UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

PETITION NO.: 737/2011 & 791/2012

FILED BY

Pashchimanchal Vidyut Vitran Nigam Limited

IN THE MATTER OF

DETERMINATION OF ANNUAL REVENUE REQUIREMENT (ARR)

AND TARIFF FOR FY 2010 - 11, FY 2011 - 12 & FY 2012 - 13

ORDER UNDER SECTION 64 OF

THE ELECTRICITY ACT, 2003

LUCKNOW

19th October, 2012

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Before

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No.: 737/2011 & 791/2012

IN THE MATTER OF:

Application dated March 25, 2011 & February 21, 2012 regarding Aggregate Revenue Requirement and determination of Tariff for FY 2010 - 11, FY 2011 - 12 & FY 2012 - 13, Pashchimanchal Vidyut Vitaran Nigam Limited (PaVNNL)

And

IN THE MATTER OF:
Pashchimanchal Vidyut Vitaran Nigam Limited (PaVNNL)

Before

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

ORDER

The Commission having deliberated upon the above petitions and also the subsequent filings by the Petitioner (the last being on 14^{th} June, 2012 and the petition thereafter being admitted on 25^{th} June, 2012), and having considered the views / comments / suggestions / objections / representations received during the course of the above proceedings and also in the public hearings held, in exercise of power vested under Sections 61, 62, 64 and 86 of the Electricity Act, 2003, hereby pass this Order signed, dated and issued on 19^{th} October,2012. The licensee, in accordance to Section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, shall arrange to get published within one week from the date of issue of this Order the tariffs approved herein by the Commission. The tariffs thus notified shall be effective from 1^{st} October, 2012 and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order.

1 BACKGROUND AND BRIEF HISTORY

1.1 BACKGROUND:

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

-Uttar Pradesh Power Corporation Limited (UPPCL): vested with the function of Transmission and Distribution within the State.

-Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL): vested with the function of Thermal Generation within the State

-Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL): vested with the function of Hydro Generation within the State.

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

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

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

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

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

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

1.2 DISTRIBUTION & TRANSMISSION TARIFF REGULATIONS:

1.2.1 Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006 (hereinafter referred to as the “Distribution Tariff Regulations”) were notified by the Commission on 6th October, 2006. These regulations are applicable for the purposes of ARR filing and Tariff determination to all the distribution licensees within the State of Uttar Pradesh.

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

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

1.3 FILING OF ARR / TARIFF PETITION:

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

1.4 ISSUES / CONCERNS OF THE COMMISSION:

1.4.1 The Commission before proceeding to the ARR / Tariff petition would like to mention certain issues / concerns arising out of the statutory provisions of the Act, which are deemed to be of utmost importance for the sector. The issues/concerns are listed below and have been deliberated upon by the Commission in detail in this Tariff Order:

- Allocation of Power to the Distribution Companies
- Fuel & Power Purchase Cost Adjustment Surcharge
- Metering of Consumers

1.5 RESPONSE TO THE ISSUES:

1.5.1 Allocation of Power to the DISCOMS

UPPCL in the submissions as recorded in the previous Tariff Order had mentioned that the proposal for allocation of PPAs to DISCOMS was under consideration of Hon'ble Government of Uttar Pradesh ("GoUP"). Also in its response dated 8th October, 2009 UPPCL had submitted that the proposal for allocation of PPAs to DISCOMS was still under consideration of Hon'ble GoUP.

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

In furtherance of the above matter UPPCL had communicated to the Commission vide letter No. 478/UPPCL/CE(Comm.)/PPA-C dated 2nd November 2011 regarding its proposed allocation of power purchase among four state owned DISCOMS as follows DVVNL – 20%, PuVVNL – 30%, MVVNL – 20% and PVVNL – 30%.

The Commission is of the view that the allocation policy proposed is inconsistent to the extent that the provision of allocation of power is not been made for Kanpur Electricity Supply Company (KESCo) and Noida Power Corporation Limited (NPCL). However the allocations of the PPAs have as yet not been finalised. Therefore, the Commission directs

UPPCL to pressingly pursue the proposal for allocation of PPAs to DISCOMS with GoUP and expedite the processes.

1.5.2 Fuel & Power Purchase Cost Adjustment Surcharge

The mechanisms for adjustment of Fuel & Power Purchase Cost Adjustment Surcharge has been formulated by the Commission vide amendment No.3 to the UPERC (Terms and Conditions of Determination of Distribution Tariff) Regulation dated 10th May 2012.

The Distribution Licensees procure power from central generating stations, state generating stations through the long-term power purchase agreements and the deficit through short-term purchases. The power purchase cost including transmission charges accounts for about 80% to 85% of the total Annual Revenue Requirement for the distribution licensees.

The Commission recognizes that the power purchase costs are uncontrollable in nature and are volatile making it difficult to accurately estimate power purchase costs at the time of annual tariff fixation. The power purchase cost variations largely depends on the following:

(a) Prices of Fuel (Coal/Gas) which are highly unpredictable as has been seen from the data of past few years.
(b) Delays in Commercial operation of new plants leading to high cost purchases from short term sources.
(c) Weather conditions such as extreme harsh summers / winter which have direct impact on the demand.
(d) Demand supply gap of power within the country.

Any fluctuation in the cost of fuel is a pass through for the generator through a fuel price adjustment formula and is payable by the distribution licensees in their monthly bills.

However, power purchase cost being uncontrollable in nature is a pass-through to the consumers but the difference in actual cost of procurement of power and the estimated cost of purchase of power gets trued up only after 12 months, provided the true-up petition is filled timely based on CAG audited accounts. The time lag burdens both the distribution licensee as well on consumers. Due to the delayed recovery of allowable procurement of power cost distribution licensee’s cash-inflows severely affected leading to working capital management problems further is affected consumers by way of interest charges.

The Commission would like to highlight here that the legacy of delayed filing of ARR / True up petitions by the distribution licensee is not helping on the above cause and extending the time lag.

The UPERC Distribution Tariff Regulation enshrines implementation of the Fuel Cost Adjustment Formula aimed at mitigating the above stated issue. The Fuel Cost Adjustment (FCA) provided in the regulations allows the licensee only to recover the fuel cost adjustment. Sub-section (4) of section 64 of the Electricity Act, 2003 provides that, no tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula, as may be specified. However, the Hon'ble Appellate Tribunal for Electricity in its Judgment dated 11th November 2011, in the matter of OP No. 1 of 2011, has directed all State Electricity Regulatory Commissions to put in place a mechanism for Fuel & Power Purchase cost adjustment preferably on a monthly basis but in no case exceeding a quarter of a year. Accordingly it is stated that the recovery of Fuel and power purchase adjustment is legitimate and is in accordance with the Electricity Act, 2003.

The Commission therefore in exercise of its power vested under the Regulation 6.9 of the Distribution Tariff Regulations and Section 64 of the Electricity Act, 2003 read with the directions given by the Aptel in the matter of OP No. 1 of 2011 has formulated the Fuel and Power Purchase Cost Adjustment formula issued vide amendment No.3 to the UPERC (Terms and Conditions of Determination of Distribution Tariff) Regulation dated 10th May 2012.

For the purpose of Fuel and Power Purchase cost adjustment formula (FPPCA) as provided in Regulation 6.9 of the UPERC (Terms and Condition of Determination of Distribution Tariff) Regulation, Amendment No.3, 2012, the monthly approvals are provided in the Annexure 12.6. The FPPCA would be applicable for the quarter January to March 2013 onwards.

1.5.3 Metering of Consumers

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

In this regard the Commission would further like to place reliance to Section 55 of the Electricity Act, 2003 which reads as follows:

> *"55. (1) No licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with regulations to be made in this behalf by the Authority:*"

The Commission in its various orders had also directed the Petitioner for proper metering of all consumers. The Commission directs the Petitioner to submit an implementation plan for 100% metering in its licensed area.

2 PROCEDURAL HISTORY

2.1 ARR & TARIFF PETITION FILING BY THE COMPANIES

2.1.1 As per the provisions of the UPERC (Term and Condition for Determination of Distribution Tariff) Regulations, 2006, the distribution licensees' are required to file their ARR / Tariff petitions before the Commission latest by 30th November each year so that the tariff can be determined and be made applicable for the subsequent financial year.

2.1.2 In this context, Chairman Paschimanchal Vidyut Vitran Nigam Ltd (PVVNL), the Distribution Company (DISCOM), had sought extension of time for submission of their ARR / Tariff petitions. It was mentioned by them that directions from Government of Uttar Pradesh (GoUP) regarding tariff related matters had not yet been received and therefore, in absence of information on the same, they are unable to design the tariff. The time extension sought by the DISCOM was allowed by the Commission.

2.1.3 The ARR / Tariff petition for FY 2010 - 11 & 2011 - 12 and FY 2012 - 13 were finally filed by Petitioner (distribution licensee) under Section 64 of the Electricity Act, 2003 on 25th March, 2011 (Petition No. 737/2011) and on 21st February, 2012 (Petition No. 791/2012). Thus there has been a delay in filing the petitions. The petition for FY 2012 - 13 being delayed by almost five months from scheduled date of filing as mandated under the UPERC Distribution Tariff Regulations.

2.1.4 The Commission noticed that the submissions of the Petitioner were void of the audited accounts for FY 2009 - 10, FY 2010 - 11 and FY 2011 - 12. The UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006 requires the distribution licensee to submit along with the ARR / Tariff petition the audited accounts for the relevant year. The Petitioner has failed to do so.

2.1.5 The Hon'ble Appellate Tribunal For Electricity (hereinafter referred to as APTEL) in its judgement in Appeal No. 121 of 2010 dated 21st October, 2011 has vide Para 12.1 upheld the Tariff Regulations in the matter of requirement of the Audited Accounts of the previous year in any ARR / Tariff filing. The order also stipulates to consider the audited accounts for the previous year and provisional half yearly accounts for the current year as part of the Annual Performance Review. It further held that in case the previous year audited accounts are not available, then the audited accounts for the year prior to the previous year could be taken into consideration. The Hon'ble APTEL, vide Para 6.15 gave directions to the Petitioner with regards to time lines for filing the audited accounts for FY 2007-08, FY 2008-09 and FY 2009 - 10. It also gave directions to State Commission to immediately initiate true-up exercise after receipt of the same. The timelines for submission of the audited accounts by the licensees / Petitioners were as follows:

Financial Year	Last date of Submission
2007-08	21.11.2011
2008-09	31.01.2011 (May be read as 31.01.2012)
2009 - 10	31.03.2012

Relevant Para of the above referred judgment of the Hon'ble APTEL is reproduced below:

"..Therefore, we direct the respondents 3 to 8 to submit the audited accounts for the FY 2007-08 to the State Commission within one month of the date of this judgment. The audited accounts for the FY 2008-09 and 2009 - 10 should be furnished by 31.01.2011 and 31.3.2012 respectively to the State Commission. The State Commission shall initiate the true up exercise upto FY 2006-07 immediately, followed by the true up of the FY 2007-08, 2008-09 and 2009 - 10 immediately after the receipt of the respective audited accounts…"

2.1.6 As per the provision of the Electricity Act, 2003, the UPERC (Terms and Condition for Determination of Distribution Tariff) Regulations, 2006 and the Hon'ble APTEL's Judgment referred above it is clear that submission of the audited accounts for the previous year is one of the requirements to be fulfilled by the Petitioner for its petition to be admitted. Accordingly for processing of the ARR / Tariff Petition for any financial year the following are required:

- Provisional half year accounts for the current financial year,
- Annual audited accounts for the previous year along with true up petition,
- In case due to any reason the audited accounts for previous year is not available, then the audited accounts for at least the year prior to the

previous year is required along with provisional accounts for the previous year.

2.1.7 The Commission finds that the non-submission of audited accounts by the Petitioners is contrary to the provisions of the UPERC Distribution Tariff Regulations. The Commission had accordingly convened a hearing on 27th March, 2012, wherein the issue of non-submission of audited accounts was discussed. During discussion on the above matter, Sh. Nand Lal, the then Director (P&A), UPPCL, speaking on behalf of the Petitioner, informed the Commission that the accounts for FY 2008-09 were under audit by the CAG and would be made available to the Commission by June, 2012. Further, he submitted that the CAG audited accounts for FY 2009 - 10 would be made available to the Commission by December, 2012. However till the issue of this order no submission has been made by the Petitioner.

2.1.8 The Commission also notices that the process of determination of ARR / Tariff for the period under consideration in this order is already much delayed and so would not like to stall it further due to the non-submission of requisite information by the Petitioner as elaborated above. Further delay in determination of tariff would adversely affect the Petitioner as well as the consumers of the State as a whole. Therefore, the Commission feels that the process for determination of tariff should not be kept in abeyance too long. Accordingly, the Commission has processed with the processing of these petitions.

2.2 PRELIMINARY SCRUTINY OF THE PETITIONS:

2.2.1 Subsequent to receipt of the ARR / Tariff Petitions a preliminary scrutiny of the Petitions was carried out by the Commission. It was observed that certain data required as per Distribution Tariff Regulations had not been furnished with the submissions made by the Petitioner. Hence a detailed deficiency note was sent to the Petitioner vide Letter No. UPERC/Secy./D(Tariff/11-227) dated 19th May 2011, Letter No. UPERC/Secy./D(Tariff/12-945) dated 30th March 2012, Letter No. UPERC/Secy./D(Tariff/12-346) dated 31st May, 2012 directing it to provide the required information within 15 days. In response to the deficiency note, the licensees provided some of the critical data required by the Commission for acceptance / admission of the petition vide Letter No. 1158/RAU/Tariff Filing FY 2011 - 12 dated 12th July, 2011, Letter No. 514/RAU/ARR & Tariff FY 2012 - 13 dated 12 April, 2012, Letter No. 936/RAU/ARR & Tariff FY 2012 - 13 dated 14th June, 2012. This was brought to the notice of the Petitioner vide Commission's letter dated 19th June, 2012, wherein it was also informed to the Petitioners that the Commission would consider the latest submission of the Petitioner for analysing the ARR

2.2.2 The Commission also noted that the licensees had not submitted with their petition the audited accounts for relevant years. The audited accounts are primarily required for the purpose of undertaking the subsequent 'true – up' exercise for any given financial year. They serve the limited purpose of recognizing the actual performance of the licensee and for considering whether to permit or not permit the 'true – up' for performance parameters considered in the Tariff Order. The ARR & Tariff determination process on the other hand is based on forecast of number of consumers likely to take supply, expected quantum of energy required to meet the demand, anticipated load etc. Further, the characteristic of power sector business is such that more often than not the Regulatory Commissions would have to deal with estimated / projected information on various factors and determine the tariff on judgmental prognosis adopting a balanced approach in addressing interests of both the consumers and the Licensee subject to adjustments during subsequent 'true-up' exercise based on audited accounts.

2.2.3 The Petitioner is already reeling under tremendous financial pressure on account of various factors including increase in Employee Cost, Administrative Costs, R&M Costs and increased cost of power purchased etc. While the Petitioner should not be allowed to recover any additional costs on account of inefficiencies, they should be allowed to recover the legitimate increase in costs through tariff revision as deemed necessary. The Commission opines that the delay in submission of audited accounts should not lead to stoppage of the process of ARR & Tariff determination.

2.2.4 The Commission vide its Letter No. 1480 dated 12th January 2012, No. 044dated 11th April 2012, and No. 063 dated 13th April 2012 directed the Petitioner to submit the audited accounts for the FY 2010 - 11 and FY 2011 - 12 and true-up petitions up to FY 2009 - 10. However, PVVNL along with the other state distribution utilities, UPPTCL and UPPCL filed the true up Petition (Petition no 809/2012) for FY 2001 to FY 2007-08 on 28th May 2012. This petition shall be taken up by the Commission separately. In the present order the Commission has not undertaken true up of any of the past years as DVVNL has not submitted audited accounts timely which are required for this purpose, in line with UPERC Distribution Tariff Regulations.

2.2.5 However, the Petitioner has not filed audited accounts for the FY 2008-09 onwards. Accordingly, the Commission has not undertaken true-up process for these years. For this very reason the Commission has been seeking again and again seeking the audited annual accounts from the Petitioner. The final approval of actual expenses will be undertaken at the time of truing up process.

2.2.6 The Commission once again directs the Petitioner to ensure finalisation of audited accounts for the past years at the earliest and in the case of coming years, within a reasonable time frame. Further, the Petitioner is also directed to ensure that the annual accounts are submitted along with the next ARR / Tariff filing by them to enable true up process to be undertaken.

2.3 INTERACTION WITH THE PETITIONERS:

2.3.1 Subsequent to the admission of the petition several written & oral interactions were held with the Petitioner wherein additional information / clarifications were sought. Meetings were also held with UPPCL and the Licensee in the office of the Commission on 27th March, 2012 and 17th May, 2012 to hear their views on their Petition.

2.4 ADMITTANCE OF ARR / TARIFF PETITION OF THE LICENSEES FOR FY 2010 - 11, 11 - 12 & 12 - 13:

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

2.4.2 The Commission observes that to proceed further in the matter of determination of ARR / Tariff it has to refer to the data submitted by the licensees in their petitions including the various additional data / clarifications submissions made by them from time to time. The petition is void of the audited accounts which are a primary requirement as per the Distribution Tariff Regulation. In the absence of such details the petition is liable for rejection. In such a scenario the Commission could have proceeded Suo-Motto, for determination of the ARR / Tariff, vide powers conferred to it under the Section 26 of the UPERC (Conduct of Business) Regulations, 2004. However, it is pertinent to note that while proceeding Suo-Motto the Commission would be referring to all the data submitted by the licensees vide their petitions including the various additional data / clarifications submissions made from time to time. As such there would be no difference in the analysis and the finalization of the ARR / Tariff orders if the petitions are accepted in their present form. The only difference would be that in Suo-Moto proceedings the Petitioners would play a passive role in the process involving issue of public notices and holding of public hearings. The Commission therefore is of the firm view that it would be in the best interest of the power sector of the State to actively involve the Petitioner, who is also the biggest stakeholder in the whole process. Required course correction with data based on audited accounts can be carried out as and when true up exercise is taken up with the audited accounts for the respective years. Also it is now clear from the perusal of the true up petition submitted for FY 2000-01 to FY 2007-08 that there is a very large gap which needs to be addressed. Taking all the above factors into consideration the Commission admitted the ARR / Tariff petitions of the Petitioner for FY 2010 - 11 & FY 2011 - 12 and FY 2012 - 13 on 25th June, 2012.

2.4.3 The Commission through its admittance orders dated 25th June 2012, directed the Petitioner to publish, within 3 days from the date of issue of that order, the Public Notice detailing the salient features of the ARR petitions in at least two daily newspapers (one English and one Hindi) for two successive days for inviting views / comments / suggestions / objections / representations by all stakeholders and public at large.

2.5 PUBLICITY OF THE PETITION

2.5.1 The Public Notice detailing the salient features of the ARR petitions were made by UPPCL on behalf of the Petitioner and they appeared in daily newspapers as detailed below inviting objections from the public at large and all stakeholders:

- Hindustan (Hindi) : 8th July, 2012; 9th July, 2012
- Hindustan Times (English) : 8th July, 2012
- Amar Ujala (Hindi) : 8th July, 2012; 9th July, 2012

- Dainik Jagran (Hindi) : 8th July, 2012; 9th July, 2012
- Aaj (Hindi) : 8th July, 2012
- Sunday Times (English) : 8th July, 2012
- Rashtriya Swaroop (Hindi) : 8th July, 2012
- Rashtriya Sahara (Hindi) : 8th July, 2012
- Swatantra Bharat (Hindi) : 8th July, 2012
- Voice of Lucknow (Hindi) : 8th July, 2012
- Avadhnama (Urdu) : 8th July, 2012
- Roznama (Urdu) : 8th July, 2012
- Dainik In Dinon (Urdu) : 8th July, 2012
- HIndustan (Hindi), Aligarh Edition : 9th July, 2012
- HIndustan (Hindi), Agra Edition : 9th July, 2012
- HIndustan (Hindi), Bareli Edition : 9th July, 2012
- HIndustan (Hindi), Moradabad Ed. : 9th July, 2012

2.6 PUBLIC HEARING PROCESS

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

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

- Agra : 16.08.2012
- Greater NOIDA : 18.08.2012
- Noida : 18.08.2012
- Allahabad : 23.08.2012
- Kanpur : 25.08.2012
- Lucknow : 11.09.2012

3 PUBLIC HEARING PROCESS

3.1 OBJECTIVE

3.1.1 The Commission, in order to achieve the twin objective i.e. to observe transparency in its proceedings and functions and to protect interest of consumers, has always attached importance to the views / comments / suggestions / objections / representations of the public on the ARR / Tariff petitions submitted by the licensees. The process gains significant importance in a "cost plus regime", where the entire cost allowed to the licensee gets transferred to the consumer. The consumers therefore have a locus-standi to comment on the ARR / Tariff Petition filed by the licensees.

3.1.2 The comments of the consumers play an important role in the determination of tariff and the design of the rate schedule. Factors such quality of electricity supply and the service levels need to be considered while determining the tariff. The Commission takes into consideration the submissions of the consumers before it embarks upon the exercise of determining the tariff.

3.1.3 The Commission, by holding public hearings, has provided the various stakeholders as well as the public at large a platform where they were able to share their views / comments / suggestions / objections / representations on the ARR / Tariff petitions submitted by the distribution licensee for FY 2010 - 11, FY 2011 - 12 and FY 2012 - 13. It also enabled the Commission to adopt a transparent and participative approach in the process of tariff determination

3.2 PUBLIC HEARING:

3.2.1 To provide an opportunity to all sections of the population in the State to air their views and to also obtain feedback from them, public hearings were held by the Commission at various places in the State. The public hearings were conducted from 16th August 2012 to 11th September 2012 as per details given below.

Table 3-1: SCHEDULE OF PUBLIC HEARING AT VARIOUS LOCATIONS OF UTTAR PRADESH

S.No.	Date	Venue of Hearing
1.	16.08.2012	Agra
2.	18.08.2012	Greater NOIDA
3.	18.08.2012	Noida
4.	23.08.2012	Allahabad
5.	25.08.2012	Kanpur
6.	11.09.2012	Lucknow

3.2.2 Consumer representatives, industry associations as well as several individual consumers participated actively in the public hearing process. The Petitioners were also given an opportunity to respond to the stakeholders.

3.2.3 The views/ suggestions/ comments/ objections/ representations on the ARR/ Tariff petitions received from the public were forwarded to the licensee for their comments / response. The Commission considers these submissions of the consumers and the response of the licensee before it embarks upon the exercise of determining the tariff for a particular period

3.2.4 Besides this the Commission, while disposing the ARR / Tariff petitions filed by the distribution licensee, has also taken into consideration the oral and written views / comments / suggestions / objections / representations received from various stakeholders during the public hearings or through post or by e-mail

3.2.5 The Commission has taken note of the views and suggestions submitted by the various stakeholders which provided useful feedback on various issues and the Commission appreciates their keen participation in the entire process.

3.3 VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON ARR / TARIFF:

3.3.1 The Commission has taken note of the various views / comments / suggestions / objections / representations made by the stakeholders and would like to make specific mention of the following stakeholders for their valuable inputs:

- Mr. Avadhesh Kumar Verma, Chairman, UPRVUP
- Dr. Anil Chaudhary, Ex-MLA

- Mr. N.S. Hanspal, IIA
- Mr. Rama Shankar Awasthi
- Mr. Hardeep Singh Rakhra

3.3.2 The list of the consumers, who have submitted their views / comments / suggestions / objections / representations, is appended at the end of this chapter. The major issues raised therein, the replies given by the Petitioner and the views of the Commission have been summarised as detailed below

3.4 GENERAL ISSUES AND COMMENTS:

A) ***Comments / Suggestions of the Public***

3.4.1 The comments/ suggestions submitted by Sh. C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, Sh. R.K. Chaudhary, President, Ramnagar Industrial Association, Varanasi, Sh. Dinesh Goel, President, Indian Industries Association, Bareilly, Sh. Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, Sh. I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, Sh. S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Sh. Sudhir Chandra Goyal, prop Khatuli Cold Storage, Sh. Vijay Acharya, Consumer Protection Council, Lucknow, Sh. A.K. Gouda, for M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad, Sh. Satish Goel, Muzaffarnagar, Sh. S.K. Sharma of Rathi Steels, Sh. Vishnu Bhawan Agarwal, Chairman, Electricity Cell, Sh. N.N. Mishra, President for MGR Industries Association, Ghaziabad in brief are as under:

3.4.2 The stakeholders stated that the directions given to the DISCOMs by the Commission (on issues such as short term and long term power procurement, installation of electronic meter in the premises of departmental employees, replacement of electro-mechanical and defective electronic meters, installation of electronic meters at the premises of new connection, double metering at the premises having connected of load 10KVA and above, voltage wise cost of service study and maintenance of fixed asset register etc.) were yet to be fully complied with. Further, as per provisions of EA 2003, the distribution licensee is required to submit its ARR and tariff petitions for the ensuing year by 30th Nov. of each year, but the Petitioner has filed the above ARR / Tariff Petitions for FY 2012 - 13 much later. ARR / Tariff determination exercise is not only about approving the expenses and revenue of the distribution licensee, but it is also an exercise in taking stock of the past work done. It also defines the road map for future performance. The stakeholder highlighted that the Hon'ble Commission has failed to exercise its power under law and have raised concerns over restructuring package.

3.4.3 The stakeholders resented that the Chief Engineer (RAU) of UPPCL had brought out the public notice inviting comments / objections on the petitions. This was illegal and unwarranted as CE (RAU) is not a licensee and has no authority to interfere with the procedures for determination of tariff of the distribution licensee.

3.4.4 The stakeholders raised concern on account of One Time Settlement Scheme (OTS) as unscrupulous consumers create artificial arrears in connivance with authorities of distribution licensee in order to get their legitimate dues waived too. They expressed that the OTS scheme is dangerous for electrical undertakings

B) ***The Petitioner's response:***

3.4.5 The Petitioner clarified that all efforts are being made to comply with each and every directive given by the Commission in the tariff order and the reasons for the non-compliance or partial compliance are submitted to the Commission from time to time. Further, reasons for delay in submission of ARR have already been explained to the Hon'ble Commission.

3.4.6 The Petitioner emphasised that the OTS scheme is implemented to liquidate the arrears as well as to help those poor consumers who are not in a position to deposit the arrears which includes interest. Only interest portion of the arrears is waved off in OTS schemes.

C) ***The Commission's view:***

3.4.7 The Commission has allowed the waiver of surcharge amount of those unmetered consumers who have signed an unconditional undertaking to take up metered connections. Waiver of arrears of all other consumers under the OTS scheme is borne by the DISCOM through its own resources or through GoUP subsidy. Further, no amount of surcharge waived off is passed onto consumers in future ARR / True-up exercises.

3.4.8 The Commission has taken a serious note of the issues raised in the first public hearing regarding discrepancy in the data contained in the ARR / Tariff petitions filed with the Commission and those made available to the public via print and electronic media. As the tariff setting proposal had already been delayed the Commission in broader interest of the industry did not postpone the public hearing but sternly directed that it be ensured by the respective DISCOMs that correct information be made available to the public before the date when the next public hearing is scheduled to be held. Nevertheless, during the hearing, the Petitioner has provided to the extent possible the correct details as and when asked for.

3.5 SUPPLY RELATED ISSUES

A) Comments / Suggestions of the Public:

3.5.1 The comments/suggestions submitted by S/Sri R.K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K. Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Satish Chand Jain, Vijay Acharya, Consumer Protection Council, Lucknow, A.K. Gouda, M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad, Satish Goel, Muzaffarnagar, Varanasi S.B. Agarwal, Secy. Gen., Associated Chambers Of Commerce And Industry of UP, Vishnu Bhagwan Agarwal, Chairman, Electricity Cell and Avadhesh Kumar Verma, Chairman, U.P.Rajya Vidyut Upbhokta Parishad and M/s Indian Industries Association, Gomti Nagar, Lucknow, Varistha Mandal Vidyut Engineer, Ijjatnaar, Laghu Udyog Sangh, Varanasi and Indian Industries Association, Lucknow, are as under:

3.5.2 The stakeholders stated that the Industrial units are facing problem of unscheduled power cuts, inadequate supply, faulty meters, low voltage on dedicated feeders & non availability of print out of load details at different times and days. Some stakeholders requested that continuous supply be made available in rural areas. They further said that Industrial feeders are not getting 24 hour supply as per commitment hence tariff be reduced accordingly. The stakeholders further stated that in Delhi the duration of non-availability of supply during a billing period is reflected in the bill for that period. The stakeholders suggested that in high demand season (from May to Sept.) planning should be done in such a manner that industrial consumer may not suffer power cut. There were also a complaints regarding poor supply mainly because a unit having 700kVA load was being fed through a feeder having mixed load and about the estimate for connection of 17kW load sanctioned under commercial category.

3.5.3 The stakeholders submitted that the main criteria considered for determination of tariff is the hours of supply. In the tariff petition it is proposed to supply 14 hrs to rural areas, 24 hrs to Mahanagars & 20 hrs to Districts whereas at ground level the actual hours of supply are quite different. They questioned as to why the common man is being misguided.

B) Petitioner's response:

3.5.4 The Petitioner has submitted that the issues related to unscheduled power cut, faulty meters, low voltage on dedicated feeders & non availability of print out of load details at different times & days are not related to present tariff petition. However it assured that these issues will be dealt by the concerned local officers of the DISCOM. Further, during the hearing, the Petitioner stated that it was not possible to provide month wise data on the hours of supply as the same was not readily available at that moment. The Petitioner however submitted action will be taken to compile the same.

3.5.5 The Petitioner submitted that the hours of supply is normally as per schedule however sometimes it may be less than that of schedule hours due to emergency rostering which is beyond their control.

3.5.6 The Petitioner stated that complaints of connection and quality of supply are not related to present tariff petition. However it assured that these issues will be dealt by the concerned local officers of the DISCOM.

3.5.7 The Petitioner clarified that ARR is prepared on assumptions based upon historical data / past trends together with available data, future availability of generation and targeted loss level for ensuing year. In the same way for projection of load forecast for ARR for FY 2012 - 13 category wise commercial data comprising of number of consumers / Connected load (kW) / energy sales up to FY 2010 - 11 & mid of FY 2011 - 12 were tabulated and CAGR for 3, 5, 7 & 10 years were determined to derive category wise numbers. Further, load shedding affects different consumers differently. So for some categories running supply hours has also been taken into account. This exercise was done to arrive at category wise expected load growth for FY 2012 - 13 and accordingly projection for generation requirement for ensuing year i.e. FY 2012 -13. However scheduled supply to consumers at particular time depends upon availability of power at that time from various state / central generating stations. It is likely that sometimes generator is unable to meet the projected generation which may adversely affect the supply at consumer end. To cope with such a situation, licensee has planned to procure power through power exchange / bilateral means so that scheduled supply to consumers could be ensured.

C) The Commission's views:

3.5.8 The Commission while determination of tariff has considered the views of the stakeholders.

3.6 BILLING AND COLLECTION

A) Comments / Suggestions of the Public:

3.6.1 The comments / suggestions submitted by S/Shri Arun Kumar Agarwal, R.K.Jain, Secretary, Western UP Chamber Of Commerce & Industry, Meerut, C.L.Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Indu.strial Area Manufacturers Association, Ghaziabad, I.K.Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K.Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Mohd. Ashraf Ali, Basti, Ram Naresh, Mirzapur, Mahendra Swaroop, President, Cold Storage Association, Lucknow, Harish Joneja, Secy. Noida Entrepreneurs Assn., Noida, D.D.Maheshwari, Secretary, Kaushambi Apartments Residents Welfare Association, Ghaziabad and Avadhesh Kumar Verma, Chairman, U.P.Rajya Vidyut Upbhokta Parishad and Indian Industries Association, Lucknow and Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow,are as under:

3.6.2 The stakeholders have proposed that the dates mentioned on the bill and the disconnection notice should strictly be adhered to so as to reduce accumulating arrears. Also bills should not be generated for non-existent premises. The non-domestic and commercial consumers who default in payment of bills add to tariff hike as it increases interest on loan component of the tariff. Prepaid meters should be installed for better revenue realization from small consumers.

3.6.3 The stakeholders submitted that the tariff proposal has no mention of recovery efficiency which is 80% or less. Billing and recovery problem are more chronic than distribution losses. False billing is also a problem. The stakeholders have asked the Petitioner to spell out the steps that are being taken to avoid false billing and to improve recovery and curb theft through illegal “katiya” connections. Some have suggested that an independent team for prevention of theft should be formed and those officers and workers under whose jurisdiction theft is found should also be penalized.

3.6.4 The stakeholders submitted that billing on the basis of NA / NR billing causes harassment to the consumers.

3.6.5 The stakeholders suggested that one month’s advance payment should be taken from the consumers and has requested for abolition of Franchisee arrangement for revenue realization. No connection should be given without meter and MCB should be installed in each connection.

3.6.6 The stakeholders requested if any excess amount is realized from consumers, it should be refunded to them immediately with interest.

3.6.7 The stakeholders requested that it should be mentioned whether a consumer is connected to rural feeder or to rural schedule.

3.6.8 The stakeholders stated that the overall revenue collection in NOIDA is 100% whereas revenue collection in the State is about 49%, and the average power purchase cost of **PVVNL** is Rs. 2.40 per unit whereas the recovery in NOIDA is more than Rs. 5.00 per unit. Therefore tariff increase is questionable

3.6.9 The stakeholders highlighted that *in the* tariff proposal the arrears to various category of consumers which is Rs. 26094.24 crores has not been shown. If all the arrears are recovered then there would not be any revenue deficit to the companies and the question of tariff hike would not arise. Huge arrears are pending with Government Departments.

3.6.10 The stakeholders resented that whenever the tariff order is issued by the Commission it projects the expected revenue for ensuing years which the distribution licensees have to recover from the consumers, but this is not being done as per the target set in the tariff order. Due to this revenue gap is increasing and ultimately consumers have to suffer.

B) Petitioner's response:

3.6.11 The Petitioner has submitted that all efforts are being made in this regard and action is being taken against all defaulting consumers. Further Prepaid meters are being arranged and will be installed at consumers premises in near future.

3.6.12 The Petitioner stated that in the matter of false billing it is making efforts to find out the fictitious consumers. Door to door search operation is being carried out and a proper report is being submitted for deletion of such fictitious connections. Further, to prevent illegal "katiya" connections, raids by special team are being carried out and FIR is being lodged against delinquent consumers. Moreover, honest consumers are being encouraged to provide information about theft of electricity through helpline numbers. Further, there is already a vigilance squad posted at various locations mainly to check theft of electricity and action is being taken against the guilty officers / officials in case they are found involved in theft cases.

3.6.13 The Petitioner has submitted that hand held billing and online billing has been introduced in many areas of the State and has ambitious plan to install meters on all consumers. This will reduce NA/NR billing.

3.6.14 The Petitioner submitted that franchisee system has been invoked to help the utility in realization of revenue and to help consumers in getting their small problems related to supply rectified. The Petitioner also clarified that there has always been a practice of refunding the excess amount and if there are any problems then the same can sorted out locally.

3.6.15 The Petitioner clarified that the bill is always prepared based on whether the consumer is fed through rural feeder or urban feeder.

3.6.16 The Petitioner resubmitted that all efforts are being made to realize the arrears on Government Departments and the details are provided to Hon'ble Commission. Further, tariff is determined against the cost of service to supply electricity and not on the basis of arrears.

3.6.17 The Petitioner submitted that the ARR contains the details of estimated expenditure and expected revenue and any deviation from actual value is taken care of at the time of subsequent true-up exercise. As such there is no loss to the consumers since **such variation** will automatically be taken into consideration in future petitions. Here it is to submit that they have submitted True-up petition upto FY 2007 -08 which is under consideration of the Commission.

C) The Commission's views:

3.6.18 The Commission has been pursuing the DISCOMs to explore alternative modes of payment such as through internet, Banks etc. which could lead to better realisation of revenue.

3.6.19 The Commission, on the issue of timely payment, has already clarified its view in its last tariff order (Para 4.7.8), stating that:

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

The Commission therefore awaits such proposal by the Petitioner

3.6.20 As far as metering is concerned, the Commission has already given directives to the DISCOM to meter as many consumers as possible. The Commission feels that prepaid meters will go a long way towards reducing commercial losses of the DISCOM. The Commission directs the Petitioner to submit details of the planned implementation of prepaid meters, including details of the consumer categories and areas proposed to be covered and the timeframe involved. The billing and collection through Franchisee model has been widely accepted in different parts of the country and the main purpose is to help the DISCOMs reduce inefficiency in billing, collection and loss reduction. Keeping the above in mind, implementation of the franchisee model will be a welcome move by the DISCOM.

3.6.21 According to Section 135 of Electricity Act, 2003, "Any officer of the licensee or supplier, as the case may be, authorized in this behalf by the State Government may -

a. Enter, inspect, break open and search any place or premises in which he has reason to believe that electricity 2[has been or is being,] used unauthorisedly;
b. Search, seize and remove all such devices, instruments, wires an any other facilitator or article which has been, or is being, used for unauthorized use of electricity;
c. examine or seize any books of account or documents which in his opinion shall be useful for or relevant to, any proceedings in respect of the offence under sub-section (1) and allow the person from whose custody such books of account or documents are seized to make copies thereof or take extracts there from in his presence

3.6.22 As far as guilty officer / officials are concerned, the Commission has already directed the DISCOMs to implement all the necessary policy frameworks to identify and resolve such kind of issues.

3.6.23 According to National Tariff Policy, the tariff should progressively reflect the cost of supply of electricity. So calculation of tariff is primarily based on cost of electricity supply. The Commission time and again has directed the DISCOMs to collect arrears and other dues from the consumer and publish its audited accounts timely

3.7 SHIFTING OF CONSUMERS

A) Comments / Suggestions of the Public:

3.7.1 The comments / suggestions submitted by Sh. Arun Kumar Agarwal, in brief are as under:

3.7.2 The stakeholder highlighted that directions of commission for shifting of HV category consumers from LV side to HV side should be implemented.

B) Petitioner's response:

3.7.3 The Petitioner has submitted that almost all consumers having sanctioned load of 50kW and above are being metered on HV side.

C) Views of the Commission:

3.7.4 The Commission reiterates its order in this regards and directs the Petitioner convert such consumers to HV side wherever feasible.

