per kVA per month which represents 70% load factor and the rate of rebate in energy charges is 20% on the consumption over 504 kVAh per kVA per month. The middle slab starts from consumption of 432 kVAh per kVA per month which represents 60% load factor upto 504 kVAh per kVA per month. The rate of rebate in energy charges is 10% in the middle slab. The lower level of consumption has been approved by the Commission considering the estimated supply hours to this category of consumers.

8.41.6 Minimum charges for the category have been increased from the existing minimum charge in line with the rate charge specified for the category.

8.41.7 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. Seasonal tariffs directed towards seasonal loads help these consumers in aligning their costs and revenue streams and thus can be mutually beneficial for both the utility and its consumers. In this back drop, the Commission, in its order to 2006-07, had made the seasonal tariffs more flexible and consumer friendly. The provision of minimum charges was removed from HV-2 category all together and also its application on seasonal industries under LMV-6 category during the off season. Further, the Commission had given flexibility to seasonal consumers to declare their off seasonal demand subject to a maximum of 25% and during this period, the consumer was to be billed on the basis of maximum demand recorded in the meter. Violation of the demand upper ceiling was also made less stringent as it was provided that the first violation in the season had to attract full billable demand charges and energy charges calculated at the rate 50% higher then the applicable tariff during normal period however, on second default the consumer will forfeit the benefit of seasonal rates for the entire season. The Commission retains the existing provision for the seasonal tariff as there is no representation for any change from the side of consumers and the licensee has also included this provision in his existing filing.

8.41.8 The existing, proposed and the rates as approved by the Commission are given in the following tables:

(A) Consumers getting supply other than Rural Schedule:

Description	Fixed Charge	Energy Charge	Minimum Charge
Existing (as 2006-07 rates in this regard are stayed)			
For All loads	Rs 80.00 / kW/ Month	Rs. 3.90/unit	Rs. 385/kW/month
Proposed			
For All loads	Rs 90.00 / kW/ Month	Rs. 4.70/unit	Rs. 450/BHP/month
Approved			
For All loads	Rs 100.00 / kW/ Month	Rs. 4.30/unit	Rs. 450/kW/month

(B) Consumers getting supply as per Rural Schedule

8.41.9 The Consumers getting supply as per rural schedule shall be entitled to a rebate of 15% on Fixed Charge, Energy charges and Minimum charges indicated above.

8.42 Rate Schedule LMV– 7: Public Water Works

8.42.1 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.

8.42.2 The fixed charges and energy charges for this category have been increased from Rs. 75/kW/month and Rs. 3.25/unit respectively to Rs. 90/kW/month and Rs. 4.00/unit respectively keeping in view its alignment with other public utilities, which is converged with the average cost of service. Any deviation from cost of service have to be only through express provision of the State Government subsidy to meet any social objective, since there is no earmarked subsidy for this category therefore, rates are aligned along the average cost of service. The proposal of the licensees contains minimum charges although the same was abolished in the previous tariff order considering the fact that consumers are few in number at sub division / division level who could be easily metered and monitored. Further, there cannot be any intention on the part of public water works to indulge in malpractices to suppress their consumption. There is no ground/fact before the Commission to deviate from its earlier logic accordingly, the proposal of minimum charges is disallowed.

8.42.3 The existing, proposed and the rates as approved by the Commission are given in the following tables:

Fixed Charge	Energy Charge	Minimum Charge
Existing		
Rs. 75 per kW/Month	Rs. 3.25/unit	-
Proposed		
Rs. 85 per kW/Month	Rs. 3.60/unit	Rs. 600/Kw/month
Approved		
Rs. 90 per kW/Month	Rs. 4.00/unit	-

8.42.4 Consumer getting supply as per rural schedule shall be eligible for rebate of 15% on fixed and energy charges as given above.

8.43 Rate Schedule LMV – 8: State Tube Wells / Panchayati Raj Tube well & Pumped Canals

8.43.1 This schedule is applicable to supply of power for all State tube-wells, including tube-wells operated by Panchayati Raj, WB tube-wells, Indo-dutch tube-wells, pumped canals and lift irrigation schemes upto 100 BHP. Further, the tariff is applicable to Laghu Dal Nahar having load above 100 BHP.

8.43.2 The fixed charges and energy charges for this category have been increased from Rs. 57/BHP/month and Rs. 2.80/unit respectively to Rs. 90/BHP/month and Rs. 3.70/unit respectively. It requires mention that the rates proposed by the licensee for this category are Rs. 90/BHP/month (120/kW/month) as fixed charge and Rs. 3.70/unit as energy charge. Accordingly, the rates prescribed for this category are in line with the rates proposed by the licensee for metered category. In this context, it stands to reason that any deviation from cost of service have to be only through express provision of the State Government subsidy to meet any social objective, since there is no earmarked subsidy for this category therefore, rates are aligned along the average cost of service. However, the energy charges are lower than the other public utilities as use of electricity under this category is mainly for irrigational purposes and hence the Commission approved the same at a slightly lower level. Further, lower tariff for the metered category is also intended to provoke the consumers to shift from unmetered to metered categories. For un-metered consumers under this category the licensees have proposed high fixed charges of Rs. 800/BHP/month. The Commission has in the tariff order 2006-07 reduced the fixed charges for the un-metered consumers under the category from earlier existing Rs. 500/BHP/month to Rs. 350/BHP/month. It was the belief of the Commission that being a public utility, such consumers do not have any incentive for suppressing their consumption moreover as they are few in number licensee could always easily meter and monitor them.

8.43.3 Aggrieved by the reduction in fixed charges for un-metered category of consumer licensees filed a review before the Commission. As the review was held as not maintainable by the Commission, licensees preferred an appeal against the above provision before the Appellate Tribunal of Electricity. The Commission through the tariff desires to send a strong economic signal to the consumers to shift over to metered category. In view of the same, for the purpose of this tariff order the Commission is accepting the higher fixed charges for un-metered consumers under the category as Rs. 800/BHP/month as proposed by the licensees.

8.43.4 The existing, proposed and the rates as approved Commission are given in the following tables:

Description	Fixed charge	Energy Charge
Existing		
Metered	Rs 50/BHP/month	Rs.2.80/kWh
Un-metered	Rs. 350/BHP/month	-
Proposed		
Metered	Rs 90/BHP/month	Rs.3.70/kWh
Un-metered	Rs. 800/BHP/month	-
Approved		
Metered	Rs 90/BHP/month	Rs.3.70/kWh
Un-metered	Rs. 800/BHP/month	-

8.44 Rate Schedule LMV - 9: Temporary Supply

8.44.1 This schedule shall apply to temporary supply of light & fan generally up to 20 KW, Public address system and illumination loads during functions, ceremonies and festivities and temporary shops, not exceeding three months. This schedule shall apply to all temporary supplies of light, fan and power load for the purpose as well as for power taken for construction purposes not exceeding two years, including civil work by all consumers and Govt. Departments.

8.44.2 For un-metered consumers under this category licensees has not proposed any change for fixed charges for illumination/Public Address/ceremonies for loads upto 20 kW/connection and the same has been retained at the earlier existing rate of Rs.1000/day. However, for shops set up during festivals/melas and having load up to 2 kW and temporary shops having loads upto 1 kW, the licensees have proposed a very steep hike in fixed charges. Against the existing rates of Rs. 75/day/shop for shops having loads upto 2 kW and Rs. 20/day/shop having loads upto 1 kW, licensees have proposed fixed charges of Rs 150/day/shop and Rs. 100/day/shop respectively. Considering the paying capacity of such shop owners, the Commission finds the proposal of licensee to be unacceptable and accordingly, prescribes a uniform rate of Rs. 100/day/shop for all types of temporary shops with loads upto 2 kW.

8.44.3 For the metered consumer under the category licensees have proposed a separate sub category for the purposes of residential construction and lower energy charges of Rs. 3.50/unit have been prescribed for this sub category. For other metered consumers under this category the licensees have proposed slightly higher energy charges of Rs. 5/unit against the earlier existing Rs. 4.50/unit. The Commission finds the proposal of the licensee to be acceptable and accordingly, approves the rates of Rs. 3.50/unit for the purpose of residential construction and Rs. 5/unit for other purposes. The Commission also approves the minimum charges of Rs. 100/kW/week as proposed by the licensee.

8.44.4 The existing, proposed and the rates as approved by the Commission are given in the following tables:

A. <u>Un-metered</u>

Existing	
(i) Fixed charges *for illumination/public address/ceremonies* for load up to 20 kW per connection	Rs 1000 per day
(ii) Fixed charges for *temporary shops* set-up during festivals / melas and having load up to 2 kW	Rs. 75/day/shop
(iii) Fixed charges for *temporary shops* other than as covered under (ii) and having load up to 1 kW	Rs.20/day/shop
Proposed	
(i) Fixed charges *for illumination/public address/ceremonies* for load up to 20 kW per connection	Rs 1000 per day
(ii) Fixed charges for *temporary shops* set-up during festivals / melas and having load up to 2 kW	Rs. 150/day/shop
(iii) Fixed charges for *temporary shops* other than as covered under (ii) and having load up to 1 kW	Rs.100/day/shop
Approved	
(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.	Rs 1500 per day
(ii) Fixed charges for *temporary shops* set-up during festivals / melas or otherwise and having load up to 2KW	Rs.100 per day/shop

B. **Metered**

Description	Energy Charge	Minimum Charge
Existing		
Individual Residential construction	-	Rs. 75/kW/week
Others	Rs. 4.50/unit	
Proposed		
Individual Residential construction	Rs. 3.50/unit	Rs. 100/kW/week
Others	Rs. 5.00/unit	
Approved		
Individual Residential construction	Rs. 3.50/unit	Rs. 100/kW/week
Others	Rs. 5.00/unit	

8.45 Rate Schedule LMV– 10: Departmental Employees and Pensioners

8.45.1 Section 23(7) of Electricity Reforms Act 1999 provides "terms and condition of service of the personnel shall not be less favourable 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 14th January, 2000. As the consumption in this category is akin to the usage in other metered domestic category therefore, the Commission continues with its approach adopted in the previous tariff order to adjust the rates of this category with the change in rates of other metered domestic consumers. Since the maximum hike in rates for the other metered domestic consumers is roughly 10% the Commission has hiked the fixed charges and fixed energy charges by roughly 10%. Further, the charges payable for using AC during period of six month i.e. April to September has been hiked from Rs. 250 / AC / Month to Rs. 400 / AC / Month in view of distinct signal given through this tariff order to discourage the unbridled usage of air-conditioners.

8.45.2 The Commission, in its earlier order, had also directed the licensee to install electronic meters in the residential premises of the employees as well as the licensees' office. The Commission has not been submitted with any status report on the same. The licensees are again directed to install meters quickly and the concessional rate given for the metered category continues.

8.45.3 The existing, proposed and the rates as approved by the Commission are given in the following tables:

CATEGORY	Fixed charge / month	Fixed Monthly Energy Charge
Existing		
Class IV employees / Operating staff	Rs. 50.00	Rs.55.00
Class III employees	Rs. 50.00	Rs. 80.00
Junior Engineers & equivalent posts.	Rs. 100.00	Rs.160.00
Assistant Engineers /	Rs. 100.00	Rs.250.00
Executive Engineers & equivalent posts	Rs. 100.00	Rs. 270.00
Deputy General Manager & equivalent posts	Rs. 250.00	Rs.320.00
General Manager and above,	Rs. 250.00	Rs.400.00
Additional charge for employees using Air Conditioners. (April to September)	Rs 250/- per month per Air conditioner	
Proposed		
Class IV employees / Operating staff	Rs. 50.00	Rs.55.00
Class III employees	Rs. 50.00	Rs. 80.00
Junior Engineers & equivalent posts.	Rs. 100.00	Rs.160.00
Assistant Engineers /	Rs. 100.00	Rs.250.00
Executive Engineers & equivalent posts	Rs. 100.00	Rs. 270.00
Deputy General Manager & equivalent posts	Rs. 250.00	Rs.320.00
General Manager and above,	Rs. 250.00	Rs.400.00
Additional charge for employees using Air Conditioners. (April to September)	Rs 250/- per month per Air conditioner	
Approved		
Class IV employees / Operating staff	Rs. 55.00	Rs. 65.00
Class III employees	Rs. 55.00	Rs. 90.00
Junior Engineers & equivalent posts.	Rs. 110.00	Rs. 180.00
Assistant Engineers /	Rs. 110.00	Rs. 280.00
Executive Engineers & equivalent posts	Rs. 110.00	Rs. 300.00

CATEGORY	Fixed charge / month	Fixed Monthly Energy Charge
Deputy General Manager & equivalent posts	Rs. 275.00	Rs. 360.00
General Manager and above,	Rs. 275.00	Rs. 440.00
Additional charge for employees using Air Conditioners. (April to September)	Rs 400/- per month per Air conditioner	

8.46 Rate Schedule HV– 1 : Non Industrial Bulk Loads

8.46.1 This rate schedule shall apply on Commercial loads (as defined within the meaning of LMV-2) above 75 kW load getting supply at Single Point on 11 kV & above voltage levels, Public & Private institutions (as defined within the meaning of LMV-4(a) & (b)) with contracted load above 75 kW and getting supply at 11 kV & above voltages and 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.

8.46.2 In the previous tariff order the Commission has created a provision wherein all consumers having a load of 75 kW or more and getting supply at 11 kV or above voltages (other than consumers under LMV-1 category) have to be billed as per HV-2 rate schedule. By bringing consumers with load above 75 kW & at 11 kV within the ambit of HV-2 category, the Commission had tried to ensure a better monitoring of the consumption of these consumers through TOD meters as well as application of TOD tariffs on these consumers, which would help these consumers to stagger their load in accordance with applicable charges thereby helping in reducing the system peak demand. However, the non industrial consumers who got shifted to HV-2 category, in pursuance of the above provision, have represented during the public hearings that their consumption pattern is such that there is not much possibility of shifting the loads to off peak hours and therefore, TOD tariffs should not be made applicable on them. To address the issue raised by such consumers the Commission has created a new category HV -1 in this tariff order, wherein two rates of charge have been specified: one against Commercial loads/private institution/ non domestic bulk power consumer above 75 kW load getting supply at 11 kV & above 75 kW load and another for public institutions above 75 kW load getting supply at 11 kV & above voltages. In order to address the grievance of Commercial loads/private institution/ non domestic bulk power consumer, being billed under HV-2 rate schedule under the provisions of tariff order 2006-07, the Commission has decided to give these consumers a rebate of more than 10% on HV-2 rate of charge at 11 kV voltage level. In fact, the energy charge of this category is roughly 80 paise less then the commercial and private institutional loads under LMV categories, which more than off sets enhanced demand charge on these consumers at normal consumption level. Accordingly, the Commission has attempted to protect the interest of these consumers even after shifting them in HV category. As far as public institutions getting supply at single point and feeding multiple individuals are concerned, the rates specified for them are further below by roughly 10% considering the non-commercial nature of public institutions and operational ease for the licensee in terms of reduced effort in collection and billing activity, as applicable in case of single point supply feeding multiple individuals.

8.46.3 Acknowledging large gap between demand and supply of power during summer season, for better and equitable management of demand, the Commission intends to discourage unbridled use of air conditioners by way of imposing additional charge on tonnage of air conditioners. By restricting AC loads during summer season the Commission attempts to at least partially assuage the agony of majority consumers facing acute summer without electricity. Accordingly, the Commission specifies that for HV-1 (with the exception of public institutions getting supply at single point and feeding to multiple individuals i.e. consumers falling under rate of charge point 3(b) of HV-1 rate schedule.) an AC load of 1.5 tonne/5kW or actual as intimated through an affidavit, shall be charged at Rs. 150/tonne of air conditioning load over and above the bill prepared on the basis of applicable rate of charge for that category. These charges shall also apply on consumers getting billed under minimum consumption charges. The consumer not having any air conditioning load or whose actual AC load is less than the AC load derived as per 1.5tonne/kW formula, shall however be at liberty to submit an affidavit to this effect with the concerned Sub Divisional Officer (SDO)/ Divisional Officer.