PART 2: ARR related

3.8 GENERAL COMMENTS ON ARR

A) Comments/Suggestions of the Public:

3.8.1 The comments / suggestions submitted by S/Sri R. K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, Ravi Rajput, Senior GM(Services), Ansal API, Lucknow, C.L.Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Indu.strial Area Manufacturers Association, Ghaziabad, I.K.Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K.Arora, President Ghaziabad Induction Furnace Association, Ghaziabad and D.D.Maheshwari, Secretary, Kaushambi Apartments Residents Welfare Association, Ghaziabad and Indian Industries Association, Lucknow, are as under:

3.8.2 The stakeholder highlighted that the average per unit cost of UPRVUNL & NTPC are almost same whereas UPRVUNL power houses are generating electricity below the prescribed norms consuming more auxiliary energy while NTPC power houses are operating at much higher PLF.

3.8.3 The stakeholder highlighted that UPPCL is supplying power to M/s Torrent at Rs. 1.91 / unit, which they sell at Rs. 4.00 / unit. If UPPCL is actually generating power at Rs. 1.81 / unit, then charging consumer at that rate should not result in losses. Giving power to M/s Torrent at Rs. 1.81 per kWh against the high cost of generation means that UPPCL is subsidizing M/s Torrent at the cost of other consumers.

B) The Petitioner's response:

3.8.4 The Petitioner clarified that the performance of UPRVUNL power generating stations and maintenance of thermal power plants are not related to the distribution licensee.

3.8.5 The Petitioner clarified that Bulk power tariff for M/s Torrent has been fixed with due diligence taking into consideration all relevant parameters and data.

C) The Commission's View:

3.8.6 **The Commission notes that M/s Torrent Power Ltd has been appointed as input based franchisee by the licensee**.

3.9 TRANSMISSION & DISTRIBUTION LOSSES

A) Comments / Suggestions of the Public:

3.9.1 The comments / suggestions submitted by S/Shri R. K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, Arun Kumar Agarwal, Lucknow, C.L.Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K.Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, S.B. Agarwal, Associated Chambers of Commerce & Industry, Lucknow, Shashi Bhushan Mishra, Sachiv, Upbhokta Sanrakshan Evam Kalyan Samiti, Mathura, Harish Joneja, Secy. Noida Entrepreneurs Assn., Noida, D.D.Maheshwari, Secretary, Kaushambi Apartments Residents Welfare Association, Ghaziabad, Vishnu Bhagwan Agarwal, Chairman, Electricity Cell, N.N. Mishra, President for MGR Industries Association, Ghaziabad and Avadhesh Kumar Verma, Chairman, UPRVUP and M/s Star Paper Mills Ltd., Saharanpur, M/s Indian Industries Association, Gomti Nagar, Lucknow,and Indian Industries Association, Lucknow, are as under:

3.9.2 The stakeholders suggested that the line losses should be reduced to 15%. One of the stakeholders suggested that Incentive scheme for reducing the distribution losses as per Para 9(a) of 'Rate Schedule for FY 2008 – 09' be implemented.

3.9.3 The stakeholders raised the issue that UPPCL is not reducing the losses to the desired level as per the directions of UPERC. Some serious efforts are required to reduce the huge T&D losses.

3.9.4 The stakeholders resented that the line losses in NOIDA are about 8%, whereas those in PVVNL are 27%, and sanctioned load in NOIDA is almost double the infrastructure available to supply power.

3.9.5 The stakeholders submitted that as per the gap between energy delivered to the four DISCOMs and energy supplied by them, there are huge transmission losses which are responsible for their losses. The losses for 2012 - 13 are Rs. 13,214.00 crores, a large part of which is due to huge transmission losses incurred by them. All the DISCOMs be directed to reduce transmission losses to low levels before they are allowed to raise tariff.

3.9.6 The stakeholder has submitted that UPPTCL has proposed transmission line losses at the rate of 3.63% for three years, how it is possible that line losses may be same for three years.

3.9.7 The stakeholders stated that in previous years crores of rupees has been spent under R-APDRP scheme by taking grant from Central Government but line losses are still 30%. It means that these schemes are running on paper only. In FY 2012 - 13 under R-APDRP schemes worth Rs. 1831.70 has been proposed to bring down AT&C losses to 15% but in tariff proposal this has not been taken into account.

B) The Petitioner's response:

3.9.8 The Petitioner submitted that they have planned and proposed a gradual reduction in distribution losses upto 19% by FY 2015 - 16. Incentive, as allowed in 9(a) of tariff 2008 - 09 would be beneficial when proper infrastructure is placed to achieve the goal.

3.9.9 The Petitioner submitted that all efforts are being made to reduce the losses as the same is beneficial to the utility as well. Tariff revision exercise is done on the basis of assumption of loss level. It may be noted that when losses are assumed on lower side then tariff will automatically be lesser. Hence loss level projection is not against the interest of the consumer.

3.9.10 The Petitioner informed that the infrastructure is sufficient to cater for supply to all consumers. However to cater for future growth action is being taken for addition of matching infrastructure.

3.9.11 The Petitioner stated that Transmission losses are very close to the desired level. However, the transmission losses is a subject dealt by UPPTCL. They are trying their best to keep these losses at desired level.

3.9.12 The Petitioner clarified that ARR for FY20012 - 13 has been filed before the Hon'ble Commission on 21.02.2012. At the time of preparation of ARR actual data for FY2010 - 11 were available and on the basis of the same transmission losses have been calculated as 3.63% for FY2010 - 11. For estimation of ARR for FY2011 - 12 & FY2012 - 13, transmission losses have been assumed to be at the same level as it was in FY2010 - 11. In the Tariff Order for FY2009 - 10 the Hon'ble Commission has approved Transmission losses at 4% and appreciated the efforts made by the transmission utility in keeping losses at competitive level.

3.9.13 The Petitioner submitted that the main objective of the R-APDRP is reduction of losses to the extent of 15% in the project area whereas the losses shown in ARR pertain to rural as well as urban area of the DISCOM which are still not covered under this scheme. However works in various schemes under R-APDRP are under progress and final outcome would be reflected on completion of the scheme.

C) The Commission's views:

3.9.14 The Commission recognises the fact that the DISCOM has been taking measures to reduce T&D losses by implementing schemes such as laying Aerial Bunch Conductors (ABC) etc. but these efforts are yet to yield satisfactory results. On the aspect of T&D losses, the DISCOM should undertake necessary strengthening and R&M of the distribution networks to reduce losses which would result in higher availability of power for sale to consumers.

3.9.15 The Commission stresses that the DISCOM acts speedily upon the past directives given concerning submission of voltage wise loss level calculation and follow the loss reduction guidelines provided by the Commissions and from time to time. It must also report to the Commission improvement on reduction of T&D losses.

3.10 INTEREST ON SECURITY DEPOSIT

A) Comments / Suggestions of the Public:

3.10.1 The comments/suggestions submitted by S/Shri C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Indu.strial Area Manufacturers Association, Ghaziabad, I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad and Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow are as under:

3.10.2 The stakeholders have raised the concern over interest on security deposit and requested that the order in this respect should be very clear.

B) Petitioner's response:

3.10.3 The Petitioner clarified that the Interest on security is being given to consumer as per orders of the Hon'ble Commission.

C) Views of the Commission:

The provisions related to security deposit and the interest payable on the same are amply clear and are dealt with in detail in the UPERC Tariff Regulations. It needs to be followed in the same spirit by both, the DISCOM as well as the consumers.

3.11 CAPITAL EXPENDITURE

A) Comments / Suggestions of the Public:

3.11.1 The comments / suggestions submitted by S/Shri R. K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, C.L.Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, D.D.Maheshwari, Secretary, Kaushambi Apartments Residents Welfare Association, Ghaziabad and Avadhesh Kumar Verma, Chairman, U.P.Rajya vidyut Upbhokta Parishad are as under:

3.11.2 The distribution loss reduction trajectory is ambitious but plan for its implementation is not indicated in the petition. Further the Petitioner has not shown any proposal for investment towards installation of latest electronic meters with networking features for theft prevention.

3.11.3 The stakeholders submitted that the distribution licensee spends crores of rupees in procuring materials such as transformers, cables, conductors, meters etc. but due to poor quality of materials procured crores of rupees are lost. To recover this loss from consumers is not appropriate.

B) The Petitioner's response:

3.11.4 The Petitioner clarified that they have planned a number of schemes to reduce line losses such as installation of ABC in theft prone areas, feeder separation program, special drive for checking consumer ledger and R-APDRP program.

3.11.5 The Petitioner submitted that Electronic meters are being purchased to cater to the requirement of theft prevention.

3.11.6 The Petitioner clarified that all materials are purchased from reputed firms through open tender and in every DISCOM there is committee for checking the quality of material. If it is found that a particular firm had supplied poor quality material then action is taken against that firm. Further level there is also an equipment quality control committee formed by the Commission which examines the quality of material from time to time.

C) The Commission views:

3.11.7 Though the DISCOMs have standard procedures for procurement of power and material yet with no control mechanism it is always questionable as to whether the procedures were strictly followed. Periodical and timely audit of books of accounts and records is one of several control mechanisms that could be adopted. The Commission has time and again directed the Petitioner to expedite the process of finalization and auditing of accounts as is would render sanctity to the procurement processes.

3.11.8 The Commission has time and again directed the Petitioner to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. However, there has been lethargic progress on the issue by them. Maintenance of Fixed Asset Register by the licensee is required according to Regulation 4.5 (9) of Tariff Regulations. The relevant Regulation is reproduced below.

> "4.5 (9) The Licensee will maintain asset registers at each operating circle/division that will capture all necessary details on the asset, including the cost incurred, date of commissioning, location of asset, and all other technical details".

The above matter was also viewed seriously by Hon'ble APTEL. It had directed the DISCOMs to comply with the directions of the Commission and submit, within one month of this judgment, a progress report in this regard to the Commission. However no report has been submitted till date. The Commission in its various communications and meetings has sought an update on the issue. During the hearing held on 27th March 2012 the Commission was informed that work on streamlining the Fixed Asset Registers is in progress and the details would be submitted within couple of months. However no details have been provided yet. The Commission directs the DISCOMs to expedite the process and update the progress to the Commission every month

3.12 POWER PROCUREMENT COST

A) Comments / Suggestions of the Public:

3.12.1 The comments / suggestions submitted by S/Shri S.B. Agarwal, Associated Chambers of Commerce & Industry, Lucknow, Satish Goel, Muzaffarnagar and N.N. Mishra, President for MGR Industries Association, Ghaziabadin are as under:

3.12.2 The stakeholders pointed out that there were discrepancies in the data related to power procurement cost. With increase in power procurement cost of Rs 0.08 paise/unit in 2012 - 13 w.r.t. that during FY 2011 - 12 the proposed increase in demand charges for HV-2 consumers is from Rs. 50 - 120/KVA/month and the proposed increase in energy charges is from Rs 1.55 – 2.15/KVAh.

B) The Petitioner's response:

3.12.3 The Petitioner clarified that the Tariff is proposed on overall input cost of service which includes power purchase cost, therefore comparison of increase with only power purchase cost is not justified.

C) The Commission's views:

3.12.4 Power procurement costs are uncontrollable in nature and are legitimately to be passed on to consumers subject to prudence check. FY 2010 - 11 and FY 2011 - 12 have already elapsed and since audited data for the year are not yet available, the Commission has relied upon the submissions made by the Petitioner on the basis of provisional accounts. The Commission shall closely scrutinise the accuracy of power procurement costs once audited account are made available in true-up proceedings. For FY 2012 - 13 the Commission has forecasted power purchase requirement and approved the power procurement cost based on merit order dispatch.

3.13 INTEREST AND FINANCE CHARGES

A) Comments / Suggestions of the Public:

3.13.1 The comments/suggestions submitted by S/Shri A.K. Gouda, for M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad and Satish Goel, Muzaffarnagar are as under:

3.13.2 The stakeholder stated that if loans are taken by the DISCOMs to compensate for the loss due to subsidized supply to agriculture or specified category of consumers, then the Govt. of UP should bear the interest expenses, and the industry should not be forced to bear this interest burden.

3.13.3 The stakeholder further submitted that the delay in payment of subsidy by the Govt. leads to short term borrowing at higher interest which further leads to financial difficulties of licensee. All the expenditure claimed by licensee needs meticulous scrutiny by the state commission.

B) Petitioner's response:

3.13.4 The Petitioner did not submit any response on this matter as the stakeholder's suggestions did not pertain to them.

C) The Commission's view:

3.13.5 The matter has been appropriately dealt with while considering the interest expenses in line with the provisions of the UPERC Distribution Tariff Regulations.

3.14 NON-AVAILABILITY OF AUDITED FIGURES AND SUBMISSION OF TRUE-UP PETITIONS

A) Comments / Suggestions of the Public:

3.14.1 The comments / suggestions submitted by S/Sri R.K.Jain, Secretary, Western UP Chamber Of Commerce & Industry, Meerut, C.L.Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, Sh I.K. Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K.Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Mahendra Swaroop, President, Cold Storage Association, Lucknow, S.B.Agarwal, Secy. Gen., Associated Chambers Of Commerce And Industry of UP, S.K.Sharma of Rathi Steels, Vishnu Bhagwan Agarwal, Chairman, Electricity Cell, A.K.Gouda, for M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad, Satish Goel, Muzaffarnagar and Avadhesh Kumar Verma, Chairman, UPRVUP and Cold Storage Association of Uttar Pradesh, Aishbagh, Lucknow and Indian Industries Association, Lucknow, in brief are as under:

3.14.2 The stakeholders have submitted that the tariff upto FY 2009 - 10 has been approved on the basis of "Declared Figures" and not on certified and audited figures as per Companies Act-1956. The Petitioner has not filed the audited accounts of FY 2009 - 10 even after 3 years and has also not provided area-wise commercial parameters like collection efficiency, AT&C losses, meter reading, billing, collection efficiency, interruptions, transformer failures etc., which should also be included in the ARRs. Some even expressed that the tariff should not have been finalised till the DISCOMs file their audited accounts.

3.14.3 The stakeholders further opined that due to non-compliance of basic requirement, the Commission had not entertained ARR for FY 2010 - 11 and the FY 2011 - 12. According to the order, it seems that the ARR for three years has been filed showing large gaps every year between projected figures and the actuals. The stakeholders further added that though It's true that Hon'ble Appellate Tribunal for Electricity (APTEL) in its judgments in Appeal No. 121 dated October 21st, 2011 has upheld the requirement of audited accounts which has not been complied with and it had even given a timetable for filing of audited accounts for the FY 2007 - 08, FY 2008 -09 and FY 2009 - 10.

3.14.4 The stakeholders raised the issue that the DISCOMs and UPPCL have claimed a true - up gap of Rs. 14,638.64 crores and carrying cost of Rs. 11,352.00 crores in true - up petition filed for FY 2000 - 01 to FY 2007 - 08 and objected that the Commission cannot proceed "Suo-motto" in absence of true - up information (based either on audited accounts or otherwise). At least balance sheet up to year 2009 - 10 be sought from the utilities.

3.14.5 The stakeholders have opposed the tariff hike either retrospectively or even prospectively on account of late submission of true up - petitions and further added that owing to the poor performance of power sector DISCOMs and because of mounting losses and heavy cash flow gap, funding banks have expressed doubts and decided to stop the funding for working capital requirements of distribution licensees, although Government has come to the rescue of UPPCL by providing a bank guarantee of Rs. 850.00 crores.

3.14.6 The stakeholders suggested that UPPCL and the DISCOMs need to seek guidance of CAG to provide a panel of UP based audit firms to monitor the authenticity of figures arising out of division of UP, unbundling of erstwhile UPSEB and creation of UPPCL, UPPTCL and DISCOMs.

3.14.7 The stakeholders highlighted that three years ARR has been filed without true - up petition. In absence of this comments on past performance and plans for improvements cannot be given. Therefore, the petition of DISCOMs for FY 2010 - 11, 2011 - 12 & 2012 - 13 be rejected on the ground that no audited balance sheet has yet been submitted as per direction of APTEL and as such tariff decision based on the estimated expenses may not be taken.

3.14.8 The stakeholders recalled the directions of APTEL regarding submission of audited balance sheet and, in case of default, action as per Section 142 of EA, 2003 be initiated against the utilities.

B) The Petitioner's response:

3.14.9 The Petitioner submitted that the ARR is always estimated on the basis of best estimate of the utility with the help of past data and data available till date. After linking this data to appropriate indices / rates like consumer price Index (CPI), whole sale price Index (WPI) and bank rates etc. for a realistic estimate of ARR for FY 2012 - 13, the figures from audited balance sheet up to FY2007-08 and provisional balance sheet up to FY 2010 - 11 have been used for such estimation and this is very much in line with the provisions of Tariff regulations. Hon'ble Commission will appreciate that the auditing of annual accounts by CAG for FY 2008 - 09 and FY 2009 - 10 is under progress and the true - up of the relevant years would be filed after receipt of final account / report from CAG. Presently True - up petition has been filed up to FY 2007 - 08 on the basis of available audited accounts of that year.

3.14.10 The Petitioners have submitted that the audited account up to FY 2007 - 08 and provisional accounts up to FY 2010 - 11 has already been submitted to the Commission for their consideration. Further the CAG audit for FY 2008 - 09 is under progress and same will be submitted at the earliest.

3.14.11 The Petitioner further pointed out that the ARR has been proposed on the basis of data available and as per provisional annual accounts for FY 2010 – 11 duly certified by Chartered Accountant. The True-up petition from FY 2000 - 01 to FY 2007 -08 has already been submitted. This it-self shows the difference between the projected and actual figures.

3.14.12 In pursuance to the directive of Hon'ble APTEL, the audited accounts up to FY 2007 - 08 for all DISCOMs and audited accounts for FY 2008 - 09 of Lucknow & Agra DISCOMs have already been filed before the Hon'ble Commission. The process of finalisation of audited accounts in other DISCOMs is under progress. Further a time table for submission of audited accounts is also submitted to the Commission.

3.14.13 The Petitioner submitted that the true-up petition from FY 2000 - 01 to FY 2007 - 08 has already been filed before Hon'ble Commission on 28th May, 2012.

3.14.14 The Petitioner highlighted that there is a provision in tariff regulation issued by Hon'ble Commission to proceed for 'Suo-Motto' in absence of a petition from the utility, however true-up petition up to FY 2007 - 08 has already been submitted to the Hon'ble Commission as per their directive. Therefore the Commission is not considering tariff revision 'Suo-Motto' but on the petitions of DISCOM.

3.14.15 The Petitioner has pointed that the Petitioner has prayed in true - up petition to recover the revenue gap through ARR of FY 2012 - 13. As per provisions of EA 2003 and National Tariff Policy the tariff should progressively reflect the efficient and prudent cost of supply of electricity. As far as tariff decision based on estimated data is concerned, it may be noted that tariff proposals are always futuristic and are generally estimated on the basis of historical data. Hence there is no point in deferring the tariff decision on such ground. Further most of the expenses are based on cash cost which is verifiable without audit and true - up will be filed after audit.

3.14.16 The Petitioner clarified that the there is no need to seek guidance from CAG as there is a panel of auditors who audit the accounts as per accounting principles laid down by CAG.

3.14.17 The Petitioner clarified that all three ARRs (FY 2010 - 11, FY 2011 - 12 and FY 2012 - 13) have been filed and are under consideration by the Commission. All data / information required by the Commission regarding these petitions have already been provided. Clarification regarding data mismatch have already been explained to the Commission

3.14.18 The Petitioner clarified that they have filed ARR for FY 2010 - 11 & FY 2011 - 12 on 25.03.2011 and ARR FY 2012 - 13 on 21.02.2012 as per provisions of Tariff Regulations. At the timing of ARR filing of FY 2012 - 13 the audited account up to FY2007 - 08 and provisional account FY 2010 – 11 duly certified by Chartered Accountant were available. As such the ARR was prepared based upon data from balance sheet and actual data available till that date. So all data used for preparation of the ARR are based upon certified values and it is erroneous to say that the data is fictitious and vague. ARRs are always prepared as per guidelines provided in the Tariff Regulations which clearly states that ARR petition shall be prepared based on an allocation statement to the best judgment of distribution licensee. Hence it contains details of estimated expenditure and expected revenue that it may recover in the ensuing financial year at the prevailing tariff. This means that ARRs will always be prepared by licensee on certain assumptions based on historical trends and data available till date. Further the Regulations stipulate that the ARR determined by the Commission for any financial year shall be trued - up on the basis of actual and audited data and operational results. Any deficit or surplus arising out of such true up shall be adjusted while determining the tariff for future years. So any difference in the estimated and actual values will automatically be adjusted by the Commission at the time of approval of true up. Thus, the ARR has been filed as per provisions of EA 2003 and Tariff Regulations.

C) The Commission's views:

3.14.19 Approval of costs without audited accounts leaves true - up exercise unattended. A bare perusal of the Tariff Regulations reveal that the information to be submitted by the licensee in its ARR / Tariff petition has to be based on audited annual accounts which are to be submitted with the petition. The Commission has time and again directed DISCOMs to expedite the process of finalisation of audited accounts. Submission of audited accounts had also been stressed upon by Hon'ble APTEL. It has given directions setting timelines for their submission. Further, now that MYT regime is going to be in place soon it is very much desirable and necessary to have books of accounts audited in a timely manner.

3.14.20 To pursue the matter with the Petitioner the Commission had convened a hearing on 27th March, 2012, where in it was informed that CAG audited accounts for FY 2008 - 09 and FY 2009 - 10 would be made available by June, 2012 and December, 2012 respectively. Considering this, the Commission, vide its order dated 29th March, 2012, had directed them to file within 15 days the provisional accounts along with the schedules duly certified by a Chartered Accountant for FY 2009 - 10 and FY 2010 - 11. As a result of several to and fro communication between the Commission and the Petitioner regarding clarifications on important data gaps / inconsistencies in the submissions made, provisional accounts for FY 2009 - 10 & FY 2010 - 11 along with the revised data in tariff formats submitted on 15th June, 2012 were considered to be the final set of data superseding all the corresponding data submitted by the Petitioner earlier. The Commission has taken note that the Petitioner has failed to provide the CAG audited accounts for FY 2008 - 09 till date. The Commission, acting in the best interest of the power sector of the State and keeping in mind the interest of all stakeholders, has initiated the tariff proceedings. The Commission reiterates that the required course correction with data based on audited accounts can be carried out as and when true - up exercise is taken up for the respective years.

3.15 GENERAL COMMENTS ON TARIFF

A) Comments / Suggestions of the Public:

3.15.1 The comments / suggestions submitted by S/Shri R. K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, Navneet Kharbanda, Director, Rainbow Boards Mills (P) Ltd. Saharanpur, Rajendra Kumar Jain, Secretary, Western Chambers of Commerce & Industry, Rakesh Goyal, Secretary, State Committee, Akhil Bhartiya Matadhikari Sangh, Vishnu Bhagwan Agarwal, Chairman Electricity Cell, Sri Awadhesh Kumar Verma, President UP Rajya Vidyut Upbhokta Parishad, Lucknow, Vijay Acharya, Consumer Protection Council, Lucknow, A.K. Gouda, for M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad, Satish Goel, Muzaffarnagar and Industrial Area Manufactures Association (Regd.) Ghaziabad, Mahendra Swaroop, President, Cold Storage Association, Lucknow and Avadhesh Kumar Verma, Chairman, U.P.Rajya vidyut Upbhokta Parishad and Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow, M/s Star Paper Mills Ltd., Saharanpur, National Chamber of Industries & Commerce and M/s Indian Industries Association, Gomti Nagar, Lucknow are as under:

3.15.2 The stakeholders suggested that rebate should be re-introduced to power consumer on the bills paid in time.

3.15.3 One of the stakeholders raised concern regarding power factor rebate, while some stakeholders requested to treat power factor 0.95 equal to 1 and accordingly kWh tariff instead of kVAh be implemented.

3.15.4 The stakeholders requested to reject the ARR proposal as the same is not based on facts and proposed tariff will increase general cost of goods. Utility has not tried to reduce losses hence proposal of tariff be rejected.

3.15.5 The stakeholders requested to be heard before increasing tariff. Some stakeholders requested to grant a 4 weeks time after 23.7.12 to file objectives.

3.15.6 The stakeholders highlighted that the DISCOMs are submitting their ARR without enclosing their audited balance sheets. Further, as per clause 8.3 of National Tariff Policy, the average cost of tariff should be within the range of +/- 20% of the cost of supply but the tariff proposal submitted by the utility is not as per this policy. Therefore they have objected to increase in tariff. The stakeholders resented that under present circumstances, how far it is justified to increase the tariff.

3.15.7 The stakeholders submitted that the load factor rebate should be calculated on the basis of actual supply of electricity as reflected in the MRI report. The condition of minimum load based on per ton capacity of furnace should be reviewed. The ceiling of minimum load requirement of one ton should have been omitted or the said ceiling be reduced from 500KVA – 400KVA. The load factor rebate should be calculated and allowed to the consumers on the basis of actual power supply of electricity and not on imaginary basis.

3.15.8 The stakeholders requested that in order to cope up with the shortage, users should be allowed to import power under open access from outside the State.

3.15.9 The stakeholder submitted that in Agra DISCOM facts about M/s Torrent Power have been concealed. No information about CS - 3 & CS - 4 has been provided.

B) The Petitioner's response:

3.15.10 The Petitioner submitted that as the tariff has already been converted from KWH to KVAH which is most rational and in favor of utility as well as consumer. A penalty below power factor of 0.85 is required to ensure the system remains healthy, as power system would be adversely affected below the power factor of 0.85. The Petitioner further added that kVAh billing is most reasonable and suitable option for utility as well as the consumer. Hence the proposal may not be considered. As far as power factor surcharge is concerned it is only levied when it goes below the permissible limit.

The Petitioner clarified that the ARR and Tariff petition is based on cost of service and the assessment of revenue. For keeping the utility financially sustainable regular revision of tariff is necessary.

3.15.11 The Petitioner clarified that consumer's request for additional time could be considered at the time of hearing. Further, the Petitioner highlighted that the time for submission of objection has been allowed as per the directions of Hon'ble Commission.

3.15.12 The Petitioner stated that the audited balance sheet up to FY 2007 - 08 has been submitted and audited balance sheet for FY 2008 - 09 will be submitted shortly. The proposed tariff is in line with the National Tariff Policy and further clarified that In view of rising cost of power and to ensure quality supply to the consumers, increase in tariff has become necessary.

3.15.13 The Petitioner stated that the load factor rebate is already being given on the basis of slab of consumption and rebates are allowed according to actual consumption.

3.15.14 The Petitioner clarified that users are already allowed to import power from outside under open access.

3.15.15 The Petitioner clarified that Section 61(d) of EA-2003 clearly states that The Appropriate Commission shall safe guarding consumer's interest and at the same time ensure recovery of cost of electricity in a reasonable manner Similarly in the National Tariff Policy in Clause 8.3 it has been mentioned that The Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In Clause 8.3(1) it states that consumers below poverty line, who consume electricity below a certain level, may receive special support through cross subsidy. Clause 8.3(2) says tariff should progressively reflect the cost of supply of electricity and be +/- 20% of average cost of supply. Keeping in view above guiding principles Hon'ble Commission would appreciate that licensee has not proposed any tariff hike during last two years and in for FY 2012 - 13 didn't propose any tariff hike in domestic as well as agriculture consumers, thereby benefiting poor / general public. Tariff hike in other categories have been proposed keeping in mind above mentioned tariff principles and guide lines of Electricity Act, 2003 and the National Tariff Policy. Hence tariff proposals are very much in line with tariff determination principle and do violate any principle.

3.15.16 The Petitioner submitted that CS - 3 & CS - 4 categories wise data for Agra DISCOM of M/s Torrent for FY 2010 - 11 & FY 2011 - 12 has already been submitted to the Hon'ble Commission.

C) The Commission's views:

3.15.17 Load factor for the consumers is to be computed and rebate is to be provided as per the provisions of the tariff order.

3.15.18 The kVAh tariff is essential for all consumers above 25 kW/25 BHP load having static TVM / TOD meters installed at their premises and accordingly with power factor rebate / power factor surcharge for cases covered in kVAh billing has been done away with. The provisions in this regard are amply clear and there is no need to modify the same. As regards the issue of leading power factor, the Commission in the previous Tariff Order (Para 5 of the rate schedule) had mentioned as follows:

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

The same has been retained, with the exception of Railway Traction (HV-3), in this order. The Commission opines the application of power factor surcharge is just and fair. Installation of capacitors help in reduction in power consumption and it is the responsibility of the consumer to install the same. The consumers should be made aware of levy of power factor surcharge and the means to improve power factor. The Commission directs the Petitioner to take initiative to explore the means and ways to achieve the same.

3.16 UNIFORM DISTRIBUTION TARIFF ACROSS THE STATE

A) Comments / Suggestions of the Public:

3.16.1 The comments / suggestions submitted by S/Shri R. K. Jain, Secretary, Western UP Chamber of Commerce & Industry, Meerut, C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, I.K.Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad and Harish Joneja, Secy. Noida Entrepreneurs Assn., Noida are as under:

3.16.2 The stakeholders suggested that the Commission should not allow uniform tariff for all DISCOMs with different consumer mix, ATC losses, recovery and gaps between requirements and expenses

B) The Petitioner's response:

3.16.3 The Petitioner clarified that the Retail Tariff within the State has been kept uniform as per guidelines provided in the Sec 8.4 (2) of the National Tariff Policy issued by Ministry of Power, Government of India.

C) The Commission's views:

3.16.4 The current tariff of consumers justifies the rationalization policy of the Commission and is totally in line with the National Tariff Policy.

Phasing out of subsidy is an ongoing process; however needy customers have to be given subsidy as per the guidelines provided by the Govt. of India. Also uniform tariff and cross subsidy are two different issue altogether. DISCOMs are functioning independently and any Profit / Loss arising due to Tariff hike will be reflected in their financial statements.

3.17 TARIFF FOR DOMESTIC CONSUMERS

A) Comments / Suggestions of the Public:

3.17.1 The comments / suggestions submitted by Shri B.C. Mittal, Senior Citizen and Ruchi's Institute of Creative Arts, New Delhi are as under:

3.17.2 The stakeholders complained about the tariff proposal of domestic consumers and poor quality of supply. One of them stated that he has being made to pay at the rate of Rs. 9.12/unit.

B) The Petitioner's response:

3.17.3 The Petitioner clarified that as far as quality of supply is concerned, Guaranteed Standard of Performance and Level of Compensation to Consumers (Annexure 7.1 of Distribution Code) has already been implemented. Other problems of consumer are related to correction of bills, which are of local nature and are under the purview of the concerned officer in charge.

C) Views of the Commission:

3.17.4 This matter has already been discussed the foregoing paragraphs.

3.18 CROSS-SUBSIDIZATION OF TARIFF AND TARIFF SUBSIDY

A) Comments / Suggestions of the Public:

3.18.1 The comments / suggestion submitted by S/Shri Rajesh Kumar Verma, R. K. Jain, Secretary, Western UP Chamber Of Commerce & Industry, Meerut, C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Indu.strial Area Manufacturers Association, Ghaziabad, I.K.Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Mohd. Maroof, Under Secretary, U.P. Govt, Energy Dept., Satish Goel, Muzaffarnagar Cold Storage Association Uttar

Pradesh, Aishbagh, Lucknow, Mahendra Swaroop, President, Cold Storage Association, Lucknow, Dhanush Vir Singh, General Manager, Benett, Coleman & Co. Ltd., Lucknow, S.B. Agarwal, Secy. Gen., Associated Chambers Of Commerce and Industry of UP, O.P. Rathi, President, Aligarh Udyog Vyapar Pratinidhi Mandal, Lucknow and M/s Indian Industries Association, Gomti Nagar, Lucknow and M/S A2Z Infrastructure Ltd., Gurgaon are as under:

3.18.2 The stakeholders have opposed the cross-subsidization of electricity charges and have submitted that the subsidy to the consumers and cross subsidy between different categories of consumers should be phased out gradually which is in line with the statement of objectives and reasons of Electricity Act, 2003. Further cross subsidization of tariff between DISCOMs should be eliminated. There should be independent tariff formulation for all DISCOMs.

3.18.3 The stakeholders wanted to know whether the Govt. of UP has given any commitment letter for promised subsidy amount which is a requisite as per the ARR Regulations and suggested that the Govt. of UP should bear, from state budget, 100% revenue gap and carrying cost till 31-3-2012 to enable the DISCOMs to work with a clean slate hereafter.

3.18.4 DISCOMs should be made responsible to function in line with the performance parameters One of the stakeholders has raised the concern over claim of higher subsidy from Government by UPPCL against the actual losses instead of the lower losses proposed.

3.18.5 The stakeholders raised the issue that elimination of cross subsidy is not reflected in tariff petition, while some stated that tariff determination should be based on average cost of supply maintaining cross subsidy level as per law.

3.18.6 Under Secretary, Government of UP has forwarded a letter from Scientist, Ministry of New & Renewable Energy, Govt of India wherein concessional tariff has been requested for production units of Poly silicon material, silicon ingots & wafers.

3.18.7 M/s A2Z has referred to a recommendation of an Inter-Ministerial Task Force constituted by the Ministry of Urban Development, Govt. Of India, based on directives of the Hon'ble Supreme Court of India which states that-

"Composter should be supplied electricity and water on the same rates as provided to agriculture sector or at concessional rates, whichever is less."

The firm has informed that since they are engaged in the process of converting solid waste into compost, and also since the Supreme Court has ordered implementation of the recommendations of the Task Force, hence electricity Tariff applicable for their process should be either at par with the agriculture sector, or at concessional rates, whichever less is

3.18.8 Some stakeholders submitted that the newspaper industry in the state should either be treated like agriculture sector, or subsidy should be provided.

B) The Petitioner's response

3.18.9 The Petitioner submitted that the proposed tariff hike in all consumer categories are within +/- 20% of the estimated cost of supply (i.e. Rs. 5.96 per unit). At present no consumer category is subsidizing any other category as the rates proposed are very close to the cost of supply.

3.18.10 The Petitioner submitted that the subsidy is being provided to the needy category of consumers as per section 8.3 of the National Tariff Policy. Also, as stated in the policy, the tariff has been kept uniform across the State. Further, the uniform tariff across the State is in no way cross subsidizing other DISCOMs as they are functioning independently and any Profit / Loss arising due to tariff hike will be reflected in their financial statements. Moreover profit making DISCOMs utilize the additional revenue for improving the quality of service to the consumers. The Government Order (GO) committing subsidy has been received by the DISCOMs and has been submitted to the Hon'ble Commission. Further, the subsidy as per the provisions made have been received and at present no other category is subsidizing any other category. The Petitioner further added that presently subsidy from the Govt. is being claimed on the basis of the cost of supply to all rural feeders in a particular month minus revenue assessed against the unmetered consumers connected on that feeder in the corresponding month at the existing rate.

3.18.11 The Petitioner stated that the tariff proposal has been put up before the Hon'ble Commission and the Commission will take a decision on the cross-subsidy.

3.18.12 The Petitioner stated that at present production units of Poly silicon material, silicon ingots & wafers comes under industrial consumer category (LMV-6 / HV-2). Concessional tariff for composter production units may be considered if Ministry of Non-Conventional & Renewable Energy, Govt. of India agrees to provide proportional subsidy in lieu of concessional tariff.

3.18.13 The Petitioner clarified that the matter of subsidy is decided by the Govt.

C) The Commission's view:

3.18.14 The Commission is of the view that tariff should be rationalized. However, it is also aware of the socio-economic condition of different groups of the population. Therefore, it is of the opinion that there is a need to have a feasible solution that helps the cause of rationalization. **Various RGGVY schemes have already providing free connections to BPL consumers in rural areas. The Commission has ensured that the tariff payable by these consumers is low keeping in mind that they belong to the most disadvantaged sections of the society.** The current tariff for this category of consumers well justifies the rationalization policy of the Commission and is in line with the National Tariff Policy.

Phasing out of subsidy is an ongoing process. However, needy consumers have to be given subsidy as per the guidelines provided by the Govt. of India. Also, uniform tariff and cross subsidy are two different issues altogether.

3.18.15 In accordance with the National Electricity Policy, consumers below poverty line who consume electricity below a specified level may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the commission targets that tariffs are within ± 20 % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy

3.18.16 Concessional tariff may be allowed for composter production units if MNRE provides subsidy to the DISCOMs.

3.19 TARIFF FOR LIFT IRRIGATION WORKS (PUBLIC & PRIVATE TUBE WELLS)

A) Comments / Suggestions of the Public:

3.19.1 The representative of Water Resources Department submitted that the tariff for state tube wells used for providing irrigation facilities for farmers is proposed to be increased from existing Rs. 1000 per BHP per month to Rs. 1200.00 per BHP/month, whereas, UPPCL has not proposed any increase in the existing tariff of unmetered rural, public tube wells which is Rs. 75 per BHP/month. The stakeholder mentioned that there is no rationale in deciding the existing and proposed rates in respect of state and public tube wells and the tariff of Govt. tube wells being 16 times higher than that of private tube wells is not justified.

3.19.2 The stakeholder further stated that energy meters are required to be installed on all state tube wells.

3.19.3 The stakeholder further added that apart from low supply hours the voltage supplied is also low and requested that till the meters are installed, only fixed charges be levied. Also tariff for lift irrigation should not be increased.

3.19.4 Sri Narendra Dev Gupta, Lucknow submitted that for controlling voltage at private tube wells a discount of 15% should be given as incentive.

B) The Petitioner's response:

3.19.5 The Petitioner submitted that the tariff of S.T.W. & Lift irrigation have been increased to offset increase in cost of service during last two years. As far as tariff of PTW is concerned, the Govt. is providing subsidy for PTW whereas no subsidy is being provided for State Tube Wells and Lift Irrigation. Concessional Tariff of STW and Lift Irrigation is only possible when propionate subsidy is provided against the loss of revenue as per section 65 of EA, 2003.

3.19.6 The Petitioner further added that there is already a tariff for metered connection of STW hence the billing will automatically be shifted to metered connection category once meters are installed on STWs.

3.19.7 The Petitioner with respect to low voltage supply has submitted that this shall be dealt by the respective field officers.

3.19.8 The Petitioner stated that the request of stakeholders with respect to incentive is not clear.

C) The Commission's view:

3.19.9 The Commission directs that billing be shifted to metered connection category once meters are installed on STWs.

3.20 TARIFF FOR EDUCATIONAL INSTITUTIONS

A) Comments/Suggestions of the Public:

3.20.1 The comments and suggestions submitted by Shri B.Singh, Executive Director / Principal AAI, CATC, Bamrauli, and IIT - Kanpur are as under:

3.20.2 IIT - Kanpur has submitted that the demand charges for loads of 75kVA and above fed at 33kV at single point have been proposed from Rs. 155/kVA to Rs. 350/kVA, and energy charges from Rs. 3.95 per unit to Rs. 6.30 per unit. It has submitted its objections to this on the following grounds:

- Loads of commercial / private institutions cannot be equated with public institutions.
- IIT - Kanpur is not a profit making institute. It provides education at highly subsidised rates and no fees is charged from SC/ST students. Also, the institute is exempted from income tax, on account of being a charitable institute.
- The budgetary allocation for the institute is approved by the Parliament and the allocation has not increased in the past five years. Any hike in tariff would thus adversely affect their resources.

3.20.3 Executive Director / Principal AAI, CATC stated that they were earlier placed under HV-2 category but later, after their objection, they were placed under HV-1 category and has requested concessional tariff for CATC, Allahabad.

B) The Petitioner's response:

3.20.4 The Petitioner submitted that the utility has not increased any tariff for any category for the last two years. With the increasing cost of electricity and high cost of service (about Rs. 5.96/- unit), increase in tariff has become inevitable. As per provisions of tariff regulation and Tariff Policy, tariff should reflect the cost of service and be fixed at +/- 20% of it. Hon'ble Commission will decide the rates on merit. The proposed tariff is most reasonable in comparison to current cost of service.

C) The Commission's view:

3.20.5 Tariff should reflect the cost of service and be fixed at +/- 20% of it. However, as regard to this particular category, the view taken is detailed while determining the Tariff in this order.

3.20.6 The Commission has approved the tariff of this category keeping in mind the high cost of service. The Commission is of the view that tariff should reflect the cost of service and be fixed at +/- 20% of it. Also the Commission would like to bring the tariff of this category to the level of other states of the country.

3.20.7 However as regard to the particular category the Commission has taken an appropriate view while discussing the Tariff in this order

3.21 TARIFF FOR TAJ TRAPEZIUM ZONE

A) Public Comments / Suggestions:

3.21.1 The comments / suggestions submitted by Dr. Anil Choudhary, Ex – MLA, Agra and Shri Mukesh Chandra, Addl. Commissioner (Administration), Agra are as under:

3.21.2 The stakeholders submitted that the consumers of Taj Trapezium zone under LMV-5 category (PTW) should be charged at par with other PTW connections at the rate of Rs. 75 per BHP. The Govt. is helping the rural consumers by providing subsidy, but the LMV-5 consumers of Taj Trapezium are not benefitted as they have to purchase electricity at a higher cost. In Nov. 2008, UPPCL had found the demands of such consumers justified, and petitioned UPERC also, as per petition No. 1271.

B) The Petitioner's response:

3.21.3 The Petitioner submitted that TTZ area supply is given as per urban schedule hence rural schedule PTW rate is not justified, Subsidy for PTW is meant for all LMV-5 consumers.

C) The Commission's views:

3.21.4 Government is providing subsidy for LMV-5 category but not for LMV-4 and LMV-8 category consumers therefore the tariff for all the three categories cannot be same.

3.21.5 Electricity in Taj Trapezium Zone is supplied as per urban schedule hence rural schedule PTW rate is not justified.

3.22 TARIFF FOR RAILWAYS/ELECTRIC TRACTION/METRO

A) Comments / Suggestions of the Public:

3.22.1 The representative of North Central Railway, Allahabad stated that the spirit of constitution provides that the power tariff for Railways should be reasonable and should not be very different from the actual costs incurred by power supply companies for generation and distribution of power. The representative has referred to a judgment of APTEL in Appeal No. 79 of 2005 which says that Railway being a public utility and is hauling passengers and goods throughout the length and breadth of the country, its plea for reasonable tariff for railway traction needs to be given serious thought.

3.22.2 The representative has further said that UPPCL has not given category wise average cost of supply, and the cost of supply to Railways for traction purpose is lowest in comparison to other consumers. The proposed energy charges are 29 - 30% higher, demand charges are 30 - 39% higher and minimum charges are 29% higher which is not justified.

3.22.3 The representative stated that the energy charges be kept at reasonably low rate for railway traction.

3.22.4 The representatives also mentioned about recording and billing of simultaneous maximum demand created at all 10 nos. traction sub stations in Mugalsarai – Kanpur section of NC Railway. The consumer has prayed that-

Last under line sentence of paragraph 2 of Rate Schedule HV-3 Railway Traction page 264 and reproduced below may be deleted from the tariff order-

"Demand measurement at a particular time will be made on the basis of simultaneous maximum demands recorded in summation kilo volt-ampere meter installed at contiguous substation serviced by same grid consumer."

3.22.5 Delhi Metro (M/s DMRC) has requested to revise their tariff on the basis of proposed power purchase cost of Rs. 4.29/kWh and proposed wheeling charges of Rs. 0.44/kWh. They have also requested to consider integration of maximum demand at 30 minutes cycle, instead of the proposed 15 minute cycle, as being done in Delhi. DMRC has also requested for blocking the leading kVArh component and desired that billing be done taking into account the lagging kVAh component only.

B) The Petitioner's response:

3.22.6 The Petitioner submitted that the tariff has been proposed keeping in mind the provision of Tariff Regulations and Tariff Policy which states that tariff should be near +/-20% of the cost of service.

3.22.7 The Petitioner has submitted that the problem of simultaneous maximum demand recording has already been discussed in the meeting with Railway Officials and action will be taken on the basis of agreed points which will be included in the new agreement for supply of power to the Railways.

3.22.8 The Petitioner submitted that DMRC has requested its tariff as Rs. 4.73 / unit (power purchase cost plus wheeling charges) against Proposed Rate of Rs. 4.80 / unit. Both these rates are very close to each other hence the Commission may consider the proposal on the basis of merit. As far as billing is concerned, it is already being done on the basis of lagging kVArh.

C) The Commission's views:

3.22.9 The Commission has evaluated the submission of the Railways & the Petitioner and the fact that they have signed agreements wherein it has been agreed that billing would be done on the basis of total simultaneous maximum demand. In the wake of the aforesaid agreements the Commission approves simultaneous metering of maximum demand.

3.22.10 As far as reduction of tariff is concerned, after applying load factor rebate, the tariff is reasonable and justified.

3.23 TOD TARIFF

A) Comments / Suggestions of the public:

3.23.1 The comments / suggestions submitted by S/Shri Sudhir Chandra Goyal, Prop. Khatuli Cold Storage and Mahendra Swaroop, President, Cold Storage Association, Lucknow and M/s Indian Industries Association, Gomti Nagar, Lucknow and Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow, are as under:

3.23.2 The stakeholders have raised their concern over proposed TOD rates and apprehend that TOD rates of previous years were wrongly printed as they were not applicable in LMV - 6. Proposed TOD rate will create a lot of problem. The stakeholders expressed resentment on the number hours of supply in case of TOD rates and stated that many cold storages get supply only during peak hours and, with TOD rates being applicable, the cost of supply goes up. Therefore, TOD rates should take care of this.

3.23.3 The stakeholders wanted that the energy charges be kept at reasonably low rate for railway traction.

B) The Petitioner's response:

3.23.4 The Petitioner clarified that concession and penalty for off-peak and peak timings have been proposed keeping in mind system conditions and availability of supply.

3.23.5 The Petitioner submitted that though previously no TOD rates were applicable but now corrigendum to this effect has already been posted on the website of UPPCL. However TOD rates have been proposed in this category in the interest of the utility as well as the consumers keeping in mind availability of supply. The Petitioner clarified that TOD meter already have software to sense and record the duration of supply hours.

C) ***The Commission's views:***

3.23.6 TOD tariff is to balance the consumption between peak and off-peak period as well as to maintain the grid stability. The Commission, in its last order, had revised TOD tariff with an aim to incentivise consumers to optimise their consumption and to stagger their load in accordance to these charges.

3.23.7 The DISCOMs should initiate immediate steps to curb T&D losses in the system and procure more long term power to improve the supply situation so that consumers can balance energy consumption.

3.24 HIGHER VOLTAGE REBATE

A) Comments / Suggestions of the Public:

3.24.1 The comments / suggestions submitted by Shri Mahendra Swaroop, President, Cold Storage Association, Lucknow and Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow, are as under:

3.24.2 The stakeholders have raised their concern regarding consumers who are getting supply at 11kV but metering is being done at 0.4kV. They stated that such consumers should be exempted from 15% surcharge w.e.f. 27.07.2008. Whatever has already been charged on this account should be refunded. Also in case metering is shifted from 11kV/0.4kV then it should be specified as to who will bear the cost.

B) The Petitioner's response:

3.24.3 The Petitioner submitted that metering of almost all consumers having sanctioned load of 50kW and above has been shifted to 11kV and no exemption of surcharge should be admissible.

C) The Commission's view:

3.24.4 Higher voltage consumers are given supply at cheaper rates as compared to those at lower voltages.

3.25 VOLTAGE WISE COST OF SERVICE

A) Comments / Suggestions of the Public:

3.25.1 The comments / suggestion submitted by Sh. S.B. Agarwal, Associated Chambers of Commerce & Industry, Lucknow, Sri N.N. Mishra, President for MGR Industries Association, Ghaziabadin brief are as under:

3.25.2 The stakeholders highlighted that voltage wise cost of service has not been calculated and the report is still awaited.

B) The Petitioner's response:

3.25.3 The Petitioner explained that Voltage wise loss level calculation is being done in two parts at 132kV & above and 66kV & below, Loss level at other voltage will be calculated in future.

C) The Commission's views:

3.25.4 The Commission stresses that DISCOMS speedily act upon the past directives given concerning submissions voltage wise loss level calculation and follow the loss reduction guidelines provided by the Commissions and from time to time must report the T&D loss improvement to the Commission.

3.26 TARIFF REVISION OF LMV and HV CONSUMERS AND MINIMUM CONSUMPTION CHARGES

A) Comments / Suggestions of the Public:

3.26.1 The comments / suggestions submitted by S/Shri Rajesh Kumar Verma, R. K. Jain, Secretary, Western UP Chamber Of Commerce & Industry, Meerut, Lokesh Kumar Agarwal, Mahanagar Adhyaksh, Meerut Unit, UP Udyog Vyapar Pratinidhi Mandal, Arun Kumar Agarwal, Lucknow, Banwari Lal Kanchal, President, UP Udyog Vyapar Pratinidhi Mandal, Lucknow, Ravindra Singh, General Secretary, Laghu Udyog Bharti, Lucknow, Pradeep Mehta, Gen Secy, Noida Entrepreneurs

Association, Noida, Ravi Rajput, Senior GM(Services), Ansal API, Lucknow, Sri C.L. Dheer, President, Industrial Forum, Sahibabad, Ghaziabad, R.K.Chaudhary, President, Ramnagar Industrial Association, Varanasi, Dinesh Goel, President, Indian Industries Association, Bareilly, Anil Gupta, Secretary, Industrial Area Manufacturers Association, Ghaziabad, I.K.Kochhar, President, Bundelkhand Chamber of Commerce & Industry, Jhansi, S.K. Arora, President Ghaziabad Induction Furnace Association, Ghaziabad, Sudhir Chandra Goyal, Prop. Khatuli Cold Storage, Shashi Bhushan Mishra, Sachiv, Upbhokta Sanrakshan Evam Kalyan Samiti, Mathura, Mohan Krishna Kejriwal, Mohan Steels Ltd., Unnao, Vipin Malhan, Chairman, NEA, Noida Enterpreneurs Association, R.C. Mishra, U.P. Steels, Muzaffarnagar, Rama Shankar Gupta, District Deoria, A.K. Gouda, M/S Goyal M.G. Gases Pvt. Ltd., Ghaziabad, Narendra Dev Gupta, Lucknow, Satish Goel, Muzaffarnagar, Purvi Uttar Pradesh Laghu Udyog Mahasangh, Varanasi, Lt. Col. Raja Singh Parihar, Lucknow, Mahendra Swaroop, President, Cold Storage Association, Lucknow, Harish Joneja, Secy. Noida Entrepreneurs Assn., Noida, Dhanush Vir Singh, General Manager, Benett, Coleman & Co. Ltd., Lucknow, K.K. Gupta, President, Varanasi Laghu Udyog Sangh, Varanasi, S.B. Agarwal, Secy. Gen., Associated Chambers Of Commerce And Industry of UP, O.P. Rathi, President, Aligarh Udyog Vyapar Pratinidhi Mandal, Lucknow, S.K. Sharma of Rathi Steels, Vishnu Bhagwan Agarwal, Chairman, Electricity Cell, N.N. Mishra, President for MGR Industries Association, Ghaziabad, P.R.Chaurasia, Mukhya Abhiyanta, Laghu Sinchai, U.P. Lucknow, G.C. Chaturvedi, Former President, Indian Industries Association, Lucknow and Col. Mohan Chandra Papnai, (Retd.), Nagrik Upbhogta Manch, Lucknow and M/s Indian Industries Association, Gomti Nagar, Lucknow, Maha Prabhandak, Jalkar Vibhag, Nagar Nigam, Kanpur, Uttar Pradesh Hotel and Restaurant Association, Hotel Deep Palace, Lucknow, Cold Storage Association Uttar Pradesh, Aishbagh, Lucknow, Varanasi Laghu Udyog Sangh, Varanasi, M/s Star Paper Mills Ltd., Saharanpur and Indian Industries Association, Lucknow, are as under:

3.26.2 The stakeholders have objected to the revision in tariff for LMV-1, LMV-2, LMV-6, LMV-7 and HV-2 category and stated that it is against the statute and Tariff Policy. Citing the poor quality of supply the stakeholders have opposed the abnormal hike in electricity charges and 100% increase in fixed charges. The stakeholder highlighted that no hike has been proposed under rural domestic, weavers under special scheme, rural non - domestic and LMV - 5 consumers. One of the stakeholders has requested that only 10% increase in fixed charges as well as energy charges in LMV - 2, LMV - 6 and HV - 1 category be made. The stakeholder further submitted that the gap between expenditure and revenue earned is constant or increasing inspite of sharp increase in tariff. Fixed / demand charges and energy charges of LMV - 6, HV - 2, HV - 1 and LMV - 2 categories have been increased sharply. The stakeholder informed that the tariff proposed in UP is higher than that applicable in neighbouring states including Rajasthan and has highlighted that proposed increase in commercial category will adversely affect the business community which are already shifting to nearby states due to higher trade taxes and higher cost of power. The industry requires to be provided necessary stimulus rather than an additional burden by way of increase in tariff in a situation where the country's GDP has fallen to 5.3%. The proposed revision is against the intent and object of the UP Industrial and Service Sector Investment Policy - 2004. Some stakeholders requested for inclusion of some other premises into LMV-1(a) & LMV-1(c) category**.** Further, one of the stakeholders mentioned that they have been sanctioned single point load as a "Deemed Franchisee" under LMV-1(3b) category and, being a single point bulk consumer for a 200 MVA load, they have to invest Rs. 300 - 400 crores for electrification of their premises. Since the supply is given at 11kV or higher, the utility saves a lot of money which would otherwise be spent on developing the required infrastructure, maintenance, complaints, bill collection etc., for multi-point load. Therefore, tariff of LMV-1(3b) category should not be increased. However, tariff for LMV-1 category should be increased. M/s U.P. Steels has informed that being a Steel Foundry, they require the services of Induction / Arc furnaces for manufacturing alloy and stainless steel castings for turbines and other applications. Steel sector is already in downfall due to high raw material cost and high employment cost. Some stakeholders objected to the higher tariff proposed for cold storages and suggested that it should not be more than 10% of the existing tariff. Some stakeholders also highlighted that proposed tariff hike shall have a debilitating effect on newspaper publishing houses.

3.26.3 The stakeholders have also proposed withdrawal of minimum charges on all categories and suggested that provision of no minimum charges for HV-1 and HV-2 category should also apply to LMV categories. 60% increase in minimum charges should be waived off. The stakeholders requested that the Small & Medium industries should be spared of minimum charge owing to shortage of power in UP. The stakeholders further submitted that no demand charge should be allowed till there is power shortage in UP or it should be linked with supply hours and further added that if at all fixed and minimum charges are required to be charged then 24 hour supply should be ensured.

3.26.4 One of the stakeholder suggested that the minimum charges adjustment should be carried out on annual basis instead of monthly basis.

3.26.5 The stakeholders requested that the Tariff of LMV - 5 LMV - 8, & HV - 4 be equalized as they are related to agriculture use purpose.

B) The Petitioner's response:

3.26.6 The Petitioner clarified that the proposed energy charge and fixed charge for LMV - 2 & LMV - 6 category consumers lead to average cost of unit which is close to the cost of energy with permissible variation. As far as rural LMV - 1 and LMV - 5 consumers are concerned, Govt. of UP provides subsidy for rural domestic, weavers and LMV - 5 consumers hence the tariff of these categories have been kept low. The Petitioner further submitted that the National Tariff Policy allows tariff to be in the range of +/- 20% of the cost of service which at present is Rs. 5.96 / unit. Hence the tariff proposal has been designed accordingly. The Petitioner added that the increasing power purchase cost and other operational expenses have necessitated the proposed increase in commercial tariff. It is not possible for the utility to sustain at the existing tariff. It is to be noted that the Industries can be promoted only with the help of power sector. Therefore, power sector should be capable of supplying reliable electricity to the industries. The Petitioner further clarified that as the consumer's load is 6700 kVA, it should have been connected on 33 kV line as per existing norms. With this option tariff of the consumer would automatically be reduced.

3.26.7 The Petitioner highlighted that fixed charges / minimum charges are part of tariff and are levied for developing the required infrastructure and to meet the expenses incurred to maintain the supply at all the times. These charges cannot be withdrawn, as they are levied as per provisions of EA 2003. The Petitioner submitted that the minimum charges have been designed to ensure minimum recovery from the consumers considering that they get electricity for about 3 - 4 hours only during the day. The Petitioner added that at the minimum 8 to 10 hours of electricity supply is being given to rural consumers and all other categories of consumers are getting supply for more than the above mentioned duration and this is despite of vast demand-supply gap. Industries are given top priority and scheduled for getting maximum supply but sometimes system condition and availability of power effects the schedule adversely.

3.26.8 The Petitioner submitted that the revenue gap has increased mainly due to increase in power purchase cost. In past two years power purchase cost has increased by 25% (from Rs 2.86 / Unit in FY 2010 - 11 to Rs. 3.58 per unit in FY 2012 - 13). The Petitioner further added that the increase in other fixed charges of the licensee has also contributed in increasing the revenue gap. The Petitioner had not proposed any Tariff hike in FY 2010 - 11 & FY 2011 - 12 due to which revenue gap has increased. So as to recover additional burden of increased cost licensee has proposed tariff hike for FY 2012 - 13.

3.26.9 In respect to minimum charges for small & medium industries the Petitioner has clarified that the minimum consumption guarantee is required where a consumer has to pay every month a certain bill amount which is levied to recover the fixed expenses since the licensee has to incur some expenditure to keep supply always ready for the consumer to the extent of their contract demand. The Petitioner further added that In the tariff order for FY 2002 – 03 the Hon'ble Commission has defined the said charges as below :-

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

It has been further mentioned in the said order that:

"the minimum charges are recovered as licensee keeps in readiness of energy for the consumer to the extent of contracted demand. If the consumer does not avail of it, energy cannot be stored or preserve. The consumer is therefore, required to pay a fixed sum for energy generation/purchase, even if he does not consume electricity at the contractual level. The levy of minimum charges has been upheld legally, and is being used in several states to enable the utility to recover a part of fixed cost. The difference between levy of fixed charges and

minimum charges is that while fixed charges are charged from consumer irrespective of consumption the minimum charges comes into effect only when the bill amount is less than certain prescribed amount. If the minimum charges are not levied than there will be increase in some other charges as the utility has to recover on its prudently incurred cost from consumer."

Therefore these charges are logical and necessary.

3.26.10 The Petitioner stated that since concessional tariff for off season has already been allowed there seems to be no need for annual adjustment of minimum charges.

3.26.11 The Petitioner submitted that for LMV - 5 category the Government is providing subsidy but for other categories subsidy is not provided therefore the tariff for LMV-4, LMV-5 and LMV-8 cannot be the same.

C) The Commission's views :

3.26.12 Minimum consumption charges / Fixed charges / Demand charges:

Fixed / Demand Charge is meant to defray the capital related and other fixed costs. A distribution licensee requires machinery, plant equipment, sub-stations, and transmission lines etc., all of which need a large capital outlay. Laying down the said infrastructure requires funds which are raised either through debt or equity; both of which come at a cost. Further debt funds are to be repaid and equity maintained. In the total cost provision is also to be made for depreciation on machinery, equipment and buildings, plants, machines, sub-stations and lines that have to be maintained. All these activities require large staff and their related cost. These costs are largely fixed in nature and are levied as a part of tariff to recover such costs. The Commission has, only after considering the interest of consumer as well as DISCOM, approved the hike in fixed charges as it reflects cost of supply.

3.26.13 As regards to minimum charges the Commission retains the structure as per the previous Tariff Order.

3.26.14 Consumers opting for seasonal benefit have the flexibility to declare their off season maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh/ kVAh) for such industries during off-season period will be the same as for normal period but without imposition of minimum charges requirement. Further, during the off season the fixed charges shall be levied on the basis of maximum demand recorded by the meter and not on normal billable demand or on percentage contracted demand. The same has been elaborated under the LMV - 6 Rate Schedule.

3.26.15 Under 'Option to migration to HV2 category', consumers under LMV - 1, LMV - 2, LMV – 4 and LMV - 6 with contracted load above 50 kW and getting supply at 11 kV and above voltage shall have an option to migrate to the HV-2 category. Hence, the eligible consumers may opt to avail this benefit.

Revision in tariff

3.26.16 ***Revision in tariff*** :
Since the Government is providing subsidy for LMV - 5 category but not for LMV - 4 and LMV – 8 category of consumers the tariff for all these categories cannot be same.

3.26.17 Rural consumers and weavers are provided subsidy by the Govt. hence it is not appropriate to compare the tariff with these categories.

3.26.18 As regards concessional tariff the Electricity Act, 2003, states that "If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under Section 62, the State Government shall, notwithstanding any direction which may be given under Section 108, pay, in advance and in such manner as may be specified."

3.26.19 The demand charges and energy charges have been increased in consideration of the Electricity Act, 2003 and The National Tariff Policy The demand charges and energy charges have been increased in consideration of the Electricity Act, 2003 and the Tariff Policy.

3.26.20 Rate schedule for HV-2 category would be based on the approval of various costs of the Petitioner.

3.26.21 The proposed tariff for LMV - 7 is most reasonable considering the current cost of service.

3.26.22 The Commission in the last tariff order had specifically brought religious institutions into the ambit of LMV-4(A) i.e. public institution with an intention to provide subsidized tariff to religious institutions. Accordingly, this category of consumers had been clubbed along with the charitable institutions including orphanage etc. providing services free of cost or at the charges / structure of charges not exceeding those in similar Government operated institutions and hence there is no need to modify these provisions.

3.26.23 Tariff for "mobile tower" category cannot be considered at par with the tariff for "BPL" category consumers.

3.26.24 Regarding the issue of resentment of the consumers in respect to increase of tariff and improving efficiency on the part of DISCOMs, the present power situation in the State indicates that the supply is far short of the demand due to poor augmentation in generating capacity and higher T&D losses. The current shortage in fuel supply in the country and increase in fuel prices are also likely to aggravate the situation further. This will definitely have an impact on tariff despite expectations of reasonable efficiency in operating parameters of the Petitioner. The Commission directs the Petitioner to initiate immediate steps to procure more long term power at reasonable rates to mitigate the demand supply gap.

3.27 TARIFF FOR AGRICULTURE, BPL, SMALL AND RURAL CONSUMERS

A) Comments / Suggestions of the Public:

3.27.1 The comments / suggestions submitted by S/Shri Narendra Dev Gupta, Lucknow and Lt. Col. Raja Singh Parihar, Lucknow are as under:

3.27.2 The stakeholders submitted that the farmers should be allowed to consume one kW domestic light and fan load, instead of two times or one-and-a half times of the sanctioned load. Farmers should be allowed interest free payment of their bills. Also discount of one or two bills should be allowed in case they deposit their bill for the whole year in advance.

3.27.3 The stakeholders suggested that the penalty clause to be made effective only when the farmers fail to pay their dues billed on yearly basis. Advance bill should be collected from the farmers with suitable discount incentive.

3.27.4 The stakeholders submitted that in category LMV – 1 (Urban) no tariff hike has been proposed but in previous years 'per connection' rate has been converted to per 'kW' which must be withdrawn. Also the slab for lifeline consumers be increased from 150 units to 200 units per month. Hike in rate for single point bulk load should not be accepted.

3.27.5 Further, they submitted that for LMV-1 (Rural Unmetered) no tariff hike has been proposed but clandestinely per connection rate has been converted to per kW which must be withdrawn. In LMV-2 the proposal for 'per kW' in place of 'per connection' should be turned down and in LMV-5 (PTW) fixed charges of Rs 75 per BHP should be lowered to Rs 50 per BHP as supply hours to this category is very low.

B) The Petitioner's response:

3.27.6 The Petitioner submitted that the provision for having 2 kW load connected against 1 kW sanctioned load is already there in distribution code which is appropriate and also interest is not charged on timely payment.

3.27.7 The Petitioner clarified that the utility has to pay for input cost on monthly basis hence recovery on yearly basis is not justified and suggestion related to advance billing may be considered by the Hon'ble Commission.

3.27.8 The Petitioner submitted that the stakeholders' request for changing per connection with per KW rate were not part of tariff petition. However utilities are not pressing for the same; The applicable tariff slab for economically weaker sections of the consumers has been fixed keeping in mind the minimum requirement of power for this category of consumers as well as the availability of power for all other categories. Domestic consumers covered under other categories are generally well off and capable of paying higher tariff rates which have been proposed matching with average cost of supply rate;

3.27.9 The tariff of LMV - 5 categories is kept low keeping in mind the consumption of electricity in this category is for agriculture purposes. No tariff hike has been proposed for this category though licensee is incurring heavy loss in this category. Government is providing only Rs. 240.00 Crores for PTW whereas it is estimated that in FY 2012 - 13 the licensee may incur Rs. 2944.00 Crores loss in supplying power to this category of consumers. So there is no justification to lower the existing tariff.

C) Views of the Commission:

3.27.10 There is a provision in the Distribution Code which provides for having 2 kW load connected against 1 kW sanctioned load.

3.27.11 Since interest is never charged on timely payment the consumers should not be concerned about it. Considering the cost of supply of electricity and the poor financial health of the DISCOM further discount is not possible at this point of time.

3.27.12 Since the utility has to pay for input cost on monthly basis the present arrangement of collection on monthly basis is appropriate

3.27.13 Even though the farmers play an very important role in shaping the agriculture sector, the burden of subsidy is too much to bear for the DISCOM. Hence there is no merit in reducing the fixed charge at this point of time

3.28 TARIFF FOR ADVERTISING / SIGN POSTS / SIGN BOARDS / GLOBE SIGN / FLEX:

A) Public Comments / Suggestions:

3.28.1 The comments / suggestions submitted by Atul Advertising, Lucknow, KVS Enterprises, Lucknow, Sh. Sainath, Media Solutions, Lucknow, Outdoors Advertising Agency Association, Lucknow, Shobha Publicity, Lucknow, Results advertising and marketing Association, Lucknow Synergy Advertising, Lucknow are as under:

3.28.2 The stakeholders have raised their objections against the proposed tariff for advertisement boards

B) The Petitioner's response:

3.28.3 The Petitioner clarified that this category is generally applicable for the higher income group hence rates have been kept slightly on higher side as they are capable of affording the cross subsidy burden of other relatively lower income group of consumers.

C) The Commission's view:

3.28.4 The Commission has decided this matter in accordance to current cost of service and practices followed elsewhere.

3.29 TARIFF FOR MILITARY ESTABLISHMENTS

A) Public Comments/Suggestions:

3.29.1 The comments / objections submitted by S/Sri. H.K.Gupta, EE, Garrison Engineer (West), MES, Allahabad and A.S. Anand, AE (Civil), BKT, MES are as under:

3.29.2 The stakeholders requested for separate reduced tariff category for Military Establishment (MES) considering nature of utilization instead of proposed LMV – 1 - 3(b), LMV - 4A (d) rate schedule. They requested for withdrawal of protective load charges and further stated that MES is drawing power for military purposes such as Military Hospitals, Training Facility for troops, Barracks etc. and hence should not be treated as commercial load. They also requested for a separate tariff as applicable to a "Deemed Licensee".

B) The Petitioner's response:

3.29.3 The Petitioner clarified that there Is no requirement to form a separate category as load under this category is generally a mixed load and as a single point supply the proposed tariff is justified vis – a – vis the current cost of service. Further, the proposed tariff of Rs. 50/kW/month & Rs. 4.15/kWh in LMV – 1 - 2(b), Rs. 150/kW/month and Rs. 6.50/kWh in LMV - 4A (d) is applicable to them against the estimated average cost of service of Rs. 5.96/kWh. MES load is generally mixed load hence the combined average tariff under LMV - 1 & LMV - 4A is very close to the cost of service. Hence there is no merit in considering reduced tariff proposal for this category.

C) The Commission's views:

3.29.4 The Commission has taken an appropriate view while determining the tariff for this category.

3.30 TARIFF FOR TELECOM TOWERS

A) Public Comments/Suggestions:

3.30.1 The comments/objections submitted by M/s Indus Towers Ltd. are as under:

3.30.2 The stakeholder has requested that tariff for mobile towers be equal to Rs. 1.90/kWh as applicable in case of Life Line consumers due to the fact that services given by these towers are of essential nature and mostly located in rural areas.

B) The Petitioner's response:

3.30.3 The Petitioner clarified that the activity of consumers under this category is commercial in nature and so tariff applicable to these categories is justified and hence request of the stakeholder need not be considered.

C) Views of the Commission:

3.30.4 The tariff for "mobile tower" category cannot be considered at par with the tariff for "Life Line" category of consumers.

3.31 LIST OF ATTENDEES:

3.31.1 The list of individuals and organisations who have submitted their objections / suggestions / comments on the ARR & Tariff petition in writing & in oral are given in ANNEXURE 12.5.

3.32 STATE ADVISORY COMMITTEE MEETING:

The 13th Meeting of the State Advisory Committee (SAC) was held on 09.08.2012 to apprise the SAC members regarding the salient features of the tariff proposal of the Licensees and seek their comments / suggestions. The activities undertaken by the Commission during the year gone by were also placed before the SAC.

The various suggestions on the ARR / Tariff petitions of the Licensees received from the members and other matters discussed during the SAC meeting are as under;

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a) In the matter of ARR / Tariff proposals filed by the Licencees for Retail / BST Tariff for the FY 2010 - 11, 2011 - 12, 2012 – 13, Shri Rajeev Goel, Sr. Manager, NPCL and Shri Manoj Jain, NPCL suggested that a system of surcharge could be introduced to compensate the licensee for the changes in financial parameters / values for the retrospective period with respect to the provisional submissions made. They also requested that measures inbuilt in tariff be taken to curb the negative effects of unauthorized use of electricity under section 126 due to change in use, when the tariff category remains same, since there is no loss to the DISCOM on account of tariff.

b) Regarding the authenticity of the ARRs and the consequent need to increase the tariff, Shri Avadhesh Kumar Verma, President UPRVUP suggested that the Commission should direct the DISCOMs to submit the category wise actual supply hours and validate the ARR based on the revised plan. Revenue Gap should be realized by recovering the Govt. and non-Govt. dues totalling approximately Rs 26,000.00 crores and thereafter from the Govt. subsidy based on the actual revenue estimates of the unmetered segment. Further, he suggested that realistic consumption of all un-metered connections should be assessed and, in future, only metered connections be provided to such consumers. Accordingly, DISCOMs are directed to submit their metering plan.

c) Shri Rathi, Chairman, ASSOCHAM suggested that a pragmatic view balancing the cost- economic factors should be taken by the Commission before increasing the tariff of industrial segment of consumers. Cross subsidization levels should be brought down to help the industry to prosper. He suggested that issue of Revenue Gap should be addressed by realization of full dues from the Government consumers and increasing the subsidization on realistic basis from the PTW / rural domestic and other unmetered consumers as discussed earlier.

d) Magsaysay Award winner, Shri Sandeep Pandey suggested that metering the subsidized categories is essential to get a clear picture of the actual subsidy required. Subsidy provisions should be budgetary, and likewise the Govt. bodies should also plan their payments to the DISCOMs in their budgets.

e) Prof Anoop Singh, IIT-Kanpur, suggested that to encourage open access the cross subsidy should not increase any further and the SLDCs need to be made independent to ensure successful implementation of open access.

f) Further, on the question of surrendering of trading license, one of the members suggested that a mechanism should be made so that surrendering of a trading license should be made possible after a specified "lock in period".

g) As regards to mitigating equipment failures, especially the frequent burnouts / failures of transformers it was stressed that procurement should be done only from reputed firms, and only 3 - star or 4 - star rated transformers / equipments should be purchased. Also the system of blacklisting the firms supplying poor quality transformers / equipments should be strictly adhered to. Shri Avadhesh Kumar Verma, President, UPRVPUP and Shri B.K.Parashar, Special Correspondent, Hindustan Times, suggested that the failure rate of transformers can be assessed only if DISCOMs are asked to submit the last two years data on the total number of transformers procured, total that failed during this period, and total that failed during their guarantee period.

h) On the matter of loss of life due to high voltages and improper earthing in the residential lines Shri Avadhesh Kumar Verma, President UPRVUP suggested that the DISCOMs should appoint nodal officers for checking the safety norms in order to prevent electrical accidents in public places and residential colonies. Further Shri Anoop Singh, IIT-K suggested that the system of Asset Coding / Bar Coding / Repair History be evolved and followed by the DISCOMs for proper monitoring of the transformers / equipments.

The above suggestions / observations have been taken into consideration by the Commission while finalising this tariff order.

4 ANALYSIS OF ARR FOR FY 2010 - 11

4.1 CONSUMPTION PARAMETERS (CONSUMER NUMBERS, CONNECTED LOAD, SALES)

4.1.1 The Petitioner's Submission:

For FY 2010 - 11, the Petitioner has provided the figures for energy sales, number of consumers and connected load as per provisional accounts. The table below summarises the numbers submitted by the Petitioner:

Table 4-1: CONSUMPTION SUBMITTED BY PETITIONER FOR FY 2010 - 11

Consumer categories	No. of consumers (Actual unaudited)	Connected load in kW (Actual unaudited)	Energy sales in MU (Actual unaudited)
LMV-1: Domestic	2,614,723	5,537,533	4,745
LMV-2:Non-Domestic	320,217	817,830	848
LMV-3: Public Lamps	768	40,833	137
LMV-4: Institutions	11,482	75,076	187
LMV-5: Private Tube Wells	342,690	1,854,442	1,958
LMV 6: Small and Medium Power	44,779	549,121	796
LMV-7: Public Water Works	2,299	69,419	217
LMV-8: State Tube Wells	4,539	59,755	195
LMV-9: Temporary Supply	2,418	59,991	40
LMV-10: Departmental Employees	20,625	68,033	91
HV-1: Non-Industrial Bulk Loads	1,172	432,913	565
HV-2: Large and Heavy Power	3,918	1,618,315	4,476
HV-3: Railway Traction	2	9,000	23
HV-4: Lift Irrigation	2	311	0
Sub-total	**3,369,634**	**11,192,572**	**14,278**
Extra state & Bulk	-	-	-
Total	**3,369,634**	**11,192,572**	**14,278**

4.1.2 The Commission's Analysis:

The Commission observes that the figures submitted by Petitioner for FY 2010 - 11 are as per Petitioner's provisional accounts. In accordance with the Distribution Tariff Regulations the ARR petition for FY 2011 - 12 has to be filed along with the audited accounts for the previous year. The said provision has not been compiled by the Petitioner.

In the absence of final audited numbers for FY 2010 - 11 and to avoid mounting costs due to delay, the Commission has considered the submission made as per Petitioner's Provisional Accounts. The Commission thus approves the consumption figures for FY 2010 - 11 as shown in Table 4-2, Table 4-3 and Table 4-4 below:

Table 4-2: NUMBER OF CONSUMERS APPROVED BY COMMISSION FOR FY 2010 - 11

Consumer categories	No. of consumers	
	(Actual unaudited)	(Approved by Commission)
LMV-1: Domestic	2,614,723	2,614,723
LMV-2:Non-Domestic	320,217	320,217
LMV-3: Public Lamps	768	768
LMV-4: Institutions	11,482	11,482
LMV-5: Private Tube Wells	342,690	342,690
LMV 6: Small and Medium Power	44,779	44,779
LMV-7: Public Water Works	2,299	2,299
LMV-8: State Tube Wells	4,539	4,539
LMV-9: Temporary Supply	2,418	2,418
LMV-10: Departmental Employees	20,625	20,625
HV-1: Non-Industrial Bulk Loads	1,172	1,172
HV-2: Large and Heavy Power	3,918	3,918
HV-3: Railway Traction	2	2
HV-4: Lift Irrigation	2	2
Sub-total	**3,369,634**	**3,369,634**
Extra state & Bulk	-	-
Total	**3,369,634**	**3,369,634**

Table 4-3: CONNECTED LOAD APPROVED BY COMMISSION FOR FY 2010 - 11

Consumer categories	Connected load (kW)	
	(Actual unaudited)	(Approved by Commission)
LMV-1: Domestic	5,537,533	5,537,533
LMV-2:Non-Domestic	817,830	817,830
LMV-3: Public Lamps	40,833	40,833
LMV-4: Institutions	75,076	75,076
LMV-5: Private Tube Wells	1,854,442	1,854,442
LMV 6: Small and Medium Power	549,121	549,121
LMV-7: Public Water Works	69,419	69,419
LMV-8: State Tube Wells	59,755	59,755
LMV-9: Temporary Supply	59,991	59,991
LMV-10: Departmental Employees	68,033	68,033
HV-1: Non-Industrial Bulk Loads	432,913	432,913
HV-2: Large and Heavy Power	1,618,315	1,618,315
HV-3: Railway Traction	9,000	9,000
HV-4: Lift Irrigation	311	311
Sub-total	**11,192,572**	**11,192,572**
Extra state & Bulk	-	-
Total	**11,192,572**	**11,192,572**

Table 4-4: ENERGY SALES APPROVED BY COMMISSION FOR FY 2010 - 11

Consumer categories	Energy sales (MU)	
	(Actual unaudited)	(Approved by Commission)
LMV-1: Domestic	4,745	4,745
LMV-2:Non-Domestic	848	848
LMV-3: Public Lamps	137	137
LMV-4: Institutions	187	187
LMV-5: Private Tube Wells	1,958	1,958
LMV 6: Small and Medium Power	796	796
LMV-7: Public Water Works	217	217
LMV-8: State Tube Wells	195	195
LMV-9: Temporary Supply	40	40
LMV-10: Departmental Employees	91	91
HV-1: Non-Industrial Bulk Loads	565	565
HV-2: Large and Heavy Power	4,476	4,476
HV-3: Railway Traction	23	23
HV-4: Lift Irrigation	0	0
Sub-total	**14,278**	**14,278**
Extra state & Bulk	-	-
Total	**14,278**	**14,278**

4.2 DISTRIBUTION LOSSES AND ENERGY BALANCE

4.2.1 The Petitioner's Submission:

The Distribution licensee has submitted a distribution loss of 27.27% for FY 2010 - 11. The intra-state & inter-state transmission losses submitted by the licensee for FY 2010 - 11 are 3.25% and 1.72% respectively. The aggregate loss (T&D) as submitted by the licensee works out to 30.85% for FY 2010 - 11.