8.46.4 The existing, proposed and the rates as approved by the Commission are given in the following tables :

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

	For supply at 11kV	For supply at 33 kV & above
Existing	**NA**	**NA**
Proposed	**NA**	**NA**
Approved		
Demand Charges	Rs.170/kVA	Rs.160/kVA
Energy Charges	Rs.3.60/kVAh	Rs.3.50/kVAh

B). Public Institutions above 75 kW load getting supply at Single Point on 11 kV & above voltage levels and feeding multiple individuals

	For supply at 11kV	For supply at 33 kV & above
Existing	**NA**	**NA**
Proposed	**NA**	**NA**
Approved		
Demand Charges	Rs.140/kVA	Rs.130/kVA
Energy Charges	Rs.3.40/kVAh	Rs.3.30/kVAh

8.47 Rate Schedule HV– 2: Large and Heavy Power

8.47.1 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.

8.47.2 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.

8.47.3 For all HV-2 consumers, conditions of supply apart from the rates, as agreed between the licensee and the consumer shall continue to prevail.

8.47.4 In the tariff order for the financial year 2006-07, to further simplify the rate structure and to align it with voltage level, the Commission had decided that all loads above 75 kW and getting supply at 11 kV, excluding consumers of LMV-1 category, would be billed under HV-2 category. By bringing all the consumers above 75 kW & at 11 kV within the ambit of HV-2 category, the Commission has ensured a better monitoring of the consumption of these consumers through TOD meters as well as application of TOD tariffs on these consumers, which would help these consumers to stagger their load in accordance with applicable charges thereby helping the system demand as well. In this context, it requires mention that the non industrial consumers who got shifted to HV-2 category, in pursuance of the above provision, have represented during the public hearings that their consumption pattern is such that there is not much possibility of shifting the loads to off peak hours and therefore, TOD tariffs should not be made applicable on them. To address the issue raised by such consumers the Commission has created a new category HV -1 as detailed under the HV-1 rate schedule.

8.47.5 Under Tariff order 2006-07, the Commission had applied the concept of hour linked tariffs on urban schedule 11 kV consumers, which got stayed on account of the review petition filed by the licensees accordingly, the base rate as provided in 2006-07 tariff order, which was at par with 2004-05 rates, continued to be applicable. In the present filing, the licensee have proposed a steep increase in the demand charges on various voltage levels to be tune of Rs. 40/kVA at 11kV and 33 kV voltage level and roughly an increase of Rs. 50/kVA at 132 kV and 220 kV voltage level. As far as energy charges are concerned, the proposal of the licensee contains an astronomically high increase at 11 kV voltage level amounting to 80 paise per unit, which is roughly a hike of 25% in energy charges. However, at higher voltage level, the proposal is to increase energy charges by roughly 5 to 10 paise per unit. The Commission does not agree with this lopsided increase in rates, which would certainly cause a rate shock to the consumers at 11 kV voltage level. Accordingly, the Commission has attempted to rebalance the rates across various voltage levels so as to allow a uniform but as far as minimal loading to consumers at all HV voltage levels. Therefore, Commission allows a uniform hike of Rs. 21/kVA in demand charge for consumers getting supply at 11 kV, 33 kV and 66 kV and Rs. 11/kVA for consumers getting supply above 66 kV and upto 132 kV. The Commission has also merged the category of consumers connected at above 132 kV into the category of consumers connected at 66 kV and above upto 132 kV. As regards the energy charges, a hike of 50 paise per unit is allowed at 11 kV voltage level whereas, for higher voltage level the hike allowed is to the tune of 5 paise per unit. The increase in the tariff is due to the increases in the input prices, however, the increase in demand charges is lower than that sought by the licensee. As far as the increase in energy charge is concerned, the increase in 33 kV voltage level and above is in line with the proposal where as, the increase in energy charges at 11 kV has been significantly reduced from the proposed hike by the licensee.

8.47.6 The application of minimum charge was abolished from HV-2 category in the tariff order for the financial year 2006-07 and licensees were directed to prepare a monthly report on the divisional basis showing all the consumers whose load factor has fallen below 15% (108 kVAh/KVA) clearly indicating the reasons for such low load factor. A copy of the report was to be submitted to the Managing Director of the licensee with a copy of the same to the vigilance cell of UPPCL and UP Electricity Regulatory Commission. A confidential report highlighting the names of the consumers involved in suspected theft (for reasons attributable to unexplained low load factor) was also to be sent to the Managing Director, concerned District Magistrate and Department of Energy Government of Uttar Pradesh. The confidential report had to be taken in cognizance for the purposes of preliminary verification, based on factual information related to load factor, even if the report was not carrying the signatures of the report sending local authority/officer. Acknowledgements against the registered dispatch of above report were also to be treated as sufficient proof for report having been dispatched. Above mentioned authorities were required, on the basis of above report and after preliminary verification of the load factor of the concerned consumer, in absence of suitable justification, setup an enquiry against such consumers. The Managing Director of the concerned distribution company was to act as a nodal person to facilitate such enquiry and initiate further necessary action if required against such consumer. The Commission is however not in receipt of any report related to consumers with low load factors as mandated in the above scheme. Strangely, on analysis of the data available in the filing for the financial year 2006-07, the average load factor of the consumers under the category has been found out to be roughly around 28%,. Based on the above facts, the Commission feels that probably the scheme has not been implemented by the licensees, which is a cause of concern for the Commission. The licensees have however, in their filing, once again proposed minimum charges at all voltage levels of HV-2 category and have strongly demanded it substantiating that abolition of minimum charges from HV-2 category has resulted in a huge revenue loss to them. The main argument on which the plank of MCG has been justified by the licensee is that since minimum consumption charges can be obtained on 3 to 4 hours of supply, which is much less than the supply being provided to consumer in the state therefore, there is, hardly any justification in removing the MCG. Surprisingly, this is a self negating logic because if minimum charges can be derived on 4 hours of supply than no consumer should be billed under the minimum charges unless there is complete collapse in metering system, a situation which cannot be allowed to permeate in a regulatory framework, that too for bulk consumers, who are significantly less in number and cross-subsidizing other category of consumers. Accordingly, the minimum charges are not allowed for this category and the scheme given in the tariff order 2006-07 continues to operate. The Commission is also of the view that right steps, if taken in accordance with the above scheme, may entail many fold increase in revenues of the licensees.

8.47.7 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. Seasonal tariffs directed towards seasonal loads help these consumers in aligning their costs and revenue streams and thus can be mutually beneficial for both the utility and its consumers. In this back drop, the Commission, in its order to 2006-07, had made the seasonal tariffs more flexible and consumer friendly. The Commission retains the existing provision for the seasonal tariff as there is no representation for any change from the side of consumers and the licensee has also included this provision in his existing filing.

8.47.8 In view of various representation by various consumer groups, the Commission has reworked the TOD structure and approved a lower premium rate of 15% during the peak hours and also lowered the off peak TOD rates from (-) 5% to (-) 7.5% in the Tariff Order for the FY 2006-07. After issuance of tariff order 2006-07, the licensees filed a review against the changed provision which was held as not maintainable by the Commission as the licensees could submit any data/justification in support of their contention that the State System has no significant off peak. Further, the argument thrown by the licensee that the State system does not have any significant off peak does not cut much ice as even if the State system does not have a pronounced off peak still one cannot deny its existence at regional level and licensee can always avail the benefit of purchasing cheap power in the situation through ABT mode. Subsequent to the review being held not maintainable, the licensees approached Appellate Tribunal of Electricity under appeal on the issue. As the matter is still pending with the Appellate Tribunal of Electricity and the licensees have not provided the Commission any consumption history of the consumers in the category in desired detail to assess the revenue impact of TOD application on the consumers, the Commission retains the existing provision of peak premium rate of (+) 15% and the off peak rebate as (-) 7.5%.

8.47.9 Load factor rebate introduced at 11 kV voltage level and retained for other higher voltage levels at the existing level with an additional slab starting at lower consumption to enable the consumers to qualify the criteria even if their operation is not of continuous nature. As far as rebate to power loom consumers is concerned it shall be applicable in accordance with the Government order dated 14th June, 2006 & the Commission's order dated 11th July, 2006, subject to adherence of provision of advance subsidy.

8.47.10 The existing, proposed and the rates as approved by the Commission are given in the following tables:

(A) <u>Urban Schedule</u>

	For supply at 11kV	**For supply at 33 & 66 kV**	**For supply at 132kV**	**For supply above 132kV**
Existing				
BASE RATE				
Demand Charges	Rs.189/kVA	Rs.179/kVA	Rs.169/kVA	Rs.159/kVA
Energy Charges	Rs.3.50/kVAh	Rs.3.30/kVAh	Rs.3.20/kVAh	Rs.3.05/kVAh
Minimum Charges	---	--	-	-
TOD RATE				
22 hrs – 06 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%	(-) 7.5%
06 hrs – 17 hrs	0	0	0	0
17 hrs – 22 hrs	(+) 15%	(+) 15%	(+) 15%	(+) 15%
Proposed				
BASE RATE				
Demand Charges	Rs.220/kVA	Rs.210/kVA	Rs.205/kVA	Rs.200/kVA
Energy Charges	Rs.4.30/kVAh	Rs.3.35/kVAh	Rs.3.25/kVAh	Rs.3.15/kVAh
Minimum Charges	Rs. 525 / month	Rs. 450 / month	Rs. 450 / month	Rs. 450 / month

	For supply at 11kV	For supply at 33 & 66 kV	For supply at 132kV	For supply above 132kV
TOD RATE				
22 hrs – 06 hrs	0	0	0	0
06 hrs – 17 hrs	0	0	0	0
17 hrs – 22 hrs	(+) 20%	(+) 20%	(+) 20%	(+) 20%
Approved				
BASE RATE				
Demand Charges	Rs.210/kVA	Rs.200/kVA	Rs.180/kVA	Rs.180/kVA
Energy Charges	Rs.4.00/kVAh	Rs.3.35/kVAh	Rs.3.25/kVAh	Rs.3.25/kVAh
Minimum Charges	---	---	---	---
TOD RATE				
22 hrs – 06 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%	(-) 7.5%
06 hrs – 17 hrs	0	0	0	0
17 hrs – 22 hrs	(+) 15%	(+) 15%	(+) 15%	(+) 15%

(B) Consumers getting supply as per Rural Schedule

The Consumers getting supply as per rural schedule were entitled to a rebate of 15% on Fixed Charge and Energy charges in the earlier tariff order. The same has been retained by the Commission for the purposes of this tariff order.

8.48 Rate Schedule HV – 3: Railway Traction

8.48.1 This schedule shall apply to the Railways for Traction loads only. A tariff hike has been proposed by the Licensee for the category. The licensees have proposed for lowering the fixed charges while marginally increasing the energy charges. However, the Commission has marginally readjusted the tariff for this category thereby bringing them in line with the rates applicable to large industrial consumers on that voltage. Minimum charges have been retained at the existing level.

8.48.2 The Commission has slightly hiked the demand charges and energy charges for this category to keep these in line with the rates of other HV categories accordingly, the existing, proposed and approved rates for the category are as follows:

Description	Charges
Existing	
(a) Demand Charge For supply at and above 132 kV Below 132 kV	 Rs. 169 per kVA per month Rs. 179 per kVA per month
(b) Energy Charges (all consumption in a month) For supply at and above 132 kV Below 132 kV	 Rs. 3.20 per kVAh Rs. 3.30 per kVAh
Minimum Charge	Rs. 425/kVA/month
Proposed	
(a) Demand Charge For supply at and above 132 kV Below 132 kV	 Rs. 165 per kVA per month Rs. 175 per kVA per month
(b) Energy Charges (all consumption in a month) For supply at and above 132 kV Below 132 kV	 Rs. 3.40 per kVAh Rs. 3.50 per kVAh
Minimum Charge	Rs. 450/kVA/month
Approved	
(a) Demand Charge For supply at and above 132 kV Below 132 kV	 Rs. 180 per kVA per month Rs. 200 per kVA per month
(b) Energy Charges (all consumption in a month) For supply at and above 132 kV Below 132 kV	 Rs. 3.25 per kVAh Rs. 3.35 per kVAh
Minimum Charge	Rs. 425/kVA/month

8.48.3 In view of representations from some large and heavy consumers that they are being billed even 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 taken 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 thereby endangering the surrounding system. The implementation of this provision went on smoothly in general consumer categories but railways, 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, was uneasy with this provision as it was being billed heavily for its leading kVAH also. While railways has submitted that they are in process to install dynamic reactive compensators but it will take couple of years considering the vastness of area accordingly, it 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. Accordingly Commission decides that till the process of installing dynamic compensators is complete for railways within the territory of Uttar Pradesh, 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 i.e. Railway traction. Therefore, the leading kVArh in case of railways need to be blocked, which will result into leading kVAh being equal to kWh for such periods.

8.49 Rate Schedule HV – 4: Lift Irrigation Works

8.49.1 This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW). For this category also the Commission has slightly readjusted the demand charges and energy charges to make them in line with the rates of other HV categories.

8.49.2 The existing, proposed and the rates as approved by the Commission are given in the following tables:

(a) **Demand Charge:**

Voltage Level	Rate of Charge
Existing	
For supply at 11 kV	Rs. 189 / kVA per month
For supply at 33 kV and 66 kV	Rs. 179 / kVA per month
For supply at 132 kV	Rs. 169 / kVA / month
Proposed	
For supply at 11 kV	Rs. 210 / kVA per month
For supply at 33 kV and 66 kV	Rs. 205 / kVA per month
For supply at 132 kV	Rs. 200 / kVA / month
Approved	
For supply at 11 kV	Rs. 210 / kVA per month
For supply at 33 kV and 66 kV	Rs. 200 / kVA per month
For supply at 132 kV	Rs. 180 / kVA / month

(b) **Energy Charges:**

Voltage Level	Rate of Charge
Existing	
For supply at 11 kV	Rs. 3.50 / kVAh
For supply at 33 kV and 66 kV	Rs. 3.30 / kVAh
For supply at 132 kV	Rs. 3.20 / kVAh
Proposed	
For supply at 11 kV	Rs. 3.90 / kVAh
For supply at 33 kV and 66 kV	Rs. 3.80 / kVAh
For supply at 132 kV	Rs. 3.70 / kVAh
Approved	
For supply at 11 kV	Rs. 4.00 / kVAh
For supply at 33 kV and 66 kV	Rs. 3.35 / kVAh
For supply at 132 kV	Rs. 3.25 / kVAh

Chapter 9. TREATMENT OF REVENUE GAP

9.1 Revenue from Sale of Power at existing tariff for FY 2007-08

9.1.1 The approval of the Discom wise and category wise sales for FY 2007-08 has already been discussed in section 5.5.4.

9.1.2 In case of FY 2007-08, different tariff's were existing at different period of time during the year. This was on account of stay granted by the Commission on the review petition filed by the licensees seeking review of certain portions of the tariff order of FY 2006-07, subsequent appeal in the Appellate Tribunal of India against the Review order and lastly the issue of the interim Tariff Order for FY 2007-08 by the Commission in November 2007. Prior to issue of the Tariff Order for FY 2006-07, the tariff as per the FY 2004-05 Tariff Order was in force.