4.2.2 The Commission's Analysis:

The Commission in its previous order has approved the Distribution losses of 24% for the FY 2009 - 10 as against the target of the 24.31% proposed by the Petitioner. The levels of loss achieved by the Petitioner in FY 2010 - 11 are much higher than the 24% distribution loss level approved by the Commission for FY 2009 - 10. The Commission feels there is ample room for reduction in distribution losses, however the licensee has failed to act upon the same.

The Commission in its last tariff order had directed the Petitioner 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 the said tariff order. Further the Petitioner was also directed the licensee to keep the Commission abreast regarding the study to be undertaken, scope of work, methodology being adopted, whether the study is being undertaken departmentally or assistance of experts in the field is being availed etc.

However no such study was carried out and no report was submitted for perusal of the Commission. In its latest submission the licensee has provided a distribution loss reduction trajectory (refer table give below). The Commission would like to reiterate that the distribution loss proposal of the licensees should be based on correct energy audit data and supported by a report on the study carried out on such data. The Commission directs the licensee to submit a detailed report explaining the data source, the scope of work, methodology adopted in arriving at distribution loss reduction trajectory. Further, Commission views it very important to install meters at all the interface points as well as the distribution transformers and feeders. The Commission directs the licensee to report the status of the metering at the above mentioned interfaces. The Commission would like to mention here that non-compliance of the above shall be treated seriously.

Table 4-5: DISTRIBUTION LOSS REDUCTION TRAJECTORY – PETITIONER

Particulars	Base Year FY 2010 - 11	FY 2011 - 12	FY 2012 - 13	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Loss	26.11%	24.41%	22.60%	21.00%	20.00%	19.00%

As the target for distribution loss achievement for FY 2010 - 11 were not specified by the Commission and the year in contention has already elapsed, the Commission accepts the distribution loss as claimed by the Petitioner. The Petitioner's submission and Commission's approved energy balance for FY 2010 - 11 is given in Table 4-6 below:

Table 4-6: ENERGY BALANCE FOR FY 2010 - 11

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Retail Sales (MU)	14,283	14,283
Distribution Losses (% of Energy Received)	27.27%	27.27%
Energy at Discom Periphery for Retail Sales (MU)	19,640	19,640
Intra -state Transmission losses %	3.25%	3.25%
Energy Available at State periphery for Transmission(MU)	20,299	20,299
Periphery Loss (Upto inter connection Point) (%)	1.72%	1.72%
Purchases Required & Billed Energy (MU)	20,655	20,655
Total Inter & Intra State Transmission Losses(%)	4.92%	4.92%
Total T&D Losses in Retail Sales	30.85%	30.85%

4.3 ENERGY AVAILABILITY

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

The Petitioner 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.

The UPPCL has drawn a merit dispatch order schedule and procured 65,271 MUs of power for FY 2010 - 11.

The Commission observes that FY 2010 - 11 has already elapsed and the figures submitted by UPPCL are actual for the year. Since the audited financial accounts of the Petitioner for the FY 2010 - 11 are yet to be finalized; the Commission has relied on data as per the provisional accounts.

Since, the power purchase expense is the single largest component in the ARR of a distribution licensee; it becomes imperative that this element of cost is incurred with utmost care based on the most efficient way of power procurement from the generating stations through long term / short term power purchase arrangements or through bilateral power purchase agreements. Power Purchase cost being un-controllable component of the ARR the Commission plans to true-up the power purchase cost to actual cost on submission of audited accounts.

4.4 POWER PROCUREMENT FROM STATE GENERATING STATIONS

4.4.1 The Petitioner's Submission:

The State of Uttar Pradesh has got both thermal as well as hydro generating stations. Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) owns all the thermal generating stations within the State and the Hydro Stations are owned by Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL). The Multi Year Tariff (MYT) orders issued by the Commission for UPRVUNL and UPJVNL for their respective power stations for FY 2009 - 10 to 2013-14 form the basis for determining the costs for FY 2010 - 11.

The Petitioner in its petition prepared based on Provisional Accounts submits that cost of power procurement for FY 2010 - 11 from State Thermal and Hydro generating stations has been done on actual basis and the cost of energy available from these stations has been derived from tariffs approved by the State Commission. Petitioner's submission of power purchased from State Thermal and Hydro Generating Stations for FY 2010 - 11 is given in Table 4-7 and Table 4-8 below:

Table 4-7: DETAILS OF POWER PURCHASE COST FROM UPRUVNL STATIONS FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A		3713		-		-	-	659.12	1.78
Anpara B		7087		-		-	-	1521.94	2.15
Harduagunj		450		-		-	-	264.10	5.87
Obra A		1039		-		-	-	305.08	2.94
Obra B		2900		-		-	-	806.44	2.78
Panki		898		-		-	-	350.27	3.90
Parichha		646		-		-	-	244.99	3.79
Parichha Extn.		2185		-		-	-	807.73	3.70
Parichha Extn. Stage II (2X250MW)		0		-		-	-	0.00	-
Harduaganj Ext. (2X250MW)		0		-		-	-	0.00	-
Total	**0**	**18916**		**-**		**-**		**4959.66**	**2.62**

Table 4-8: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FY 2010 - 11- PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara		254		-		-	-	32.30	1.27
Matatila		63		-		-	-	3.69	0.59
Obra (Hydel)		82		-		-	-	2.96	0.36
Rihand		142		-		-	-	4.11	0.29
UGC Power Stations		37		-		-	-	6.24	1.67
Belka & Babail		0		-		-	-	-	-
Sheetla		2		-		-	-	0.69	3.08
Total		**580**		**-**		**-**		**49.99**	**0.86**

4.4.2 The Commission's Analysis:

The Commission has observed that the Petitioner failed to provide the bifurcation of fixed and variable costs of power procured, further no corroborative report is available from state load dispatch centre to verify the actual units and cost power procured by UPPCL. With these constrains the Commission is hindered of making any kind of prudence check of the power purchases from State owned generating stations. The

Commission strongly opines that power should be procured on least cost basis and as per merit order principle. Faced with constrains and taking cognizance of the fact that power purchase constitutes un-controllable component of the ARR the Commission approves power purchases form State Thermal and Hydro generating stations on the basis of assumptions given in Table 4-9 below. Commission reiterates that it will have a serious review and consideration into these costs during true-up exercise for FY 2010 - 11 based on audited accounts.

Table 4-9: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL and UPJVNL - FY 2010 - 11

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	1. Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. 2. Thereafter, Merit Order Despatch is run for approval of quantum.
2	**Fixed & Variable Charges**	1. As provided in ARR / Tarif petition by UPPCL for FY 2012-13

Based on above approach, the summary of approved costs of UPRVUNL Thermal generating stations and UPJVNL Hydro generating stations is given in Table 4-10 and Table 4-11 below:

Table 4-10: APPROVED COST OF POWER PURCHASE FROM UPRUVNL STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A		3713		-		-	-	659.12	1.78
Anpara B		7087		-		-	-	1521.94	2.15
Harduagunj		450		-		-	-	264.10	5.87
Obra A		1039		-		-	-	305.08	2.94
Obra B		2900		-		-	-	806.44	2.78
Panki		898		-		-	-	350.27	3.90
Parichha		646		-		-	-	244.99	3.79
Parichha Extn.		2185		-		-	-	807.73	3.70
Parichha Extn. Stage II (2X250MW)		0		-		-	-	0.00	-
Harduaganj Ext. (2X250MW)		0		-		-	-	0.00	-
Total	**0**	**18916**		**-**		**-**		**4959.66**	**2.62**

Table 4-11: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara		254		-		-	-	32.30	1.27
Matatila		63		-		-	-	3.69	0.59
Obra (Hydel)		82		-		-	-	2.96	0.36
Rihand		142		-		-	-	4.11	0.29
UGC Power Stations		37		-		-	-	6.24	1.67
Belka & Babail		0		-		-	-	-	-
Sheetla		2		-		-	-	0.69	3.08
Total		**580**		**-**		**-**		**49.99**	**0.86**

4.5 CAPACITY ALLOCATION FROM CENTRAL GENERATING STATIONS & OTHER STATIONS

4.5.1 The Petitioner's Submission:

Petitioner procures power from Central Generating Stations (CGS) includes power from NTPC, NHPC, NPCIL as well as from generating station with Joint Ventures and IPP's. The Petitioner in its petition prepared based on Provisional Accounts has submitted that cost of power procurement for FY 2010 - 11 from these sources been done on actual basis. The Petitioner has mentioned that the cost of energy from Central Sector Station has been derived from tariffs approved by Central Electricity Regulatory Commission. The cost of power purchase from Independent Power Producers (IPPs) within the State has been determined in accordance with UPERC (Terms and Conditions of Generation Tariff) Regulations. Similarly the cost of power purchase from IPPs outside the State has been derived from tariffs and power purchase agreement approved by the Commission. The cost of energy from other sources has been derived from the power purchase / banking / trading agreements and tariffs approved by the Commission.

4.5.2 The Commission's Analysis:

The Commission has carried out prudence check of the quantum of power purchased by the Petitioner from central generating stations owned by NTPC, NHPC and NPCIL as well as from station Nathpa Jhakri HPS, Tala Power and Vishnu Prayag which come under IPPs / JV. The prudence check has been done by cross verifying statistical publication made by NRPC and ERPC in their respective monthly energy accounting report. The commission has observed the units submitted by Petitioner tally with those published by NRPC and ERPC. The Commission in the absence of the audited accounts have relied on the provisional accounts for the cost element.

4.5.3 The Petitioner's Submission:

The Petitioner's submission of power purchased from NTPC generating stations for FY 2010 - 11 is provided in Table 4-12 given below:

Table 4-12: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta		779		-		-	-	248.82	3.19
Auriya		1753		-		-	-	559.17	3.19
Dadri Thermal		672		-		-	-	206.57	3.07
Dadri Gas		1972		-		-	-	616.58	3.13
Dadri Extension		587		-		-	-	204.77	3.49
Rihand-I		2796		-		-	-	514.60	1.84
Rihand-II		2901		-		-	-	614.30	2.12
Singrauli		6872		-		-	-	1,240.63	1.81
Tanda		3140		-		-	-	872.40	2.78
Unchahar-I		2030		-		-	-	495.84	2.44
Unchahar-II		1215		-		-	-	305.17	2.51
Unchahar-III		566		-		-	-	171.35	3.03
Farakka		235		-		-	-	77.94	3.32
Kahalgaon St. I		455		-		-	-	126.52	2.78
Talchar		0		-		-	-	-	-
Kahalgaon St.II Ph.I		1402		-		-	-	472.75	3.37
Koldam (Hydro)		0		-		-	-	-	-
Rihand-III		0		-		-	-	-	-
Total	**0**	**27374**		**-**		**-**		**6,727.41**	**2.46**

4.5.4 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NTPC generating stations is given in Table 4-13 below:

Table 4-13: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC - FY 2010 - 11

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. The same is cross verified with Regional Energy Accounting Report and Annual Report of NRPC and ERPC. Further the quantum approved as per Merit Order Despatch Principles.
2	**Fixed Charges**	Fixed charges are computed after considering UP state's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and ERPC and fixed cost approved by as per CERC order for respective power plants.
3	**Variable Charges**	Due to paucity of information on variable cost of various plants, the variable cost is calculated after subtracting fixed charges as computed above from the total cost as provided by UPPCL in ARR / Tariff petition for FY 2012-13.

Based on above approach, the summary of approved costs of NTPC generating stations is given in Table 4-14 below:

Table 4-14: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	419	779	0.69	53.97	2.50	195.03	3.20	249.00	3.20
Auriya	663	1753	0.44	77.24	2.85	499.76	3.29	577.00	3.29
Dadri Thermal	840	672	0.80	53.69	2.24	150.31	3.04	204.00	3.04
Dadri Gas	830	1972	0.47	93.48	2.81	553.52	3.28	647.00	3.28
Dadri Extension	980	587	3.24	190.00	0.22	13.00	3.46	203.00	3.46
Rihand-I	1000	2796	0.72	202.13	1.23	343.87	1.95	546.00	1.95
Rihand-II	1000	2901	0.86	248.45	1.36	394.55	2.22	643.00	2.22
Singrauli	2000	6872	0.44	300.05	1.32	904.95	1.75	1,205.00	1.75
Tanda	440	3140	0.98	306.43	1.86	584.57	2.84	891.00	2.84
Unchahar-I	420	2030	0.81	164.49	1.77	358.51	2.58	523.00	2.58
Unchahar-II	420	1215	0.96	116.98	1.69	205.02	2.65	322.00	2.65
Unchahar-III	210	566	1.35	76.26	1.67	94.74	3.02	171.00	3.02
Farakka	1600	235	-	-	-	-	-	-	-
Kahalgaon St. I	840	455	0.79	35.93	3.85	175.07	4.64	211.00	4.64
Talchar	1000	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	1000	1402	0.84	117.22	2.35	328.78	3.18	446.00	3.18
Koldam (Hydro)	800	0	-	-	-	-	-	-	-
Rihand-III	0	0	-	-	-	-	-	-	-
Total	**14463**	**27374**		**2,036.31**		**4,801.69**		**6,838.00**	**2.50**

4.5.5 The Petitioner's Submission:

The Petitioner's submission of power purchased from NHPC generating stations for FY 2010 - 11 is provided in Table 4-15 below:

Table 4-15: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera		488		-		-	-	65.11	1.33
Chamera-II		395		-		-	-	121.43	3.07
Chamera-III		0		-		-	-	-	-
Dhauliganga		288		-		-	-	57.75	2.00
Salal I&II		225		-		-	-	16.22	0.72
Tanakpur		82		-		-	-	18.24	2.22
Uri		607		-		-	-	89.41	1.47
Dulhasti		605		-		-	-	304.82	5.04
Sewa-II		96		-		-	-	47.57	4.93
Uri-II		0		-		-	-	-	-
Parbati ST-III		0		-		-	-	-	-
Total		**2788**		**-**		**-**		**720.53**	**2.58**

4.5.6 The The Commission Analysis:

The assumptions considered by Commission while approving the power purchase from the NHPC generating stations is given in Table 4-16 below:

Table 4-16: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FY 2010 - 11

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. The same is cross verified with Regional Energy Accounting Report and Annual Report of NRPC and are considered must -run in Merit Order Despatch Principles.
2	**Fixed Charges**	Fixed charges are computed after considering UP state's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and fixed cost approved by as per CERC order for respective power plants.
3	**Variable Charges**	Due to paucity of information on variable cost of various plants, the variable cost is calculated after subtracting fixed charges as computed above from the total cost as provided by UPPCL in ARR / Tariff petition for FY 2012-13

Based on above approach, the summary of approved costs of NHPC generating stations is given in Table 4-17 below:

Table 4-17: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera	540	488	0.57	27.82	1.05	51.10	1.62	78.92	1.62
Chamera-II	300	395	1.30	51.19	1.45	57.08	2.74	108.27	2.74
Chamera-III	0	0	-	-	-	-	-	-	-
Dhauliganga	280	288	1.31	37.87	0.76	21.96	2.07	59.83	2.07
Salal I&II	690	225	0.36	8.16	0.36	8.06	0.72	16.22	0.72
Tanakpur	94	82	1.31	10.78	0.11	0.87	1.41	11.65	1.41
Uri	480	607	0.73	44.46	0.74	44.95	1.47	89.41	1.47
Dulhasti	390	605	2.33	141.13	2.24	135.41	4.57	276.54	4.57
Sewa-II	120	96	3.24	31.22	3.53	34.02	6.76	65.24	6.76
Uri-II	240	0	-	-	-	-	-	-	-
Parbati ST-III	520	0	-	-	-	-	-	-	-
Total	**3654**	**2788**		**352.63**		**353.45**		**706.08**	**2.53**

4.5.7 The Petitioner's Submission:

The Petitioner's submission of power purchased from NPCIL generating stations for FY 2010 - 11 is provided in Table 4-18 below:

Table 4-18: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP		595		-		-	-	121.60	2.05
RAPP #3&4		541		-		-	-	114.19	2.11
RAPP#5&6		670		-		-	-	202.65	3.02
Total		**1806**						**438.43**	**2.43**

4.5.8 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NPCIL generating stations is given in Table 4-19 below:

Table 4-19: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL - FY 2010 - 11

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. The same is cross verified with Regional Energy Accounting Report and Annual Report of NRPC and are considered must -run in Merit Order Despatch Principles.
2	**Tariff (Single part)**	As provided in ARR / Tariff petition by UPPCL for FY 2012-13.

Based on above approach, the summary of approved costs of NPCIL generating stations is given in Table 4-20 below:

Table 4-20: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP	440	595		-	2.05	121.60	2.05	121.60	2.05
RAPP #3&4	440	541		-	2.11	114.19	2.11	114.19	2.11
RAPP#5&6	440	670		-	3.02	202.65	3.02	202.65	3.02
Total	**1320**	**1806**				**438.43**		**438.43**	**2.43**

4.5.9 The Petitioner's Submission:

The Petitioner's submission of power purchased from IPP's and Joint Ventures (JV's) for FY 2010 - 11 is provided in Table 4-21 given below:

Table 4-21: DETAILS OF POWER PURCHASE COST FROM IPPS / JVs FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri HPS		1312		-		-	-	343.48	2.62
VishnuPrayag		1757		-		-	-	442.09	2.52
Tala Power		157		-		-	-	28.94	1.84
Tehri Hydro		1276		-		-	-	610.32	4.78
Rosa Power Project I		2567		-		-	-	850.57	3.31
IGSTPP, Jhajhjhar		0		-		-	-	-	-
Koteshwar (100 Mar 11, 300 2011-12)		0		-		-	-	-	-
Anpara 'C' (600 2011-12, 600 12-13)		0		-		-	-	-	-
Karcham-Wangtoo (2011 -12)		0		-		-	-	-	-
Bajaj Hindusthan		0		-		-	-	-	-
Rosa Power Project II (300 26-Jun-10)		0		-		-	-	-	-
Srinagar (2011-12)		0		-		-	-	-	-
Teesta St-III (2011-12)		0		-		-	-	-	-
Total		**7069**		**-**		**-**		**2,275.39**	**3.22**

4.5.10 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from IPP and Joint Ventures (JV) is given in Table 4-22 below:

Table 4-22: ASSUMPTIONS FOR POWER PURCHASE FROM IPPs / JVs - FY 2010 - 11

S. No.	Particulars	Assumptions
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. Nathpa-Jhakri, Tehri, Tala and Vishnuprayag are considered as must - run in Merit Order Despatch Principles. Rosa Power Plant is considered as per Merit Order Desptach Principles
2	**Tariff (Single part & Two part) IPPs (Nathpa-Jhakri, Tehri, Tala and Vishnuprayag) and Rosa**	As provided in ARR / Tariff petition by UPPCL for FY 2012-13.

Based on above approach, the summary of approved power purchase costs from IPP and Joint Ventures (JV) is given in Table 4-23 below:

Table 4-23: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri HPS	1500	1312		-	2.62	343.48	2.62	343.48	2.62
VishnuPrayag	400	1757		-	2.52	442.09	2.52	442.09	2.52
Tala Power	1020	157		-	1.84	28.94	1.84	28.94	1.84
Tehri Hydro	1000	1276		-	4.78	610.32	4.78	610.32	4.78
Rosa Power Project I	300	2567		-	3.31	850.57	3.31	850.57	3.31
IGSTPP, Jhajhjhar	1200	0		-	-	-	-	-	-
Koteshwar (100 Mar 11, 300 2011-12)	100	0		-	-	-	-	-	-
Anpara 'C' (600 2011-12, 600 12-13)	0	0		-	-	-	-	-	-
Karcham-Wangtoo (2011 - 12)	0	0		-	-	-	-	-	-
Bajaj Hindusthan	0	0		-	-	-	-	-	-
Rosa Power Project II (300 26-Jun-10)	0	0		-	-	-	-	-	-
Srinagar (2011-12)	0	0		-	-	-	-	-	-
Teesta St-III (2011-12)	0	0		-	-	-	-	-	-
Total	**5520**	**7069**				**2,275.39**		**2,275.39**	**3.22**

4.5.11 The Petitioner’s Submission:

The Petitioner’s submission of power purchased from Co-generating stations for FY 2010 - 11 is provided in Table 4-24 below:

Table 4-24: POWER PURCHASE COST FROM STATE CO-GENERATION FACILITIES FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen		3402		-		-	-	1,404.08	4.13

4.5.12 The Commission's Analysis:

In an effort to encourage renewable generation the Commission has mandated that the distribution licensees shall, based on availability, procure power to the extent available from the co-generating stations available in the State. Approved power purchased from Co-generating stations for FY 2010 - 11 is provided in Table 4-25 below:

Table 4-25: APPROVED COST OF POWER PURCHASE: STATE CO-GENERATION FACILITIES FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen		3402		-	4.13	1,404.08	4.13	1,404.08	4.13

4.5.13 The Petitioner's Submission:

The Petitioner's submission of power purchased from other sources for FY 2010 - 11 for meeting emergency is provided in Table 4-26 below:

Table 4-26: DETAILS OF POWER PURCHASE FROM OTHER SOURCES FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL, IEX)		1711		-		-	-	631.98	3.69
Others/UI		1624		-		-	-	796.35	4.90
Total		**3335**						**1,428.32**	**4.28**

4.5.14 The Commission's Analysis

The Commission has run merit order despatch considering all possible sources and accordingly approves Petitioner's submission of power purchased from other sources for meeting emergency requirements.

Table 4-27: APPROVED COST OF POWER PURCHASE FROM OTHER SOURCES FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL, IEX)		1711		-	3.69	631.98	3.69	631.98	3.69
Others/UI		1624		-	4.90	796.35	4.90	796.35	4.90
Total		**3335**				**1,428.32**		**1,428.32**	**4.28**

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

The Commission in its Distribution Tariff Regulations 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 understands that the UI mechanism is meant for the purpose of disciplining the grid operations and is not to be treated as a regular source for power purchase. Hence the Commission reiterates that the Petitioner should take due care while overdrawing power from the grid; especially when the UI rates are high. The Commission would also like to caution the Petitioner here that this issue would be dealt with at the time of true-up and at that time any power purchases undertaken in contravention to the provisions of the Distribution Tariff Regulations would be disallowed and the Petitioner would have to bear the cost for the same.

CERC has also issued a Press Release dated 23rd July 2009 in this regard, wherein Forum of Regulators (FOR) has agreed that additional Unscheduled-Interchange (UI) charges imposed on distribution utilities for excessive over-drawal during the period when grid frequency is below 49.2 Hz. should not be permitted in the ARR of distribution utilities w.e.f. 1st August, 2009. This will ensure that consumers are not burdened for inefficiency or incompetence of that particular distribution utility. Accordingly, the Commission directs the Petitioner to submit the details of power procured below 49.2 Hz between 1st April 2010 to 31st March 2011 along with costs during the submission of next ARR / Tariff petition.

Further, the Commission would like to reiterate that the Petitioner 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.

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

4.6 SUMMARY OF POWER PURCHASE

4.6.1 The total power purchase quantum available in MW terms from State owned generating stations, CGS and other sources along with the quantum and cost approval as submitted by Petitioner and approved by Commission for FY 2010 - 11 is presented in the two tables Table 4-28 and Table 4-29 below:

Table 4-28: SUMMARY OF POWER PURCHASE COST FY 2010 - 11 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	0	3713	-	-	-	-	-	659.12	1.78
Anpara B	0	7087	-	-	-	-	-	1,521.94	2.15
Harduagunj	0	450	-	-	-	-	-	264.10	5.87
Obra A	0	1039	-	-	-	-	-	305.08	2.94
Obra B	0	2900	-	-	-	-	-	806.44	2.78
Panki	0	898	-	-	-	-	-	350.27	3.90
Parichha	0	646	-	-	-	-	-	244.99	3.79
Parichha Extn.	0	2185	-	-	-	-	-	807.73	3.70
Parichha Extn. Stage II (2X250MW)	0	0	-	-	-	-	-	-	-
Harduaganj Ext. (2X250MW)	0	0	-	-	-	-	-	-	-
Sub total - Thermal	**0**	**18916**		**0.00**		**0.00**		**4959.66**	**2.62**
Per unit Avg Rate of Thermal Generation								**2.62**	
Hydro Stations									
Khara	0	254	-	-	-	-	-	32.30	1.27
Matatila	0	63	-	-	-	-	-	3.69	0.59
Obra (Hydel)	0	82	-	-	-	-	-	2.96	0.36
Rihand	0	142	-	-	-	-	-	4.11	0.29
UGC Power Stations	0	37	-	-	-	-	-	6.24	1.67
Belka & Babail	0	0	-	-	-	-	-	-	-
Sheetla	0	2	-	-	-	-	-	0.69	3.08
Sub total - Hydro	**0**	**580**		**0.00**		**0.00**		**49.99**	**0.86**
Purchase Per unit Avg Rate from hydro generating stations								**0.86**	
Sub-Total Own generation	**0**	**19496**		**-**		**-**		**5,009.66**	**2.57**
Procurement of power from Central Sector Generating Stations									
Anta	0	779	-	-	-	-	-	248.82	3.19
Auriya	0	1753	-	-	-	-	-	559.17	3.19
Dadri Thermal	0	672	-	-	-	-	-	206.57	3.07
Dadri Gas	0	1972	-	-	-	-	-	616.58	3.13
Dadri Extension	0	587	-	-	-	-	-	204.77	3.49
Rihand-I	0	2796	-	-	-	-	-	514.60	1.84
Rihand-II	0	2901	-	-	-	-	-	614.30	2.12
Singrauli	0	6872	-	-	-	-	-	1,240.63	1.81
Tanda	0	3140	-	-	-	-	-	872.40	2.78
Unchahar-I	0	2030	-	-	-	-	-	495.84	2.44
Unchahar-II	0	1215	-	-	-	-	-	305.17	2.51
Unchahar-III	0	566	-	-	-	-	-	171.35	3.03

Farakka	0	235	-	-	-	-	-	77.94	3.3
Kahalgaon St. I	0	455	-	-	-	-	-	126.52	2.7
Talchar	0	0	-	-	-	-	-	-	
Kahalgaon St.II Ph.I	0	1402	-	-	-	-	-	472.75	3.3
Koldam (Hydro)	0	0	-	-	-	-	-	-	
Rihand-III	0	0	-	-	-	-	-	-	
Sub-Total NTPC	**0**	**27374**		**-**		**-**		**6,727.41**	**2.4**
Chamera	0	488	-	-	-	-	-	65.11	1.3
Chamera-II	0	395	-	-	-	-	-	121.43	3.0
Chamera-III	0	0	-	-	-	-	-	-	
Dhauliganga	0	288	-	-	-	-	-	57.75	2.0
Salal I&II	0	225	-	-	-	-	-	16.22	0.7
Tanakpur	0	82	-	-	-	-	-	18.24	2.2
Uri	0	607	-	-	-	-	-	89.41	1.4
Dulhasti	0	605	-	-	-	-	-	304.82	5.0
Sewa-II	0	96	-	-	-	-	-	47.57	4.9
Uri-II	0	0	-	-	-	-	-	-	
Parbati ST-III	0	0	-	-	-	-	-	-	
Sub-Total NHPC	**0**	**2788**		**-**		**-**		**720.53**	**2.5**
NAPP	0	595	-	-	-	-	-	121.60	2.0
RAPP #3&4	0	541	-	-	-	-	-	114.19	2.1
RAPP#5&6	0	670	-	-	-	-	-	202.65	3.0
Sub-Total NPCIL	**0**	**1806**				**-**		**438.43**	**2.4**
Nathpa Jhakri HPS	0	1312	-	-	-	-	-	343.48	2.0
VishnuPrayag	0	1757	-	-	-	-	-	442.09	2.5
Tala Power	0	157	-	-	-	-	-	28.94	1.8
Tehri Hydro	0	1276	-	-	-	-	-	610.32	4.7
Rosa Power Project I	0	2567	-	-	-	-	-	850.57	3.3
IGSTPP, Jhajhjhar	0	0	-	-	-	-	-	-	
Koteshwar (100 Mar 11, 300 2011-12)	0	0	-	-	-	-	-	-	
Anpara 'C' (600 2011-12, 600 12-13)	0	0	-	-	-	-	-	-	
Karcham-Wangtoo (2011 -12)	0	0	-	-	-	-	-	-	
Bajaj Hindusthan	0	0	-	-	-	-	-	-	
Rosa Power Project II (300 26-Jun-10)	0	0	-	-	-	-	-	-	
Sitanagar (2011-12)	0	0	-	-	-	-	-	-	

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	
Sub-Total IPP/JV	**0**	**7069**				**-**		**2,275.39**	**3.**
Captive and Cogen	0	3402	-	-	-	-	-	1,404.08	4.
Inter system exchange (Bilateral & PXIL, IEX)	0	1711	-	-	-	-	-	631.98	3.
Others/UI	0	1624	-	-	-	-	-	796.35	4.9
Sub-Total : Co-Generation & Other Sources	**0**	**6738**				**-**		**2,832.41**	
Provision of LPS								35.50	
Rebate Against Power purchase								(94.49)	
Incentive from CGS against Power Purchase								(2.42)	
Incidental Power Purchase cost and (rebates)								**(61.42)**	
Grand Total of Power Purchase	**0**	**65271**		**-**		**-**		**17,942.41**	**2.**

Table 4-29: SUMMARY OF APPROVED POWER PURCHASE COST FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	0	3713	-	-	-	-	-	659.12	1.78
Anpara B	0	7087	-	-	-	-	-	1,521.94	2.15
Harduagunj	0	450	-	-	-	-	-	264.10	5.87
Obra A	0	1039	-	-	-	-	-	305.08	2.94
Obra B	0	2900	-	-	-	-	-	806.44	2.78
Panki	0	898	-	-	-	-	-	350.27	3.90
Parichha	0	646	-	-	-	-	-	244.99	3.79
Parichha Extn.	0	2185	-	-	-	-	-	807.73	3.70
Parichha Extn. Stage II (2X250MW)	0	0	-	-	-	-	-	-	-
Harduaganj Ext. (2X250MW)	0	0	-	-	-	-	-	-	-
Sub total - Thermal	**0**	**18916**		**0.00**		**0.00**		**4959.66**	**2.62**
Per unit Avg Rate of Thermal Generation								**2.62**	
Hydro Stations									
Khara	0	254	-	-	-	-	-	32.30	1.27
Matatila	0	63	-	-	-	-	-	3.69	0.59
Obra (Hydel)	0	82	-	-	-	-	-	2.96	0.36
Rihand	0	142	-	-	-	-	-	4.11	0.29
UGC Power Stations	0	37	-	-	-	-	-	6.24	1.67
Belka & Babail	0	0	-	-	-	-	-	-	-
Sheetla	0	2	-	-	-	-	-	0.69	3.08
Sub total - Hydro	**0**	**580**		**0.00**		**0.00**		**49.99**	**0.86**
Purchase Per unit Avg Rate from hydro generating stations								**0.86**	
Sub-Total Own generation	**0**	**19496**		**-**		**-**		**5,009.66**	
Procurement of power from Central Sector Generating Stations									
Anta	0	779	-	-	-	-	-	248.82	3.19
Auriya	0	1753	-	-	-	-	-	559.17	3.19
Dadri Thermal	0	672	-	-	-	-	-	206.57	3.07
Dadri Gas	0	1972	-	-	-	-	-	616.58	3.13
Dadri Extension	0	587	-	-	-	-	-	204.77	3.49
Rihand-I	0	2796	-	-	-	-	-	514.60	1.84
Rihand-II	0	2901	-	-	-	-	-	614.30	2.12
Singrauli	0	6872	-	-	-	-	-	1,240.63	1.81
Tanda	0	3140	-	-	-	-	-	872.40	2.78
Unchahar-I	0	2030	-	-	-	-	-	495.84	2.44
Unchahar-II	0	1215	-	-	-	-	-	305.17	2.51
Unchahar-III	0	566	-	-	-	-	-	171.35	3.03

Farakka	0	235	-	-	-	-	-	77.94	3.32
Kahalgaon St. I	0	455	-	-	-	-	-	126.52	2.78
Talchar	0	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	0	1402	-	-	-	-	-	472.75	3.37
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	0	0	-	-	-	-	-	-	-
Sub-Total NTPC	**0**	**27374**		**-**		**-**		**6,727.41**	**2.46**
Chamera	0	488	-	-	-	-	-	65.11	1.33
Chamera-II	0	395	-	-	-	-	-	121.43	3.07
Chamera-III	0	0	-	-	-	-	-	-	-
Dhauliganga	0	288	-	-	-	-	-	57.75	2.00
Salal I&II	0	225	-	-	-	-	-	16.22	0.72
Tanakpur	0	82	-	-	-	-	-	18.24	2.22
Uri	0	607	-	-	-	-	-	89.41	1.47
Dulhasti	0	605	-	-	-	-	-	304.82	5.04
Sewa-II	0	96	-	-	-	-	-	47.57	4.93
Uri-II	0	0	-	-	-	-	-	-	-
Parbati ST-III	0	0	-	-	-	-	-	-	-
Sub-Total NHPC	**0**	**2788**		**-**		**-**		**720.53**	
NAPP	0	595	-	-	-	-	-	121.60	2.05
RAPP #3&4	0	541	-	-	-	-	-	114.19	2.11
RAPP#5&6	0	670	-	-	-	-	-	202.65	3.02
Sub-Total NPCIL	**0**	**1806**				**-**		**438.43**	
Nathpa Jhakri HPS	0	1312	-	-	-	-	-	343.48	2.62
VishnuPrayag	0	1757	-	-	-	-	-	442.09	2.52
Tala Power	0	157	-	-	-	-	-	28.94	1.84
Tehri Hydro	0	1276	-	-	-	-	-	610.32	4.78
Rosa Power Project I	0	2567	-	-	-	-	-	850.57	3.31
IGSTPP, Jhajhjhar	0	0	-	-	-	-	-	-	-
Koteshwar (100 Mar 11, 300 2011-12)	0	0	-	-	-	-	-	-	-
Anpara 'C' (600 2011-12, 600 12-13)	0	0	-	-	-	-	-	-	-
Karcham-Wangtoo (2011 -12)	0	0	-	-	-	-	-	-	-
Bajaj Hindusthan	0	0	-	-	-	-	-	-	-
Rosa Power Project II (300 26-Jun-10)	0	0	-	-	-	-	-	-	-
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Sub-Total IPP/JV	**0**	**7069**				**-**		**2,275.39**	
Captive and Cogen	0	3402	-	-	-	-	-	1,404.08	4.13
Inter system exchange (Bilateral & PXIL, IEX)	0	1711	-	-	-	-	-	631.98	3.69
Others/UI	0	1624	-	-	-	-	-	796.35	4.90
Sub-Total : Co-Generation & Other Sources	**0**	**6738**				**-**		**2,832.41**	**4.20**
Provision of LPS								35.50	
Rebate Against Power purchase								(94.49)	
Incentive from CGS against Power Purchase								(2.42)	
Incidental Power Purchase cost and (rebates)								**(61.42)**	
Grand Total of Power Purchase	**0**	**65271**		**-**		**-**		**17,942.41**	**2.75**

4.7 ANNUAL REVENUE REQUIREMENT FOR FY 2010 - 11

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

a) Power Purchase Cost
b) Transmission Charges
c) SLDC Charges
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 Expenses

k) Contribution to Contingency Reserve

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

4.8 ESCALATION INDEX

The Regulation 4.3 of Distribution Tariff Regulations stipulates the methodology for consideration of the O&M Expenses, wherein such expenses are linked to the inflation index determined under these Regulations. The relevant provisions of the Distribution Tariff Regulation are reproduced below:

> *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 <u>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</u>……..”[Emphasis supplied]*

The Commission in accordance with the above stated regulation has calculated the inflation index for the FY 2010 - 11 based on the weighted average index of WPI and CPI. The Commission has considered the WPI and CPI index as available on the website of Economic Advisor, Ministry of Commerce and Industry Ministry of Labour respectively. Accordingly, the Commission has calculated the inflation index for approval of O&M expenses at 9.96% as shown in the Table 4-30 below:

Table 4-30: INFLATION INDEX FOR FY 2010 - 11

Month	Wholesale Price Index			Consumer Price Index			Consolidated Index		
	FY 2008-09	FY 2009-10	FY 2010-11	FY 2008-09	FY 2009-10	FY 2010-11	FY 2008-09	FY 2009-10	FY 2010-11
	A	B	C	D	E	F	G=A*0.6+D*0.4	H=B*0.6+E*0.4	I=C*0.6+F*0.4
April	124	125	139	138	150	170	129	135	151
May	124	126	139	139	151	172	130	136	152
June	127	127	140	140	153	174	132	137	153
July	129	128	141	143	160	178	134	141	156
August	129	130	141	145	162	178	135	143	156
September	129	130	142	146	163	179	136	143	157
October	129	131	143	148	165	181	136	145	158
November	127	133	144	148	168	182	135	147	159
December	125	133	146	147	169	185	134	148	162
January	124	135	148	148	172	188	134	150	164
February	123	135	148	148	170	185	133	149	163
March	124	136	150	148	170	185	133	150	164
Average	**126**	**131**	**143**	**145**	**163**	**180**	**134**	**144**	**158**
Weighted Average of Inflation							((158/144)-1)*100 =		**9.96%**

4.9 POWER PROCUREMENT COST

4.9.1 The Petitioner's Submission:

Petitioner has submitted that the actual power purchase cost has been computed on the basis of merit order principle. The Petitioner submits that presently UPPCL is carrying out the function of power procurement for bulk supply to distribution licensees in the state. UPPCL purchases power from various generators i.e. central, state generating station, IPPs etc. and supplies to various distribution licensees of the state at the bulk supply rate as GoUP has yet not allocated individual power share to distribution licensees. The Petitioner further submits PGCIL charges levied on energy procured from Northern Region have been incorporated in the Power Procurement Cost.

4.9.2 The Commission's Analysis:

The Commission observes that FY 2010 - 11 has already elapsed and the figures submitted by Petitioner are based on Provisional Accounts for the year. Since audited numbers for the year are not available the Commission has relied on the submission made by the Petitioner. Further as submitted by the Petitioner the power purchase costs have been grossed up to include PGCIL charges (inter-state transmission charges) and the bulk supply rate is determined by dividing the cost so computed with the energy input (MU) at transmission-distribution interface. As per the Petitioner's submission the bulk power supply tariff at UPPCL level for FY 2010 - 11 works out as given in Table 4-31 below:

Table 4-31: CONSOLIDATED BULK SUPPLY TARIFF

Particulars		FY 2010-11	
		Petitioner Submission	Approved
Purchases Required & Billed Energy (MU)	A	65,271	65,271
Periphery Loss (Upto inter connection Point) (%)	B	1.72%	1.72%
Energy Available at State periphery for Transmission(MU)	C=A*(1-B)	64,146	64,146
Intra -state Transmission losses %	D	3.25%	3.25%
Energy Available at State periphery for Transmission(MU)	E=D*(1-D)	62,062	62,062
Power Purchase Cost (Rs. Cr)	F	17,942	17,942
PGCIL (NR) inter-state transmission charges (Rs. Cr)	G	744	744
Total Power Procurement Cost (Rs. Cr)	H=F+G	18,687	18,687
Bulk Supply Tariff (Rs/unit)	I=(H/E)*10	3.01	3.01

The Petitioner's allocated power procurement costs as per the provisional accounts are as under:

Table 4-32: POWER PROCUREMENT COST FOR FY 2010 - 11

Particulars	FY 2010-11	
	Petitioner's	Commission
	Filing Submission	Approved
Energy Input into Transmission-Distribution Interface (MU)	19,640	19,640
Bulk Supply Tariff (Rs/kWh)	3.01	3.01
Power Procurement cost from UPPCL (Rs. Cr)	5,913	5,913

Since the financial statements for the year are yet to be finalized and audited by CAG, further power procurement cost being un-controllable component of the ARR the Commission plans to true-up the power procurement cost to actual cost on submission of audited accounts.

4.10 TRANSMISSION AND SLDC CHARGES

4.10.1 Inter-state transmission charges

The Petitioner's Submission:

The interstate transmission charges are payable by the UPPCL to PGCIL. The PGCIL charges are levied on energy procured from NTPC, NPCIL, NHPC, SJVNL, Tehri, TALA and others. These charges have been incorporated in Power Procurement Cost. The Petitioner submits that while considering power procurement to meet the State requirement, losses external to its system i.e. in the Northern Region PGCIL system need to be accounted for. The availability of power for the Petitioner (i.e. at UPPCL system boundary) from these sources gets reduced to the extent of these losses and the Petitioner has accordingly incorporated them while drawing up the energy balance.

The Commission's Analysis:

In absence of audited accounts for FY 2010 - 11 Commission is hindered from carrying out prudence check of the inter-state transmission charges submitted by the Petitioner. Commission accepts inter-state transmission charges of Rs. 744 Crores as submitted by the Petitioner, However reiterates that the actual inter-state transmission charges for FY 2010 - 11 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. As explained in the "Power Procurement Cost" section the inter-state transmission charges of Rs. 744 Crores are added to determine the bulk supply tariff.

4.10.2 Intra-state transmission charges

The Petitioner's Submission:

The intra state transmission charges are payable by Petitioner are based on the actual energy received and uniform charges are to be paid by all the Distribution Licensees in the state proportionate to the energy delivered to them. Accordingly, licensee has submitted cost of intra state transmission charges for FY 2010 - 11. The Transmission licensee is also performing the function of SLDC, as such SLDC cost is embedded in the transmission charges.

The Commission's Analysis:

The Petitioner, based on provisional accounts, has submitted intrastate transmission charges to be Rs. 283 Crores In absence of audited accounts for FY 2010 - 11 Commission is hindered from carrying out prudence check of the intra-state transmission & SLDC charges submitted by the Petitioner. Commission accepts transmission & SLDC charges as submitted by the Petitioner based on provisional accounts. However reiterates that the actual intra-state transmission charges for FY 2010 - 11 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. The Petitioner's submission and Commission's approved Transmission Charges for FY 2010 - 11 are given in Table 4-33 below:

Table 4-33: INTRA STATE TRANSMISSION CHARGES FOR FY 2010 - 11

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Energy Input into Transmission-Distribution Interface (MU)	19,640	19,640
Transmission Tariff (Rs/kWh)	0.14	0.14
Transmission cost (Rs. Cr.)	283	283

4.11 O&M EXPENSES

4.11.1 The Petitioner's Submission:

Operation and Maintenance (O&M) expenses comprise of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure. The Petitioner has submitted actual unaudited and chartered accountant certified O&M expenses for FY 2010 - 11. The Petitioner has submitted that it has made detailed examination of the various components that make up employee cost and assessed the extent of retirements as well as the manpower additions. The submitted employee cost incorporates the impact of recommendation of the Sixth Pay Commission.

4.11.2 The Commission's Analysis:

The Commission in its previous order had approved O&M expenses for FY 2009 - 10 by applying an escalation factor of **8.74%** (inflation index) over the provisional figures of FY 2008-09 as then submitted by the Petitioner. The Regulation 4.3 of the Distribution Tariff Regulations stipulates that *the O & M expenses of the base year (i.e. FY 2007-08) shall be escalated at inflation rates, notified by the Central Government for different years.* The O&M expenses of the base year have not yet been determined, for want of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07 between the distribution companies and transmission companies. The Commission would like to reiterate that a suitable norm for allowance of O&M expenses could be adopted only after undertaking a thorough study of the O&M expenditure based on the past performances and the cost drivers of the same, through a separate process. As such the Commission has directed the Petitioner to submit its share of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07.

The Commission opines that escalating O&M expenses based on Petitioner's submission is incorrect, as it takes wrong base year, hence the Commission has decided that for FY

2010 - 11 the A&G and R&M components of O&M expenses would be escalated based on approved O&M expenses of FY 2009 - 10. However for employee expenses, the Commission has taken a different view on account of Sixth Pay Commission salary revision impact which is discussed in the "Employee Expenses" section.

The Commission reiterates that the base year numbers may go under revision based on the true up for the relevant years and would have a cascading effect on the approvals of O&M expenses for the subsequent years. The Commission plans to realign approved O&M expenses of FY 2010 - 11 during true-up exercise.

O&M Expenses as submitted by Petitioner and approved by the Commission for FY 2010 - 11 are summarised in the Table 4-34 below:

Table 4-34: O&M EXPENSES FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's	Commission
	Filing Submission	Approved
Employee Expenses		
Employee Cost and Provisions	290	288
Incremental Employee Expenses @ 2.5%	-	6
Gross Employee Expenses	**290**	**294**
Employee expenses capitalized	75	76
Net Employee Expenses	**215**	**218**
		-
A&G Expenses		**-**
Admin & Gen Expenses	38	35
Incremental Admin & Gen Expenses @ 2.5%	-	1
Gross Admin & Gen Expenses	**38**	**35**
Admin & Gen expenses capitalized	9	8
Net Admin & Gen Expenses	**29**	**27**
		-
R&M Expenses		**-**
Repair & Maintenance Expenditure	137	181
Incremental R&M Expenses @ 2.5%	-	4
Gross Repair & Maintenance Expenses	**137**	**185**
	-	-
Total	**382**	**430**

4.12 INCREMENTAL O&M EXPENSES ON ADDITIONS TO ASSETS

4.12.1 The Petitioner's Submission:

Contrary to the provisions of Regulation 4.3 (1) of the Distribution Tariff Regulations Petitioner has not requested for incremental O&M expenses for FY 2010 - 11 at 2.5% of the capital addition made during FY 2009 - 10.

4.12.2 The Commission's Analysis:

Regulation 4.3 (3) stipulates that "Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. Accordingly in addition to the normal O&M expenses the regulations provide for incremental O&M expenses for FY 2010 - 11 at 2.5% of the additions to capital assets made during FY 2009 - 10. The incremental O&M expenses for FY 2010 - 11 work out to Rs. 11 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.

4.13 EMPLOYEE EXPENSES

4.13.1 The Petitioner's Submission:

The Petitioner has submitted actual employee expenses for the FY 2010 - 11 based on provisional accounts. The Petitioner has submitted that it has endeavoured to control the employee expenses but cost have increased due to impact of implementation of time scale and arrear of Sixth Pay Commission which is totally beyond the control of the Petitioner.

4.13.2 The Commission's Analysis:

As discussed in the preceding section, the Commission is treating employee expenses for FY 2010 - 11 in a different manner on account of Sixth Pay Commission impact. The Commission's distinct view on the "employee expenses" component is taken in spirit of the Regulation 4.3(5) "The Commission may consider additional O&M expenses on account of war, insurgency, and change in laws or like eventualities for a specified period." The Commission opines that the impact of Sixth Pay Commission is a change in law and therefore uncontrollable.

Accordingly the Commission approves the following items of employee expenses viz., Basic salaries, and dearness allowance (DA) as submitted by Petitioner. Dearness

Allowance and Terminal benefits like pension, gratuity and other annulment benefits are linked to basic salary. The Commission therefore approves these as submitted by Petitioner. Commission approves the other items of employee expenses viz., Bonus / Exgratia, Medical Expenses Reimbursement, Leave Travel Assistance, Earned Leave Encashment, Compensation and Staff Welfare Expenses for FY 2010 - 11 based on the escalation factor of 9.96% over the numbers approved by Commission for FY 2009 - 10.

The Petitioner has considered capitalization of employee expenses of Rs. 76.06 Crores for FY 2010 - 11 which is 26% the employee cost. The Petitioner has failed to adhere with the Commission's direction in its last Tariff order to submit an appropriate policy on capitalization of salaries and wages and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has considered the employee capitalization as submitted by Petitioner based on the provisional accounts.

Further, the Commission re-directs the Petitioner to undertake a fresh study for employee expenses. Further Commission reiterates that the Petitioner should devise an appropriate capitalization policy and should develop proper accounting system to capture the expenses related to capital schemes rather than assuming a standard percentage. Further the Commission also directs the Petitioner to maintain necessary sub-account to capture the impact of pay revisions which are uncontrollable in nature. The Commission directs the Petitioner to submit a report on above matter within 6 months from the date of issue of this Tariff Order. The Petitioner's submission and Commission's approved employee expense for FY 2010 - 11 is given in Table 4-35 below:

Table 4-35: PaVVNL EMPLOYEE EXPENSES FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Salaries	157	157
Dearness Allowance	63	63
Other Allowances & Relief	8	8
Bonus/Exgratia	2	3
Medical Expenses Reimbursement	5	8
Leave Travel Assistance	0	0
Earned Leave Encashment	9	3
Compensation	0	0
Staff Welfare Expenses	0	1
Pension and gratuity	44	44
Other Terminal benefits	-	-
Expenditure on trust	0	-
Any other employee expenses	1	-
Arrear of Pay Commission/Time Scale	-	-
Additional employee Expenses(@2.5% of incremental GFA)	-	6
Grand Total	**290**	**294**
Employee expenses capitalization %age	26%	26%
Employee expenses capitalized	75	76
Net employee expenses	**215**	**218**

4.14 ADMINISTRATION AND GENERAL EXPENSES (A & G EXPENSES)

4.14.1 The Petitioner's Submission:

The Petitioner has submitted actual A&G expenses for the FY 2010 - 11 based on provisional accounts. The Petitioner submits that these expenses are incurred to meet day-to-day expenses related to the administration and general management and are affected by inflationary pressures. In its endeavour to control these costs and to drive operational efficiency improvement licensee has claimed Rs. 2.25 Crores to embrace various information technology (IT) initiatives such as implementation of software solution, networking (both local area network & wide area network), retail billing solution, energy billing system, energy accounting system etc. Petitioner has also claimed regulatory expenses as application fees plus 0.05% of revenue as license fees in A&G expenses.

4.14.2 The Commission's Analysis:

The Petitioner has not submitted the audited accounts for the FY 2010 - 11 which has hindered the prudence check to be undertaken by the Commission. However in the absence of the audited accounts the Commission in accordance with the Regulation 4.3 of the Distribution Tariff Regulations the Commission approves the A&G expenses for FY 2010 - 11 based on the escalation factor of 9.96% over the approved figures for FY 2009 - 10.

The Petitioner has capitalized A&G expenses @ 23% of the total A&G expenses for FY 2010 - 11. The Commission observes that the capitalisation of 23% is on the higher side. Further the basis of such capitalisation has also not been explained by the Petitioner. The Petitioner has failed to adhere with the Commission's direction in its last Tariff order to submit an appropriate policy on capitalization of A&G expenses and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has considered the A&G capitalization as submitted by Petitioner based on provisional accounts. The Commission's approval is subject to the true-up process on submission of the audited accounts.

Commission reiterates that the Petitioner should devise an appropriate capitalization policy and should develop proper accounting system to capture the expenses related to capital schemes rather than assuming a standard percentage. The Commission directs the Petitioner to submit a report on above matter within 6 months from the date of issue of this Tariff Order. The Petitioner's submission and Commission's approved A&G expense for FY 2010 - 11 is given in Table 4-36 below:

Table 4-36: PaVVNL A&G EXPENSES FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Administration Expenses		
Rent rates and taxes (Other than all taxes on income and profit)	0.8	0.3
Insurance of employees, assets, legal liability	0.4	0.4
Revenue Stamp Expenses Account	-	-
Telephone,Postage,Telegram, Internet Charges	3.5	3.2
Incentive & Award To Employees/Outsiders	-	-
Consultancy Charges	0.0	0.0
Travelling	2.7	2.1
Technical Fees	-	-
Other Professional Charges	-	-
Conveyance And Travel (vehicle hiring, running)	-	-
UPERC License fee	-	-
Plant And Machinery (for administrative use)	-	-
Security / Service Charges Paid To Outside Agencies	-	-
Other Regulatory Expenses	-	2.6
IT related expenses	-	1.4
Sub-Total of Administrative Expenses	**7.4**	**9.9**
Other Charges		
Fee And Subscriptions (Books And Periodicals)	2.8	0.6
Printing And Stationery	2.2	1.7
Advertisement Expenses	1.9	1.0
Contributions/Donations To Outside Institute / Association	-	-
Electricity Charges To Offices	8.2	7.0
Water Charges	0.0	0.0
Consultancy expenses /Any Study related expenses	-	-
Miscellaneous Expenses	12.9	12.2
Expenses on Public Interraction Program	-	-
Any Other expenses	0.7	0.7
Sub-Total of other charges	**28.7**	**23.3**
Legal Charges	1.6	1.4
Auditor'S Fee	0.5	0.0
Frieght - Material Related Expenses	-	-
Other Departmental Charges	-	-
Additional A&G expenses(@2.5% of incremental GFA)	-	0.7
Total Charges	**38.2**	**35.3**
A&G expenses capitalization %age	23%	23%
Expenses capitalized	8.8	8.1
Net Administrative and General expenses	**29.4**	**27.2**

4.15 REPAIRS AND MAINTENANCE (R&M) EXPENSES

4.15.1 The Petitioner's Submission:

The Petitioner has submitted actual R&M expenses for the FY 2010 - 11 based on provisional accounts. The Petitioners submits that increase in cost of raw material and fuel as well increase in the amount of annual maintenance contracts to maintain additional transformers, cables, grid substation, etc. has translated to a higher R&M expenses.

Petitioner also mentions that it has initiated proactive preventive maintenance and capital expenditure to improve the quality of supply in its distribution area and reduction in number of overloaded transformer etc. However due to tight financial position and heavy cash losses, system improvement and preventive maintenance are not achieved to the expected level resulting in frequent breakdowns and supply interruptions.

4.15.2 The Commission's Analysis:

The Commission acknowledges initiatives under taken by the Petitioner in upgrading and maintaining its distribution system given its tight financial position and cash crunch situation. In the absence of a true up petition based on the audited accounts the Commission has considered the R&M expenses for FY 2010 - 11 by applying an escalation factor of 9.96% (inflation index) over the approved figures for FY 2009 - 10 in line with the provisions of the Distribution Tariff Regulations.

In terms of Regulation 4.3 (3) Distribution Tariff Regulation in addition to the normative O&M expenses incremental O&M expenses are allowed at 2.5% of the capital addition in the previous year. Accordingly, the Commission has allowed an incremental O&M expenses at 2.5% of the additions to the assets during the previous year i.e. FY 2009 - 10. The same has been allocated to Employee Expenses, A&G expenses and R&M expenses. Thus the approval for additional expenditure allowed for R&M expenses is approved at Rs. 4 Crores

The Commission considers Repairs & Maintenance expenses as critical to operational activities. The approval for these expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudency check with regards to the spending in R&M works over the year. The

Petitioner's submission and Commission's approved R&M expense for FY 2010 - 11 is given in Table 4-37 below:

Table 4-37: PaVVNL R&M EXPENSES FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Plant and Machinery	54	63
Building	3	3
Civil Works	-	-
Hydraulic Works	-	-
Transformers	-	-
Lines, Cables Net Works etc.	81	106
Vehicles	-	9
Furniture and Fixtures	0	0
Office Equipments	0	0
Transportation	-	-
Sub station maintenance by private agencies	-	-
Any other items (Capitalisation)	-	-
Additional R&M(@2.5% of incremental GFA)	-	4
Total	**137**	**185**

4.16 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS

4.16.1 The Petitioner's Submission:

Petitioner has determined GFA and CWIP figures on the following basis:

- The opening GFA and CWIP have been taken as per the closing figures of the provisional annual accounts of FY 2010 - 11.
- 81% of the opening CWIP and investment made during the year, expenses capitalized & interest capitalized has been capitalized during the year and transferred to GFA as additions.
- Investment through "deposit work" has not been taken for capital formation as per policy adopted by the Commission in previous Tariff Order.

4.16.2 The Commission's Analysis:

The Commission in its last tariff order for the FY 2009 - 10 had approved the gross fixed assets (GFA) of Rs. 4,041 Crores as on 31st March 2010 for the Petitioner. The opening balance as per Petitioner's provisional accounts of FY 2010 - 11 is Rs. 4,525 Crores As the figure for gross fixed assets flows from the previous years, the Commission has considered the quantum of GFA from the provisional accounts of FY 2010 - 11.

The Petitioner vide its submission dated 22nd May 2012, has submitted that the system loading charges recovered from the consumers are included in the account head 55 which represents the "Consumer Contribution, Grants & subsidies towards cost of Capital". The Commission has also verified the accounts submitted along with the said letter and the notes to accounts attached to it which clearly indicates that the system loading charges form part of the subhead of consumer contribution towards cost of capital assets. The Commission, based on the provisional accounts, has accepted Petitioner's contention that the Investment through "deposit work" has not been taken for capital formation which also excludes system loading charges. The capital investments are considered to be funded on the basis of normative debt-equity ratio instead of debt-equity funding proposed by the Petitioner.

Based on the provisional accounts the Commission has accepted Petitioner's contention the Investment through "deposit work" has not been taken for capital formation. The capital investments are considered to be funded through on the basis of normative debt-equity ratio instead of debt-equity funding proposed by the Petitioner.

Commission with past experiences is fully aware of the variation from the envisaged capital investment occurring due to certain policy issues as well as non-availability of Government Guarantee for drawal of financial institutional loans. This problem is bound to further aggravate with the failure of the Petitioner to submit investment plan and capital work-in-progress (CWIP) details. Variation in capital investment plan adversely affects the creation of assets whose effect cascades to depreciation and interest and finance charges components of the ARR. Accordingly the Commission has considered the GFA formation as shown in the table below:

Table 4-38: PaVVNL CAPITALISATION & WIP OF INVESTMENTS FOR FY 2010 - 11 (Rs. Crores)

Particulars		FY 2010-11	
		Petitioner's Filing Submission	Commission Approved
Opening WIP as on 1st April	A	151	151
Investments	B	535	535
Employee Expenses Capitalisation	C	83	76
A&G Expenses Capitalisation	D	9	8
Capitalisated Interest on long term loans	E	20	11
Total Investments	F= A+B+C+D+E	**798**	**781**
Transferred to GFA (Total Capitalisation)		643	643
Closing WIP	**H= F-G**	**155**	**138**

Table 4-39: PaVVNL INVESTMENT FUNDING FOR FY 2010 - 11 (Rs. Crores)

Particulars		FY 2010-11	
		Petitioner's Filing Submission	Commission Approved
Investment		535	535
Less:			
Consumer Contribution and Capital Assets Subsidy		-	-
System Loading Charges		-	-
Total		-	-
Investment funded by debt and equity		535	535
Debt Funded	70%	374	374
Equity Funded	30%	160	160

4.17 DEPRECIATION EXPENSE

4.17.1 The Petitioner's Submission:

Petitioner based on the provisional accounts, has submitted depreciation for FY 2010 - 11 as Rs. 177 Crores (unaudited) based on average depreciation rate of 4.24%.

4.17.2 Commission's Analysis:

The Commission vide Distribution Tariff Regulation has specified the methodology for the computation of depreciation. The regulation specifies the rates to be used for the purpose of computation of the depreciation charged during the year. Regulation 4.5(9) requires that *"the Licensee will maintain asset registers at each operating circle/division that will capture all necessary details on the asset, including the cost incurred, date of commissioning, location of asset, and all other technical details"*.

The Commission has repeatedly vide its order given several directions to the Petitioner to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. Further, the Honorable Appellate Tribunal for Electricity (order to Appeal No. 121 of 2010 & I.A. No. 83 of 2011, Para 7.4, 7.5 & 7.6) has also reinforced Commission's views and directed the distribution licensee to comply with the regulation and direction issued by the Commission. However the distribution licensees have failed to produce any records relating to fixed assets registers.

Distribution licensee seems to be ignorant of significance of maintenance of Fixed Asset Register and filing of investment plans with cost benefit of capital expenditure. Components of the ARR viz., depreciation, allowable interest on debt and return on equity are adversely affected by inadvertent misrepresentations of capital assets creation numbers. Non-maintenance of Fixed Asset Register and absence of strict policy for undertaking capital investment based on cost benefit analysis gives ample room for such misrepresentations.

Given the very sad state of Distribution Licensee affairs on the above matter and reluctance to act on repeated directions issued by the Commission and the Appellate Tribunal for Electricity, the Commission is severely hindered in its task of undertaking prudence check of ARR components viz., depreciation, and allowable interest on debt and return on equity. On account of lack of details of fixed assets register, the Commission has assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset. Keeping consistency with the approach adopted in its previous tariff orders, the Commission has considered depreciation rate of 7.84% being the depreciation rate bracket for major class of assets as per the Distribution Tariff Regulations.
Considering the total capitalization approved by the Commission for FY 2010 - 11 as above, the capital formation and depreciation as submitted by the Petitioner vis-à-vis approved by the Commission is given in Table 4-40 and Table 4-41 below:

Table 4-40: PaVVNL GROSS FIXED ASSETS FOR FY 2010 - 11 (Rs. Crores)

Particulars		FY 2010-11	
		Petitioner's Filing Submission	Commission Approved
Depreciation Rate	A	4.24%	7.84%
Opening GFA as on 1st April	B	4,525	4,525
Addition to GFA during the year	C	1,067	1,067
Deduction from GFA during the year	D	424	424
Closing GFA as on 31st March	E= B+C-D	5,168	5,168
Opening Accumulated Depreciation	F	2,083	2,083
Depreciation on Opening GFA + Addition during the year	G = B*A+C*A/2	214	397
Depreciation on assets deducted during the year	H	81	81
Closing Accumulated Depreciation	I=F+G-H	2,217	2,399
Opening Net Fixed Assets	J=B-F	2,443	2,443
Closing Net Fixed Assets	K=E-I	2,952	2,770

Table 4-41: PaVVNL DEPRECIATION FOR FY 2010 - 11 (Rs. Crores)

Particulars		FY 2010-11	
		Petitioner's Filing Submission	Commission Approved
Depreciation Rate	A	4.24%	7.84%
Opening GFA as on 1st April	B	4,525	4,525
Addition to GFA during the year	C	1,067	1,067
Depreciation on Opening GFA + Addition during the year	**D = (A*B)+(C*A/2)**	214	397
Less:			
Depreciation on assets created from Consumer Contribution and Capital Assets Subsidy	E	38	38
Depreciation on Opening GFA + Addition during the year chargeable as ARR component	**F=D-E**	177	359

4.18 INTEREST AND FINANCING COST

4.18.1 Interest on Long term Loans

The Petitioner's Submission:

Petitioner based on the provisional accounts, has submitted interest cost on long term loans to be Rs. 76.42 Crores

The Commission's Analysis:

The Commission has computed the interest cost on long term loans for FY 2010 - 11 based on the approved investment and funding scheme described in Table 4-39. The Commission has considered normative debt: equity ratio of 70:30 instead of debt-equity funding proposed by the Petitioner. As the Commission's assumed normative debt equity ratio is higher compared to that submitted by Petitioner, the Commission's approval regarding total long term loan quantum and resulting incidence of interest and finance charges is higher.

As far as new loans drawn based on the investment made are concerned, the Petitioner has not provided details investment and the terms of funding. Regulation 4.8.1 (c) stipulates that *"Interest on fresh loans shall be allowed only on loan raised for projects approved and undertaken in accordance with the guidelines contained in regulation 4.5 of these regulations. In case of non-compliance of the stipulated guidelines, no interest shall be allowed by the Commission."* However considering that fact that capital investment are very essential for keeping the system running and meeting the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply & system reliability. The Commission has taken a lenient view on allowance of interest cost. Absent the said information on funding of capital investment the Commission has considered the approved debt funded investment as given in Table 4-39, while calculating interest on long term loans.

Interest on long term loans as submitted by the Petitioner vis-à-vis approved by the Commission for FY 2010 - 11 is given in Table 4-42 below:

Table 4-42: PaVVNL INTEREST ON LONG TERM LOANS FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Govt of UP (Loan Transfer Scheme)	18.98	18.98
Govt of UP (WB Aided Project)		
Govt of UP (APDRP)		
Power Finance Corp Ltd (Theft Prevention)	3.19	3.19
Power Finance Corp Ltd (Loan Transfer Scheme)	1.19	1.19
Power Finance Corp Ltd (UPPCL)	0.05	0.05
REC Ltd (ABC Loan)	3.63	3.63
REC Ltd (Construction of S/S)	0.35	0.35
REC Ltd (Loan Transfer Scheme)	20.28	20.28
REC Ltd (UPPCL)	0.17	0.17
APDRP (PFC)	19.75	19.75
R-APDRP (PFC)	-	-
HUDCO Loans	8.66	8.66
NCRPB	0.17	15.56
NOIDA	-	-
OTHERS	-	-
UP State Industrial Development Corp	-	-
Feeder Separation Loan	-	-
Total	**76.42**	**91.81**

4.18.2 Interest on Working Capital

Petitioner's Submission:

Petitioner has, based on the provisional accounts, submitted interest cost on working capital loans to be Rs. 61.31 Crores, for FY 2010 - 11. Petitioner submits that its working capital requirement is more than what Commission allows based on normative value. It continues to face severe cash crunch situations and often finds it difficult to meet out even its power purchase obligation from its revenues. On the said argument the Petitioner has submitted before the Commission to allow working capital requirement as requested.

Commission's Analysis:

Regulation 4.8.2 of the Distribution Tariff Regulations lays down the norms and methodology for calculating interest on working capital. Although the Commission is aware of the financial distress and liquidity crunch of the distribution licensee, the

Commission opines that the distribution licensee is eligible only for interest cost on account of normative working capital. Commission views that the Petitioner should manage its day to day affairs pragmatically by improving collection efficiency, reducing bad debts thus strengthening its cash position. The Commission has considered the interest on working capital in line with the provisions of the Distribution Tariff Regulations

Interest costs on working capital loans as submitted by the Petitioner vis-à-vis approved by the Commission based on computation of interest on normative working capital for FY 2010 - 11 is given in Table 4-43 below:

Table 4-43: PaVVNL INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
One month's O&M Expenses	38.82	35.83
One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	25.67	25.67
Receivables equivalent to 60 days average billing on consumers	905.17	905.17
Gross Total	**969.67**	**966.67**
Less:Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	585.02	585.02
Net Working Capital	**384.64**	**381.65**
Rate of Interest for Working Capital		12.50%
Interest on Working Capital	**61.31**	**47.71**

4.18.3 Interest on Consumer Security Deposits

Petitioner's Submission:

The Licensee has claimed expenditure on account of the interest paid to consumers on security deposits to the tune of Rs. 17.40 Crores in FY 2010 - 11 based on the provisional accounts. However, the Licensee has failed to provide details of calculation of the same.

Commission's Analysis:

In terms of Regulation 4.8(3) of the Distribution Tariff Regulation, the licensee has to pay interest to the consumers at the bank rate or more on the consumer security deposit. Such payment of interest on security deposit is also mandated under the Section 47 (4) of the Electricity Act, 2003. The Petitioner in its petition has not submitted details of calculation of interest on security deposit. As this interest paid to consumers is a part of the tariff and Commission opines to approve them to be recovered through the ARR. Commission's computation of interest expense based on provisional accounts of 2010 - 11 is given in table below. The Commission has considered the prevalent bank rate of the Reserve bank of India for approval of the Interest rate applicable for such payments. Accordingly the Commission has approved interest on security deposits for FY 2010 - 11 at Rs. 33.29 Crores considering 6% rate of interest. The interest is payable for the period the security deposit is retained by the Petitioner, however the Petitioner has calculated the interest on security deposit on the closing value of the security deposit. The Commission has accordingly considered the interest payable on the average security deposit for the period.

Table 4-44: PaVVNL INTEREST ON SECURITY DEPOSITS FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Opening Balance for Security Deposit	524.65	524.65
Additions During the Year	60.37	60.37
Closing Balance for Security Deposit	585.02	585.02
Rate of Interest	6.00%	6.00%
Interest on Security Deposit	**17.40**	**33.29**

4.18.4 Summary of Interest and Finance Charges

The approved interest charges on long term loans have been capitalized at the rate of 23% in consistency with the approach adopted in its previous tariff orders. In the absence of an approved Investment capitalization policy frame work, it is very difficult for the Commission to understand the drivers of capitalization of interest expense of Rs. 20.36 Crores as claimed by Petitioner, which works out as 18.26% of interest on long term loans. In its previous order the Commission had directed the Petitioner to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in a separate account typically termed as 'Interest during Construction' (IDC) rather than assuming a standard capitalization percentage. In response to the said direction the Petitioner has stated that it is trying to implement computerized accounting system after which the process of identification of scheme wise capital expenditure would be possible vis-à-vis IDC costs. Considering the history of the Petitioner, it is rather hard for the Commission to guess by when the system will be up and running. The Commission directs the Petitioner to provide monthly report on the progress on computerization of accounting system. Interest and financing charges (net of capitalization) inclusive of Interest on working capital, interest on consumer security deposits, discount to consumers and other approved interest and finance costs as submitted by the Petitioner and approved by the Commission for FY 2010 - 11 is given in Table 4-45 below:

Table 4-45: PaVVNL INTEREST AND FINANCE CHARGES FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Interest on Long term Loans	**76.42**	**91.81**
a) Interest on Existing Loans		
b) Interest on New Loans		
Interest on Working Capital Loans	61.31	47.71
Allocation of Interest of loan through UPPCL	0.00	
Sub Total	137.72	139.51
Interest on Consumer Security Deposits	17.40	33.29
Finance Charges / Guarantee Fees	0.68	7.56
Bank Charges	0.13	0.13
Discount to Consumers	-	-
Sub Total	18.20	40.98
Gross Total Interest & Finance Charges	**155.92**	**180.49**
Less: Capitalization of interest on Long term Loans	20.36	10.77
% Capitalization	26.64%	23.00%
Net Interest & Finance Charges	**135.56**	**169.72**

4.19 PROVISION FOR BAD AND DOUBTFUL DEBTS

4.19.1 The Petitioner's Submission:

In the ARR for FY 2010 - 11, the Petitioner has proposed Bad and Doubtful debts @2% of revenue receivables to the tune of Rs. 1.50 Crores, as generally accepted accounting principle of provisioning for un-collectable dues in the course of normal operations. Petitioner states that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts during any particular year. Therefore Petitioner maintains that this is a legitimate ARR component and need be allowed.

4.19.2 The Commission's Analysis:

Regulation 4.4 of the Distribution Tariff Regulations provide for expenses under Bad & Doubtful Debts to the extent of 2 % of the revenue receivables. However the distribution licensees have to actually identify and write-off the bad debts as per a transparent policy approved by the Commission.

The Commission in its previous tariff orders opined that it is not averse to allowing provision for bad and doubtful debts in the course of normal operations of the distribution licensees. 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. Accordingly, the Commission reiterates and directs the distribution licensee to form a clear cut 'Bad Debt' policy as defined in Distribution Tariff Regulations.

The Commission in its previous order directed the distribution licensee to submit ten such sample cases of LT & HT consumers where orders have been issued for writing off bad debts clearly depicting the procedure adopted for writing off bad debts along with a policy framework for Commission's approval within a month of issue of this order. In this regard the Petitioner has submitted that action is being taken regularly in cases by way of P.D. and writing off the fictitious arrears at the distribution level. However no such sample was submitted to the Commission.

In the backdrop of non-compliance with the above direction and due to lack of approved transparent policy on identifying and writing off bad debts by the Commission opines that it is inappropriate to approve the Bad & Doubtful debts. The Commission redirects to submit such sample along with policy framework for managing bad debts for the Commission's perusal within a month of issue of this order.

4.20 OTHER INCOME

4.20.1 The Petitioner's Submission:

As per the Petitioner's submission other Income includes income from retail sources, non-tariff income and revenue support from the GoUP. The 'other income from retail sources' includes miscellaneous revenues from consumers. Non-tariff income includes income such as interest on loans and advances to employee, income from fixed rate investment deposits, interest on loans and advances to licensees. Revenue support from the GoUP includes subsidy to partially cover the revenue shortfall arising from below Cost of Service tariffs for the Rural Domestic and Private Tube Wells (PTW) categories. Accordingly, other income has been submitted by the Petitioner at Rs. 638 Crores for FY 2010 - 11 based on the provisional accounts.

4.20.2 The Commission's Analysis:

The Commission has approved the total other Income as submitted by the Petitioner at Rs. 638 Crores based on the provisional accounts. However, since the Petitioner is still to submit audited accounts, the Commission has considered the data as per provisional accounts, which will be subject to true up on submission of audited accounts.

Table 4-46: PaVVNL OTHER INCOME FOR FY 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's Filing Submission	Commission Approved
Income from Investment	-	-
Non Tariff Income	58	58
Sub Total	58	58
GoUP Subsidy - Rural Domestic & PTW	580	580
Total	638	638

4.21 RETURN ON EQUITY

4.21.1 The Commission's Analysis:

The Petitioner has not claimed any return on equity for the year under review. The Petitioner has stated that they do not want to burden the consumers by proposing return on equity as it will further increase the gap. Moreover, Petitioner has submitted that to bridge revenue shortfall it would have to ask for more GoUP subsidy and resort to short term loans from market apart from other measures to be initiated for productivity improvement. Hence the Commission considering the plea of the Petitioner has not approved return on equity for FY 2010 - 11. However, Commission's calculation of return on equity only for the purpose of representation is given in Table 4-47 below:

Table 4-47: PaVVNL RETURN ON EQUITY FOR 2010 - 11 (Rs. Crores)

Particulars		FY 2010-11	
		Petitioner's Filing Submission	Commission Approved
Return on Equity			
Regulatory equity at the beginning of the year	a	1,533	1,533
Capitalised assets during the year	b	-	535
Equity portion of expenditure on capitalised assets	c=b*30%	-	160
% of Equity		-	30%
Regulatory Equity at the end of the year	**d=a+c**	**1,837**	**1,693**
Return Computation		-	-
Return Regulatory equity at the beginning of the year @ 16%	e=a*16%	-	245
Return on Equity portion of capital expenditure on capitalised assets	f=c*16%/2	-	13
Total Return on Regulatory Equity	**g=e+f**	**-**	**258**

4.22 CONTRIBUTION TO CONTINGENCY RESERVE

4.22.1 The Commission's Analysis:

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.

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

Commission accepts the views of the Petitioner. However the Commission's estimated amount on account of Contribution to Contingency Reserve for representation purpose only is Rs. 22.63 Crores for FY 2010 - 11, the calculation are given in Table 4-48 below:

Table 4-48: PaVVNL CONTRIBUTION TO CONTINGENCY RESERVE FOR 2010 - 11 (Rs. Crores)

Particulars	FY 2010-11	
	Petitioner's	Commission
	Filing Submission	Approved
Opening Balance of GFA	4,525.37	4,525.37
Contribution	0.0%	0.5%
Contribution to Contingency Reserve	**-**	**22.63**

4.23 REVENUE FROM SALE OF ELECTRICITY

4.23.1 The Petitioner's Submission:

For FY 2010 - 11, the Petitioner has submitted the revenue from tariffs of Rs. 5,431.01 Crores, based on tariffs as per tariff order dated 31st March, 2010.

4.23.2 The Commission's Analysis:

The Commission observes that the figures submitted by Petitioner for FY 2010 - 11 are as per Petitioner's provisional accounts. The Commission notes that the Petitioner is required to submit audited accounts for FY 2010 - 11 as per the UPERC Regulations.

In the absence of final audited numbers for FY 2010 - 11 and to avoid mounting costs due to delay, the Commission has considered the filing submission made as per Petitioner's Provisional Accounts. The Commission thus approves the revenue from tariffs for FY 2010 - 11 as Rs. 5,431.01 Crores.