9.1.3 The estimation of the revenue for FY 2007-08 with existing tariff is based on the sales approved by the Commission and the category-wise average "through rate" (Average Realisation) provided by the licensee in its ARR filing for FY 2007-08. The category-wise and Discom-wise revenue from sale of power as approved by the Commission for FY 2007-08 is given as below:

Table 9-1: Approved Revenue from Sale of Power at existing Tariff – FY 2007-08

(Rs. Crores)

	Meerut	Agra	Lucknow	Varanasi	Total
LMV 1: Domestic Light, Fan and Power	1,158.09	760.27	793.30	787.51	**3,499.16**
LMV 2: Non-Domestic Light, Fan and Power	251.82	193.34	216.65	360.81	**1,022.62**
LMV 3: Public Lamps	35.80	18.29	51.42	12.05	**117.56**
LMV 4: Public/Private Institutions	103.65	139.27	169.40	205.04	**617.37**
LMV 5: Private Tubewells	194.99	144.31	72.53	99.42	**511.25**
LMV 6: Small and Medium Power	279.01	212.61	156.86	151.77	**800.24**
LMV 7: Public Water Works	64.55	59.46	61.58	79.71	**265.30**
LMV 8: State Tubewells	43.15	101.14	97.31	143.61	**385.21**
LMV 9: Temporary Supply	11.96	6.75	7.29	1.01	**27.01**
LMV 10: Department Employees / Pensioners	6.05	5.05	6.16	4.83	**22.09**
HV 2: Large and Heavy Power	1,621.98	556.55	321.07	422.65	**2,922.26**
HV 3: Railway Traction	-	110.80	11.98	180.36	**303.14**
HV 4: Lift Irrigation Works	0.22	39.30	26.63	174.78	**240.93**
Sub-Total	**3,771.26**	**2,347.15**	**1,992.18**	**2,623.54**	**10,734.14**
Bulk and Extra Supply	112.25	576.17	1.49	0.15	**690.06**
Total	**3,883.51**	**2,923.32**	**1,993.67**	**2,623.69**	**11,424.19**

9.1.4 Based on the approved sales, the revenue from sale of power is Rs.11424.19 Crores as against the licensees' estimates of Rs.10358.00 Crores for FY 2007 – 08.

9.2 Revenue gap for FY 2007-08

9.2.1 In the ARR/Tariff petitions for the FY 2007-08 the licensees had indicated an overall gap of Rs. 5121 Crores which was proposed to be bridged through tariff hikes of Rs. 121 Crores (additional revenue for part of the year when the proposed tariff would be applicable), additional government subsidy of Rs. 2000 Crores and institutional finances to the tune of Rs. 3000 Crores against government repayment guarantee. However, under the revised proposals submitted by the discoms it has been indicated that the envisaged revenue gap shall be bridged through Rs. 1822 Crores subsidy from GoUP and Rs. 1414 Crores additional revenue on account of tariff hike proposed in FY 2007-08 which however cannot be considered as the year is already over and the proposed tariffs cannot be applied. Further, the discoms have mentioned additional revenue available on account of savings in the power purchase costs to the tune of Rs. 707 Crores. The remaining gap was proposed to be funded through Rs. 2390 Crores worth of institutional loans already availed by the licensees and the balance gap of Rs. 610 Crores was proposed to be bridged in a similar manner.

9.2.2 As per the approved ARR for FY 2007-08 for Discoms, the net revenue gap after considering the revenue from existing tariff's and the GoUP subsidy of Rs. 1822 Crores for rural domestic consumers and PTW category consumers is Rs. 3013.93 Crores.

9.2.3 The Commission opines that bridging the gap by way of such loan funds amounts to meeting current requirements with long term funds, which is akin to working capital loans. Such an approach is not only against the regulatory principles but also against consumer interests as it would lead to increase in costs by way of interest and repayment obligation on such loans. Further, licensees can only be allowed working capital to the extent permissible under the provisions of tariff regulations. The Commission views such a management of financial resources grossly against the prudent financial practice and warns that continuation of such a practice would lead the power utilities of UP into a vicious debt trap.

9.2.4 However, the Commission has allowed these institutional loans as subsidy from GoUP and the debt servicing of such loans is to be directly funded by the GoUP through budgetary provisions and the same should not be included in any of the future ARR / Tariff requirements of the licensees.

9.2.5 Based on the proposed funding mechanism the net revenue gap in FY 2007-08 as given below:

Table 9-2: Treatment of Revenue Gap for FY 2007-08

Details	Units	FY 2007-08 Approved
Gross ARR	Rs. Crores	16,260.13
Revenue from Existing Tariff	Rs. Crores	11,424.19
Net Revenue Gap	**Rs. Crores**	***4,835.93***
Funded Through:		
Tariff Increases	*Rs. Crores*	-
Government Subsidy	*Rs. Crores*	*1,822.00*
Deficit Financing #	*Rs. Crores*	*2,306.93*
Any Other Means (Savings on Power Purchase Cost)	*Rs. Crores*	*707.00*
Net Revenue Gap Carried Forward	Rs. Crores	-

 # - Considered only to the extent required to meet the revenue gap but less than Rs. 3000 Crores as proposed by Discoms

9.2.6 Based on the approved ARR and bridging mechanism provided by the licensee, there is no revenue gap in FY 2007-08.

9.3 Revenue from Sale of Power at Existing Tariff for FY 2008-09

9.3.1 The Discom wise and category wise approved sales for FY 2008-09 is already discussed earlier in section 5.5.4.

9.3.2 Based on the existing tariff and the sales approved by the Commission, the revenue from sale of power is estimated to be Rs. 13218 Crores in FY 2008-09.

9.4 Revenue gap for FY 2008-09

9.4.1 As per the approved ARR for FY 2008-09 for Discoms, the net revenue gap after considering the revenue from existing tariff's is Rs. 4316.88 Crores. The licensees have not submitted any tariff proposal to meet the revenue gap in FY 2008-09 even after specific directions from the Commission in this regards.

9.4.2 The licensees have submitted that Rs. 1532 Crores would be available as subsidy from GoUP to subsidise the tariff for rural domestic consumers and PTW category of consumers. Further, the licensee has stated that the additional revenue from tariff proposal already submitted for FY 2007-08 and additional subsidy from GOUP may also be considered to meet the revenue gap in FY 2008-09.

9.4.3 The licensee has also submitted that Tariff Proposal for FY 2008-09 would be submitted later on and the additional revenue would be used to meet the remaining gap. Till date no tariff proposal has been submitted by the licensees.

9.4.4 In absence of any Tariff Proposal from the licensee, the Commission in its best judgement has proposed ways to bridge the revenue gap.

9.4.5 One of the means for bridging the revenue gap is increases in the existing tariff. The state has not seen tariff hikes commensurate with the increasing cost in the recent past and hence the revenue gap has been increasing every year. In order to partly mitigate the revenue gap, the Commission in its best judgement has proposed revised tariff's for FY 2008-09 based on the proposal submitted by the licensees for FY 2007-08 and the existing tariff.

9.4.6 The estimated revenue from sale of power in FY 2008-09 based on the approved tariff schedule is as given below.

Table 9-3: Revenue from Sale of Power (Revised Approved Tariff) – FY 2008-09

(Rs. Crores)

FY 2008-09: Revenue (Approved)					
	Meerut	Agra	Lucknow	Varanasi	Total
LMV 1: Domestic Light, Fan and Power	1,557.61	1,097.03	1,065.26	1,039.68	**4,759.58**
LMV 2: Non-Domestic Light, Fan and Power	375.02	236.14	248.15	370.86	**1,230.17**
LMV 3: Public Lamps	45.48	34.73	63.01	25.13	**168.36**
LMV 4: Public/Private Institutions	142.28	205.90	226.99	279.33	**854.50**
LMV 5: Private Tubewells	196.70	160.62	70.80	99.58	**527.71**
LMV 6: Small and Medium Power	365.52	261.32	193.10	191.55	**1,011.49**
LMV 7: Public Water Works	88.11	88.36	84.23	116.46	**377.17**
LMV 8: State Tubewells	96.86	183.45	181.03	271.33	**732.67**
LMV 9: Temporary Supply	8.64	8.96	8.29	1.17	**27.06**
LMV 10: Department Employees / Pensioners	5.11	4.03	5.06	4.17	**18.37**
HV 2: Large and Heavy Power	2,107.62	675.23	429.97	695.95	**3,908.76**
HV 3: Railway Traction	-	121.45	14.31	205.36	**341.12**
HV 4: Lift Irrigation Works	0.55	57.81	32.69	228.65	**319.70**
Sub-Total	**4,989.52**	**3,135.02**	**2,622.89**	**3,529.23**	**14,276.65**
Bulk and Extra Supply	97.41	681.75	1.40	0.14	**780.71**
Total	**5,086.93**	**3,816.77**	**2,624.29**	**3,529.37**	**15,057.36**

9.4.7 Based on the approved sales, the revenue from sale of power with approved tariff is Rs.15057.36 Crores as against the licensees' estimates of Rs.11566 Crores for FY 2008-09 at existing tariff.

9.4.8 The Rate Schedule to be notified by the licensee has been annexed as ANNEXURE – VI to this order. Unless specifically mentioned in this Order, all definitions of categories and the charges applicable to the categories shall be as given in the Rate Schedule. Also enclosed as ANNEXURE - VII is the Schedule for Miscellaneous Charges and ANNEXURE - VIII for Power Factor Apparatus.

9.4.9 Based on the above, the summary of the proposed funding mechanism for bridging the revenue gap in FY 2008-09 is as given below:

Table 9-4: Treatment of Revenue Gap for FY 2008-09

Details	Units	FY 2008-09
		Approved
Gross ARR	Rs. Crores	17,534.94
Revenue from Existing Tariff	Rs. Crores	13,218.06
Net Revenue Gap	**Rs. Crores**	***4,316.88***
Funded Through:		
Tariff Increases	*Rs. Crores*	*1,839.30*
Government Subsidy	*Rs. Crores*	*1,532.00*
Efficiency improvement initiatives, Tariff Rationalisation & other initiatives	*Rs. Crores*	*945.58*
Net Revenue Gap Carried Forward	**Rs. Crores**	**-**

9.4.10 The Discom wise summary of the proposed funding mechanism for bridging the revenue gap is enclosed at ANNEXURE - IX.

9.4.11 As can be seen from the above, the Commission has revised the existing tariff and the additional revenue potential from the revised tariff's is estimated to be Rs. 1839.30 Crores.

9.4.12 The Licensees have been indicating substantial saving on account efficiency improvement initiatives in the past filings, which is not shown in the present filing. The Commission feels that there is substantial scope for improvement in the operations of the licensees and suitable steps, if taken by the licensees in this direction can result into enormous financial savings. The Commission in the Tariff Order for FY 2004-05 had specified a T&D loss reduction trajectory mandating a 3% loss reduction per annum commencing from FY 2002-03 onwards till FY 2004-05 and a reduction of 3.5% in FY 2005-06. This would have brought down the T&D losses in the UP system to 23.9% by end of FY 2005-06. However, the licensees have failed to achieve the same even by FY 2006-07.

9.4.13 As per Commission's conservative estimates, reduction of 1% in loss levels can yield additional revenue to the tune of roughly Rs. 150 Crores for the licensee. The Commission has, in the past tariff order and also in the current tariff order, prescribed some innovative schemes for reduction of distribution losses and believes that if these schemes are properly implemented by the licensees, can do the trick and ensure quick financial turnaround. The Commission exhorts licensees to make a concerted effort on this front and achieve a loss reduction of atleast 3.5% to 4% from the levels approved by the Commission. Considering the huge investments under APDRP and other initiatives by the licensees the proposed loss reduction target is not at all un-achievable. This would yield significant benefits to the licensee.

9.4.14 Further, in addition to the efficiency improvements through loss reduction, the licensee also needs to improve on the performance parameters like collection efficiency, etc. Efficient management of the power procurement process can also yield significant reduction in the power purchase costs. Further, the commission has introduced some new tariff's in the tariff schedule and some new provisions which have substantial potential to generate additional revenues. These include introduction of significant steep tariff for advertising hoardings under the LMV-2 category, additional charges on usage of air-conditioners thereby attempting to fetch sizeable revenue from non-essential luxurious consumption. This would go a long way in bridging the revenue gap. The effect of this could not be captured in the revenue computations using approved tariff due to non-availability of base data.

9.4.15 Based on the same, the Commission envisages that the revenue gap of Rs. 945.58 Crores can be met through the above mentioned measures if implemented properly by the licensees. In view of the same, no revenue gap for FY 2008-09 is envisaged.

9.4.16 The mechanism for bridging the revenue gap proposal given by the Commission is based on estimates and hence is subject to true-up at a later stage.

Chapter 10. DIRECTIONS TO DISCOMS & TRANSCO

10.1 This chapter details the Commission's directives to the licensees. The Licensees in their ARR and Tariff filings have not provided any details regarding the status of compliance to the Commission's directives issued vide the tariff order for FY 2006-07. In their filing and through their subsequent letters, the licensees have submitted that the status of compliance to the Commission's directives are being compiled and would be submitted shortly. But the same have not been submitted to the Commission till date. The Commission expresses its deep anguish over the lackadaisical attitude of the licensee in providing the necessary information. In view of the same, the Commission once again directs the licensees to comply with the directives issued under the FY 2006-07 Tariff Order and submit the compliance report along with reasons of non-compliance, if applicable, to the Commission within one month from the date of issue of the Tariff order.

10.2 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 FY 2006-07 tariff order. In case of such directives, if the licensee has not complied with the same earlier, it shall be necessary for the licensee to provide reasons for non-compliance and further comply with the same as per the time-lines prescribed in the present tariff order.

10.3 The directives for the distribution licensees as issued under the present Tariff order are given in the table below along with the time frame for compliance.

Table 10-1: Directives for Discoms

Sr. No	Ref.	Description of Directive for Discoms	Time Period for compliance from the date of issue of the tariff order
1.	1.2.7	The Commission directs the utilities to file the application for fresh licenses for newly formed entities.	1 Month
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
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

Sr. No	Ref.	Description of Directive for Discoms	Time Period for compliance from the date of issue of the tariff order
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
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
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
7.	**Error! Reference source not found.**	The Commission directs the licensee to explore the innovative modes of payment atleast in the cities having population of more than 10 lacs. Further the licensee shall keep the Commission updated about the progress on a quarterly basis.	Every Quarter
8.	**Error! Reference source not found.**	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
9.	**Error! Reference source not found.**	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
10.	**Error! Reference source not found.**	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
11.	**Error! Reference source not found.**	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 tariff order.	1 Month
12.	**Error! Reference source not**	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	3 Months

Sr. No	Ref.	Description of Directive for Discoms	Time Period for compliance from the date of issue of the tariff order
	found.	the date of tariff order.	
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
14.	5.4.7	The Licensees are directed to report the status of the metering along with the proposed plan to undertake the metering for the remaining T<>D 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.	Every Month
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
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.
17.	5.11.18	The Commission directs the licensees to submit the investment plan for next year filing strictly in accordance with Distribution Tariff Regulation failing which no investments would be approved.	Next Year Filing

Sr. No	Ref.	Description of Directive for Discoms	Time Period for compliance from the date of issue of the tariff order
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
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
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.	Next Year Filing
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
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
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 consumers to the Commission for approval within a period of one month from the date of issue of the tariff order.	1 Month
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 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.	6 Months Bi-monthly progress report to be submitted.

Sr. No	Ref.	Description of Directive for Discoms	Time Period for compliance from the date of issue of the tariff order
25.	HV-2 Rate Schedule pt 3 (c)	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.	3 Months
26.		The Commission directs the licensee to establish and earmark funds for consumer education and awareness. The details about the scope of 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.	3 Months

10.4 The directives for the transmission company are given in the table below along with the time frame for compliance.

Table 10-2: Directives for Transco

Sr. No	Ref.	Description of Directive for Transco	Time Period for compliance
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
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
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
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
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	2 Months

Sr. No	Ref.	Description of Directive for Transco	Time Period for compliance
		Transmission Tariff Regulations approved by the Commission within two month from the issue of this tariff order	
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
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
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
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

The Commission would like to submit that while it has attempted to enlist most of the directives given in the tariff order in the present chapter, the list given above may not be exhaustive and the licensee is directed adhere to all the directives given in the text of the tariff order.

Chapter 11. WAY FORWARD

11.1 In the last tariff order, the Commission through the chapter titled 'The Regulator's Dilemma' had put forward its views on the issues related to the status of the power sector reforms in the state. The Commission had expressed its anguish over the state of implementation of the reforms in the state where even after nine years since the initiation of the process, the structural arrangements have not been resolved, institutional capacity has not been developed, promoting autonomy in management, creating accountability and institutional strengthening not been given adequate attention, direct intervention of State Government in minutest administrative, technical & commercial matters not mitigated, adherence to legislative mandate has almost grounded to a halt . The Commission had stressed on the need for this impasse to be resolved immediately.

11.2 The Commission had also commented on the desired role of the Commission and the government in forming public policies and had submitted that the formation of the broad public policy is the responsibility of the Governments and not of regulators, it was also accepted that there would be occasions when the public or national interest might require a direction that does not fit the logical reasoning of a quasi-judicial regulator but this power must be used with circumspection. Ideally, this could be through preliminary discussion with the regulator or asking the regulator for advice on a draft policy.

11.3 With regards to the issue of adopting a progressive tariff policy, the Commission had opined that a marginal cost based tariff structure can be a way of ensuring that both economic efficiency and viability of the electricity industry would be guaranteed by following strictly marginal cost based pricing. However, the Commission, at least in the early period of regulation and with the existing state of utilities, had thought that they may be better off adopting an average cost approach integrated with few performance based parameters, as has been attempted in the Tariff order while aligning the rate bands along average cost of service and linking it with supply hours.

11.4 As a parting thought, the Commission had expressed a view that the need of the hour was to understand that respect to statutory obligations and improvements in governance are the aspects, which would give desired results. Mere corporatization and revision of tariff rates will not lead any where. Unless the legally mandated structures are put in place, the benefits of reform exercise are not likely to come. This holds true in the current context also.

11.5 Carrying forward from where the Commission had concluded in the last tariff order, the Commission would now like to put forth its views on the new developments that are happening/ likely to happen in the sector on account of implementation of the initiatives to fulfil the objectives of the Electricity Act 2003 in its true spirit. While the fact remains that there are numerous issues, which the Commission has also highlighted through its various orders, plaguing the UP power sector, the time has come when the utilities need to appraise themselves about the new developments in the sector and find ways and means to adopt them and not be left behind as compared to the other states/utilities in the country.

11.6 The need for self sustaining growth of the power sector and its financial viability which is essential for the speedy and sustained socio-economic development of the States was the basic objective with which the reforms process was initiated in the country. Further, a healthy power sector would pave the way for further industrialization, growth in agricultural production and economic growth. In view of the same, the main objectives of reform can be summarised as given below:

- To promote the development of an efficient, commercially viable and competitive power sector.
- To provide reliable quality and uninterrupted supply, at reasonable prices, to all consumer categories.
- To ensure that the social and environmental aspects are fully taken into consideration.

11.7 Accordingly, to achieve the above objectives of the reform, the EA 2003 has identified certain initiatives to be undertaken in the power sector to accomplish the goal of financial viability as well as sustainability of power utilities as an independent organization. Some of the reform measures suggested under the act are as follows:

- Functional unbundling of the integrated State Electricity Boards and setting up of State Electricity Regulatory Commission (SERC) by states made mandatory;
- De-licensing of Generation, other than for large hydro projects;
- Allowing Open access on Transmission and Distribution networks;
    - Retail competition which mandates that by July 2008 all consumers above 1MW are free to choose their supplier;
- Rural power development by De-licensing generation and distribution in rural areas;
- Captive Power Policy where Captive Power User is allowed to sale power to any consumer and inject power in the gird;

- Power trading and market development are recognized whereby Power Exchange is conceptualised and formed;
- Strong anti-theft and malpractice provisions;
- Broader Private Sector Participation by providing a conducive atmosphere for private investments;

11.8 While initial steps have been initiated in UP towards implementing some of the measures, the Commission would like to touch upon some of the critical issues/developments in the power sector which it thinks the utilities in UP power sector need to look at from the point of view of implementation in the state. Some of the initiatives are as follows:

- Implementation of Open Access on Transmission and Distribution Networks in the State;
- Power trading and market development;
- Power Exchange Model;

11.9 Implementation of the Open Access on Transmission and Distribution Networks in the State

11.9.1 Enabling and encouraging Open Access on the transmission and distribution networks in the most important aspect for introducing competition in the electricity industry.

11.9.2 Section 39(2)(d) and 40(c) of the Electricity Act 2003 requires the State Transmission Utility and Transmission Licensees to provide non-discriminatory open access to transmission system for use by any licensee or generating company or consumer as and when open access is provided by the State commission under section 42(2) on payment of transmission charges and a surcharge.

11.9.3 Section 42(2) of Electricity Act 2003 states that the State Commission shall introduce open access in such phases and subject to such conditions, (including the cross subsidies, and other operational constraints) as may be specified and shall accord due regard to all relevant factors including cross subsidies, and other operational constraints.

11.9.4 The UPERC has issued UPERC (Terms and Conditions of Open Access) Regulations 2004 on 7th June 2005. As per the regulations the Phasing of open Access in the state of UP is as under:

Table 11-1: Phasing of Open Access in the State

Phases	Category of consumers	Time from which Open access allowed
Phase I	Consumers with Demand of 20 MW and above and connected on voltage levels of 33 KV and above	July 1, 2005
Phase II	Consumers with Demand of 10 MW and above and connected on voltage levels of 33 KV and above	April 1, 2006
Phase III	Consumers with demand of 5 MW and above and connected on voltage levels of 11 KV and above	April 1, 2007
Phase IV	Consumers with demand of above 1 MW	April 1, 2008

11.9.5 Accordingly, the regulations also directed the Distribution licensees that within 60 days of coming into force of these regulations, the licensees shall furnish to the State Transmission Utility and the State Load Dispatch Centre details of their agreements for use of the transmission system and / or distribution system and the terms and conditions for such use. Such distribution licensees would then operate as long term Open Access users.

11.9.6 For the purpose of granting open access to consumers, it would be necessary for the transmission and distribution licensees to assess the availability of the transmission and distribution capacity in the state. Further, allocation of the capacity available to the existing long term users i.e. the distribution licensees is the most important aspect. This would not only enable the transmission licensees to recover the open access charges from the open access users based on the capacity allocated instead of recovery of charges based on energy transferred through the networks. This would also enable the transmission and distribution licensees to assess the extent of surplus capacity available in the networks which can be utilised for granting short term open access.

11.9.7 The licensees need to act as a facilitator enabling consumers to avail open access on the transmission and distribution networks in the state. For this purpose it is necessary to have set procedure for seeking open access. This would include formulation of a standard application procedure for grant of Open Access which needs to be evolved in line with the provisions of the Open Access Regulations issued by the Commission. Further, model agreements like the Bulk Power Transmission Agreement (BPTA), Connections Agreements, etc. which need to be executed between the consumer seeking open access and the licensee whose network he intends to utilise have to be prepared and made available to the consumers.

11.9.8 These activities will make the process for seeking open access devoid of procedural hassles and encourage consumers to go in for such transactions. This would introduce the element of competition in the sector thus encouraging the existing utilities to bring in more efficiency in their operations and face the competition.

11.9.9 The Commission, in the present order, has specified the Open Access and related charges payable by consumers seeking open access on the licensees' network. In order to further encourage the consumers to go in for such transactions, the Commission has also specified voltage level charges thus moving in the direction of progressive tariff setting principles. Thus the Commission urges the licensees also to move forward in the same direction and try to fulfil the objective of the Electricity Act 2003 in the true spirit by providing non-discriminatory Open Access to consumers.

11.10 Strengthening the function of Power trading and market development

11.10.1 Under the previous structure, a single-buyer model prevailed in the state of UP with UPPCL, which was entrusted with the role of the transmission company, making purchases from all the generators, including central generating stations and IPPs on behalf of the Discoms in the state. However, with the enactment of the Electricity Act, 2003, the provisions under Section 41 of the Act made the separation of the transmission and trading function mandatory. Responding to the above statutory requirement, UPPTCL was separated out from UPPCL and entrusted with the role of the State Transmission Utility and a transmission licensee through GoUP notification. Post this separation, UPPCL was entrusted the responsibility of power procurement and trading of power on behalf of the discoms.

11.10.2 As per the The Electricity Act, 2003 ("Act"), Trading has been defined as "purchase of electricity for resale thereof" and has now been identified as a licensed activity which shall be regulated as per the regulations to be issued by specific state commissions and Central Commission (CERC). CERC and several state Commissions have already issued / notified regulations in this regard permitting all kinds of trades ranging from a few hours to years.

11.10.3 As has been mentioned earlier, post the unbundling of UPSEB, UPPCL has been mandated to play the key role of power trading. UPPCL is envisaged to be serving the demand for all the distribution companies, both long term as well short term, presumably in the most economical manner. UPPCL in its role as the aggregator of power for the state will have to follow a strategy centered around meeting the state power supply shortages and trading seasonal surpluses available in the state.

11.10.4 Considering the immediate need for capacity building and institutional strengthening for short term and long term trading function (mainly for procurement of long term power), UPPCL may need to develop the Trading Desk. The key drivers that emphasize need for a Trading Desk are as follows:

a. Real Time Monitoring;
b. External Information and networking;
c. Skill Sets & Training;

11.10.5 Trading Desk derives its functions from the objectives of UPPCL that pertain to trading and power procurement. The following are the key functions of the trading desk –

a. Ensuring Availability - Demand Supply Analysis and Forecasting, Long Term & Short Term Power Procurement, Consultative Role in Generation Planning;
b. Ensuring Optimum Utilisation – Long Term & Short term sale of power;
c. Ensuring Smooth Functioning - System Operations & Related Commercial Services Settlement;

11.10.6 Accordingly, for developing the Trading Desk, UPPCL needs to undertake the following task viz.,

- Requirement analysis - will look to establish the requirements for setting up a lean and efficient trading desk. It will look into following areas:
  a. Skills Sets Required;
  b. Information Requirement;
  c. Organization Structure;
  d. Key Business Processes Design;
  e. Automation Requirements;
  f. Training Requirements;
- Implementation Phase- Once the requirement is identified, this will assist in implementation and stabilizing the new business environment, including identifying the key personnel. The capacity building for the personnel involved in the trading desk shall be through workshops and training sessions by experts from the field.

11.11 Power Exchange

11.11.1 Energy trading is, in many ways, similar to trading in commodity markets. Similar risks and opportunities exist in both the markets.

11.11.2 Based on the similar concept of trading commodities, CERC has recently issued guidelines to establish and operate the National Power Exchange. Private sector has also been given the opportunity to participate in power exchange. The CERC has allowed the operational liberty to power exchange within the realms of overall regulatory structure and has opened the doors of power exchange for private sector also.

11.11.3 The participation in the power exchange would be voluntary and no existing power purchase agreements and bilateral contracts will be disturbed. The modus operandi of power exchange will basically be like commodity exchange. A power exchange will give a platform to electricity buyers, traders, and sellers to cut the forward and spot deals.

11.11.4 The CERC is striving to promote the exchange to come out as market-based foundation for extending price risk management and price discovery to traders, distribution licensees, generators, consumers, and many other stakeholders. Broadly speaking, what is mandated is minimal regulation, voluntary participation and no restriction on ownership. It is a process which is ring-fencing between ownership, management and Power Exchange operations, transparency in decision-making and efficient clearing and settlement systems.

11.11.5 An energy exchange could serve to bridge the nationwide demand-supply mismatch in the energy sector, by allowing surplus regions to trade power at optimal price with all buyers. IEX with other well known partners from Power Sector would be starting the Power Exchange which is expected to be online in the Financial Year 2008-09.

11.11.6 As per the IEX, the following are the entities who can be a member in the power exchange:

- Inter-State Generating Stations (ISGS);
- Distribution Licensees;
- State Generating Stations;
- IPPs connected to Inter State Transmission System;
- CPPs and IPPs (with consent from DISCOM/SLDC/STU/RLDC);
- Open Access Customers (with consent from DISCOM/SLDC/STU/RLDC);
- Electricity Traders / Marketers;

11.11.7 A power exchange will result in operating the assets as effectively as possible to deliver strong, stable return on investment. Most utilities look to employ their trading operations as a facilitation mechanism for better asset utilisation and stable returns as well as to meet their short term demand of power.

11.11.8 In the Power Exchange, the price will be discovered through an auction. Therefore, on exchanges, the pricing cannot be controlled. It would help the State access cheaper power as per its requirements, provided the power managers kept an eye on the market situation and took a decision accordingly. Similarly, if the electricity traded on the exchange, fetches higher price, the exchange may attract more generating firms. This may lead to an increase in the deficit outside the exchange, where companies would continue to strike bilateral agreements for buying/selling electricity.

11.11.9 The power exchanges would enable participants to trade electricity the subsequent day through standard hourly contracts and block contracts which will be offered to Power Exchange Bolt on a day-ahead basis. The transaction would happen through injection or drawing power from the grid at a given hour at an equilibrium market price. The timeline for scheduling & settlement is carried out by the Power Exchange through RLDC & SLDC.

11.11.10 A power exchange could possibly bring in all sellers to a platform and help them sell power in a transparent manner. This may help buyers know the pulse of the market and quote accordingly. When the exchange begins to account for a majority of trading on a daily basis, the electricity sold outside the exchange will also follow the exchange-traded pricing.

11.11.11 The concept of power exchanges hold multitude of opportunities which can be exploited favourably by the utilities in the state. **To begin with UPPCL which is entrusted with the function of procuring and meeting the demand for power on behalf of the discoms can participate in the power exchange and explore this option. However, to be able to exploit the potential of the power exchanges to the fullest extent, the utilities need to nurture a team with appropriate skill sets essentials to carry out the function in the power exchange as 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, open access issues, availability-based tariff, unscheduled interchange mechanism, scheduling dispatch and energy accounting procedure.** In view of the above, Commission is of the opinion that the utilities in the state need to make the extra effort to understand the nuances of the proposed system and exploit the benefit to the fullest extent.

11.12 While the Commission through this particular chapter has tried to touch upon some of the new developments happening in the power sector and some of the areas where the Commission feels that the utilities need to further focus their efforts, the Commission realises that its role to some extent is more of a facilitator while the actual efforts need to be done by the utilities themselves through proactive efforts.

11.12.1 As has been the case always, the Commission is hopeful that the utilities will rise to the challenge and look at new opportunities which are coming up in the sector and at the same time not lose focus on the reform initiatives on with an aim to carry out genuine improvements in service and efficiency thereby making Uttar Pradesh an attractive destination not only for investments in the power sector, but also in the larger economy of the State.

11.12.2 The power sector is the flag-bearer of development of any economy, and the state of the power sector is often an accurate reflection of the state of the economy. It is for the utilities to take note of this important social and economic responsibility that is vested in them, and take necessary measures to propel the State ahead.

11.12.3 Accordingly, it is most crucial for the state and the State owned power utilities to work out a Business Plan which would not only reflect the visions of the utilities as well as the government but would also lay down the path and strategy to translate the vision into reality. Having said that, it is concluded:

The greatest difficulty in the world is not for people to accept new ideas, but to make them forget the old ones!!

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John M. Kenyo

Chapter 12. APPLICABILITY OF THE ORDER

12.1 The licensee in accordance to the section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 shall initiate necessary steps to implement the tariff notified by the Commission and publish the tariffs approved by the Commission in atleast two daily newspapers (one English and one Hindi) having circulation in the area of supply latest by 23rd April 2008. The new rates and the order would become applicable after seven days of such publication.