4.24 APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP

In the preceding sections, the Commission has detailed out expenses under various heads as per the petition of the Petitioner as well as those approved by the Commission. The Commission has also approved the revenue from existing tariffs. Based on these, the approved ARR, revenue from tariffs and resultant gap for FY 2010 - 11 is summarized in the Table 4-49 below:

Table 4-49: ARR, REVENUE AND GAP SUMMARY FOR FY 2010 - 11 (Rs. Crores)

S. No.	Item	FY 2010-11		
		Petitioner's	Commission	
		Filing Submission	Approved	% of ARR
1	Power Purchase Expenses (incl PGCIL charges)	5,913	5,913	91%
2	Transmission Charges - Intra state (incl SLDC Charges)	283	283	4%
3	Employee cost	290	294	5%
4	A&G expenses	38	35	1%
5	R&M expenses	137	185	3%
6	Interest & Finance charges	156	180	3%
7	Depreciation	177	359	6%
8	**Total Expenditure**	**6,995**	**7250**	**111%**
Less	**Expense capitalization**	112	95	1%
9	*Employee cost capitalized*	83	76	1%
10	*Interest capitalized*	20	11	0%
11	*A&G expenses capitalized*	9	8	0%
12	**Net Expenditure**	**6,884**	**7,155**	**110%**
Add	**Special Appropriations**	-	-	0%
13	*Provision for Bad & Doubtful debts*	1	-	0%
14	*Provision for Contingency Reserve*	-	-	0%
15	*Other (Misc.) - Net Prior Period Credit*	1	-	0%
16	*OTS Waivers*	-	-	0%
17	**Total net expenditure with provisions**	**6,886**	**7155**	**110%**
18	Add: Return on Equity	-	-	0%
19	Less: Non Tariff Income	58	58	1%
20	Less: Subsidy from Govt	580	580	9%
21	**Annual Revenue Requirement (ARR)**	**6,248**	**6517**	**100%**
22	Revenue from existing tariffs	5,431	5,431	0%
23	Gap for current year at existing tariffs	817	1,086	0%
24	Gap carried forward from previous years (from FY 2009)	-	(72)	0%

5 ANALYSIS OF ARR FOR FY 2011 - 12

5.1 CONSUMPTION PARAMETERS: CONSUMER NUMBERS, CONNECTED LOAD, SALES

5.1.1 The Petitioner's Submission:

For FY 2011 - 12, the Petitioner has provided the figures for energy sales, number of consumers and connected load as per provisional accounts. The table below summarises the numbers submitted by the Petitioner:

Table 5-1: CONSUMPTION ESTIMATED BY PETITIONER FOR FY 2011 - 12

Consumer categories	No. of consumers	Connected load in kW	Energy sales in MU
	(Estimated)	(Estimated)	(Estimated)
LMV-1: Domestic	2,818,109	5,928,703	5,323
LMV-2:Non-Domestic	331,224	857,921	997
LMV-3: Public Lamps	756	43,437	152
LMV-4: Institutions	12,892	75,565	213
LMV-5: Private Tube Wells	351,270	1,931,647	2,095
LMV 6: Small and Medium Power	48,889	582,621	869
LMV-7: Public Water Works	2,490	78,905	235
LMV-8: State Tube Wells	4,763	63,885	209
LMV-9: Temporary Supply	1,786	52,428	56
LMV-10: Departmental Employees	21,216	71,300	104
HV-1: Non-Industrial Bulk Loads	409	173,954	714
HV-2: Large and Heavy Power	5,105	2,141,113	5,017
HV-3: Railway Traction	3	16,700	46
HV-4: Lift Irrigation	2	311	0
Sub-total	**3,598,914**	**12,018,490**	**16,031**
Extra state & Bulk	-	-	-
Total	**3,598,914**	**12,018,490**	**16,031**

5.1.2 The Commission's Analysis:

The Commission observes that the figures submitted by Petitioner for FY 2011 - 12 are as per Petitioner's provisional accounts. The Commission notes that the Petitioner is required to submit audited accounts for FY 2010 - 11 as per the UPERC Regulations.

In the absence of final audited numbers for FY 2011 - 12 and to avoid mounting costs due to delay, the Commission has considered the submission made as per Petitioner's

Provisional Accounts. The Commission thus approves the consumption figures for FY 2011 - 12 as shown in Table 5-2 below:

Table 5-2: CONSUMPTION PARAMETERS APPROVED BY COMMISSION FOR FY 2011 - 12

Consumer categories	No. of consumers		Connected load (kW)		Energy sales (MU)	
	(Petitioner's submission)	(Approved by Commission)	(Petitioner's submission)	(Approved by Commission)	(Petitioner's submission)	(Approved by Commission)
LMV-1: Domestic	2,818,109	2,818,109	5,928,703	5,928,703	5,323	5,323
LMV-2:Non-Domestic	331,224	331,224	857,921	857,921	997	997
LMV-3: Public Lamps	756	756	43,437	43,437	152	152
LMV-4: Institutions	12,892	12,892	75,565	75,565	213	213
LMV-5: Private Tube Wells	351,270	351,270	1,931,647	1,931,647	2,095	2,095
LMV 6: Small and Medium Power	48,889	48,889	582,621	582,621	869	869
LMV-7: Public Water Works	2,490	2,490	78,905	78,905	235	235
LMV-8: State Tube Wells	4,763	4,763	63,885	63,885	209	209
LMV-9: Temporary Supply	1,786	1,786	52,428	52,428	56	56
LMV-10: Departmental Employees	21,216	21,216	71,300	71,300	104	104
HV-1: Non-Industrial Bulk Loads	409	409	173,954	173,954	714	714
HV-2: Large and Heavy Power	5,105	5,105	2,141,113	2,141,113	5,017	5,017
HV-3: Railway Traction	3	3	16,700	16,700	46	46
HV-4: Lift Irrigation	2	2	311	311	0	0
Sub-total	**3,598,914**	**3,598,914**	**12,018,490**	**12,018,490**	**16,031**	**16,031**
Extra state & Bulk	-	-	-	-	-	-
Total	**3,598,914**	**3,598,914**	**12,018,490**	**12,018,490**	**16,031**	**16,031**

5.2 DISTRIBUTION LOSSES AND ENERGY BALANCE

5.2.1 The Petitioner's Submission:

The Distribution licensee has estimated a distribution loss of 26.49% for FY 2011 - 12. The intra-state & inter-state transmission losses submitted by the licensee for FY 2011 - 12 are 4.20% and 1.70% respectively. The aggregate loss (T&D) as submitted by the licensee works out to 30.78% for FY 2011 - 12.

The Licensee intends to pursue the aggressive loss reduction programs through technology intervention, process and efficiency improvement through implementation of capital investment plan. The objective of efficiency improvement programs would be to ensure a reliable distribution system and enhance the quality supply to consumer as well as to reduce technical & commercial losses.

The future projection of distribution losses vis-à-vis loss reduction trajectory as submitted by the Petitioner is given in Table 5-3 below:

Table 5-3: DISTRIBUTION LOSS REDUCTION TRAJECTORY – PETITIONER

Particulars	Base Year FY 2010 - 11	FY 2011 - 12	FY 2012 - 13	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Loss	26.11%	24.41%	22.60%	21.00%	20.00%	19.00%

5.2.2 The Commission's Analysis:

The Commission feels there is ample room for reduction in distribution losses; however the licensee has failed to act upon the same. There is an urgent need to have an appreciable loss reduction trajectory and aggressive follow-up efforts to achieve it. However considering licensee past efforts at achieving targets and lethargic attitude at cutting losses the Commission feels cynical about the loss reduction achieved by licensee for FY 2011 - 12.

The Commission in its last tariff order had directed the Petitioner 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 the said tariff order. Further the Petitioner was also directed the licensee to keep the Commission abreast regarding the study to be undertaken, scope of work, methodology being adopted, whether the study is being undertaken departmentally or assistance of experts in the field is being availed etc.

The Petitioner in its petition has mentioned that the above referred directive has been considered under the R-APDRP Project. However no such study was carried out as yet and no report was submitted for perusal of the Commission. The Commission would like to reiterate that the distribution loss proposal of the licensees should be based on correct energy audit data and supported by a report on the study carried out on such data. The Commission directs the licensee to submit a detailed report explaining the data source, the scope of work, methodology adopted in arriving at distribution loss reduction trajectory submitted above.

The Commission had not approved a distribution loss trajectory for the FY 2011 - 12 and further as the year in contention has already elapsed; the Commission finds merit in approving the losses proposed by the Petitioner.

The Petitioner's submission and Commission's approved energy balance for FY 2011 - 12 is given in Table 5-4 below:

Table 5-4: ENERGY BALANCE FOR FY 2011 - 12

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Retail Sales (MU)	16,031	16,031
Distribution Losses (% of Energy Received)	26.49%	26.49%
Energy at Discom Periphery for Retail Sales (MU)	21,809	21,809
Intra -state Transmission losses %	4.20%	4.20%
Energy Available at State periphery for Transmission(MU)	22,765	22,765
Periphery Loss (Upto inter connection Point) (%)	1.70%	1.70%
Purchases Required & Billed Energy (MU)	23,160	23,160
Total Inter & Intra State Transmission Losses(%)	5.83%	5.83%
Total T&D Losses in Retail Sales	30.78%	30.78%

5.3 ENERGY AVAILABILITY

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

The Petitioner has 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.

The UPPCL has drawn a merit dispatch order schedule and has estimated to procure 73,962 MUs of power for FY 2011 - 12.

The Commission observes that FY 2011 - 12 has already elapsed and the Commission has little choice but to accept the Petitioner's submission. Thus the Commission approves total power purchase cost (excluding PGCIL Charges) of Rs. 26,307 Crores submitted by approved by the Petitioner, based on the review and analysis mentioned in succeeding sections.

Since, the power purchase expense is the single largest component in the ARR of a distribution licensee; it becomes imperative that this element of cost is incurred with utmost care based on the most efficient way of power procurement from the generating stations through long term / short term power purchase arrangements or through bilateral power purchase agreements. Power Purchase cost being un-controllable component of the ARR the Commission plans to true-up the power purchase cost to actual cost on submission of audited accounts.

5.4 POWER PROCUREMENT FROM STATE GENERATING STATIONS

5.4.1 The Petitioner's Submission:

The State of Uttar Pradesh has got both thermal as well as hydro generating stations. Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) owns all the thermal generating stations within the State and the Hydro Stations are owned by Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL). The Multi Year Tariff (MYT) orders issued by the Commission for UPRVUNL and UPJVNL for their respective power stations for FY 2009 - 10 to 2013-14 form the basis for determining the costs for FY 2011 - 12.

The Petitioner's in its latest petition for FY 2012 - 13 submits that computation cost of power procurement for FY 2011 - 12 from State Thermal and Hydro generating stations has been done on the basis of actuals till March 2012. The cost of energy available from these stations has been derived by the Petitioner from tariffs approved by the State Commission. Petitioner's submission of power purchased from State Thermal and Hydro Generating Stations for FY 2011 - 12 is given in Table 5-5 and Table 5-6 below:

Table 5-5: DETAILS OF POWER PURCHASE COST FROM UPRUVNL STATIONS FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A		3804		-		-	-	696.11	1.83
Anpara B		6692		-		-	-	1,457.63	2.18
Harduagunj		475		-		-	-	158.17	3.33
Obra A		517		-		-	-	183.20	3.55
Obra B		3348		-		-	-	610.71	1.82
Panki		860		-		-	-	359.94	4.19
Parichha		412		-		-	-	159.05	3.86
Parichha Extn.		2147		-		-	-	810.40	3.77
Parichha Extn. Stage II (2X250MW)		0		-		-	-	-	-
Harduaganj Ext. (2X250MW)		0		-		-	-	-	-
Total	**0**	**18255**		**0**		**0**		**4435**	**2.43**

Table 5-6: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FY 2011 - 12 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara		295		-		-	-	18.12	0.61
Matatila		100		-		-	-	6.05	0.61
Obra (Hydel)		240		-		-	-	15.80	0.66
Rihand		517		-		-	-	29.48	0.57
UGC Power Stations		24		-		-	-	5.88	2.49
Belka & Babail		0		-		-	-	-	-
Sheetla		3		-		-	-	0.85	2.72
Total		**1179**		**-**		**-**		**76.18**	**0.65**

5.4.2 The Commission's Analysis:

The Commission has observed that the Petitioner has failed to provide details of units procured from UPRUVNL's individual station, bifurcation of fixed and variable costs of power procurement. Further, no individual corroborative report is available from state load dispatch center to verify the actual units and cost power procured by UPPCL. With these constrains the Commission is hindered of making any kind of prudence check of the power purchases from State owned generating stations. The Commission strongly opines that power should be procured on least cost basis and as per merit order principle. Faced with constrains and taking cognizance of the fact that power purchase constitutes un-controllable component of the ARR the Commission approves power purchases form State Thermal and Hydro generating stations on the basis of assumptions given in Table 5-7 below. The Commission reiterates that it will have a serious look into these costs during true-up exercise for FY 2011 - 12 based on audited accounts.

Table 5-7: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL and UPJVNL - FY 2011 - 12

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	1. Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. 2. Thereafter, Merit Order Despatch is run for approval of quantum.
2	**Fixed & Variable Charges**	1. As provided in ARR / Tarif petition by UPPCL for FY 2012-13

Based on above approach, the summary of approved costs of UPRVUNL Thermal generating stations and UPJVNL Hydro generating stations is given in Table 5-8 and Table 5-9 given below:

Table 5-8: APPROVED COST OF POWER PURCHASE FROM UPRUVNL STATIONS FY 2010 - 11

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A	0	3804	-	-	-	-	-	696.11	1.83
Anpara B	0	6692	-	-	-	-	-	1,457.63	2.18
Harduagunj	0	475	-	-	-	-	-	158.17	3.33
Obra A	0	517	-	-	-	-	-	183.20	3.55
Obra B	0	3348	-	-	-	-	-	610.71	1.82
Panki	0	860	-	-	-	-	-	359.94	4.19
Parichha	0	412	-	-	-	-	-	159.05	3.86
Parichha Extn.	0	2147	-	-	-	-	-	810.40	3.77
Parichha Extn. Stage II (2X250MW)	0	0	-	-	-	-	-	-	-
Harduaganj Ext. (2X250MW)	0	0	-	-	-	-	-	-	-
Total	**0**	**18255**	**-**	**0**	**-**	**0**	**-**	**4435**	**2.43**

Table 5-9: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara	0	295	-	-	-	-	-	18.12	0.61
Matatila	0	100	-	-	-	-	-	6.05	0.61
Obra (Hydel)	0	240	-	-	-	-	-	15.80	0.66
Rihand	0	517	-	-	-	-	-	29.48	0.57
UGC Power Stations	0	24	-	-	-	-	-	5.88	2.49
Belka & Babail	0	0	-	-	-	-	-	-	-
Sheetla	0	3	-	-	-	-	-	0.85	2.72
Total	**0**	**1179**	**-**	**-**	**-**	**-**	**-**	**76.18**	**0.65**

5.5 CAPACITY ALLOCATION FROM CENTRAL GENERATING STATIONS & OTHER STATIONS

5.5.1 The Petitioner's Submission:

Petitioner procures power from Central Generating Stations (CGS) includes power from NTPC, NHPC, NPCIL as well as from generating station with Joint Ventures and IPPs. The Petitioner in its latest petition for FY 2012 - 13 submits that cost of power procurement for FY 2011 - 12 from these sources has been done on the basis of actual upto March 2012. The Petitioner has mentioned that the cost of energy from Central Sector Station has been derived from tariffs approved by Central Electricity Regulatory Commission. The cost of power purchase from Independent Power Producers (IPPs) within the State has been determined in accordance with UPERC (Terms and Conditions of Generation Tariff) Regulations. Similarly the cost of power purchase from IPPs outside the State has been derived from tariffs and power purchase agreement approved by the Commission. The cost of energy from other sources has been derived from the power purchase / banking / trading agreements and tariffs approved by the Commission.

5.5.2 The Commission's Analysis:

Commission again strongly reiterates that power should be procured on least cost basis and as per merit order principle and that it will have a serious look into these costs during true-up exercise for FY 2011 - 12 based on audited accounts

5.5.3 The Petitioner's Submission:

The Petitioner's submission of power purchased from NTPC generating stations for FY 2011 - 12 is provided in Table 5-10 given below:

Table 5-10: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta		818		-		-	-	397.35	4.86
Auriya		1515		-		-	-	728.03	4.80
Dadri Thermal		660		-		-	-	274.45	4.16
Dadri Gas		1904		-		-	-	857.29	4.50
Dadri Extension		1188		-		-	-	509.06	4.28
Rihand-I		2926		-		-	-	730.35	2.50
Rihand-II		2648		-		-	-	650.20	2.46
Singrauli		6300		-		-	-	1,212.68	1.92
Tanda		2983		-		-	-	1,452.76	4.87
Unchahar-I		1889		-		-	-	762.60	4.04
Unchahar-II		1104		-		-	-	415.99	3.77
Unchahar-III		592		-		-	-	254.44	4.30
Farakka		222		-		-	-	102.08	4.59
Kahalgaon St. I		484		-		-	-	215.95	4.46
Talchar		0		-		-	-	1.75	-
Kahalgaon St.II Ph.I		1322		-		-	-	502.84	3.80
Koldam (Hydro)		0		-		-	-	-	-
Rihand-III		0		-		-	-	-	-
Total	**0**	**26554**		**-**		**-**		**9,067.83**	**3.41**

5.5.4 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NTPC generating stations is given in Table 5-11 below:

Table 5-11: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC - FY 2011 - 12

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	1. Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. 2. Further the quantum is approved as per Merit order despatch principles.
2	**Fixed Charges**	Fixed charges are computed after considering UP state's allcoated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and ERPC and fixed cost approved by as per CERC order for respective power plants.
3	**Vairable Charges**	Due to paucity of information on variable cost of variours plants, the variable cost are calculted after substracting fixed charges as computed above from the total cost as provided by UPPCL in ARR / Tariff petition for FY 2012-13.

Based on above approach, the summary of approved costs of NTPC generating stations is given in Table 5-12 given below:

Table 5-12: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	0	818	-	-	-	-	-	397.35	4.86
Auriya	0	1515	-	-	-	-	-	728.03	4.80
Dadri Thermal	0	660	-	-	-	-	-	274.45	4.16
Dadri Gas	0	1904	-	-	-	-	-	857.29	4.50
Dadri Extension	0	1188	-	-	-	-	-	509.06	4.28
Rihand-I	0	2926	-	-	-	-	-	730.35	2.50
Rihand-II	0	2648	-	-	-	-	-	650.20	2.46
Singrauli	0	6300	-	-	-	-	-	1,212.68	1.92
Tanda	0	2983	-	-	-	-	-	1,452.76	4.87
Unchahar-I	0	1889	-	-	-	-	-	762.60	4.04
Unchahar-II	0	1104	-	-	-	-	-	415.99	3.77
Unchahar-III	0	592	-	-	-	-	-	254.44	4.30
Farakka	0	222	-	-	-	-	-	102.08	4.59
Kahalgaon St. I	0	484	-	-	-	-	-	215.95	4.46
Talchar	0	0	-	-	-	-	-	1.75	-
Kahalgaon St.II Ph.I	0	1322	-	-	-	-	-	502.84	3.80
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	0	0	-	-	-	-	-	-	-
Total	**0**	**26554**		**-**		**-**		**9,067.83**	**3.41**

5.5.5 The Petitioner's Submission:

The Petitioner's submission of power purchased from NHPC generating stations for FY 2011 - 12 is provided in Table 5-13 below:

Table 5-13: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FY 2011 - 12 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera		499		-		-	-	71.33	1.43
Chamera-II		390		-		-	-	126.41	3.24
Chamera-III		0		-		-	-	-	-
Dhauliganga		281		-		-	-	81.87	2.91
Salal I&II		208		-		-	-	18.86	0.91
Tanakpur		88		-		-	-	19.59	2.22
Uri		464		-		-	-	81.45	1.76
Dulhasti		567		-		-	-	318.64	5.62
Sewa-II		127		-		-	-	65.85	5.19
Uri-II		0		-		-	-	-	-
Parbati ST-III		0		-		-	-	-	-
Total		**2624**		**-**		**-**		**784.00**	**2.99**

5.5.6 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NHPC generating stations is given in Table 5-14 below:

Table 5-14: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC - FY 2011 - 12

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. considered must -run in Merit Order Despatch.
2	**Fixed Charges**	Fixed charges are computed after considering UP state's allcoated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and fixed cost approved by as per CERC order for respective power plants.
3	**Vairable Charges**	Due to paucity of information on variable cost of variours plants, the variable cost are calculted after substracting fixed charges as computed above from the total cost as provided by UPPCL in ARR / Tariff petition for FY 2012-13

Based on above approach, the summary of approved costs of NHPC generating stations is given in Table 5-15 given below:

Table 5-15: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera	0	499	-	-	-	-	-	71.33	1.43
Chamera-II	0	390	-	-	-	-	-	126.41	3.24
Chamera-III	0	0	-	-	-	-	-	-	-
Dhauliganga	0	281	-	-	-	-	-	81.87	2.91
Salal I&II	0	208	-	-	-	-	-	18.86	0.91
Tanakpur	0	88	-	-	-	-	-	19.59	2.22
Uri	0	464	-	-	-	-	-	81.45	1.76
Dulhasti	0	567	-	-	-	-	-	318.64	5.62
Sewa-II	0	127	-	-	-	-	-	65.85	5.19
Uri-II	0	0	-	-	-	-	-	-	-
Parbati ST-III	0	-	-	-	-	-	-	-	-
Total	**0**	**2624**		**-**		**-**		**784.00**	**2.99**

5.5.7 The Petitioner's Submission:

The Petitioner's submission of power purchased from NPCIL generating stations for FY 2011 - 12 is provided in Table 5-16 below:

Table 5-16: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP		611		-		-	-	181.21	2.97
RAPP #3&4		582		-		-	-	173.20	2.98
RAPP#5&6		904		-		-	-	333.85	3.69
Total		**2097**						**688.26**	**3.28**

5.5.8 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NPCIL generating stations is given in Table 5-17 below:

Table 5-17: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL - FY 2011 - 12

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13 and are considered must -run in Merit Order Despatch.
2	**Tariff (Single part)**	As provided in ARR / Tariff petition by UPPCL for FY 2012-13.

Based on above approach, the summary of approved costs of NPCIL generating stations is given in Table 5-18 below:

Table 5-18: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP	0	611	-	-	-	-	-	181.21	2.97
RAPP #3&4	0	582	-	-	-	-	-	173.20	2.98
RAPP#5&6	0	904	-	-	-	-	-	333.85	3.69
Total		**2097**				**-**		**688.26**	**3.28**

5.5.9 The Petitioner's Submission:

The Petitioner's submission of power purchased from IPP's and Joint Ventures (JV's) for FY 2011 - 12 is provided in Table 5-19 below:

Table 5-19: DETAILS OF POWER PURCHASE COST FROM IPPs / JVs FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri HPS		1362		-		-	-	367.41	2.70
VishnuPrayag		1888		-		-	-	455.75	2.41
Tala Power		150		-		-	-	27.79	1.85
Tehri Hydro		1627		-		-	-	725.20	4.46
Rosa Power Project I		3908		-		-	-	2,006.62	5.13
IGSTPP, Jhajhjhar		78		-		-	-	44.41	5.70
Koteshwar (100 Mar 11, 300 2011-12)		230		-		-	-	113.69	4.95
Anpara 'C' (600 2011-12, 600 12-13)		1195		-		-	-	247.54	2.07
Karcham-Wangtoo (2011 - 12)		0		-		-	-	-	-
Bajaj Hindusthan		319		-		-	-	110.17	3.45
Rosa Power Project II (300 26-Jun-10)		0		-		-	-	-	-
Srinagar (2011-12)		0		-		-	-	-	-
Teesta St-III (2011-12)		0		-		-	-	-	-
Total		**10758**		**-**		**-**		**4,098.59**	**3.81**

5.5.10 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from IPPs and Joint Ventures (JVs) is given in Table 5-20 below:

Table 5-20: ASSUMPTIONS FOR POWER PURCHASE FROM IPPs / JVs - FY 2011 - 12

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. Nathpa-Jhakri, Tehri, Tala and Vishnuprayag are considered as must -run in Merit Order Despatch. Rosa Power Plant, IGSTPP, Jhajhjhar, Koteshwar and Anpara 'C'are considered as per Merit order principles
2	**Tariff (Single part & Two part)**	
	IPPs (Nathpa-Jhakri, Tehri, Tala and Vishnuprayag) Koteshwar Rosa Power Plant, IGSTPP, Jhajhjhar and Anpara 'C'	As provided in ARR / Tariff petition by UPPCL for FY 2012-13, due to paucity of information on cost.

Based on above approach, the summary of approved power purchase costs from IPP's and Joint Ventures (JV's) is given in Table 5-21 below:

Table 5-21: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri HPS	0	1362	-	-	-	-	-	367.41	2.70
VishnuPrayag	0	1888	-	-	-	-	-	455.75	2.41
Tala Power	0	150	-	-	-	-	-	27.79	1.85
Tehri Hydro	0	1627	-	-	-	-	-	725.20	4.46
Rosa Power Project I	0	3908	-	-	-	-	-	2,006.62	5.13
IGSTPP, Jhajhjhar	0	78	-	-	-	-	-	44.41	5.70
Koteshwar (100 Mar 11, 300 2011-12)	0	230	-	-	-	-	-	113.69	4.95
Anpara 'C' (600 2011-12, 600 12-13)	0	1195	-	-	-	-	-	247.54	2.07
Karcham-Wangtoo (2011 - 12)	0	0	-	-	-	-	-	-	-
Bajaj Hindusthan	0	319	-	-	-	-	-	110.17	3.45
Rosa Power Project II (300 26-Jun-10)	0	0	-	-	-	-	-	-	-
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-
Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Total	**0**	**10758**				**-**		**4,098.59**	**3.81**

5.5.11 The Petitioner's Submission:

The Petitioner's submission of power purchased from Co-generating stations for FY 2011 - 12 is provided in Table 5-22 given below:

Table 5-22: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen		2855		-		-	-	1,178.32	4.13

5.5.12 The Commission's Analysis:

In an effort to encourage renewable generation the Commission has mandated that the distribution licensees shall, based on availability, procure power to the extent available from the co-generating stations available in the State. Approved power purchased from Co-generating stations for FY 2011 - 12 is provided in Table 5-23 below:

Table 5-23: APPROVED COST OF POWER PURCHASE: STATE CO-GENERATION FACILITIES FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen		2855	-	-	-	-	-	1,178.32	4.13

5.5.13 The Petitioner's Submission:

The Petitioner's submission of power purchased from other sources for FY 2011 - 12 for meeting emergency is provided in Table 5-24 below:

Table 5-24: DETAILS OF POWER PURCHASE FROM OTHER SOURCES FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL, IEX)		7584		-		-	-	3,329.84	4.39
Others/UI		2056		-		-	-	1,133.32	5.51
Total		**9639**						**4,463.17**	**4.63**

5.5.14 The Commission's Analysis:

The Commission has run merit order despatch considering all possible sources and accordingly approves Petitioner's submission of power purchase from other sources for meeting emergency requirements.

Table 5-25: APPROVED COST OF POWER PURCHASE FROM OTHER SOURCES FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL, IEX)		7584	-	-	-	-	-	3,329.84	4.39
Others/UI		2056	-	-	-	-	-	1,133.32	5.51
Total		**9639**				**-**		**4,463.17**	**4.63**

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

The Commission in its Distribution Tariff Regulations 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 understands that the UI mechanism is meant for the purpose of disciplining the grid operations and is not to be treated as a regular source for power purchase. Hence the Commission reiterates that the Petitioner should take due care while overdrawing power from the grid; especially when the UI rates are high. The Commission would also like to caution the Petitioner here that this issue would be dealt with at the time of true-up and at that time any power purchases undertaken in contravention to the provisions of the Distribution Tariff Regulations would be disallowed and the Petitioner would have to bear the cost for the same.

CERC has also issued a Press Release dated 23rd July 2009 in this regard, wherein Forum of Regulators (FOR) has agreed that additional Unscheduled-Interchange (UI) charges imposed on distribution utilities for excessive over-drawal during the period when grid frequency is below 49.2 Hz. should not be permitted in the ARR of distribution utilities w.e.f. 1st August, 2009. This will ensure that consumers are not burdened for inefficiency or incompetence of that particular distribution utility. Accordingly, the Commission directs the Petitioner to submit the details of power procured below 49.2 Hz between 1st April 2011 to 31st March 2012 along with costs during the submission of next ARR / Tariff petition.

Further, the Commission would like to reiterate that the Petitioner 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.

As per the Ministry of Power resolution dated 15th May 2012, the licensee is directed to comply with the guidelines for short term procurement of power by distribution licensees through tariff based bidding process.

5.6 SUMMARY OF POWER PURCHASE

5.6.1 The total power purchase quantum available in MW terms from State owned generating stations, CGS and other sources along with the quantum and cost approval as submitted by Petitioner and approved by Commission for FY 2011 - 12 is presented in tables Table 5-26 and Table 5-27 below:

Table 5-26: SUMMARY OF POWER PURCHASE COST FY 2011 - 12 – PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	0	3804	-	-	-	-	-	696.11	1.83
Anpara B	0	6692	-	-	-	-	-	1,457.63	2.18
Harduagunj	0	475	-	-	-	-	-	158.17	3.33
Obra A	0	517	-	-	-	-	-	183.20	3.55
Obra B	0	3348	-	-	-	-	-	610.71	1.82
Panki	0	860	-	-	-	-	-	359.94	4.19
Parichha	0	412	-	-	-	-	-	159.05	3.86
Parichha Extn.	0	2147	-	-	-	-	-	810.40	3.77
Parichha Extn. Stage II (2X250MW)	0	0	-	-	-	-	-	-	-
Harduaganj Ext. (2X250MW)	0	0	-	-	-	-	-	-	-
Sub total - Thermal	**0**	**18255**		**0.00**		**0.00**		**4435.21**	**2.43**
Per unit Avg Rate of Thermal Generation								**2.43**	
Hydro Stations									
Khara	0	295	-	-	-	-	-	18.12	0.61
Matatila	0	100	-	-	-	-	-	6.05	0.61
Obra (Hydel)	0	240	-	-	-	-	-	15.80	0.66
Rihand	0	517	-	-	-	-	-	29.48	0.57
UGC Power Stations	0	24	-	-	-	-	-	5.88	2.49
Belka & Babail	0	0	-	-	-	-	-	-	-
Sheetla	0	3	-	-	-	-	-	0.85	2.72
Sub total - Hydro	**0**	**1179**		**0.00**		**0.00**		**76.18**	**0.65**
Purchase Per unit Avg Rate from hydro generating stations								**0.65**	
Sub-Total Own generation	**0**	**19433**		**-**		**-**		**4,511.40**	
Procurement of power from Central Sector Generating Stations									
Anta	0	818	-	-	-	-	-	397.35	4.86
Auriya	0	1515	-	-	-	-	-	728.03	4.80
Dadri Thermal	0	660	-	-	-	-	-	274.45	4.16
Dadri Gas	0	1904	-	-	-	-	-	857.29	4.50
Dadri Extension	0	1188	-	-	-	-	-	509.06	4.28
Rihand-I	0	2926	-	-	-	-	-	730.35	2.50
Rihand-II	0	2648	-	-	-	-	-	650.20	2.46
Singrauli	0	6300	-	-	-	-	-	1,212.68	1.92
Tanda	0	2983	-	-	-	-	-	1,452.76	4.87
Unchahar-I	0	1889	-	-	-	-	-	762.60	4.04
Unchahar-II	0	1104	-	-	-	-	-	415.99	3.77
Unchahar-III	0	592	-	-	-	-	-	254.44	4.30

Farakka	0	222	-	-	-	-	-	102.08	4.59
Kahalgaon St. I	0	484	-	-	-	-	-	215.95	4.46
Talchar	0	0	-	-	-	-	-	1.75	-
Kahalgaon St.II Ph.I	0	1322	-	-	-	-	-	502.84	3.80
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	0	0	-	-	-	-	-	-	-
Sub-Total NTPC	**0**	**26554**		**-**		**-**		**9,067.83**	**3.41**
Chamera	0	499	-	-	-	-	-	71.33	1.43
Chamera-II	0	390	-	-	-	-	-	126.41	3.24
Chamera-III	0	0	-	-	-	-	-	-	-
Dhauliganga	0	281	-	-	-	-	-	81.87	2.91
Salal I&II	0	208	-	-	-	-	-	18.86	0.91
Tanakpur	0	88	-	-	-	-	-	19.59	2.22
Uri	0	464	-	-	-	-	-	81.45	1.76
Dulhasti	0	567	-	-	-	-	-	318.64	5.62
Sewa-II	0	127	-	-	-	-	-	65.85	5.19
Uri-II	0	0	-	-	-	-	-	-	-
Parbati ST-III	0	0	-	-	-	-	-	-	-
Sub-Total NHPC	**0**	**2624**		**-**		**-**		**784.00**	**2.99**
NAPP	0	611	-	-	-	-	-	181.21	2.97
RAPP #3&4	0	582	-	-	-	-	-	173.20	2.98
RAPP#5&6	0	904	-	-	-	-	-	333.85	3.69
Sub-Total NPCIL	**0**	**2097**				**-**		**688.26**	**3.28**
Nathpa Jhakri HPS	0	1362	-	-	-	-	-	367.41	2.70
VishnuPrayag	0	1888	-	-	-	-	-	455.75	2.41
Tala Power	0	150	-	-	-	-	-	27.79	1.85
Tehri Hydro	0	1627	-	-	-	-	-	725.20	4.46
Rosa Power Project I	0	3908	-	-	-	-	-	2,006.62	5.13
IGSTPP, Jhajhjhar	0	78	-	-	-	-	-	44.41	5.70
Koteshwar (100 Mar 11, 300 2011-12)	0	230	-	-	-	-	-	113.69	4.95
Anpara 'C' (600 2011-12, 600 12-13)	0	1195	-	-	-	-	-	247.54	2.07
Karcham-Wangtoo (2011 -12)	0	0	-	-	-	-	-	-	-
Bajaj Hindusthan	0	319	-	-	-	-	-	110.17	3.45
Rosa Power Project II (300 26-Jun-10)	0	0	-	-	-	-	-	-	-
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Sub-Total IPP/JV	**0**	**10758**				**-**		**4,098.59**	**3.81**
Captive and Cogen	0	2855	-	-	-	-	-	1,178.32	4.13
Inter system exchange (Bilateral & PXIL, IEX)	0	7584	-	-	-	-	-	3,329.84	4.39
Others/UI	0	2056	-	-	-	-	-	1,133.32	5.51
Sub-Total : Co-Generation & Other Sources	**0**	**12495**				**-**		**5,641.48**	
Revised O&M and other Charges								**334.18**	
Incidental Power Purchase cost and (rebates)								**334.18**	
Grand Total of Power Purchase	**0**	**73962**		**-**		**-**		**25,125.74**	**3.40**

Table 5-27: SUMMARY OF APPROVED POWER PURCHASE COST FY 2011 - 12

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	0	3804	-	-	-	-	-	696.11	1.83
Anpara B	0	6692	-	-	-	-	-	1,457.63	2.18
Harduagunj	0	475	-	-	-	-	-	158.17	3.33
Obra A	0	517	-	-	-	-	-	183.20	3.55
Obra B	0	3348	-	-	-	-	-	610.71	1.82
Panki	0	860	-	-	-	-	-	359.94	4.19
Parichha	0	412	-	-	-	-	-	159.05	3.86
Parichha Extn.	0	2147	-	-	-	-	-	810.40	3.77
Parichha Extn. Stage II (2X250MW)	0	0	-	-	-	-	-	-	-
Harduaganj Ext. (2X250MW)	0	0	-	-	-	-	-	-	-
Sub total - Thermal	**0**	**18255**		**0.00**		**0.00**		**4435.21**	**2.43**
Per unit Avg Rate of Thermal Generation								**2.43**	
Hydro Stations									
Khara	0	295	-	-	-	-	-	18.12	0.61
Matatila	0	100	-	-	-	-	-	6.05	0.61
Obra (Hydel)	0	240	-	-	-	-	-	15.80	0.66
Rihand	0	517	-	-	-	-	-	29.48	0.57
UGC Power Stations	0	24	-	-	-	-	-	5.88	2.49
Belka & Babail	0	0	-	-	-	-	-	-	-
Sheetla	0	3	-	-	-	-	-	0.85	2.72
Sub total - Hydro	**0**	**1179**		**0.00**		**0.00**		**76.18**	**0.65**
Purchase Per unit Avg Rate from hydro generating stations								**0.65**	
Sub-Total Own generation	**0**	**19433**		**-**		**-**		**4,511.40**	
Procurement of power from Central Sector Generating Stations									
Anta	0	818	-	-	-	-	-	397.35	4.86
Auriya	0	1515	-	-	-	-	-	728.03	4.80
Dadri Thermal	0	660	-	-	-	-	-	274.45	4.16
Dadri Gas	0	1904	-	-	-	-	-	857.29	4.50
Dadri Extension	0	1188	-	-	-	-	-	509.06	4.28
Rihand-I	0	2926	-	-	-	-	-	730.35	2.50
Rihand-II	0	2648	-	-	-	-	-	650.20	2.46
Singrauli	0	6300	-	-	-	-	-	1,212.68	1.92
Tanda	0	2983	-	-	-	-	-	1,452.76	4.87
Unchahar-I	0	1889	-	-	-	-	-	762.60	4.04
Unchahar-II	0	1104	-	-	-	-	-	415.99	3.77
Unchahar-III	0	592	-	-	-	-	-	254.44	4.30

Farakka	0	222	-	-	-	-	-	102.08	4.59
Kahalgaon St. I	0	484	-	-	-	-	-	215.95	4.46
Talchar	0	0	-	-	-	-	-	1.75	-
Kahalgaon St.II Ph.I	0	1322	-	-	-	-	-	502.84	3.80
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	0	0	-	-	-	-	-	-	-
Sub-Total NTPC	**0**	**26554**		**-**		**-**		**9,067.83**	**3.41**
Chamera	0	499	-	-	-	-	-	71.33	1.43
Chamera-II	0	390	-	-	-	-	-	126.41	3.24
Chamera-III	0	0	-	-	-	-	-	-	-
Dhauliganga	0	281	-	-	-	-	-	81.87	2.91
Salal I&II	0	208	-	-	-	-	-	18.86	0.91
Tanakpur	0	88	-	-	-	-	-	19.59	2.22
Uri	0	464	-	-	-	-	-	81.45	1.76
Dulhasti	0	567	-	-	-	-	-	318.64	5.62
Sewa-II	0	127	-	-	-	-	-	65.85	5.19
Uri-II	0	0	-	-	-	-	-	-	-
Parbati ST-III	0	0	-	-	-	-	-	-	-
Sub-Total NHPC	**0**	**2624**		**-**		**-**		**784.00**	
NAPP	0	611	-	-	-	-	-	181.21	2.97
RAPP #3&4	0	582	-	-	-	-	-	173.20	2.98
RAPP#5&6	0	904	-	-	-	-	-	333.85	3.69
Sub-Total NPCIL	**0**	**2097**				**-**		**688.26**	
Nathpa Jhakri HPS	0	1362	-	-	-	-	-	367.41	2.70
VishnuPrayag	0	1888	-	-	-	-	-	455.75	2.41
Tala Power	0	150	-	-	-	-	-	27.79	1.85
Tehri Hydro	0	1627	-	-	-	-	-	725.20	4.46
Rosa Power Project I	0	3908	-	-	-	-	-	2,006.62	5.13
IGSTPP, Jhajhjhar	0	78	-	-	-	-	-	44.41	5.70
Koteshwar (100 Mar 11, 300 2011-12)	0	230	-	-	-	-	-	113.69	4.95
Anpara 'C' (600 2011-12, 600 12-13)	0	1195	-	-	-	-	-	247.54	2.07
Karcham-Wangtoo (2011 - 12)	0	0	-	-	-	-	-	-	-
Bajaj Hindusthan	0	319	-	-	-	-	-	110.17	3.45
Rosa Power Project II (300 26-Jun-10)	0	0	-	-	-	-	-	-	-
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Sub-Total IPP/JV	**0**	**10758**				**-**		**4,098.59**	
Captive and Cogen	0	2855	-	-	-	-	-	1,178.32	4.13
Inter system exchange (Bilateral & PXIL, IEX)	0	7584	-	-	-	-	-	3,329.84	4.39
Others/UI	0	2056	-	-	-	-	-	1,133.32	5.51
Sub-Total : Co-Generation & Other Sources	**0**	**12495**				**-**		**5,641.48**	**4.52**
Revised O&M and other Charges								**334.18**	
Incidental Power Purchase cost and (rebates)								**334.18**	
Grand Total of Power Purchase	**0**	**73962**		**-**		**-**		**25,125.74**	**3.40**

5.7 ANNUAL REVENUE REQUIREMENT FOR FY 2011 - 12

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

a) Power Purchase cost
b) Transmission Charges
c) SLDC Charges
d) Operation and Maintenance Expenses
- 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 Expenses

k) Contribution to Contingency Reserve

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

5.8 ESCALATION INDEX

The Regulation 4.3 of Distribution Tariff Regulations stipulates the methodology for consideration of the O&M Expenses, wherein such expenses are linked to the inflation index determined under these Regulations. The relevant provisions of the Distribution Tariff Regulation are reproduced below:

> *"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……..."[Emphasis supplied]*

The Commission in accordance with the above stated regulation has calculated the inflation index for the FY 2011-12 based on the weighted average index of WPI and CPI. The Commission has considered the WPI and CPI index as available on the website of Economic Advisor, Ministry of Commerce and Industry Ministry of Labour respectively. Accordingly, the Commission has calculated the inflation index for approval of O&M expenses at 8.67% as shown in the Table 5-28 below:

Table 5-28: INFLATION INDEX FOR FY 2011 - 12

Month	Wholesale Price Index			Consumer Price Index			Consolidated Index		
	FY 2009-10	FY 2010-11	FY 2011-12	FY 2009-10	FY 2010-11	FY 2011-12	FY 2009-10	FY 2010-11	FY 2011-12
	A	B	C	D	E	F	G=A*0.6+D*0.4	H=B*0.6+E*0.4	I=C*0.6+F*0.4
April	125	139	152	150	170	186	135	151	166
May	126	139	152	151	172	187	136	152	166
June	127	140	153	153	174	189	137	153	167
July	128	141	154	160	178	193	141	156	170
August	130	141	155	162	178	194	143	156	171
September	130	142	156	163	179	197	143	157	173
October	131	143	157	165	181	198	145	158	173
November	133	144	157	168	182	199	147	159	174
December	133	146	157	169	185	202	148	162	175
January	135	148	158	172	188	198	150	164	174
February	135	148	158	170	185	199	149	163	175
March	136	150	160	170	185	201	150	164	176
Average	**131**	**143**	**156**	**163**	**180**	**195**	**144**	**158**	**172**
Weighted Average of Inflation							((172/158)-1)*100 =		**8.67%**

5.9 POWER PROCUREMENT COST

5.9.1 The Petitioner's Submission:

Petitioner has estimated that the power purchase cost has been computed on the basis of merit order principle. The Petitioner submits that presently UPPCL is carrying out the function of power procurement for bulk supply to distribution licensees in the state. UPPCL purchases power from various generators i.e. central, state generating station, IPPs etc. and supplies to various distribution licensees of the state at the bulk supply rate as GOUP has yet not allocated individual power share to distribution licensees. The Petitioner further submits estimated PGCIL charges levied on estimated energy procured from Northern Region have been incorporated in the Power Procurement Cost.