12.2 The revised rates shall continue to be in force till issuance of the next tariff order.

12.3 The retail tariffs as determined under this Order shall also apply in the area of operations of M/s. KESCO and M/s. NPCL.

Sd/-	Sd/-	Sd/-
(R. D. Gupta)	(P. N. Pathak)	(Vijoy Kumar)
Member	Member	Chairman

Dated : 15th April, 2008
Lucknow

ANNEXURE – I

Performance Review for FY 2006-07 vis-à-vis Tariff Order

Comparison of ARR FY 2006-07 & Tariff order - Lucknow Discom				
Particulars	FY 2006-07 Tariff Order	FY 2006-07 (Actual) (Unaudited)	Difference	Difference (%)
Power Purchase Cost	1,857	1,882	(25)	1.4%
Transmission Charges	138	166	(27)	19.8%
Employee Costs	222	203	19	-8.5%
Admin & General Expenses	26	35	(10)	37.3%
Repair & Maintenance Expense	51	75	(24)	46.7%
Provision for Bad Debts	-	21	(21)	0.0%
Depreciation Expense	158	119	39	-24.5%
Interest and Finance Charges	90	110	(19)	21.3%
Capitalised Expenses	56	40	16	-28.7%
Total	**2,486**	**2,571**	**(85)**	**3.4%**

Comparison of ARR FY 2006-07 & Tariff order - Meerut Discom				
Particulars	FY 2006-07 Tariff Order	FY 2006-07 (Actual) (Unaudited)	Difference	Difference (%)
Power Purchase Cost	3,475	3,443	32	-0.9%
Transmission Charges	259	303	(44)	17.1%
Employee Costs	197	193	3	-1.6%
Admin & General Expenses	23	23	0	-0.6%
Repair & Maintenance Expense	71	102	(30)	42.7%
Provision for Bad Debts	-	21	(21)	0.0%
Depreciation Expense	221	223	(2)	1.0%
Interest and Finance Charges	99	121	(23)	23.0%
Capitalised Expenses	51	37	14	-28.3%
Total	**4,293**	**4,393**	**(99)**	**2.3%**

Comparison of ARR FY 2006-07 & Tariff order - Varanasi Discom				
Particulars	**FY 2006-07 Tariff Order**	**FY 2006-07 (Actual) (Unaudited)**	**Difference**	**Difference (%)**
Power Purchase Cost	2,474	2,537	(62)	2.5%
Transmission Charges	184	223	(39)	21.2%
Employee Costs	244	215	29	-12.0%
Admin & General Expenses	18	20	(2)	13.5%
Repair & Maintenance Expense	55	97	(43)	78.7%
Provision for Bad Debts	-	42	(42)	0.0%
Depreciation Expense	169	149	20	-11.9%
Interest and Finance Charges	93	117	(24)	26.1%
Capitalised Expenses	56	39	17	-29.9%
Total	**3,181**	**3,361**	**(180)**	**5.7%**

Comparison of ARR FY 2006-07 & Tariff order - Agra Discom				
Particulars	**FY 2006-07 Tariff Order**	**FY 2006-07 (Actual) (Unaudited)**	**Difference**	**Difference (%)**
Power Purchase Cost	2,973	2,965	9	-0.3%
Transmission Charges	221	261	(40)	17.9%
Employee Costs	156	151	5	-3.3%
Admin & General Expenses	25	24	1	-2.2%
Repair & Maintenance Expense	46	68	(22)	47.0%
Provision for Bad Debts	-	35	(35)	0.0%
Depreciation Expense	143	142	1	-0.8%
Interest and Finance Charges	72	103	(31)	42.7%
Capitalised Expenses	42	30	12	-28.2%
Total	**3,594**	**3,717**	**(123)**	**3.4%**

ANNEXURE – II

Discom-wise details for Consumers, connected load and Sales

No.of Consumers, Connected Load and Consumption for Consolidated Discom - Tariff Filing from FY 2006-07 to FY 2008-09

Consolidated UPPCL	FY 2006-07			FY 2007-08			FY 2008-09		
	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)
LMV-1	7,182,762	11,387,332	12,268	8,180,871	13,270,963	15,087	8,735,277	14,994,211	16,590
LMV-2	855,471	1,867,636	2,315	927,279	1,831,480	2,399	1,015,058	2,269,601	2,725
LMV-3	9,099	94,793	361	12,889	109,153	485	10,524	127,033	486
LMV-4	26,992	490,298	1,387	37,876	146,513	1,783	37,240	713,181	1,874
LMV-5	688,725	3,282,934	3,753	699,556	3,320,058	3,855	744,316	3,876,389	4,436
LMV-6	130,940	1,215,932	1,587	121,686	1,234,444	1,663	130,933	1,466,166	1,929
LMV-7	5,906	183,560	696	6,242	201,158	797	6,259	209,529	807
LMV-8	28,865	456,697	1,447	28,914	462,665	1,749	29,887	534,998	1,716
LMV-9	3,970	27,018	58	4,556	24,112	65	4,637	32,751	71
LMV-10	60,928	157,911	117	66,084	176,741	138	66,530	178,644	145
HV-2	5,358	1,827,322	5,350	5,515	1,809,309	5,750	5,353	2,251,502	6,418
HV-3	9	256,063	635	13	258,779	648	10	266,408	661
HV-4	105	141,602	533	106	146,745	535	105	143,902	542
Extra State	9	12,200	24	7	14,100	36	8	12,100	25
Bulk Supply	2	1,195,008	2,891	2	1,263,654	3,254	2	1,278,843	3,432
LMV-6A	-	-	-	27,921	76,450	128	27,921	78,370	137
Total	**8,999,141**	**22,596,306**	**33,424**	**10,119,517**	**24,346,325**	**38,371**	**10,814,060**	**28,433,628**	**41,996**

No.of Consumers, Connected Load and Consumption for Agra Discom - Tariff Filing from FY 2006-07 to FY 2008-09

Agra Discom	FY 2006-07			FY 2007-08			FY 2008-09		
	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)
LMV-1	1,370,229	2,034,381	2,449	1,510,659	2,273,501	2,877	1,635,187	2,617,871	3,254
LMV-2	185,018	393,244	543	304,746	399,837	643	218,935	461,883	640
LMV-3	4,604	16,412	66	6,149	21,791	112	4,937	23,920	94
LMV-4	5,560	99,723	329	7,594	29,699	390	7,579	142,222	445
LMV-5	129,761	804,281	998	130,166	825,229	888	141,618	858,805	1,116
LMV-6	37,954	327,845	417	32,073	328,267	442	37,953	386,360	492
LMV-7	1,692	42,274	169	1,781	46,771	210	1,792	49,121	196
LMV-8	5,510	114,748	302	5,454	117,246	337	5,712	132,881	354
LMV-9	677	7,198	21	814	3,776	22	843	9,322	27
LMV-10	13,367	39,046	27	14,406	43,000	29	14,598	43,756	31
HV-2	1,209	333,552	1,012	1,917	330,022	997	1,211	396,212	1,142
HV-3	5	95,538	237	9	94,809	227	6	99,398	246
HV-4	23	28,180	82	23	21,574	75	23	28,676	84
Extra State	4	6,100	17	4	6,100	25	4	6,000	17
Bulk Supply	1	1,142,508	2,497	1	1,215,497	2,826	1	1,222,660	2,921
LMV-6A	-	-	-	3,417	50,411	27	3,417	16,682	29
Total	**1,755,614**	**5,485,030**	**9,165**	**2,019,212**	**5,807,528**	**10,128**	**2,073,815**	**6,495,769**	**11,087**

No.of Consumers, Connected Load and Consumption for Meerut Discom - Tariff Filing from FY 2006-07 to FY 2008-09									
Meerut Discom	FY 2006-07			FY 2007-08			FY 2008-09		
	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)
LMV-1	1,923,122	4,046,791	3,778	2,066,880	4,516,570	4,379	2,187,380	5,308,876	4,572
LMV-2	257,362	616,892	665	48,598	48,321	475	304,199	798,720	779
LMV-3	698	27,354	106	877	24,248	106	794	32,083	131
LMV-4	5,597	108,097	253	8,651	33,459	350	7,703	178,739	334
LMV-5	291,992	1,381,181	1,507	287,836	1,349,827	1,560	312,296	1,553,955	1,712
LMV-6	35,487	407,642	583	34,747	432,090	626	35,482	504,911	735
LMV-7	1,360	49,396	157	1,436	54,445	177	1,441	53,964	183
LMV-8	4,695	60,483	192	4,778	59,910	280	4,869	68,879	218
LMV-9	1,422	13,475	16	1,682	13,789	19	1,646	16,105	19
LMV-10	17,239	53,522	33	18,501	60,820	39	18,518	60,938	41
HV-2	3,042	984,785	2,975	1,581	1,039,534	3,264	3,034	1,250,565	3,738
HV-3	-	-	-	-	-	-	-	-	-
HV-4	2	311	0	9	1,034	1	2	-	0
Extra State	-	-	-	-	-	-	-	-	-
Bulk Supply	1	52,500	394	1	48,157	427	1	56,183	512
LMV-6A	-	-	-	8,376	3,377	33	8,376	19,878	35
Total	**2,542,019**	**7,802,429**	**10,659**	**2,483,953**	**7,685,580**	**11,736**	**2,885,740**	**9,903,795**	**13,009**

No.of Consumers, Connected Load and Consumption for Lucknow Discom - Tariff Filing from FY 2006-07 to FY 2008-09									
Lucknow Discom	FY 2006-07			FY 2007-08			FY 2008-09		
	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)
LMV-1	1,846,321	2,541,818	2,965	2,164,579	3,132,908	3,969	2,241,409	3,224,885	4,066
LMV-2	213,324	447,542	487	255,744	669,098	671	253,099	524,255	571
LMV-3	3,502	38,186	137	4,458	39,972	146	3,908	43,752	169
LMV-4	7,909	156,003	378	10,728	45,831	473	10,815	212,463	488
LMV-5	112,573	429,819	520	118,813	470,602	670	121,524	609,291	681
LMV-6	28,410	243,700	278	25,849	239,529	266	28,410	289,746	330
LMV-7	1,348	42,642	164	1,418	46,397	175	1,424	49,226	189
LMV-8	8,756	114,121	394	8,761	119,506	487	9,046	131,881	455
LMV-9	1,833	5,602	19	2,019	5,774	21	2,105	6,472	22
LMV-10	16,958	41,877	31	18,157	46,158	36	18,311	46,818	38
HV-2	581	205,712	578	967	198,225	561	580	244,408	653
HV-3	1	14,025	23	1	14,326	27	1	14,592	24
HV-4	17	23,113	56	22	25,867	58	17	23,552	57
Extra State	3	-	7	1	5,000	5	2	-	7
Bulk Supply	-	-	-	-	-	-	-	-	-
LMV-6A	-	-	-	6,536	2,375	26	6,536	15,660	27
Total	**2,241,536**	**4,304,160**	**6,038**	**2,618,053**	**5,061,567**	**7,591**	**2,697,187**	**5,436,999**	**7,777**

No.of Consumers, Connected Load and Consumption for Varanasi Discom - Tariff Filing from FY 2006-07 to FY 2008-09									
Varanasi Discom	FY 2006-07			FY 2007-08			FY 2008-09		
	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)	No. of Consumers	Connected Load (kW)	Unit Sold (MUs)
LMV-1	2,043,090	2,764,342	3,076	2,438,753	3,347,984	3,862	2,671,301	3,842,580	4,698
LMV-2	199,767	409,958	621	318,191	714,225	610	238,825	484,743	735
LMV-3	295	12,841	52	1,405	23,143	121	885	27,278	93
LMV-4	7,926	126,475	427	10,903	37,525	570	11,143	179,757	607
LMV-5	154,399	667,653	728	162,741	674,400	737	168,878	854,338	928
LMV-6	29,089	236,745	308	29,018	234,558	330	29,088	285,148	371
LMV-7	1,506	49,248	206	1,607	53,545	234	1,602	57,219	239
LMV-8	9,904	167,345	559	9,921	166,004	645	10,260	201,358	689
LMV-9	38	743	3	41	774	3	43	852	3
LMV-10	13,364	23,466	27	15,020	26,763	33	15,104	27,133	35
HV-2	526	303,273	785	1,050	241,528	928	528	360,318	886
HV-3	3	146,500	376	3	149,644	394	3	152,419	391
HV-4	63	89,998	394	52	98,270	401	63	91,673	402
Bulk Supply	-	-	-	-	-	-	-	-	-
Extra State	2	6,100	1	2	3,000	5	2	6,100	1
LMV-6A	-	-	-	9,593	20,287	43	9,593	26,150	46
Total	**2,459,972**	**5,004,687**	**7,562**	**2,998,300**	**5,791,650**	**8,916**	**3,157,317**	**6,597,065**	**10,123**

ANNEXURE – III

Discoms Wise details for Power Purchases (Quantum and Cost)

Power purchase cost for FY 2006-07 and projections for FY 2007-08 & FY 2008-09				
Details	**Agra Discom**			
	FY 2006-07 (Actual) (Unaudited)	**FY 2006-07 Tariff Order**	**FY 2007-08 (Projection)**	**FY 2008-09 (Projection)**
Energy Procured: Net Generation (MU)	13,993	13,957	14,866	15,253
Cost of Generation (Rs.Cr)		2,973	3,423	3,586
Energy Delivered by UPPCL TransCo(MU)	13,147	13,260	13,970	14,399
Transmission Rate (Rs/Unit)	-	0.167	0.191	0.231
Cost of Transmission (Rs.Cr)		221	267	333
Total Power Acquisition Cost(Rs.Cr)	-	3,194	3,691	3,919

Power purchase cost for FY 2006-07 and projections for FY 2007-08 & FY 2008-09				
Details	**Meerut Discom**			
	FY 2006-07 (Actual) (Unaudited)	**FY 2006-07 Tariff Order**	**FY 2007-08 (Projection)**	**FY 2008-09 (Projection)**
Energy Procured: Net Generation (MU)	16,250	16,314	17,179	17,896
Cost of Generation (Rs.Cr)		3,475	3,956	4,208
Energy Delivered by UPPCL TransCo(MU)	15,267	15,498	16,143	16,894
Transmission Rate (Rs/Unit)	-	0.167	0.191	0.231
Cost of Transmission (Rs.Cr)		259	309	390
Total Power Acquisition Cost(Rs.Cr)	-	3,734	4,265	4,598

Power purchase cost for FY 2006-07 and projections for FY 2007-08 & FY 2008-09				
Details	Lucknow Discom			
	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Energy Procured: Net Generation (MU)	8,884	8,716	10,829	10,882
Cost of Generation (Rs.Cr)		1,857	2,494	2,559
Energy Delivered by UPPCL TransCo(MU)	8,346	8,280	10,176	10,273
Transmission Rate (Rs/Unit)	-	0.167	0.191	0.231
Cost of Transmission (Rs.Cr)		138	195	237
Total Power Acquisition Cost(Rs.Cr)	-	1,995	2,688	2,796

Power purchase cost for FY 2006-07 and projections for FY 2007-08 & FY 2008-09				
Details	Varanasi Discom			
	FY 2006-07 (Actual) (Unaudited)	FY 2006-07 Tariff Order	FY 2007-08 (Projection)	FY 2008-09 (Projection)
Energy Procured: Net Generation (MU)	11,974	11,616	13,554	14,298
Cost of Generation (Rs.Cr)		2,474	3,121	3,362
Energy Delivered by UPPCL TransCo(MU)	11,250	11,035	12,737	13,498
Transmission Rate (Rs/Unit)	-	0.167	0.191	0.231
Cost of Transmission (Rs.Cr)		184	244	312
Total Power Acquisition Cost(Rs.Cr)	-	2,659	3,365	3,674

ANNEXURE – IV

Licensee's Proposed Rate Schedule - FY 2007-08

RATE SCHEDULE	CATEGORY OF CONSUMERS	ARR & TARIFF FY (2007-08)
LMV-1	DOMESTIC LIGHT, FAN & POWER:	PROPOSED TARIFF
	(a) Consumers getting supply as per "Rural Schedule"	
	(i) Un-Metered	
	Fixed Charge	Rs.110 /connection/month
	Energy Charge	Nil
	(ii) Metered	
	Fixed Charge	Rs.15 /kW/month
	Energy Charge	Rs.1.00 /kWh
	(b) Supply at single point for bulk loads:	
	Fixed Charge	Rs.35 /kW/month
	Energy Charge	Rs.2.80 /kWh
	(c) Other Metered Domestic Consumers: (For All Loads)	
	Fixed Charge	Rs.50.00/kW/month
	Energy Charge	
	Consumption upto 150 kWh/Month	Rs.3.00 /kWh
	Consumption above 150 kWh/Month	Rs.3.30 /kWh
	(d) Life Line Consumers:	
	For 1.0 kW connected Load & Consumption upto 100 kWh/Month	
	Fixed Charge	Rs.50.00/kW/month
	Energy Charge	Rs.1.90 /kWh
LMV-2	NON-DOMESTIC LIGHT, FAN & POWER:	PROPOSED TARIFF
	(a) Consumers getting supply as per "Rural Schedule"	
	(i) Un-Metered	
	Fixed Charge	Rs.165 /connection/month
	Energy Charge	Nil
	(ii) Metered	
	Fixed Charge	Rs.20 /kW/month
	Energy Charge	Rs.1.45 /kWh
	(b) Other Metered Consumers:(For All Loads)	
	Fixed Charge	Rs. 90 /kW/month
	Energy Charge	Rs. 4.50 /kWh
	Minimum Charge	Rs. 300 /kW/month
LMV-3	PUBLIC LAMPS:	PROPOSED TARIFF
	Fixed Charges:	
	Gram Pachayat	Rs. 1000 /kW/ month
	Nagar Palika and Nagar Panchayat	Rs. 1250 /kW/ month
	Nagar Nigam	Rs. 1500 /kW /month
LMV-4	LIGHT, FAN & POWER FOR PUBLIC & PRIVATE INSTITUTION:	PROPOSED TARIFF
	Fixed Charge	Rs. 85 /kW/month
	Energy Charge	Rs. 3.90 /kWh
	Minimum Charge	Rs. 300 /kW/month

LMV-5	SMALL POWER FOR PRIVATE TUBE WELL/ PUMPING SETS FOR IRRIGATION PURPOSES:	PROPOSED TARIFF
	(A) Consumers getting supply as per "Rural Schedule"	
	(i) Un-Metered Supply	
	Fixed Charge	**Rs.75 /BHP/month**
	Energy Charge	**Nil**
	Maximum Lighting load allowed	**120 Watts**
	(ii) Metered Supply	
	Fixed Charge	**Rs.15 /BHP/month**
	Energy Charge	**Rs. 0.75 /kWh**
	Minimum Charge	**Rs.65 /BHP/month**
	(B) Consumers getting supply as per "Urban Schedule (Metered Supply)"	
	Fixed Charge	**Rs. 30 /BHP/month**
	Energy Charge	**Rs. 2.00/kWh**
	Minimum Charge	**Rs. 130 /BHP/month**
LMV-6	**SMALL AND MEDIUM POWER:**	**PROPOSED TARIFF**
	(i) Consumers getting supply other than "Rural Schedule"(For all loads)	
	LMV-6(A) Power Loom:	
	Fixed Charge	**Rs. 90.00 /kW/month**
	Energy Charge	**Rs. 4.60 /kWh**
	Minimum Charge	**Rs. 350 /kW/month**
	LMV-6(B) Small & Medium Power:	
	Fixed Charge	**Rs. 90.00 /kW/month**
	Energy Charge	**Rs. 4.70 /kWh**
	Minimum Charge	**Rs. 450 /kW/month**
	(ii) Consumers getting supply as per "Rural Schedule"	Consumers getting supply as per rural shedule shall be eligible for a rebate of 15% on Fixed Charge and Energy Charges as per Base Rate. Minimum charge for consumers on rural shedule shall be (-)15% of the Base Rate minimum charges.
LMV-7	**PUBLIC WATER WORKS:**	**PROPOSED TARIFF**
	(a) Consumers getting supply other than "Rural Schedule"	
	Fixed Charge	**Rs.85 /kW/month**
	Energy Charge	**Rs.3.60 /kWh**
	Minimum Charge	
	Urban	**Rs. 600 /kW/month**
	Rural	**Rs. 450 /kW/month**
	(b) Consumers getting supply as per "Rural Schedule"	Consumers getting supply as per rural shedule shall be eligible for a rebate of 15% on Fixed Charge and Energy Charges
LMV-8	**STW, PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:**	**PROPOSED TARIFF**
	(i) Metered	
	Fixed Charge	**Rs.90 /BHP/month**
	Energy Charge	**Rs.3.70 /kWh**
	(ii) Un-Metered	
	Fixed Charge	**Rs.800 /BHP/month**
	Energy Charge	**Nil**

LMV-9	**TEMPORARY SUPPLY:**	**PROPOSED TARIFF**		
	(A) Un-Metered Supply:			
	(i) Fixed Charges for Illumination/Public Address/ceremonies for loads upto 20 kW/connection.	**Rs.1000 per day**		
	(ii) Fixed charges for Temporary shops set-up during festivals/melas and having load up to 2 KW	**Rs.150 per day per shop**		
	(iii) Fixed charges for Temporary shops other than as covered under (ii) and having load up to 1 kW	**Rs.100 per day per shop**		
	(B) Metered Supply:			
	Energy Charges:			
	(i) Individual Residential Construction	**Rs.3.50 /kWh**		
	(ii) Others	**Rs.5.00 /kWh**		
	Minimum Charge:	**Rs 100 /kW/week (part of week shall be treated as full week)**		
LMV-10	**DEPT. EMPLOYEES AND PENSIONERS:**	**PROPOSED TARIFF**		
	Un-Metered Supply:			
	Category	*Fixed Charge/month*	*Fixed Monthly Energy Charge*	
	(a) Class IV employees/ Operating staff	Rs. 50.00	Rs. 55.00	
	(b) Class III employees	Rs. 50.00	Rs. 80.00	
	(c) J E & equivalent posts.	Rs.100.00	Rs.160.00	
	(d) A E & equivalent posts	Rs.100.00	Rs.250.00	
	(e) E E & equivalent posts	Rs.100.00	Rs.270.00	
	(f) D.G.M & equivalent posts	Rs.250.00	Rs.320.00	
	(g) General Manager and above	Rs.250.00	Rs.400.00	
	Additional Charge for using A.C (April to Sept.)	Rs.250.00 per Month/A.C.		
	Additional Charge for E D	20%		
	Metered Supply:	50% Rebate on the rate of charge applicable to other metered consumers under LMV-1 category		
HV-2	**LARGE AND HEAVY POWER:**	**PROPOSED TARIFF**		
	(A) Consumers below 11 kV Supply:			
	Demand Charge(Rs/kVA/Month)	**250**		
	Energy Charge (Rs/kVAh)	**4.50**		
	Minimum Charges (Rs/kVA/Month)	**625**		
	(B) For Consumers on 11 kV Supply:			
	(a) Urban Schedule:			
	For All Loads	BASE RATE		
	Demand Charge(Rs/kVA/Month)	**220**		
	Energy Charge (Rs/kVAh)	**4.30**		
	Minimum Charges (Rs/kVA/Month)	**525**		
		TOD RATES		
	2200hrs-0600 hrs	0.0		
	0600 hrs-1700 hrs	0.0		
	1700 hrs-2200hrs	(+) 20.0%		
	(b) Rural Schedule:	**Rural Rebate**		
		Consumers getting supply below 11 kV and on 11 kV as per "Rural Schedule" are entitled to a rebate of 15 % on "base rate of charge" and minimum charge as given for supply below 11 kV and at 11 kV under Urban Schdule without TOD rates.		
	Energy Charge (Rs/kVAh)			
	Minimum Charges (Rs/kVA/Month)			
	(C) Consumers above 11 kV Voltage:			
	BASE RATE	For supply above 11 kV and up to & including 66 kV	For supply above 66 kV and up to & including 132 kV	For supply above 132 kV
	Demand Charges (Rs /kVA/Month)	**210**	**205**	**200**
	Energy Charge (Rs / kVAh)	**3.35**	**3.25**	**3.15**
	Minimum Charges (Rs/kVA/Month)	450	450	450
	TOD Rates			
	2200 hrs-0600 hrs	0.0	0.0	0.0
	0600 hrs-1700 hrs	0.0	0.0	0.0
	1700 hrs-2200 hrs	(+) 20%	(+) 20%	(+) 20%

HV-3	RAILWAY TRACTION:	PROPOSED TARIFF
	(a) Demand Charge :	
	For supply at & above 132 kV	Rs.165 /kVA/month
	Below 132 kV	Rs.175 /kVA/month
	(b) Energy Charge :	
	For supply at & above 132 kV	Rs.3.40 /kVAh
	Below 132 kV	Rs.3.50 /kVAh
	Minimum Charge :	Rs.450 /kVA/month
HV-4	Lift Irrigation Works:	PROPOSED TARIFF
	(a) Demand Charge :	
	For Supply at 11 kV	Rs.210 /kVA/month
	For Supply above11 kV &up to 66 kV	Rs.205 /kVA/month
	For Supply above 66 kV&up to 132 kV	Rs.200 /kVA/month
	(b) Energy Charge :	
	For Supply at 11 kV	Rs.3.90 /kVAh
	For Supply above11 kV &up to 66 kV	Rs.3.80 /kVAh
	For Supply above 66 kV& up to132 kV	Rs.3.70 /kVAh
	Minimum Charge :	Rs.550 /kVA/month

ANNEXURE – V

Discom-wise Summary of ARR for FY 2007-08 & FY 2008-09

Approved ARR for FY 2007-08 & FY 2008-09 - Meerut Discom (Rs.Crs)				
Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Power purchase cost	3,955.79	4,197.74	4,207.64	4,518.52
Transmission charges	309.11	339.55	390.30	386.07
Employee Costs	219.24	205.85	258.58	219.05
A&G Costs	24.60	25.34	27.33	26.96
Repair & Maintenance expense	108.53	79.38	127.22	84.47
Interest & Finance Charges	193.23	199.27	161.83	199.98
Provision for Bad & Doubtful Debts	23.58	0.00	25.97	0.00
Depreciation	261.82	272.80	306.92	299.78
Special appropriations				
Return on capital base and loans balances	0.00	0.00	0.00	0.00
Less Expenses Capitalised	41.30	52.34	62.54	59.34
Total Expenses	**5,054.59**	**5,267.59**	**5,443.25**	**5,675.49**
Less Other Income	9.87	9.87	10.37	10.37
Total ARR	**5,044.72**	**5,257.72**	**5,432.88**	**5,665.12**

Approved ARR for FY 2007-08 & FY 2008-09 - Agra Discom (Rs.Crs)				
Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Power purchase cost	3,423.24	3,323.01	3,586.16	3,633.53
Transmission charges	267.49	268.80	332.16	258.06
Employee Costs	169.47	160.13	199.97	171.71
A&G Costs	25.70	26.49	28.39	28.40
Repair & Maintenance expense	84.84	51.34	104.97	55.05
Interest & Finance Charges	181.30	190.31	147.08	188.37
Provision for Bad & Doubtful Debts	40.40	0.00	44.04	0.00
Depreciation	190.05	201.50	235.17	230.43
Special appropriations				
Return on capital base and loans balances	0.00	0.00	0.00	0.00
Less Expenses Capitalised	33.78	45.04	59.22	51.60
Total Expenses	**4,348.70**	**4,176.55**	**4,618.72**	**4,513.96**
Less Other Income	30.47	30.47	33.04	33.04
Total ARR	**4,318.23**	**4,146.08**	**4,585.68**	**4,480.92**

Approved ARR for FY 2007-08 & FY 2008-09 - Lucknow Discom (Rs.Crs)				
Particulars	**FY 2007-08**		**FY 2008-09**	
	Petitioner	**Commission**	**Petitioner**	**Commission**
Power purchase cost	2,493.52	2,228.90	2,558.51	2,391.87
Transmission charges	194.85	180.30	237.33	208.87
Employee Costs	229.26	215.98	270.47	230.97
A&G Costs	37.22	38.39	40.37	41.05
Repair & Maintenance expense	92.73	56.85	118.35	60.79
Interest & Finance Charges	176.17	170.02	150.59	167.21
Provision for Bad & Doubtful Debts	23.98	0.00	25.94	0.00
Depreciation	212.69	226.26	285.53	257.99
Special appropriations				
Return on capital base and loans balances	0.00	0.00	0.00	0.00
Less Expenses Capitalised	44.71	55.89	64.12	63.15
Total Expenses	**3,415.71**	**3,060.81**	**3,622.96**	**3,295.60**
Less Other Income	18.25	18.25	19.19	19.19
Total ARR	**3,397.46**	**3,042.56**	**3,603.77**	**3,276.41**

Approved ARR for FY 2007-08 & FY 2008-09 - Varanasi Discom (Rs.Crs)				
Particulars	**FY 2007-08**		**FY 2008-09**	
	Petitioner	**Commission**	**Petitioner**	**Commission**
Power purchase cost	3,121.23	2,926.78	3,361.68	3,142.18
Transmission charges	243.89	236.75	311.83	274.39
Employee Costs	241.00	228.80	284.36	245.04
A&G Costs	21.30	21.92	23.67	23.47
Repair & Maintenance expense	101.34	60.81	134.83	65.12
Interest & Finance Charges	194.89	164.66	172.56	163.54
Provision for Bad & Doubtful Debts	45.51	0.00	48.09	0.00
Depreciation	226.99	241.37	302.04	274.12
Special appropriations				
Return on capital base and loans balances	0.00	0.00	0.00	0.00
Less Expenses Capitalised	43.73	54.34	65.01	61.75
Total Expenses	**4,152.42**	**3,826.73**	**4,574.06**	**4,126.12**
Less Other Income	12.97	12.97	13.64	13.64
Total ARR	**4,139.45**	**3,813.76**	**4,560.42**	**4,112.48**

Approved ARR for FY 2007-08 & FY 2008-09 - Consolidated Discoms (Rs.Crs)				
Particulars	FY 2007-08		FY 2008-09	
	Petitioner	Commission	Petitioner	Commission
Power purchase cost	12,993.78	12,676.43	13,713.99	13,686.11
Transmission charges	1,015.34	1,025.39	1,271.62	1,127.38
Employee Costs	858.97	810.77	1,013.38	866.76
A&G Costs	108.82	112.13	119.76	119.89
Repair & Maintenance expense	387.45	248.38	485.37	265.44
Interest & Finance Charges	745.59	724.27	632.07	719.11
Provision for Bad & Doubtful Debts	133.47	0.00	144.04	0.00
Depreciation	891.54	941.93	1,129.65	1,062.32
Special appropriations	0.00	0.00	0.00	0.00
Return on capital base and loans balances	0.00	0.00	0.00	0.00
Less Expenses Capitalised	163.53	207.61	250.89	235.83
Total Expenses	**16,971.42**	**16,331.69**	**18,259.00**	**17,611.18**
Less Other Income	71.56	71.56	76.24	76.24
Total ARR	**16,899.86**	**16,260.13**	**18,182.76**	**17,534.94**

ANNEXURE – VI

RATE SCHEDULE FOR FY 2008-09

Retail Tariffs for Financial Year 2008-09

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 15th April, 2008 on the Annual Revenue Requirement Petitions filed by four distribution companies (i.e. Pashchimanchal Vidyut Vitaran Nigam Ltd., Meerut, Madhyanchal Vidyut Vitaran Nigam Ltd. Lucknow, Poorvanchal Vidyut Vitaran Nigam Ltd. Varanasi, & Dakshinanchal Vidyut Vitaran Nigam Ltd. Agra) for the financial year 2007-08 & 2008-09 has determined the retail supply tariffs that will be charged from the different category of consumers existing under the four DISCOMs.