5.9.2 The Commission's Analysis:

The Commission observes that FY 2011 - 12 has already elapsed as such it has little choice currently but to approve the submission made by the Petitioner. Further as submitted by the Petitioner the power purchase costs have been grossed up to include PGCIL charges (inter-state transmission charges) and the bulk supply rate is determined by dividing the cost so computed with the energy input (MU) at transmission-distribution interface. The Petitioner's submission and Commission's approved bulk power supply tariff for FY 2011 - 12 is given in Table 5-29 below:

Table 5-29: CONSOLIDATED BULK SUPPLY TARIFF

Particulars		FY 2011-12	
		Petitioner Estimated	Approved
Purchases Required & Billed Energy (MU)	A	73,962	73,962
Periphery Loss (Upto inter connection Point) (%)	B	1.70%	1.70%
Energy Available at State periphery for Transmission(MU)	C=A*(1-B)	72,701	72,701
Intra -state Transmission losses %	D	4.20%	4.20%
Energy Available at State periphery for Transmission(MU)	E=D*(1-D)	69,648	69,648
Power Purchase Cost (Rs. Cr)	F	25,126	25,126
PGCIL (NR) inter-state transmission charges (Rs. Cr)	G	1,181	1,181
Total Power Procurement Cost (Rs. Cr)	H=F+G	26,307	26,307
Bulk Supply Tariff (Rs/unit)	I=(H/E)*10	3.78	3.78

The Petitioner's submission and Commission's approved power procurement cost for FY 2011 - 12 is given in table below. Since the audited financial accounts for the year are yet to be finalized and power procurement cost being un-controllable component of the ARR the Commission plans to true-up the power procurement cost to actual cost on submission of audited accounts.

Table 5-30: POWER PROCUREMENT COST FOR FY 2011 - 12

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Energy Input into Transmission-Distribution Interface (MU)	21,809	21,809
Bulk Supply Tariff (Rs/kWh)	3.78	3.78
Power Procurement cost from UPPCL (Rs. Cr)	8,238	8,238

5.10 TRANSMISSION AND SLDC CHARGES

5.10.1 Inter-state transmission charges

The Petitioner's Submission:

The interstate transmission charges payable by the UPPCL to PGCIL. The PGCIL charges are levied on energy procured from NTPC, NPCIL, NHPC, SJVNL, Tehri, TALA and others. These charges have been incorporated in Power Procurement Cost. The Petitioner submits that while considering power procurement to meet the State requirement, losses external to its system, i.e. in the Northern Region PGCIL system need to be accounted for. The availability of power for the Petitioner (i.e. at UPPCL system boundary) from these sources gets reduced to the extent of these losses and the Petitioner has accordingly incorporated them while drawing up the energy balance.

The Commission's Analysis:

In absence of accounts for FY 2011 - 12 Commission is hindered from carrying out prudence check of the inter-state transmission charges submitted by the Petitioner. Commission accepts inter-state transmission charges of Rs. 1181 Crores as submitted by the Petitioner based on the provisional accounts. However the actual inter-state transmission charges for FY 2011 - 12 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. As explained in the "Power Procurement Cost" section the inter-state transmission charges of Rs. 1181 Crores are grossed to determine the bulk supply tariff.

5.10.2 Intra-state transmission charges

The Petitioner's Submission:

The intra state transmission charges are payable by Petitioner are based on the actual energy received and uniform charges are to be paid by all Distribution Licensees in UP state proportionate to the energy delivered to them. Accordingly, licensee has submitted cost of intra state transmission charges for FY 2011 - 12. The Transmission licensee is also performing the function of SLDC, as such SLDC cost is embedded in the transmission charges.

The Commission's Analysis:

In absence of audited accounts for FY 2011 - 12 Commission is hindered from carrying out prudence check of the intra state transmission & SLDC charges submitted by the Petitioner. Commission accepts intra state transmission & SLDC charges as submitted by the Petitioner placing reliance on the provisional account, however the actual transmission charges for FY 2011 - 12 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. The Petitioner's submission and Commission's approved intra state transmission Charges for FY 2011 - 12 are given in Table 5-31 below:

Table 5-31: INTRA STAE TRANSMISSION CHARGES FOR FY 2011 - 12

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Energy Input into Transmission-Distribution Interface (MU)	21,809	21,809
Transmission Tariff (Rs/kWh)	0.16	0.16
Transmission cost (Rs. Cr.)	358	358

5.11 O&M EXPENSES

5.11.1 The Petitioner's Submission:

Operation and Maintenance (O&M) expenses comprise of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure. Absent norm for allowance of O&M expenses, going by the precedence's set in the previous tariff orders the Petitioner has estimated individual components of O&M expenses for FY 2011 - 12. The Petitioner has submitted that it has made detailed examination of the various components that make up employee cost and assessed the extent of retirements as well as the manpower additions planned. Petitioner has estimated employee cost for FY2011 - 12 based on the provisional accounts of FY2010 - 11 and data available to the date of submission of the petition. In line with the recommendation of Sixth Pay Commission & GoUP order, it has also factored in benefit of Assured Career Progression (ACP) scheme and salary arrears while estimating the employee costs. Estimation of various sub-accounts of employee cost is detailed in "Employee Expenses" Section. A&G expenses have been estimated considering the impact of inflation and need for addition of more substation and offices. Repair & Maintenance expenses as per annual unaudited accounts for the financial year 2010 - 11 has been increased by using the escalation index for estimating the expenses for FY2011 - 12. Petitioner has also submitted that in estimating expenses for ensuing years from FY2010 - 11 if there is abnormal increase in expenses from past trends then base year value has also been corrected to get realistic projected figures.

5.11.2 The Commission's Analysis:

The Regulation 4.3 of the Distribution Tariff Regulations stipulates that the O & M expenses of the base year (i.e. FY 2007-08) shall be escalated at inflation rates, notified by the Central Government for different years. The O&M expenses of the base year have not yet been determined, for want of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07 between the distribution companies and transmission companies. The Commission would like to reiterate that a suitable norm for allowance of O&M expenses could be adopted only after undertaking a thorough study of the O&M expenditure based on the past performances, and the cost drivers of the same, through a separate process. As such the Commission has directed the Petitioner to submit its share of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07.

The Commission opines that escalating O&M expenses based on Petitioner's submission is incorrect, as it takes wrong base year, hence the Commission has decided that for 2011 - 12 the A&G and R&M components of O&M expenses would be escalated based on approved O&M expenses of FY 2009 - 10. However for employee expenses, the Commission has taken a different view on account of Sixth Pay Commission salary revision impact which is discussed in the "Employee Expenses" section.

The Commission reiterates that the base year numbers may go under revision based on the true up for the relevant years and would have a cascading effect on the approvals of O&M expenses in subsequent years. The Commission plans to realign approved O&M expenses of FY 2011 - 12 during true-up exercise.

O&M Expenses as submitted by Petitioner and approved by the Commission for FY 2011 - 12 are summarised in Table 5-32 given below:

Table 5-32: O&M EXPENSES FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Employee Expenses		
Employee Cost and Provisions	342	336
Incremental Employee Expenses @ 2.5%	17	16
Gross Employee Expenses	**359**	**352**
Employee expenses capitalized	54	53
Net Employee Expenses	**305**	**299**
A&G Expenses		
Admin & Gen Expenses	48	38
Incremental Admin & Gen Expenses @ 2.5%	2	2
Gross Admin & Gen Expenses	**50**	**39**
Admin & Gen expenses capitalized	8	6
Net Admin & Gen Expenses	**43**	**33**
R&M Expenses		
Repair & Maintenance Expenditure	151	197
Incremental R&M Expenses @ 2.5%	7	9
Gross Repair & Maintenance Expenses	**158**	**206**
Total	**506**	**538**

5.12 INCREMENTAL O&M EXPENSES ON ADDITIONS TO ASSETS

5.12.1 The Petitioner's Submission:

Petitioner in accordance with the provisions of Regulation 4.3(1) of the Distribution Tariff Regulations has claimed incremental O&M expenses of Rs. 26.7 Crores for FY 2011 - 12 at 2.5% of the capital addition of Rs. 1,067 Crores made during FY 2010 - 11. The same are allocated across the individual elements of the O&M expenses on the basis of contribution of each element in the gross O&M expenses excluding the incremental O &M charges.

5.12.2 The Commission's Analysis:

Regulation 4.3 (3) stipulates that "Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. Accordingly in addition to the normal O&M expenses the Commission approves incremental O&M expenses of Rs. 26.7 Crores for FY 2011 - 12 at 2.5% of the approved capital assets additions of Rs. 1,067 Crores of FY 2010 - 11. 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.

5.13 EMPLOYEE EXPENSES

5.13.1 The Petitioner's Submission:

The Petitioner has submitted estimated employee expenses for the FY 2011 - 12 based on the provisional accounts of FY 2010 - 11. The Petitioner submits that it endeavours to control the employee expenses but cost may increase due to the factors which are totally beyond the control of the Petitioner like statutory obligation to implement revised pay scale as per the recommendation of Sixth Pay Commission.

Various sub-accounts of employee cost are estimated as follows

- Basic Salary for FY 2011 - 12 is estimated to increase by 5% over FY 2010 - 11 values.
- Dearness Allowance for FY 2011 - 12 is estimated to be 58% of Basic Salary.
- Pension and Other Allowances & Relief have been calculated at 19.8% and 8.15% of Basic Salary and Dearness Allowance.
- Medical Reimbursement, LTA, Earned leave encashment, staff welfare expenses and other terminal benefit have been forecasted to increase by inflation index per year over FY2010 - 11 values.

5.13.2 The Commission's Analysis:

As discussed in the preceding section 5.11.2 the Commission is treating employee expenses for FY 2011 - 12 in a different manner to factor-in the recommendation of the Sixth Pay Commission. The Commission's distinct view on the "employee expenses" component is taken in spirits of the Regulation 4.3(5) "The Commission may consider additional O&M expenses on account of war, insurgency, and change in laws or like eventualities for a specified period." The Commission opines that the impact of Sixth Pay Commission recommendations is a change in law and therefore uncontrollable.

Accordingly the Commission approves the following items of employee expenses viz., Basic salaries, dearness allowance (DA) and other allowances & relief as estimated by Petitioner, which have been actually the same as projected by the Petitioner. Dearness Allowance and Terminal benefits like pension, gratuity and other annulment benefits re linked to basic salary. The Commission therefore approves the same as estimated by Petitioner. Commission approves the other items of employee expenses viz., Bonus/Exgratia, Medical Expenses Reimbursement, Earned Leave Encashment etc. FY 2011 - 12 based on the escalation factor of 8.67% over the numbers approved by the Commission for FY 2010 - 11. The rationale for considering components as proposed by the Petitioner is as follows:

a) **Basic Salary:** The Commission has considered the basic salary separately to account for the revision in the wages due to implementation of the Sixth Pay Commission. Petitioner has projected an increase of 5% in the basic salary for the FY 2011 - 12 over the provisional figures of FY 2010 - 11. The escalation rate considered by the Commission comes to 8.67%. The Commission appreciated the Petitioners' efforts to restrict its expenses and therefore approves the escalation of 5% on the approved figures of FY 2010 - 11 for Basic Salaries.

b) **Dearness Allowance**: The dearness allowance has a direct linkage with the Basic Salaries approved. The Commission has considered the average Dearness Allowance for the FY 2011 - 12 based on the actual for 58%.

c) **Terminal Benefits and other annulment benefits**: These expense are linked to directly to the Basic Salary and the Dearness allowance disbursed therefore these are considered as a percentage of Basic and DA as proposed by the Petitioner.

Petitioner has capitalized employee expenses @ 15% of the total employee expenses for FY 2011 - 12. The Petitioner has failed to adhere with the Commission's direction in its last Tariff Order to submit an appropriate policy on capitalization of salaries and wages and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has capitalized employee expenses at 15% as submitted by Petitioner for FY 2011 - 12.

Further, the Commission re-directs the Petitioner to undertake a fresh study for employee expenses. Further Commission reiterates the need that the Petitioner should devise an appropriate capitalization policy and should develop proper accounting system to capture the expenses related to capital schemes rather than assuming a standard percentage. Further the Commission also directs the Petitioner to maintain necessary sub-account to capture the impact of pay revisions which are uncontrollable in nature. The Commission directs the Petitioner to submit a report on above matter within 6 months from the date of issue of this Tariff Order. The Petitioner's submission and Commission's approved employee expense for FY 2011 - 12 is given in Table 5-33 below:

Table 5-33: PaVVNL EMPLOYEE EXPENSES FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Salaries	165	165
Dearness Allowance	96	96
Other Allowances & Relief	9	9
Bonus/Exgratia	4	4
Medical Expenses Reimbursement	5	8
Leave Travel Assistance	0	0
Earned Leave Encashment	10	3
Compensation	0	0
Staff Welfare Expenses	0	1
Pension and gratuity	50	50
Other Terminal benefits	-	-
Expenditure on trust	0	-
Any other employee expenses	2	-
Arrear of Pay Commission/Time Scale	-	-
Additional employee Expenses(@2.5% of incremental GFA)	17	16
Grand Total	**359**	**352**
Employee expenses capitalization %age	15%	15%
Employee expenses capitalized	54	53
Net employee expenses	**305**	**299**

5.14 ADMINISTRATION AND GENERAL EXPENSES (A & G EXPENSES)

5.14.1 The Petitioner's Submission:

The Petitioner has estimated A&G expenses for the FY 2011 - 12 based on provisional accounts of FY 2010 - 11. The Petitioner submits that these expenses are incurred to meet day-to-day expenses related to the administration and general management and are affected by inflationary pressures. In its endeavour to control these costs and to drive operational efficiency improvement licensee has claimed Rs. 2.25 Crores to embrace various information technology (IT) initiatives such as implementation of software solution, networking (both local area network & wide area network), retail billing solution, energy billing system, energy accounting system etc. Petitioner has also claimed regulatory expenses as application fees plus 0.05% of revenue as license fees in A&G expenses.

5.14.2 The Commission's Analysis:

Commission approves the A&G expenses for FY 2010 - 11 based on the escalation factor of 8.67% over the approved figures for FY 2010 - 11. The Commission appreciates the commitment of the Petitioner to keep costs under control and accordingly approves gross A&G expenses of Rs. 33.5 Crores for FY 2011 - 12 including allocation of additional A&G expenses.

Petitioner has capitalized A&G expenses @ 15% of the total A&G expenses for FY 2011 - 12. The Petitioner has failed to adhere with the Commission's direction in its last tariff order to submit an appropriate policy on capitalization of A&G expenses and develop proper accounting system to capture the same. The Petitioner has failed to adhere with the Commission's direction in its last tariff order to submit an appropriate policy on capitalization of A&G expenses and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has considered the A&G capitalization percentage as submitted by Petitioner for FY 2010 - 11. The Commission's approval is subjected to the true-up process on submission of the audited accounts.

Commission reiterates the need that the Petitioner should devise an appropriate capitalization policy framework and should develop proper accounting system to capture the expenses related to capital schemes rather than assuming a standard percentage. The Commission directs the Petitioner to submit a report on above matter within 6 months from the date of issue of this Tariff Order. The Petitioner's submission and Commission's approved A&G expense for FY 2011 - 12 is given in Table 5-34 below:

Table 5-34: PaVVNL A&G EXPENSES FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Administration Expenses		
Rent rates and taxes (Other than all taxes on income and profit)	0.8	0.3
Insurance of employees, assets, legal liability	0.4	0.4
Revenue Stamp Expenses Account	-	-
Telephone,Postage,Telegram, Internet Charges	3.9	3.4
Incentive & Award To Employees/Outsiders	-	-
Consultancy Charges	0.0	0.0
Travelling	3.0	2.2
Technical Fees	-	-
Other Professional Charges	-	-
Conveyance And Travel (vehicle hiring, running)	-	-
UPERC License fee	-	-
Plant And Machinery (for administrative use)	-	-
Security / Service Charges Paid To Outside Agencies	-	-
Other Regulatory Expenses	3.5	2.9
IT related expenses	2.3	1.5
Sub-Total of Administrative Expenses	**13.9**	**10.8**
Other Charges		
Fee And Subscriptions (Books And Periodicals)	3.0	0.7
Printing And Stationery	2.4	1.8
Advertisement Expenses	2.0	1.1
Contributions/Donations To Outside Institute / Association	-	-
Electricity Charges To Offices	9.1	7.7
Water Charges	0.0	0.0
Consultancy expenses /Any Study related expenses	-	-
Miscellaneous Expenses	14.2	13.2
Expenses on Public Interraction Program	-	-
Any Other expenses	0.8	0.8
Sub-Total of other charges	**31.6**	**25.3**
Legal Charges	1.7	1.5
Auditor'S Fee	0.5	0.0
Frieght - Material Related Expenses	-	-
Other Departmental Charges	-	-
Additional A&G expenses(@2.5% of incremental GFA)	2.4	1.8
Total Charges	**50.0**	**39.4**
A&G expenses capitalization %age	15%	15%
Expenses capitalized	7.5	5.9
Net Administrative and General expenses	**42.5**	**33.5**

5.15 REPAIRS AND MAINTENANCE (R&M) EXPENSES

5.15.1 The Petitioner's Submission:

The Petitioner has estimated R&M expenses for the FY 2011 - 12 based on provisional accounts of FY 2010 - 11. The Petitioners submits that increase in cost of raw material and fuel as well increase in the amount of annual maintenance contracts to maintain additional transformers, cables, grid substation, etc. has translated to a higher R&M expenses.

Petitioner also mentions that it has initiated proactive preventive maintenance and capital expenditure to improve the quality of supply in its distribution area and reduction in number of overloaded transformer etc. However due to tight financial position and heavy cash losses, system improvement and preventive maintenance are not achieved to the expected level which results to frequent breakdowns and supply interruptions.

5.15.2 The Commission's Analysis:

The Commission acknowledges initiatives under taken by the Petitioner in upgrading and maintaining its distribution system. In the absence of a true up petition based on the audited accounts the Commission has considered the R&M expenses for FY 2011 - 12 by applying an escalation factor of 8.67% (inflation index) over the approved figures for FY 2010 - 11 in line with the provisions of the Distribution Tariff Regulations. The Commission thus approves the R&M cost of Rs. 206 Crores as against Rs. 158 Crores submitted by the Petitioner. Further, the Commission also has allowed an incremental O&M expenses @ 2.5% of the additions to the assets during the previous year i.e. FY 2010 - 11.

The Commission considers Repairs & Maintenance expenses as critical to operational activities. The approval for these expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudency check with regards to the spending in R&M works over the year. The Petitioner's submission and Commission's approved R&M expense for FY 2011 - 12 is given in Table 5-35 below:

Table 5-35: PaVVNL R&M EXPENSES FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Plant and Machinery	59	68
Building	3	3
Civil Works	-	-
Hydraulic Works	-	-
Transformers	-	-
Lines, Cables Net Works etc.	89	115
Vehicles	-	10
Furniture and Fixtures	0	0
Office Equipments	0	0
Transportation	-	-
Sub station maintenance by private agencies	-	-
Any other items (Capitalisation)	-	-
Additional R&M(@2.5% of incremental GFA)	7	9
Total	**158**	**206**

5.16 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS

5.16.1 The Petitioner's Submission:

The Petitioner in the petition has stated that GFA and CWIP are derived as follows:

- The opening GFA and CWIP have been taken from the provisional annual accounts of FY 2010 - 11.
- 40% the opening CWIP and 40% of investment made during the year, expenses capitalized & interest capitalized (40% of total investment) has been assumed to get capitalized during the year.
- Investment through "deposit work" has not been taken for capital formation as per policy adopted by the Commission in previous Tariff Order.

5.16.2 The Commission's Analysis:

The Commission in its last Tariff Order for the FY 2009 - 10 had approved the gross fixed assets (GFA) of Rs. 4,041 Crores as on 31st March 2010 for the Petitioner. The opening balance as per Petitioner's provisional accounts of FY 2010 - 11 is Rs. 4,525 Crores As the figure for gross fixed assets flows from the previous years, the Commission has adopted the quantum of GFA from the provisional accounts of FY 2010 - 11. Further, the same would be subject to revision at the time of true-up for the year.

The Petitioner vide its submission dated 22nd May 2012, has submitted that the system loading charges recovered from the consumers are included in the account head 55 which represents the "Consumer Contribution, Grants & subsidies towards cost of Capital". The Commission has also verified the accounts submitted along with the said letter and the notes to accounts attached to it which clearly indicates that the system loading charges form part of the subhead of consumer contribution towards cost of capital assets. The Commission, based on the provisional accounts, has accepted Petitioner's contention that the Investment through "deposit work" has not been taken for capital formation which also excludes system loading charges. The capital investments are considered to be funded through on the basis of normative debt-equity ratio instead of debt-equity funding proposed by the Petitioner.

Based on the provisional accounts the Commission has accepted Petitioner's contention the Investment through "deposit work" has not been taken for capital formation. The capital investments are considered to be funded through on the basis of normative debt-equity ratio instead of debt-equity funding proposed by the Petitioner.

Commission with past experiences is fully aware of the variation from the envisaged capital investment occurring due to certain policy issues as well as non-availability of Government Guarantee for drawal of financial institutional loans. This problem is bound to further aggravate with the failure of the Petitioner to submit investment plan and capital work-in-progress (CWIP) details. Variation in capital investment plan adversely affects the creation of assets whose effect cascades to depreciation and interest and finance charges components of the ARR. Here, the Commission would like to reiterate that it shall be undertaking true-up exercise for approved figures and the actual expenses incurred for the various years once audited accounts are finalized for past periods.

Table 5-36: PaVVNL CAPITALISATION & WIP OF INVESTMENTS FOR FY 2011 - 12 (Rs. Crores)

Particulars		FY 2011-12	
		Petitioner's Estimates	Commission Approved
Opening WIP as on 1st April	A	155	138
Investments	B	569	569
Employee Expenses Capitalisation	C	54	53
A&G Expenses Capitalisation	D	8	6
Capitalisated Interest on long term loans	E	34	11
Total Investments	F= A+B+C+D+E	**819**	**777**
Transferred to GFA (Total Capitalisation)		328	328
Closing WIP	**H= F-G**	**491**	**450**

Table 5-37: PaVVNL INVESTMENT FUNDING FOR FY 2011 - 12 (Rs. Crores)

Particulars		FY 2011-12	
		Petitioner's Estimates	Commission Approved
Investment		569	569
Less:			
Consumer Contribution and Capital Assets Subsidy		-	-
System Loading Charges		-	-
Total		-	-
Investment funded by debt and equity		569	569
Debt Funded	70%	398	398
Equity Funded	30%	171	171

5.17 DEPRECIATION EXPENSE

5.17.1 The Petitioner's Submission:

Petitioner has estimated depreciation for FY 2011 - 12 as Rs. 200 Crores, based on an average depreciation rate of 3.75%.

5.17.2 The Commission's Analysis:

The Commission in its Distribution Tariff Regulations has specified the methodology for the computation of depreciation. The regulation specifies the rates to be used for the purpose of computation of the depreciation charged during the year. Regulation 4.5(9) requires that *"the Licensee will maintain asset registers at each operating circle/division that will capture all necessary details on the asset, including the cost incurred, date of commissioning, location of asset, and all other technical details"*.

The Commission has repeatedly vide its order given several directions to the Petitioner to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. Further, the Honorable Appellate Tribunal for Electricity (order to Appeal No. 121 of 2010 & I.A. No. 83 of 2011, Para 7.4, 7.5 & 7.6) has also reinforced Commission views and directed the distribution licensee to comply with the regulation and direction issued by the Commission. However the distribution licensees have failed to produce any records relating to fixed assets registers.

Distribution licensee seems to be ignorant of significance of maintenance of Fixed Asset Register and filing of investment plans with cost benefit of capital expenditure. Components of the ARR viz., depreciation, allowable interest on debt and return on equity are adversely affected by inadvertent misrepresentations of capital assets creation numbers. Non-maintenance of Fixed Asset Register and absence of strict policy framework for undertaking capital investment based on cost benefit analysis gives ample room for such misrepresentations.

Given the very sad state of Distribution licensee affairs on the above matter and annoying reluctance to act on repeated direction issued by the Commission, the Commission is severely hindered in its task of undertaking prudence check of ARR components viz., depreciation, and allowable interest on debt and return on equity. On account of lack of details of fixed assets register, the Commission has assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset. Keeping consistency with the approach adopted in its previous tariff orders has considered depreciation rate of 7.84% being the depreciation rate bracket for major class of assets as per the Distribution Tariff Regulations.

Considering the total capitalization approved by the Commission for FY 2011 - 12 as above, the capital formation and depreciation as submitted by the Petitioner vis-à-vis approved by the Commission is given in Table 5-38 and Table 5-39 below:

Table 5-38: PaVVNL GROSS FIXED ASSETS FOR FY 2011 - 12 (Rs. Crores)

Particulars		FY 2011-12	
		Petitioner's Estimates	Commission Approved
Depreciation Rate	A	3.75%	7.84%
Opening GFA as on 1st April	B	5,168	5,168
Addition to GFA during the year	C	328	328
Deduction from GFA during the year	D	-	-
Closing GFA as on 31st March	E= B+C-D	5,496	5,496
Opening Accumulated Depreciation	F	2,217	2,399
Depreciation on Opening GFA + Addition during the year	G = B*A+C*A/2	200	418
Depreciation on assets deducted during the year	H	-	-
Closing Accumulated Depreciation	I=F+G-H	2,417	2,817
Opening Net Fixed Assets	J=B-F	2,952	2,770
Closing Net Fixed Assets	K=E-I	3,079	2,679

Table 5-39: PaVVNL DEPRECIATION FOR FY 2011 - 12 (Rs. Crores)

Particulars		FY 2011-12	
		Petitioner's Estimates	Commission Approved
Depreciation Rate	A	3.75%	7.84%
Opening GFA as on 1st April	B	5,168	5,168
Addition to GFA during the year	C	328	328
Depreciation on Opening GFA + Addition during the year	**D = (A*B)+(C*A/2)**	200	418
Less:			
Depreciation on assets created from Consumer Contribution and Capital Assets Subsidy	E	-	79
Depreciation on Opening GFA + Addition during the year chargeable as ARR component	**F=D-E**	200	339

5.18 INTEREST AND FINANCING COST

5.18.1 Interest on Long term Loans

The Petitioner's Submission:

Petitioner has submitted estimated interest cost on long term loans to be Rs. 105.73 Crores for FY 2011 - 12.

The Commission's Analysis:

The Commission has computed the interest cost on long term loans for FY 2011 - 12 based on the approved investment and funding scheme described in Table 5-40. The Commission has considered normative debt: equity ratio of 70:30 instead of debt-equity funding proposed by the Petitioner. As the Commission's assumed normative debt equity ratio is higher compared to that submitted by Petitioner, the Commission's approval regarding total long term loan quantum and resulting incidence of interest and finance charges is higher.

As far as new loans drawn based on the investment made are concerned, the Petitioner has not provided details of investments and the terms of funding. Regulation 4.8.1(c) stipulates that *"Interest on fresh loans shall be allowed only on loan raised for projects* *approved and undertaken in accordance with the guidelines contained in regulation 4.5 of these regulations. In case of non-compliance of the stipulated guidelines, no interest shall be allowed by the Commission."* However considering that fact that capital investment are very essential for keeping the system running and meeting the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply & system reliability. The Commission has taken a lenient view on allowance of interest cost. Absent the information on funding of capital investment the Commission has considered the approved debt funded investment as given in Table 5-37, while calculating interest on long term loans.

Interest on long term loans as submitted by the Petitioner vis-à-vis approved by the Commission for FY 2011 - 12 is given in Table 5-40 below:

Table 5-40: PaVVNL INTEREST ON LONG TERM LOANS FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Govt of UP (Loan Transfer Scheme) Govt of UP (WB Aided Project) Govt of UP (APDRP)	10.55	10.55
Power Finance Corp Ltd (Theft Prevention)	3.58	3.58
Power Finance Corp Ltd (Loan Transfer Scheme)	0.98	0.98
Power Finance Corp Ltd (UPPCL)	-	-
REC Ltd (ABC Loan)	6.10	6.10
REC Ltd (Construction of S/S)	3.52	3.52
REC Ltd (Loan Transfer Scheme)	23.44	23.44
REC Ltd (UPPCL)	-	-
APDRP (PFC)	16.87	16.87
R-APDRP (PFC)	-	-
HUDCO Loans	38.97	38.97
NCRPB	0.04	35.67
NOIDA	-	-
OTHERS	-	-
UP State Industrial Development Corp	-	-
Feeder Separation Loan	1.69	1.69
Total	**105.73**	**141.36**

5.18.2 Interest on Working Capital

The Petitioner's Submission:

Petitioner has submitted estimated interest cost on working capital loans to be Rs. 40.52 Crores, for FY 2011 - 12. Petitioner submits that its working capital requirement is more than what Commission allows based on normative value. It continues to face severe cash crunch situations and often finds it difficult to meet out even its power purchase obligation from its revenues. On the said argument the Petitioner has submitted before the Commission to allow working capital requirement as requested.

The Commission's Analysis:

Regulation 4.8.2 of the Distribution Tariff Regulations lays down the norms and methodology for calculating interest on working capital. Although the Commission is aware of the financial distress and liquidity crunch of the distribution licensee, the Commission opines that the distribution licensee is eligible only for interest cost on account of normative working capital. Commission views that the Petitioner should manage its day to day affairs pragmatically by improving collection efficiency, reducing bad debts thus strengthening its cash position. The Commission has considered the working capital requirement in accordance with the regulations and allowed interest on working capital at 12.5%.

Interest costs on working capital loans as submitted by the Petitioner vis-à-vis approved by the Commission based on computation of interest on normative working capital for FY 2011 - 12 is given in Table 5-41 below:

Table 5-41: PaVVNL INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
One month's O&M Expenses	47.24	44.85
One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	3.95	3.95
Receivables equivalent to 60 days average billing on consumers	1,059.86	1,059.86
Gross Total	**1,111.05**	**1,108.66**
	-	-
Less:Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	609.28	609.28
Net Working Capital	**501.76**	**499.38**
Rate of Interest for Working Capital	0.00%	12.50%
Interest on Working Capital	**40.52**	**62.42**

5.18.3 Interest on Consumer security Deposits

The Petitioner's Submission:

The Licensee has estimated expenditure on account of the interest paid to consumers on security deposits to the tune of Rs. 36.56 Crores in FY 2011 - 12 however in has not provided details of calculation of the same.

The Commission's Analysis:

In terms of the Regulation 4.8(3) of the Distribution Tariff Regulation, the licensee has to pay interest to the consumers at bank rate or more on the consumer security deposit. Such payment of interest on security deposit is also mandated under the Section 47 (4) of the Electricity Act, 2003. The Petitioner in its petition has not submitted details of calculation of interest on security deposit. As this interest paid to consumers is a part of the tariff and Commission opines to approve them to be recovered through the ARR. Commission's computation of interest expense based on provisional accounts of FY 2010 - 11 and additions made during FY 2011 - 12 as per Petitioner filings is given in table below. The Commission has considered the prevalent bank rate of the Reserve bank of India for approval of the Interest rate applicable for such payments. Accordingly the Commission has approved interest on security deposits for FY 2011 - 12 at Rs. 35.83 Crores.

Table 5-42: PaVVNL INTEREST ON SECURITY DEPOSITS FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Opening Balance for Security Deposit	585.02	585.02
Additions During the Year	24.26	24.26
Closing Balance for Security Deposit	609.28	609.28
Rate of Interest	6.00%	6.00%
Interest on Security Deposit	**36.56**	**35.83**

5.18.4 Summary of Interest and Finance charges

The approved interest charges on long term loans have been capitalized at the rate of 23% in consistency with the approach adopted in its previous tariff orders. Absent an Investment capitalization policy frame work, it is very difficult for the Commission to understand the drivers of capitalization of interest expense of Rs. 33.64 Crores as claimed by Petitioner, which works out as 31.81% of interest on long term loans. In its previous order the Commission had directed the Petitioner to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in a separate account typically termed as 'Interest during Construction' (IDC) rather than assuming a standard capitalization percentage. In response to the said direction the Petitioner has stated that it trying to implement computerized accounting system after which the process of identification of scheme wise capital expenditure would be possible vis-à-vis IDC costs. Considering the history of the Petitioner, it is rather hard for the Commission to guess by when the system will be up and running. The Commission directs the Petitioner to provide monthly report on the progress on computerization of accounting system. Interest and financing charges (net of capitalization) inclusive of Interest on working capital, interest on consumer security deposits, discount to consumers and other approved interest and finance costs as submitted by the Petitioner and approved by the Commission for FY 2011 - 12 is given in Table 5-43 below:

Table 5-43: PAVVNL INTEREST and FINANCE CHARGES FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Interest on Long term Loans	**105.73**	**141.36**
a) Interest on Existing Loans		
b) Interest on New Loans		
Interest on Working Capital Loans	40.52	62.42
Allocation of Interest of loan through UPPCL	0.00	-
Sub Total	146.24	203.78
Interest on Consumer Security Deposits	36.56	35.83
Finance Charges / Guarantee Fees	0.14	8.97
Bank Charges	2.81	2.81
Discount to Consumers	-	-
Sub Total	39.51	47.62
Gross Total Interest & Finance Charges	**185.75**	**251.40**
Less: Capitalization of interest on Long term Loans	33.64	11.45
% Capitalization	31.81%	23.00%
Net Interest & Finance Charges	**152.11**	**239.95**

5.19 PROVISION FOR BAD AND DOUBTFUL DEBTS

5.19.1 The Petitioner's Submission:

In the ARR for FY 2011 - 12, the Petitioner has estimated Bad and Doubtful debts @2% of revenue receivables to the tune of Rs. 19 Crores, as generally accepted accounting principle of provisioning for un-collectable dues in the course of normal operations. Petitioner states that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts during any particular year. Therefore Petitioner maintains that this is a legitimate ARR component and need be allowed.

5.19.2 The Commission's Analysis:

Regulation 4.4 of the Distribution Tariff Regulations provide for expenses under Bad & Doubtful Debts to the extent of 2% of the revenue receivables. However the distribution licensees have to actually identify and write-off the bad debts as per a transparent policy approved by the Commission.

The Commission in its previous tariff orders opined that it is not averse to allowing provision for bad and doubtful debts in the course of normal operations of the distribution licensees. 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. In this regards, the Commission in its previous order directed the distribution licensee to submit ten such sample cases of LT & HT consumers where orders have been issued for writing off bad debts clearly depicting the procedure adopted for writing off bad debts along with a policy for Commission's approval within a month of issue of this order. In this regard the Petitioner has submitted that action is being taken regularly in cases by way of P.D. and writing off the fictitious arrears at the distribution level. However no such sample was submitted to the commission

In the backdrop of non-compliance with the above direction and due to lack of approved transparent policy on identifying and writing off bad debts, the Commission opines that it is inappropriate to approve the Bad & Doubtful debts. The Commission redirects to submit such sample along with policy framework for managing bad debts for the Commission's perusal within a month of issue of this order.