The same retail tariff shall also be applicable in the area of supply of M/s KESCO and M/s NPCL.

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 provisions of applicable 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) No new connection of 25 kW & above loads for Light, Fan & Power and 25 BHP & above for Motive Power Loads shall be given without 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 as may be appropriate on all existing consumers with load above 25 kW/25 BHP as the case may be.

2. Reading of Meters:

As per the provisions of applicable 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 above Supply Code.

4. Billing in case of Defective Meters

As per the provisions of applicable 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 a factor of 0.90 i.e. desired average power factor. 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 = (Fixed/Demand Charges in BHP * 0.90) / 0 .746

By applying the same formula 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. <u>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 i.e. Railway traction and shall be treated as unity. Hence, for Railway Traction, 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.</u>

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 0.9 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 @ 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 the 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 specified in ANNEXURE - VIII to the Rate Schedule.

(ii) In respect of the consumers 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 any action under section 139 or section 140 of the Electricity Act, 2003. 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.

9. Incentive Scheme for reducing distribution losses {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 metering installation of a 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 check meters on the electricity pole outside the premises of the consumer or for creation of meter rooms (housing individual meters) 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 are less than 8%, they shall be charged on the rate of charge given in their respective rate schedule with a rebate of paise 25 per unit on their energy charges. For consumers who's meters are defective the energy consumption shall be taken as average of past three billing cycle and the distribution losses shall be assessed accordingly. To implement the said scheme, the licensees are directed to submit a methodology for determination of losses and billing of such consumers to the Commission for approval within a period of one month from the date of issue of the tariff order.

Note:

1. The above schemes shall be implemented within three months of issuance of this tariff order and meanwhile the Licensees shall make the necessary arrangements for launching of above schemes.
2. 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.
3. Complaint regarding failure of the licensee to launch the above scheme and/or non installation of meters within the stipulated time as provided above shall be heard by the Consumer Grievance Redressal Forums and shall be decided within 15 days. The order of the CGRF in this regard shall be final. Since installation of meter is factual and substantive issue, the dispute has to be processed by CGRF under the directive issued through this tariff order and

not under the powers conferred by UPERC (Consumer Grievance Redressal Forum & Electricity Ombudsman) Regulation. In case, the meters are not installed despite categorical directive of CGRF, the matter may be referred to the Commission, which may fix personal responsibility of the officer concerned for the non-compliance of the Commission's directive.

4. Consumers shall however note that they shall be entitled to rebate under any one of the incentive schemes detailed above at a time.
5. These schemes shall not apply in NPCL's area of supply.

10. Provision related to Surcharge Waiver Scheme for Recovery of Blocked Arrears

The licensee may, on a decision by its Board of Directors, launch a Surcharge Waiver Scheme (One time Settlement Scheme) in any two months of a financial year for recovery of its blocked arrears by waving off surcharge to the extent not exceeding 50% of overall surcharge without any further approval of the Commission. For un-metered categories, licensee may waive off surcharge to the extent not exceeding 50% of overall surcharge provided the consumer offers an unconditional undertaking to take metered supply immediately. The impact of such surcharge waiver shall be allowed as pass through in the next tariff. However, for metered categories, the licensee may waive off surcharge to the extent not exceeding 50% of overall surcharge however, the impact of the surcharge waived will not be allowed under bad debts written off, while processing the next ARR filing. The benefit of surcharge waiver scheme will be allowed at one service connection number once in a duration of five years. Further, the licensee may launch a surcharge waiver scheme without any restrictions on quantum of surcharge waiver provided there is a State Government's commitment for advance subsidy to compensate the loss of the licensee arising out of surcharge waiver.

11. Special Tariff for Air Conditioning Loads (Applicability April to September)

For all loads above 5 kW under LMV-2, LMV-4 and HV-1 (with the exception of single point consumers feeding to multiple individuals i.e. consumers falling under point 1 (c) of HV-1 rate schedule) an AC load of 1.5 tonne/5kW or actual as intimated through an affidavit, shall be taken for applicability of this tariff and a tariff of Rs. 150/tonne of air conditioning load shall be charged over and above the bill prepared on the basis of applicable rate of charge for that category. These charges shall also apply on consumers getting billed under minimum consumption charges. The consumer not having any air conditioning load or whose actual AC load is less than the AC load derived as per 1.5tonne/kW formula, shall however be at liberty to submit an affidavit to this effect with the concerned Sub Divisional Officer (SDO)/ Divisional Officer. Based on the affidavit submitted by the Consumers they shall be charged as per their actual AC load. Accordingly, consumers not having any AC load shall be exempted from the application of this tariff.

12. 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.

13 Option of migration to HV2 category:

The consumer under LMV-1, LMV-2, LMV-4, LMV-6 with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-2 category.

14. Rounding off

All bills will be rounded off to the nearest rupee.

15. Pre-paid Meters / Automatic Meter Reading System

In line with the advise given to the State Government under Section 86(2) of the Electricity Act 2003, 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 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.

RATE SCHEDULE LMV – 1

1. Domestic Light, Fan & Power

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

b) Electric Crematoria.

c) 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 out side cantonments 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. Provided that professionals, architects, chartered accountants, engineers, doctors, lawyers and teachers etc. may utilize a maximum of 50 square meters of residential space in their possession, for carrying out professional practice or consultancy work, and this shall not attract non-domestic tariff. This is subject to the condition that the area utilized for professional practice or consultancy work should not be more than 25% of the constructed area.

2. **Character and Point of Supply** – As per the provisions of applicable 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. 110 /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 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%)	Rs. 35.00 / kW/ Month	Rs.2.80/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 and with plot area & constructed area less than 500 sq. ft.

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 all the three criteria laid down for lifeline consumers at the same time)

Description	Consumption Range	Fixed Charge	Energy Charge
All loads	Upto 200 kWh / Month	Rs 60.00 / kW/ Month	Rs. 3.00/kWh
	Above 200 kWh / Month (From 201st unit onwards)		Rs. 3.30/kWh

Note:

1. **For all domestic consumers the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills.**

4. **Incentive scheme for reducing NA/NR bills**

If NA/NR in a division is less than 5% of LMV-1 consumer base in a billing cycle than an incentive of Rs. 1/kW per billing cycle is being allowed to the concerned division on the basis of the total contracted load of LMV-1 consumers in the division for that billing cycle. The amount of incentive so given by the licensee may be recovered in the next ARR filing. The licensee shall device a scheme for suitable allocation of the incentive amount among the officers & staff of the division responsible for bringing down NA/NR figures.

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, and Power Looms with less than 5 kW load.

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 provisions of applicable 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 180 / 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 /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 100.00 / kW/ Month	Rs. 4.30/kWh	Rs. 300/kW/Month

4. Rebate to Power Looms:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14th June, 2006 and the Commission's order dated 11th 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 provisions of applicable 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 1000 per kW or part thereof per month	Rs 1250 per kW or part thereof per month	Rs 1500 per kW or part thereof per month

(b) Metered Supply:

Description	Gram Panchayat		Nagar Palika and Nagar Panchayat		Nagar Nigam	
All loads	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	Rs. 100 / kW / month	Rs. 3.70 / kWh	Rs. 100 / kW / month	Rs. 3.90 / kWh	Rs. 100/kW/ month	Rs. 4.10 / kWh

3. **For 'Maintenance Charges', 'Provision of Lamps' and 'Verification of Public Lamp Load' refer** ANNEXURE - VI (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) 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 provisions of applicable 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
(A) For Public Institutions	Rs. 90 /kW/ month	Rs. 4.00 / kWh
(B) For Private Institutions	Rs. 100 /kW/ month	Rs. 4.30 / kWh

Note :

For all consumers of private institution the licensee shall install a meter outside the premises of these consumers and will provide a real time display unit within the consumer premises for his information to indicate the electricity consumed by the consumer. Provided further that for billing purpose, reading of consumer meter and not the display unit shall be taken into account. In case the consumer disputes the reading of the outside meter on the basis of the display unit within his premises, a check meter will be installed in parallel of the outside meter and the provisional billing would be done in accordance with the provisions of the applicable supply code. Prior to installation of check meter licensee shall ensure checking of existing meter along with the checking of the associated CT & PT, if it forms a part of metering arrangement, in presence of the consumer and a report to this effect should be prepared under joint signature of the representative of the licensee and the consumer.

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 capacitor.

2. **Character and Point of Supply –** As per the provisions of applicable 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**: The consumer shall have the option to take supply under metered category or un-metered category

(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

(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. 175 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 provisions of applicable 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 100.00 / kW/ Month	Rs. 4.30/unit	Rs. 450/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 then the applicable tariff during normal period but only for the month in which the consumer has defaulted whereas previously the consumer used to forfeit the benefit of seasonal rates for the entire season on the very first default. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season. The minimum charges for seasonal industries under this category have been withdrawn for their off-season, therefore, the issue of annual adjustment of minimum charges loses its relevance. **Since there is no provision of minimum charges during off season period therefore, there is no issue of adjustment of minimum charges.**

5. Rebate to Power Looms:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14th June, 2006 and the Commission's order dated 11th 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 *plus* 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 *plus* 10% as applicable in second slab *plus* 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 provisions of applicable 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:

Fixed Charge	Energy Charge
Rs. 90 per kW/Month	Rs. 4.00/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 provisions of applicable 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 90/BHP/month	Rs.3.70/kWh
Un-metered	Rs. 800/BHP/month	-

4. For finding out net additional load during any quarter of the year for this category refer ANNEXURE - VI (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 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 provisions of applicable 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 ***for illumination / public address / ceremonies*** for load up to 20 kW per connection plus Rs.100 per kW per day for each additional kW.	Rs 1500 per day
(ii) Fixed charges for ***temporary shops*** set-up during festivals / melas or otherwise and having load up to 2KW	Rs.100 per day/shop

B. Metered

Description	Energy Charge	Minimum Charge
Individual Residential construction	Rs. 3.50 / kWh	Rs. 100/kW/week
Others	Rs. 5.00 / 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:

Category	Fixed charge / month	Fixed Monthly Energy Charge
Class IV employees / Operating staff	Rs. 55.00	Rs. 65.00
Class III employees	Rs. 55.00	Rs. 90.00
Junior Engineers & equivalent posts.	Rs. 110.00	Rs. 180.00
Assistant Engineers /	Rs. 110.00	Rs. 280.00
Executive Engineers & equivalent posts	Rs. 110.00	Rs. 300.00
Deputy General Manager & equivalent posts	Rs. 275.00	Rs. 360.00
General Manager and above,	Rs. 275.00	Rs. 440.00
Additional charge for employees using Air Conditioners. (April to September)		Rs. 400/- 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 **Anneure-1(A)**

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 14th 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.

2. Character and Point of Supply – As per the provisions of applicable 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

	For supply at 11kV	For supply at 33 kV & above
Demand Charges	Rs.170/kVA	Rs.160/kVA
Energy Charges	Rs.3.60/kVAh	Rs.3.50/kVAh

(b) Public Institutions with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels.

	For supply at 11kV	**For supply at 33 kV & above**
Demand Charges	Rs.140/kVA	Rs.130/kVA
Energy Charges	Rs.3.40/kVAh	Rs.3.30/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 provisions of applicable 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

	For supply at 11kV	**For supply at 33 & 66 kV**	**For supply at 132kV and above voltages**
BASE RATE			
Demand Charges	Rs. 210 / kVA	Rs. 200 / kVA	Rs. 180 / kVA
Energy Charges	Rs. 4.00 / kVAh	Rs. 3.35 / kVAh	Rs. 3.25 / kVAh
Minimum Charges	---	--	-
TOD RATE			
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 however, directs the licensees to shift the metering arrangement of such consumers to HV side within three months of issuance of this order. Failure of the licensee to comply with this requirement will tantamount to non-compliance of the Commission's order and force the Commission to initiate proceedings against the officers responsible under Section 142 of the EA 2003.

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 kVA and energy charge per kVAh) for such industries during off-season period will be the same as the tariff for normal period. However, during the off season, such a consumer shall be billed on the basis of maximum demand recorded in his meter (not on normal billable demand or on percentage contracted demand) and the energy charges applicable to the consumer in his normal season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher then 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. **Since there is no provision of minimum charges therefore, there is no issue of adjustment of minimum charges.**

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 *plus* 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 *plus* 10% as applicable in second slab *plus* 20% on the consumption over 504 kVAh /kVA/month

However, for all consumers who's load factor is below 15% (108 kVAH/kVA), a monthly report would be prepared on the divisional basis clearly indicating the reasons for such low load factor and the same would be submitted to the

Managing Director of the licensee with a copy of the same to the vigilance cell of UPPCL and UP Electricity Regulatory Commission. A confidential report highlighting the names of the consumers involved in suspected theft (for reasons attributable to unexplained low load factor) may also be sent to the Managing Director, concerned District Magistrate and Department of Energy Government of Uttar Pradesh. The confidential report would be taken in cognizance for the purposes of preliminary verification, based on factual information related to load factor, even if the report is not carrying the signatures of the report sending local authority/officer. Acknowledgement against the registered dispatch of above report would be treated as sufficient proof for report having been dispatched. Above mentioned authorities shall, on the basis of above report and after preliminary verification of the load factor of the concerned consumer, in absence of suitable justification, setup enquiry against such consumers. The Managing Director of the concerned distribution company shall act as a nodal person to facilitate such enquiry and initiate further necessary action if required against such consumer.

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. Rebate to Power Looms:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14th June, 2006 and the Commission's order dated 11th July, 2006 subject to adherence of provision of advance subsidy.

7. 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

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:

Description	Charges
(a) Demand Charge	
For supply at and above 132 kV	Rs. 180 per kVA per month
Below 132 kV	Rs. 200 per kVA per month
(b) Energy Charges (all consumption in a month)	
For supply at and above 132 kV	Rs. 3.25 per kVAh
Below 132 kV	Rs. 3.35 per kVAh
Minimum Charge	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

Description	Rebate on Energy charges
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab *plus* 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 *plus* 10% as applicable in second slab *plus* 20% on the consumption over 504 kVAh /kVA/month

5. 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 provisions of applicable 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 Charge

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 210 / kVA per month
For supply at 33 kV and 66 kV	Rs. 200 / kVA per month
For supply at 132 kV	Rs. 180 / kVA / month

(b) Energy Charges :

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 4.00 / kVAh
For supply at 33 kV and 66 kV	Rs. 3.35 / kVAh
For supply at 132 kV	Rs. 3.25 / kVAh

(c) Minimum Charge: Rs. 425/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 circuits is more than one, demand and energy measurement will be done on the principle of current transformer summation metering.

ANNEXURE - VI (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. For this purpose, the controlling officer shall inform that concerned Executive Engineer of Distribution/Undertaking Unit who will install a meter at the residence of such transferred employee within one month from the date of relieve for billing the electricity consumption at the appropriate rate schedule. A similar certificate shall be required from the pensioners in case of change of residence.

(iii) Every employee shall give a declaration within one month that he is availing this rate schedule only at the place of his posting. 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. 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 - VI (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 labor 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 Rate shall not apply to the consumers with metered supply.

2. Provisions 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 labor 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 intJimated 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 - VI (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 March 31 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 - VII

SCHEDULE OF MISCELLANEOUS CHARGES

Sl. No	NATURE OF CHARGES	UNIT	RATES
1.	Checking and Testing of Meters:		
	a. Single Phase Meters	Per Meter	50.00
	b. Three Phase Meters	Per Meter	50.00
	c. Recording Type Watt-hour Meters	Per Meter	175.00
	d. Maximum Demand Indicator	Per Meter	350.00
	e. Tri-vector Meters	Per Meter	1000.00
	f. Ammeters and Volt Meters	Per Meter	50.00
	g. Special Meters	Per Meter	400.00
	h. Initial Testing of Meters	Per Meter	Nil
2.	Disconnection and Reconnection of supply for any reason whatsoever (Disconnection and Reconnection to be separately treated as single job)		
	a. Consumer having load above 100 BHP/75kW	Per Job	500.00
	b. Power consumers upto 100BHP/75kW	Per Job	275.00
	c. All other categories of consumers.	Per Job	150.00
3.	Replacement of Meters:		
	a. By higher capacity Meter	Per Job	50.00
	b. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	75.00
	c. Changing of position of Meter Board at the consumer's request	Per Job	100.00
4.	Service of Wireman :		
	a. Replacement of Fuse	Per Job	20.00
	b. Inserting and Removal of Fuse in respect of night loads.	Per Job	25.00
	c. Hiring of services by the consumer during temporary supply or otherwise.	Per wireman /day of 6 Hrs.	60.00
5.	Resealing of Meters on account of any reason in addition to other charges payable in terms of other provision of charging of penalties, etc)	Per Meter	100.00
6.	Checking of Capacitors (other than initial checking) on consumer's request:		

Sl. No	NATURE OF CHARGES	UNIT	RATES
	a. At 400 V / 230 V b. At 11 kV and above.	Per Job Per Job	100.00 200.00

Charges for Tatkal Vidyut Sanyojan (Tatkal Connection)

For urban consumers of LMV-1, LMV-1 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 - VIII

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
8.	8	6

Sl. No.	Name Plate Rating in KVA of Individual Welding Transformer	Capacity of the Capacitors (KVAR)
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 - IX

Discom-wise Revenue Gap Funding Mechanism

Discom wise Funding Mechanism for FY 2007-08						
Details	**Units**	**Lucknow**	**Meerut**	**Varanasi**	**Agra**	**Total**
Gross ARR	Rs. Crores	3,042.56	5,257.72	3,813.76	4,146.08	16,260.13
Revenue from Existing Tariff	Rs. Crores	1,993.67	3,883.51	2,623.69	2,923.32	11,424.19
Net Revenue Gap	**Rs. Crores**	**1,048.89**	**1,374.21**	**1,190.07**	**1,222.77**	**4,835.93**
Funded Through:						
Tariff Increases	*Rs. Crores*	-	-	-	-	-
Government Subsidy	*Rs. Crores*	*440.47*	*460.02*	*643.92*	*277.59*	1,822.00
Deficit Financing	*Rs. Crores*	*484.11*	*680.07*	*382.92*	*759.84*	2,306.93
Any Other Means (Savings on Power Purchase Cost)	*Rs. Crores*	*124.31*	*234.12*	*163.23*	*185.33*	707.00
Net Revenue Gap Carried Forward	**Rs. Crores**	**-**	**-**	**-**	**-**	**-**

Discom wise Funding Mechanism for FY 2008-09						
Details	**Units**	**Lucknow**	**Meerut**	**Varanasi**	**Agra**	**Total**
Gross ARR	Rs. Crores	3,276.41	5,665.12	4,112.48	4,480.92	17,534.94
Revenue from Existing Tariff	Rs. Crores	2,256.00	4,468.79	3,071.57	3,421.71	13,218.06
Net Revenue Gap	**Rs. Crores**	**1,020.42**	**1,196.34**	**1,040.91**	**1,059.21**	**4,316.88**
Funded Through:						
Tariff Increases	*Rs. Crores*	*368.29*	*618.14*	*457.80*	*395.06*	1,839.30
Government Subsidy	*Rs. Crores*	*380.23*	*383.75*	*532.52*	*235.50*	1,532.00
Efficiency improvement initiatives, Tariff Rationalisation & other initiatives	*Rs. Crores*	*271.90*	*194.44*	*50.59*	*428.64*	*945.58*
Net Revenue Gap Carried Forward	**Rs. Crores**	**-**	**-**	**-**	**-**	**-**

ANNEXURE - X

List of Persons who have attended Public Hearing at 4 places for ARR & Tariff determination for FY 2008-09

List of Persons who attended Public Hearing on 18th February 2008 at Lucknow		
Sr. No.	**Name**	**Designation and Company/Institution**
List of Licensee's Representatives		
1	A.A. Khan	S.E. , RAU, UPPCL
2	A.K.Singh	C.E., MVVNL
3	Awdhesh Kumar Verma	Chairman, Uttar Pradesh Rajya Upbhokta Parisad
4	B.B. Singh	M.D., MVVNL
5	C.A. Bhushan Rastogi	Consultant
6	D.K.Tiwari,	J.E.
7	J.M.L.Vaish	
8	M.S. Gulati	
9	Mohammad Gufran	
10	P.K. Johari	E.E. ,RAU, UPPCL
11	P.K.Jain	E.E. ,MVVNL
12	Rama Agrawal	S.E. ,MVVNL
13	S.C. Ahuja	C.E., RAU, UPPCL, Lucknow
14	S.K.Chawla	C.E.(Com), MVVNL
List of Consumer Groups/Industry Associations/Individual Consumers etc		
15	Abhishek Srivastava	Voice (CCEA)
16	Anand Dhavale,	Feedback Ventures
17	Arun Kumar Mishra	INCF, Rajajipuram
18	Ashish Srivastava	N. Railway
19	D.S. Verma	Executive Director, IIA
20	G.C. Chaturvedi	I.I.A. Lucknow
21	G.S. Dhirani	Cold Storage Association
22	Gaurav Mathur	D.E.E.
23	Harinam Singh	Nigoha, Lucknow
24	Harish Chandra	Advocate
25	Krishana Kumar	UPS
26	Kshitij Patel	Feedback Ventures
27	Kuwanr Vishal Singh	IIA, Mahoba
28	M.L. Agrawal	
29	Mahendra Swaroop	President (WWROAD) Aishbag, Lucknow.
30	Mohit Arya	
31	N. Hanspal	IIA, Lucknow
32	Om Prakash	CEDE/N.C. Railway
33	Prasant Mishra	N.C. Railway
34	Pushpendra Singh	

List of Persons who attended Public Hearing on 18th February 2008 at Lucknow		
Sr. No.	Name	Designation and Company/Institution
35	R.Thapa	General Manager, Parsvnath
36	Ramshanker Awasthi	Tribhuwan Industries Limited
37	Ranveer Singh	
38	S.C. Gupta	
39	Sanjay Srivastava	
40	Sumit Singh	Consumerguild

List of Persons who attended Public Hearing on 20th February 2008 at Kanpur		
Sr. No.	Name	Designation and Company/Institution
List of Licensee's Representatives		
1	A.A. Khan	SE, RAU,UPPCL
2	A.K. Shukla	A.E. UPPCL
3	A.K.Arora	Resident officer, NPCL
4	C.B.S. Rathor	C.E.(Com) Agra
5	CA. Bhusan Rastogi	Consultant
6	G.C. Jain	SE, PVVNL
7	Gauri Shanker Lal	S.E. (EDC) Kanpur
8	Gulab Singh	E.E , EDD
9	J.P.Saxena	J.E. UPPCL
10	Mohammad Gufran	(UPPCL)
11	Nand Lal	M.D. Kesco
12	O.N. Mishra	C.E.
13	P.K.Gupta,	S.E. Kesco
14	P.P. Dixit	Kesco
15	R.K. Singh	E.E. Kesco
16	Rajesh Kumar	C.E., Kanpur Zone
17	Randeer Singh	C.E. Agra Zone
18	S.K Verma	Ex.Engineer, KESCO
19	S.K. Rajpoot	PA (Com)
List of Consumer Groups/Industry Associations/Individual Consumers etc		
20	Alok Kumar	
21	Anand Mishra	Sahara
22	Anoop Srivastava	
23	Arun Jain	Member Co-op Estate Dadanagar
24	Ashok Srivastava	Voice, CCEA
25	Ashok Tiwari	
26	Ashutosh Gupta	Kannuj
27	Awadhpal Singh	
28	Durgesh Pandey	
29	Ganesh Tiwari	Chamber of Steel

List of Persons who attended Public Hearing on 20th February 2008 at Kanpur		
Sr. No.	**Name**	**Designation and Company/Institution**
30	Hari Govind Pandey	CCEA
31	J.K. Pandey	
32	K.B. Negam	President, Lok Kalyan& Vidhi Sansthan
33	Kapil Sabharwal	Vyapar Mandal
34	Ladli Prasad	
35	Laxman Adwani	Chamber of Steel
36	Mahesh Mishara	ABC NEWS
37	Manikant Jain	Mahamantri
38	Manmohan Rajput	IIA
39	Naveen Jain	Chamber of Steel
40	P.D. Dubey	Member CCEA Kanpur
41	Parmesh Kumar Mishra	Cloth Committee
42	Purshottam Diwedi	Hindustan
43	R.D. Tiwari	
44	R.K. Pandey	
45	Rajeev Ranjan Singh	
46	Rajesh Grover	IIA
47	Rajiv Jain	Loha Vyapar Mandal
48	Rakesh Kumar Singh	Vyapar Mandal
49	Ramesh Chandra	IIA
50	Ravi Bhusan Srivastava	Sahara India Co.
51	Ravi Mishra	
52	Ravindra Nath Pandey	
53	Rizwan Hamid	
54	Sanjay Shukla	CCEA
55	Santosh	
56	Santosh Gupta	News channel
57	Saumil Singh	Consumer guild
58	Secretary	Co-op Estate, Dadanagar
59	Shailendra Mishra	News channel
60	Shishir Mishra	Dainik Jagran
61	Shri Brijesh	Amar Ujala
62	Shri Krishna Gupta	Kanpur Cloth Committee
63	Shri Mahesh	
64	Shri Manoj	PIA
65	Shri Subodh	The U.P.Industrial Mfrs Association
66	Sunil Jaiswal	CCFA, Kanpur
67	Sunil Vaish	IIA
68	V.D. Roy	M.L.A co-ordinator
69	Vijay Prakash Chaudhry	
70	Vishal Rajeev Mishra	

List of Persons who attended Public Hearing on 21st February 2008 at Ghaziabad		
Sr. No.	Name	Designation and Company/Institution
List of Licensee's Representatives		
1	Shri Devesh	PVVNL
2	L.A. Khan	EE, EUDD-II, Ghaziabad
3	Bhupendra Singh	EE, EUDD-II, Ghaziabad
4	Sanjay Jain	SDO-III
5	S.C. Ahuja	C.E., RAU, Lucknow
6	Mohammad Gufran	EE, RAU, UPPCL, Lucknow
7	A.K.Sharma	S.E.(Com)
8	S.K. Goel	C.E
9	C. L. Gupta	Ex.Engineer, EUID, Noida
10	Santosh Kumar	J.E.
11	Dharmendra Patel	J.E.
12	S.N.Yadav	S.E.(EUDC)
	List of Consumer Groups/Industry Associations/Individual Consumers etc	
13	Shri Ashok Dhir	Sahibababad Inds Association
14	Vinod Kumar Yadav	
15	Manish Kumar Singh	
16	Shri Ravindra	Bhushan Steel
17	C.L.Dhir	Sahibababad Inds Association
18	Ravindra Kapoor	Sahibababad Inds Association
19	Vijay Laxmi	
20	Sudhir Kumar	Secretary, Federation of RWAs, Indirapur
21	Damayanti Bisni	Federation of RWAs, Indirapur
22	Mahipal Singh	
23	Pravesh. J. Bhatt	Ex.Engineer (Dakshin Gujarat Vij Co Ltd)
24	Ashish Nandan	TERI
25	Ramjeen Jha	
26	Tushar Gupta	TERI
27	Rajshekher	
28	Samvit Tiku	TERI
29	Priyanka Juneja	TERI
30	Ravindra Bahukhandi	TERI
31	Ramit Malhotra	
32	D.C. Verma	
33	A.A. Khan	
34	Hemant Kumar	Voice, Tech Advocate
35	Manoj Jain	
36	Ashok Agarwal	Federation of Muj Com & Industry
37	S.C. Jain	Association of Steel Rolling Mills & Fur Asso
38	Indian Industries Association	Muzaffarngar.
39	Yogesh Goel	Uttar Pradesh Steels, Muzaffar Nagar
40	R.C. Mishra	V.P. Steel, Muzaffar Nagar
41	Sanjay Agarwal	Head Utilities, Honda Siel Cars
42	Ravi Gupta	Jagriti, NGO

List of Persons who attended Public Hearing on 21st February 2008 at Ghaziabad		
Sr. No.	**Name**	**Designation and Company/Institution**
43	Vinod Gautam	Chairman, Vidyut Jankalyan Society
44	Vinod Gupta	Chairman, Paschimanchal Vidyut Jan Kalyan Society
45	Anil Gupta	
46	A.K. Sagar	
47	Kuldeep Saxena	Federation RWA, Indirapuram
48	Pankaj Kumar	Jt Secretary, Federation of Indirapuram, Ghaziabad
49	Shri Sanjeev Malik	B.S.RoadInd Area
50	Arvind Rai Sharma	General Secretary, B.S. Road, Industies, Area.
51	Col.P.K.Singh	M/s Ansal Housing, New delhi
52	Harish Chandra	
53	D.S. Rajput	President, Exp. Garden, RWA

List of Persons who attended Public Hearing on 25th February 2008 at Gorakhpur		
Sr. No.	**Name**	**Designation and Company/Institution**
	List of Consumer Groups/Industry Associations/Individual Consumers etc	
1	Abhishek Srivastava	Voice, CCEA
2	Anil Badewal	Chairman, Udyug Vyapar Mandal
3	Arun Goel	Nand Textiles, GIDA
4	Arvind Singh	
5	Dhruv Chandra Jayswal	
6	Durgesh Pandey	
7	G.S. Chaudhary	Sudhila Polytex
8	Haji Iftikhar Ahmad Khan	President, Uttar Pradesh Bunkar Sabha
9	Jayesh Chauhan	Feedback Ventures
10	Jetendra Singh	
11	K.K. Maheshwari	
12	Kamal Ahmad	
13	P.K. Maskara	President, Chamber of Industries, Gorakhpur
14	Prem Mohan Das	Indralok Cinema
15	Rajan Ray	Swatantra Bharat
16	Rajesh Rastogi	
17	Rajesh Tiwari	Maavindvasin Indsutries
18	Rajkishore	Mahamantri, Udyog Vyapar Mandal
19	Rasool Ahmad	H.M.S.Textiles
20	Sanjay Kumar Singh	
21	Sanjay Singh	
22	Satish Ogha	
23	Shahid Akhtar	
24	Shamshad Alam	Consumer Guild
25	Shanker Singh	

List of Persons who attended Public Hearing on 25th February 2008 at Gorakhpur		
Sr. No.	**Name**	**Designation and Company/Institution**
26	Shri Amar Tulsiyan	Director, Bathwal Udyog, GIDA
27	Shri Ansari	President, Power Loom Association
28	Shri Arvind	
29	Shri Ashish Khetan	Vinayak Udyog
30	Shri Ashok	
31	Shri Navneet	
32	Shyam Bihari	
33	Uday Pratap Singh	
34	V.N. Nayan	Nayak Polytex, GIDA
35	Vijay Singh	