5.20 OTHER INCOME

5.20.1 The Petitioner's Submission:

As per the Petitioner other Income includes income from retail sources, non-tariff income and revenue support from the GoUP. The 'other income from retail sources' includes miscellaneous revenues from consumers. Non-tariff income includes income such as interest on loans and advances to employee, income from fixed rate investment deposits, interest on loans and advances to licensees. Revenue support from the GoUP includes subsidy to partially cover the revenue shortfall arising from below Cost of Service tariffs for the Rural Domestic and Private Tube Wells (PTW) categories. Accordingly, other income has been estimated by the Petitioner at Rs. 880 Crores for FY 2011 - 12.

5.20.2 The Commission's Analysis:

The Commission has approved the total other Income as submitted by the Petitioner at Rs. 880 Crores

Table 5-44: PaVVNL OTHER INCOME FOR FY 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Income from Investment	-	-
Non Tariff Income	20	20
Sub Total	20	20
GoUP Subsidy - Rural Domestic & PTW	860	860
Total	880	880

5.21 RETURN ON EQUITY

5.21.1 The Commission's Analysis:

The Petitioner has not claimed any return on equity for the year under review. The Petitioner has stated that they do not want to burden the consumers by proposing return on equity as it will further increase the gap. Moreover, Petitioner has submitted that to bridge revenue shortfall it would have to ask for more GoUP subsidy and resort to short term loans from market apart from other measures to be initiated for productivity improvement. Hence the Commission considering the plea of the Petitioner has not approved return on equity for FY 2011 - 12. However, Commission's calculation of return on equity only for the purpose of representation is given in Table 5-45 below:

Table 5-45: PaVVNL RETURN ON EQUITY FOR 2011 - 12 (Rs. Crores)

Particulars		FY 2011-12	
		Petitioner's Estimates	Commission Approved
Return on Equity			
Regulatory equity at the beginning of the year	a	1,837	1,693
Capitalised assets during the year	b	328	569
Equity portion of expenditure on capitalised assets	c=b*30%	98	171
% of Equity		-	30%
Regulatory Equity at the end of the year	**d=a+c**	**1,935**	**1,864**
Return Computation		-	-
Return Regulatory equity at the beginning of the year @ 16%	e=a*16%	294	271
Return on Equity portion of capital expenditure on capitalised assets	f=c*16%/2	8	14
Total Return on Regulatory Equity	**g=e+f**	**302**	**285**

5.22 CONTRIBUTION TO CONTINGENCY RESERVE

5.22.1 The Commission's Analysis:

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.

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

Commission accepts the views of the Petitioner. Commission's estimated amount on account of Contribution to Contingency Reserve for representation purpose only is Rs. 25.84 Crores for FY 2011 - 12 , the calculation are given in Table 5-46 below:

Table 5-46: PaVVNL CONTRIBUTION TO CONTINGENCY RESERVE FOR 2011 - 12 (Rs. Crores)

Particulars	FY 2011-12	
	Petitioner's Estimates	Commission Approved
Opening Balance of GFA	5,168.36	5,168.36
Contribution	0.0%	0.5%
Contribution to Contingency Reserve	**-**	**25.84**

5.23 REVENUE FROM SALE OF ELECTRICITY

5.23.1 The Petitioner's Submission:

For FY 2011 - 12, the Petitioner has submitted the revenue from tariffs of Rs. 6,359.15 Crores, based on tariffs as per tariff order dated 31st March, 2010.

5.23.2 The Commission's Analysis:

The Commission observes that the figures submitted by Petitioner for FY 2011 - 12 are as per Petitioner's provisional accounts. The Commission notes that the Petitioner is required to submit audited accounts for FY 2011 - 12 as per the UPERC Regulations.

In the absence of final audited numbers for FY 2011 - 12 and to avoid mounting costs due to delay, the Commission has considered the filing submission made as per Petitioner's Provisional Accounts. The Commission thus approves the revenue from tariffs for FY 2011 - 12 as Rs. 6,359.15 Crores.

5.24 APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP

In the preceding sections, the Commission has detailed out expenses under various heads as per the petition of the Petitioner as well as those approved by the Commission. The Commission has also approved the revenue from existing tariffs. Based on these, the approved ARR, revenue from tariffs and resultant gap for FY 2011 - 12 is summarized in the Table 5-47 below:

Table 5-47: ARR, REVENUE AND GAP SUMMARY FOR FY 2011 - 12 (Rs. Crores)

S. No.	Item	FY 2011-12		
		Petitioner's	Commission	
		Estimates	Approved	% of ARR
1	Power Purchase Expenses (incl PGCIL charges)	8,238	8,238	93%
2	Transmission Charges - Intra state (incl SLDC Charges)	358	358	4%
3	Employee cost	359	352	4%
4	A&G expenses	50	39	0%
5	R&M expenses	158	206	2%
6	Interest & Finance charges	186	251	3%
7	Depreciation	200	339	4%
8	**Total Expenditure**	**9,548**	**9782**	**111%**
Less	**Expense capitalization**	95	70	1%
9	*Employee cost capitalized*	54	53	1%
10	*Interest capitalized*	34	11	0%
11	*A&G expenses capitalized*	8	6	0%
12	**Net Expenditure**	**9,453**	**9,712**	**110%**
Add	**Special Appropriations**	-	-	0%
13	*Provision for Bad & Doubtful debts*	19	-	0%
14	*Provision for Contingency Reserve*	-	-	0%
15	*Other (Misc.) - Net Prior Period Credit*	-	-	0%
16	*OTS Waivers*	-	-	0%
17	**Total net expenditure with provisions**	**9,471**	**9712**	**110%**
18	Add: Return on Equity	-	-	0%
19	Less: Non Tariff Income	20	20	0%
20	Less: Subsidy from Govt	860	860	10%
21	**Annual Revenue Requirement (ARR)**	**8,591**	**8832**	**100%**
22	Revenue from existing tariffs	6,359	6,359	0%
23	Gap for current year at existing tariffs	2,232	2,473	0%
24	Gap carried forward from previous years (from FY 2009-10 to FY 2010-11)	817	1,014	0%

6 ANALYSIS OF ARR FOR FY 2012 - 13

6.1 CONSUMPTION PARAMETERS:

(CONSUMER NUMBERS, CONNECTED LOAD, SALES)

6.1.1 The Petitioner's Submission:

For FY 2012 - 13, the Petitioner has forecast figures for energy sales, number of consumers and connected load. The methodology adopted for forecast is described below:

1. As a first step, the following parameters were computed:
    a. Compounded Annual Growth Rate (CAGR) for 3 - years i.e. FY 2008 – 09, FY 2009 – 10 and FY 2010 - 11 for the following parameters consumer sub-category wise:
        i. Number of consumers.
        ii. Connected load (kW).
        iii. Billed energy sales (kWh).
    b. The 3 / 5 / 7 / 10 - year CAGRs for each of the above three commercial parameters consumer category - wise and not sub-category wise.
    c. The following parameters for 3 years i.e. FY 2008 - 09, FY 2009 - 10 and FY 2010 – 11 for each consumer sub-category:
        i. Energy sales per consumer
        ii. Connected load per consumer
        iii. Energy sales/Connected load
    d. Projected running hours factor (i.e. the ratio between projected supply hours to existing supply hours) for FY 2011 - 12 and FY 2012 - 13 for each area type i.e. Mahanagar, Commissionary, Districts, Bundelkhand and Rural Area.

       The running hour factors computed have been summarized below:

Table 6-1: RUNNING HOURS FACTORS SUBMITTED BY PETITIONER

Area types	FY 2010-11 (Base Year)	FY 2011-12	FY 2012-13
Mahanagar	1.00	1.11	1.11
District	1.00	1.10	1.30
Commissionary	1.00	1.13	1.15
Rural	1.00	1.06	1.33
Bundelkhand	1.00	1.00	1.01

a. Demand Side Management (DSM) factor for each consumer sub - category projected for FY 2010 - 11, FY 2011 - 12 and FY 2012 - 13 has been assumed as 1 for all consumer categories.

2. In the second step, the number of consumers has been projected for FY 2011 – 12 and FY 2012 - 13 as described below:

   a. LMV consumers:

      i. 3 - year CAGR of number of consumers, sub-category wise, was adopted.

      ii. Wherever calculated value of 3 - year CAGR of number of consumers seemed unreasonably high or low, the most reasonable calculated value between 5 / 7 / 10 - year CAGR was adopted. The adopted value of CAGR was applied across all sub-categories within a given consumer category.

      iii. The adopted CAGR was applied to determine forecasted values of number of consumers taking FY 2010 - 11 as the base year.

   b. HV consumers:
   The number of consumers corresponding to the forecasted value of connected load (described in subsequent sections) for a consumer sub-category in a given year was determined by dividing the connected load by the value of connected load per consumer calculated for the preceding year.

3. In the third step the connected load has been projected for FY 2011 - 12 and FY 2012 - 13 as described below:

   a. LMV consumers:

The number of consumers (projected in previous step) was multiplied by the highest ratio of connected load per consumer calculated for the last three years i.e. FY 2008 -09, FY 2009 - 10 and FY 2010 - 11 to determine consumer sub-category wise connected load forecasts corresponding to forecasted values of number of consumers.

b. HV consumers:

   i. Normally 3-year CAGR of connected load (sub-category wise) was adopted.

   ii. Wherever calculated value of 3-year CAGR of connected load seemed unreasonably high or low, the most reasonable calculated value between 5/7/10 -year CAGR was adopted. The adopted value of CAGR was applied across all sub-categories within a given consumer category.

   iii. The adopted CAGR was applied to determine forecasted values of connected load, taking FY 2010 - 11 as the base year.

4. As the fourth step, the energy sales have been projected for FY 2011 - 12 and FY 2012 - 13 as described below:

   a. LMV 1 & LMV 10 consumer categories:
   Forecasted value of energy sales for each consumer sub-category was determined by multiplying the number of consumers by the highest value of energy sales per consumer for the last three years. Wherever the highest value of energy sales per consumer was found to be unreasonably high, the second highest value of the above ratio was adopted as the multiplier for determining energy sales corresponding to the forecasted value of number of consumers.

   b. Metered LMV category consumer other than LMV - 1 & LMV - 10 consumers:
   The highest value of energy sales per kW connected load for a given consumer sub - category for the last three years was adopted as the multiplier to obtain forecasted value of energy sales corresponding to the forecasted value of connected load.

   c. Unmetered LMV category consumers (except rural state tube wells):

Forecasted value of energy sales for a given consumer sub-category was obtained by multiplying the forecasted value of connected load by the standard value of energy sales per kW connected load laid down in the norms shown in Table 6-2 below:

d. Rural State Tube Wells:

   i. Forecasted value of energy sales was obtained by multiplying the forecasted value of number of consumers by the standard value of energy sales per consumer laid down in the norms shown in Table 6-2 below:

Table 6-2: CONSUMPTION NORMS FOR UNMETERED CATEGORIES SUBMITTED BY PETITIONER

Consumer categories	Units	Consumption of Energy Per Month
Private Tube Well	KWh/KW	91.66
Domestic Rural Consumers	KWh/KW	72.00
Rural Commercial Consumers	KWh/KW	72.00
Rural State Tube Well	KWh/ Consumer or Pump	3562.35
Street Light - Rural Area	KWh/KW	300.00
Street Light - Urban Area	KWh/KW	360.00

e. HV consumers:
Sub-category wise energy sales forecasts were obtained by multiplying the forecasted value of connected load by the highest ratio of energy sales per kW connected load of the last three years.

5. In the fifth and final step, the energy sales projected for LMV category consumers are multiplied with the projected running hours factor. Further, the energy sales projected for all categories are also multiplied by the DSM factors.

The methodology adopted by the Petitioner to forecast the number of consumers, connected load and energy sales has been described in the 5 steps above. Based on this forecasting methodology the consumption parameters estimated by the Petitioner for FY 2012 - 13 are summarized below:

Table 6-3: CONSUMPTION ESTIMATED BY PETITIONER FOR FY 2012 - 13

Consumer categories	No. of consumers (Estimated)	Connected load in kW (Estimated)	Energy sales in MU (Estimated)
LMV-1: Domestic	3,012,421	6,601,910	7,439
LMV-2:Non-Domestic	366,068	947,472	1,322
LMV-3: Public Lamps	891	48,683	268
LMV-4: Institutions	14,403	146,556	500
LMV-5: Private Tube Wells	368,866	1,996,025	2,223
LMV 6: Small and Medium Power	51,463	655,731	1,308
LMV-7: Public Water Works	2,827	100,997	352
LMV-8: State Tube Wells	4,725	67,985	204
LMV-9: Temporary Supply	2,552	66,367	59
LMV-10: Departmental Employees	20,995	69,385	144
HV-1: Non-Industrial Bulk Loads	1,211	457,056	641
HV-2: Large and Heavy Power	4,007	1,713,338	4,969
HV-3: Railway Traction	2	9,000	23
HV-4: Lift Irrigation	2	343	0
Sub-total	**3,850,432**	**12,880,848**	**19,453**
Extra state & Bulk	1	45,000	316
Total	**3,850,433**	**12,925,848**	**19,769**

6.1.2 The Commission's Analysis:

The Commission has reviewed the forecast methodology adopted by the Petitioner and assessed that there is further scope for refinement in the forecast methodology adopted for FY 2012 - 13 due to the following reasons:

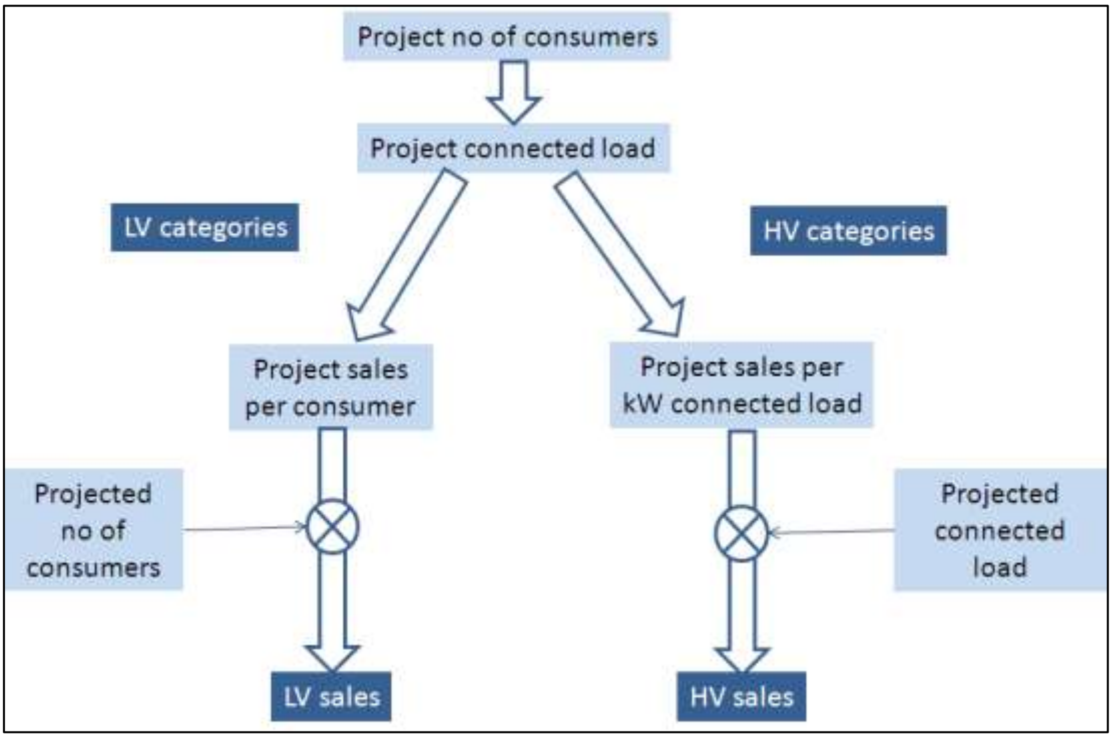
Table 6-4: REFINEMENT OF FORECAST METHODOLOGY ADOPTED BY THE PETITIONER

S.N.	Petitioner's methodology	Commission's refinement	Rationale for refinement
1	For computing the number of consumers of LMV category and the connected load of HV category consumers only the 3 - year CAGR has been computed sub - category wise. However, in number of cases, the growth rate finally assumed has been hard punched as a number different than 3 - year CAGR. In such cases, there does not seem to be any documented basis for the growth rate assumed.	The Commission has plotted a line graph and analysed the trend for each sub-category. If the trend was found consistent over the last 5 years the Commission has assumed the 5 - year CAGR. If any sudden variation in the trend was observed in the past 2 / 3 / 4 years, the Commission considered the 2 / 3 / 4 - year CAGR accordingly.	The basis for each assumption is consistent with historical trend.
2	LMV category connected load has been projected by multiplying connected load per consumer with the number of consumers projected. The connected load per consumer in most cases is taken as maximum of last 3 years data.	The Commission has projected the connected load on the basis of historical trend.	Projected connected load is in line with historical variations.
3	HV category number of consumers has been projected in the same ratio as growth in connected load thus assuming that connected load per consumer remains same.	The Commission has taken into consideration historical trend while projecting number of consumers.	No direct proportionate relationship between growth in number of consumers and connected load is taken into account

S.N.	Petitioner's methodology	Commission's refinement	Rationale for refinement
4	Sales have been projected as follows: a) After projecting number of consumers and connected load, the factors of per capita consumption of LMV consumers and the consumption per kW of load of HV consumers has been estimated. These have been estimated on the basis of maximum value of the 3 - year historical data. b) The number of consumers in case of LMV category or connected load in case of HV category has been multiplied with the respective factor to estimate the sales.	Same projection method has been used. However the factors have been estimated by analysing their historical trend rather than simply taking the maximum of 3 - year values.	Estimation of factors is more accurate thus leading to higher overall accuracy.
5	In case of unmetered consumption, the metered consumption has been estimated ignoring the shift between the metered and the unmetered consumers.	The Commission has taken into account the shift of from unmetered category of consumers to metered categories.	This reflects the ground reality more accurately

The following diagram illustrates the forecast methodology employed by the Commission.

Figure 1: METHODOLOGY TO FORECAST CONSUMPTION FOR FY 2012 - 13



The following sections describe in detail the forecast methodology used by Commission.

1. As a **first step**, historical consumption parameters (for each of the 5 years between FY 2007-08 and FY 2011 - 12) were tabulated for each consumer sub-category. These parameters included number of consumers, connected load (kW), sales per consumer (kWh) and sales per kW of connected load (kWh/kW). The table below provides the source of data for each year:

Table 6-5: SOURCE OF DATA FOR HISTORICAL PARAMETERS

S.No	Year	Source of data
1	FY 2007-08	Unaudited actuals submitted by Petitioner and approved by Commission in ARR FY 2009 - 10 order dated 31st March, 2011
2	FY 2008-09	Provisionally audited actuals submitted by Petitioner and approved by Commission in ARR FY 2009 - 10 order dated 31st

S.No	Year	Source of data
		March, 2011
3	FY 2009 - 10	Unaudited actuals submitted by Petitioner in ARR FY 2010 - 11 & FY 2011 - 12 petition submitted in March, 2011
4	FY 2010 - 11	Unaudited actuals submitted by Petitioner in ARR FY 2012 - 13 petition submitted in February, 2012
5	FY 2011 - 12	Estimated by Petitioner in ARR FY 2012 - 13 petition submitted in February, 2012

2. **Secondly**, 5-year CAGR was computed for each of the parameter and for each consumer sub-category based on the above set of data.

3. As a **third step**, the value for FY 2012 - 13 was estimated for each of the above consumption parameters in the following manner:
    a. A 5-year trend line was plotted and the trend observed.
    b. If the trend appeared to be smooth, the 5-year CAGR was adopted.
    c. If there was a sharp change in the trend in recent years, then the appropriate CAGR was adopted. For example, if the parameter increased in value for the first three years and then reduced or the rate of increase changed for the next two years, the 2-year CAGR was adopted.
    d. The adopted CAGR was applied on the value of FY 2011 - 12 to derive the value for FY 2012 - 13.
    e. In the case of unmetered categories, the above derived values were further adjusted in the following manner:
        i. A 5% shift in number of consumers and connected load was assumed from unmetered categories to the corresponding metered categories (LMV1: Rural, LMV2: Rural, LMV3: Public Lamps, LMV5: PTW Rural, LMV8: State Tube Wells).
        ii. The sales for unmetered categories were estimated by multiplying the norms for unmetered consumption with the appropriate consumption parameter (connected load or number of

consumers). The consumption norms have been established in UPPCL Order No. 2649-CUR/L, dated 20-07-2001 and described in the table below:

Table 6-6: CONSUMPTION NORMS FOR UNMETERED CATEGORIES

S.No	Category	Consumption
1	LMV1: Domestic Rural	72 kWh/kW/month
2	LMV2: Non Domestic Rural	72 kWh/kW/month
3	LMV3: Public Lamps	300 kWh/kW/month
4	LMV5: Pvt. Tube Wells Rural	91.66 kWh/kW/month
5	LMV8: State Tube Wells	3562.35 kWh/connection/month

iii. Consumers shifted from unmetered to metered categories have been assumed to continue to consume as per the above norms during the transition period.

Based on the above projection methodology, the Commission hereby approves the consumption parameters for FY 2012 - 13 as shown in Table 6-7. The detailed sub-category wise consumption parameters (historical and approved) have been provided in Annexure 12.1.

Table 6-7: CONSUMPTION PARAMETERS APPROVED BY COMMISSION FOR FY 2012 - 13

Consumer categories	No. of consumers		Connected load (kW)		Energy sales (MU)	
	(Petitioner's submission)	(Approved by Commission)	(Petitioner's submission)	(Approved by Commission)	(Petitioner's submission)	(Approved by Commission)
LMV-1: Domestic	3,012,421	3,010,637	6,601,910	6,476,041	7,439	5,926
LMV-2:Non-Domestic	366,068	347,352	947,472	915,585	1,322	1,062
LMV-3: Public Lamps	891	760	48,683	43,324	268	166
LMV-4: Institutions	14,403	14,479	146,556	76,142	500	239
LMV-5: Private Tube Wells	368,866	362,211	1,996,025	1,993,153	2,223	2,191
LMV 6: Small and Medium Power	51,463	53,291	655,731	622,363	1,308	929
LMV-7: Public Water Works	2,827	2,833	100,997	86,147	352	258
LMV-8: State Tube Wells	4,725	5,065	67,985	67,740	204	222
LMV-9: Temporary Supply	2,552	1,583	66,367	48,051	59	52
LMV-10: Departmental Employees	20,995	21,417	69,385	73,217	144	107
HV-1: Non-Industrial Bulk Loads	1,211	430	457,056	179,673	641	718
HV-2: Large and Heavy Power	4,007	5,508	1,713,338	2,313,787	4,969	4,935
HV-3: Railway Traction	2	3	9,000	17,535	23	45
HV-4: Lift Irrigation	2	2	343	311	0	0
Sub-total	**3,850,432**	**3,825,571**	**12,880,848**	**12,913,068**	**19,453**	**16,852**
Extra state & Bulk	1	-	45,000	-	316	-
Total	**3,850,433**	**3,825,571**	**12,925,848**	**12,913,068**	**19,769**	**16,852**

Table 6-8: NUMBER OF CONSUMERS: HISTORICAL TREND AND APPROVED VALUES FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Approved for FY 12-13	Growth: FY 13 over FY 12
LMV-1: Domestic	2109662	2383937	2359220	2614723	2818109	8%	3010637	7%
LMV-2:Non-Domestic	273178	290163	304953	320217	331224	5%	347352	5%
LMV-3: Public Lamps	677	657	623	768	756	3%	760	1%
LMV-4: Institutions	5932	7707	8471	11482	12892	21%	14479	12%
LMV-5: Private Tube Wells	308986	318923	321000	342690	351270	3%	362211	3%
LMV 6: Small and Medium Power	36916	39249	43178	44779	48889	7%	53291	9%
LMV-7: Public Water Works	1474	1643	1996	2299	2490	14%	2833	14%
LMV-8: State Tube Wells	4741	4720	4541	4539	4763	0%	5065	6%
LMV-9: Temporary Supply	1002	1563	1509	2418	1786	16%	1583	-11%
LMV-10: Departmental Employees	19147	18888	19563	20625	21216	3%	21417	1%
HV-1: Non-Industrial Bulk Loads	0	0	517	1172	409	-	430	5%
HV-2: Large and Heavy Power	3713	4195	3964	3918	5105	8%	5508	8%
HV-3: Railway Traction	0	0	0	2	3	-	3	0%
HV-4: Lift Irrigation	2	2	2	2	2	0%	2	0%
Sub-total	**2765430**	**3071647**	**3069535**	**3369634**	**3598914**	7%	**3825571**	6%
Extra state & Bulk	1	1	1	0	0	-100%	0	
Total	**2765431**	**3071648**	**3069536**	**3369634**	**3598914**	7%	**3825571**	6%

Table 6-9: CONNECTED LOAD (KW): HISTORICAL TREND AND APPROVED VALUES FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Approved for FY 12-13	Growth: FY 13 over FY 12
LMV-1: Domestic	4498302	4895540	4994848	5537533	5928703	7%	6476041	9%
LMV-2:Non-Domestic	627279	677550	729837	817830	857921	8%	915585	7%
LMV-3: Public Lamps	29574	32116	32317	40833	43437	10%	43324	0%
LMV-4: Institutions	77855	77591	69094	75076	75565	-1%	76142	1%
LMV-5: Private Tube Wells	1693747	1758928	1688023	1854442	1931647	3%	1993153	3%
LMV 6: Small and Medium Power	446772	486438	505132	549121	582621	7%	622363	7%
LMV-7: Public Water Works	52253	55137	60385	69419	78905	11%	86147	9%
LMV-8: State Tube Wells	68909	67023	58537	59755	63885	-2%	67740	6%
LMV-9: Temporary Supply	7160	14370	11478	59991	52428	64%	48051	-8%
LMV-10: Departmental Employees	59318	58239	61694	68033	71300	5%	73217	3%
HV-1: Non-Industrial Bulk Loads	0	0	257962	432913	173954	-	179673	3%
HV-2: Large and Heavy Power	1305424	1539369	1444341	1618315	2141113	13%	2313787	8%
HV-3: Railway Traction	0	0	225	9000	16700	-	17535	5%
HV-4: Lift Irrigation	311	311	311	311	311	0%	311	0%
Sub-total	**8866904**	**9662612**	**9914183**	**11192572**	**12018490**	8%	**12913068**	7%
Extra state & Bulk	45000	45000	45000	0	0	-100%	0	
Total	**8911904**	**9707612**	**9959183**	**11192572**	**12018490**	8%	**12913068**	7%

Table 6-10: ENERGY SALES (MU): HISTORICAL TREND AND APPROVED VALUES FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Approved for FY 12-13	Growth: FY 13 over FY 12
LMV-1: Domestic	3974	4343	4407	4745	5323	8%	5926	11%
LMV-2:Non-Domestic	715	673	763	848	997	9%	1062	7%
LMV-3: Public Lamps	115	125	120	137	152	7%	166	9%
LMV-4: Institutions	223	193	173	187	213	-1%	239	12%
LMV-5: Private Tube Wells	1944	1917	1855	1958	2095	2%	2191	5%
LMV 6: Small and Medium Power	657	722	760	796	869	7%	929	7%
LMV-7: Public Water Works	164	184	196	217	235	9%	258	9%
LMV-8: State Tube Wells	206	206	196	195	209	0%	222	7%
LMV-9: Temporary Supply	11	19	22	40	56	51%	52	-8%
LMV-10: Departmental Employees	43	90	87	91	104	25%	107	4%
HV-1: Non-Industrial Bulk Loads	0	0	626	565	714	-	718	1%
HV-2: Large and Heavy Power	3550	4013	3801	4476	5017	9%	4935	-2%
HV-3: Railway Traction	0	0	0	23	46	-	45	0%
HV-4: Lift Irrigation	0	0	0	0	0	8%	0	5%
Sub-total	**11602**	**12485**	**13007**	**14278**	**16031**	8%	**16852**	5%
Extra state & Bulk	346	348	353	0	0	-100%	0	
Total	**11948**	**12834**	**13360**	**14278**	**16031**	8%	**16852**	5%

6.2 DISTRIBUTION LOSSES AND ENERGY BALANCE

6.2.1 The Petitioner's Submission:

The Distribution licensee has estimated a distribution loss of 22.60% for FY 2012 - 13. The intra-state & inter-state transmission losses submitted by the licensee for FY 2011 - 12 are 3.63% and 2.08% respectively. The aggregate loss (T&D) as submitted by the licensee works out to 26.96% for FY 2012 - 13.

The Licensee intends to pursue the aggressive loss reduction programs through technology intervention, process and efficiency improvement through implementation of capital investment plan. The objective of efficiency improvement programs would be to ensure a reliable distribution system and enhance the quality supply to consumer as well as to reduce technical & commercial losses.

The future projection of distribution losses vis-à-vis loss reduction trajectory as submitted by the Petitioner is given in Table 6-11 below:

Table 6-11: DISTRIBUTION LOSS REDUCTION TRAJECTORY – PETITIONER

	Base Year FY 2010 - 11	FY 2011 - 12	FY 2012 - 13	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Loss	26.11%	24.41%	22.60%	21.00%	20.00%	19.00%

6.2.2 The Commission's Analysis:

The Commission feels there is ample room for reduction in distribution losses; however the licensee has failed to act upon the same. There is an urgent need to have an appreciable loss reduction trajectory and aggressive follow-up efforts to achieve it.

The Commission in its last tariff order had directed the Petitioner 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 the said tariff order. Further the Petitioner was also directed to keep the Commission abreast regarding the study to be undertaken, scope of work, methodology being adopted, whether the study is being undertaken departmentally or assistance of experts in the field is being availed etc.

However no such study was carried out and no report was submitted for perusal of the Commission. The Commission would like to reiterate that the distribution loss proposal of the licensees should be based on correct energy audit data and supported by a report on the study carried out on such data. The Commission directs the licensee to submit a detailed report explaining the data source, the scope of work, methodology adopted in arriving at distribution loss reduction trajectory submitted above.

However in the present scenario where more than half year of FY 2012 - 13 has been elapsed the Commission considers the estimates of the Petitioner for approval of Distribution losses. The Petitioner's submission and Commission's approved energy balance for FY 2012 - 13 is given in Table 6-12 below:

Table 6-12: ENERGY BALANCE FOR FY 2012 - 13

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Retail Sales (MU)	19,453	16,852
Distribution Losses (% of Energy Received)	22.60%	24.49%
Energy at Discom Periphery for Retail Sales (MU)	25,133	22,318
Intra -state Transmission losses %	3.63%	3.63%
Energy Available at State periphery for Transmission(MU)	26,080	23,159
Periphery Loss (Upto inter connection Point) (%)	2.08%	2.08%
Purchases Required & Billed Energy (MU)	26,633	23,651
Total Inter & Intra State Transmission Losses(%)	5.63%	5.63%
Total T&D Losses in Retail Sales	26.96%	28.75%

6.3 ENERGY AVAILABILITY

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

The Petitioner has 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.

The UPPCL has drawn a merit dispatch order schedule and has projected to procure 83,788 MUs of power for FY 2012 - 13.

The Commission has also run the merit dispatch order schedule for power purchase for the FY 2012 - 13 after considering the availability of power and monthly sales trend projection of the Petitioner. The final merit dispatch order showing the approved power purchase quantum by the Commission for FY 2012 - 13 is given in Table 6-38.Table 6-38

Since, the power purchase expense is the single largest component in the ARR of a distribution licensee; it becomes imperative that this element of cost is incurred with utmost care based on the most efficient way of power procurement from the generating stations through long term / short term power purchase arrangements or through bilateral power purchase agreements. Power Purchase cost being un-controllable component of the ARR the Commission plans to true-up the power purchase cost to actual cost on submission of audited accounts.

6.4 POWER PROCUREMENT FROM STATE GENERATING STATIONS

6.4.1 The Petitioner's Submission:

The State of Uttar Pradesh has got both thermal as well as hydro generating stations. Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) owns all the thermal generating stations within the State and the Hydro Stations are owned by Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL). The Multi Year Tariff (MYT) orders issued by the Commission for UPRVUNL and UPJVNL for their respective power stations for FY 2009 - 10 to 2013-14 form the basis for determining the costs for FY 2012 - 13.

The Petitioner's in its latest petition for FY 2012 - 13 submits that computation cost of power procurement for FY 2012 - 13 has been done on the based on

- Actual power purchase cost and units of FY2010 - 11
- Trend observed in the previous and current year.
- Impact of loss reduction initiatives.
- Estimated growth in sales.
- Share of expected capacity available from various Generators to the UPPCL/DISCOMS.

The cost of energy available from State Thermal and Hydro generating stations has been derived by the Petitioner from tariffs approved by the State Commission (MYT order's dated 20th January, 2011 and 20th October, 2011). Petitioner's submission of power purchased from State Thermal and Hydro Generating Stations for FY 2012 - 13 is given in Table 6-13 and Table 6-14 below:

Table 6-13: DETAILS OF POWER PURCHASE COST FROM UPRUVNL STATIONS FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A	630	4004	0.58	231.23	1.27	510.47	1.85	741.70	1.85
Anpara B	1000	6333	1.01	637.54	1.29	819.81	2.30	1,457.35	2.30
Harduagunj	220	796	1.96	156.10	2.58	205.31	4.54	361.41	4.54
Obra A	382	1417	1.22	172.76	1.99	282.59	3.21	455.35	3.21
Obra B	1016	3766	1.28	480.43	2.05	771.88	3.33	1,252.31	3.33
Panki	210	1050	1.00	104.52	3.14	329.42	4.13	433.93	4.13
Parichha	220	805	0.86	69.04	3.59	288.97	4.45	358.02	4.45
Parichha Extn.	420	2526	1.48	373.85	2.92	738.60	4.40	1,112.45	4.40
Parichha Extn. Stage II (2X250MW)	500	1639	1.22	200.63	2.92	479.24	4.15	679.87	4.15
Harduaganj Ext. (2X250MW)	500	2568	1.69	433.94	2.83	727.46	4.52	1,161.40	4.52
Total	**5098**	**24904**		**2860.04**		**5153.76**		**8013.80**	**3.22**

Table 6-14: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara	72	208	1.04	21.66	-	-	1.04	21.66	1.04
Matatila	30	67	0.61	4.09	-	-	0.61	4.09	0.61
Obra (Hydel)	99	175	0.70	12.22	-	-	0.70	12.22	0.70
Rihand	300	417	0.88	36.70	-	-	0.88	36.70	0.88
UGC Power Stations	22	25	2.40	6.01	-	-	2.40	6.01	2.40
Belka & Babail	0	11	-	-	2.62	2.89	2.62	2.89	2.62
Sheetla	4	10	-	-	2.98	2.84	2.98	2.84	2.98
Total	**527**	**912**		**80.68**		**5.72**		**86.41**	**0.95**

6.4.2 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the State owned thermal generating stations are given in Table 6-15 below:

Table 6-15: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	1. Net Power Purchase Quantum is considered as per UPERC's MYT Tariff Order dated 20.01.2011 for UPRVUNL for FY 10-14. 2. Therafter, Merit Order Despatch is run for approval of quantum.
2	**Fixed & Variable Charges**	As per UPERC's MYT Tariff Order dated 20.01.2011 for UPRVUNL for FY 10-14.

Table 6-16: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	1. Net Power Purchase Quantum form all power stations expect Belka & Babail is considered as per UPERC's MYT Tariff Order dated 20.10.2011 for UPJVNL for FY 10-14. 2. Net Power Purchase from Belka & Babail is taken as provided by UPPCL 3. Hydro Stations are considered Must -run in Merit Order Despatch
2	**Fixed & Variable Charges**	1. The tariff for all power stations has been taken from the UPERC's MYT Tariff Order dated 20.10.2011 for UPJVNL for FY 10-14.

Based on above approach, the summary of approved costs of UPRVUNL and UPJVNL Thermal generating stations is given in Table 6-17 and
Table 6-18 below:

Table 6-17: APPROVED COST OF POWER PURCHASE FROM UPRUVNL STATIONS FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A	630	4040	0.57	230.27	1.26	510.30	1.83	740.57	1.83
Anpara B	1000	6517	0.98	638.71	1.29	842.38	2.27	1,481.09	2.27
Harduagunj	229	1038	2.18	226.29	3.02	313.98	5.20	540.27	5.20
Obra A	382	1900	1.04	197.61	1.77	336.36	2.81	533.97	2.81
Obra B	1080	6052	1.05	635.48	1.65	997.52	2.70	1,633.00	2.70
Panki	210	1055	1.33	140.27	3.10	326.82	4.43	467.09	4.43
Parichha	220	1133	1.04	117.86	2.87	325.65	3.91	443.51	3.91
Parichha Extn.	420	2678	1.49	399.09	2.50	668.62	3.99	1,067.71	3.99
Parichha Extn. Stage II (2X250MW)	500	3388	1.58	535.29	2.47	836.14	4.05	1,371.43	4.05
Harduaganj Ext. (2X250MW)	500	3388	1.71	579.34	2.27	769.67	3.98	1,349.01	3.98
Total	**5171**	**31190**		**3700.21**		**5927.44**		**9627.64**	**3.09**

Table 6-18: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Khara	72	303	0.71	21.53	-	-	0.71	21.53	0.71
Matatila	30	81	0.51	4.11	-	-	0.51	4.11	0.51
Obra (Hydel)	99	276	0.44	12.14	-	-	0.44	12.14	0.44
Rihand	300	756	0.48	36.27	-	-	0.48	36.27	0.48
UGC Power Stations	14	31	2.02	6.26	-	-	2.02	6.26	2.02
Belka & Babail	6	11	-	-	2.68	2.95	2.68	2.95	2.68
Sheetla	4	10	-	-	2.81	2.81	2.81	2.81	2.81
Total	**524**	**1468**		**80.32**		**5.76**		**86.08**	**0.59**

6.5 CAPACITY ALLOCATION FROM CENTRAL GENERATING STATIONS & OTHER STATIONS

6.5.1 The Petitioner's Submission:

Petitioner procures power from Central Generating Stations (CGS) includes power from NTPC, NHPC, NPCIL as well as from generating station with Joint Ventures and IPP's. The Petitioner's in its latest petition for FY 2012 - 13 submits that cost of power procurement for FY 2012 - 13 from these sources has been based on

- Actual power purchase cost and units of FY2010 - 11
- Trend observed in the previous and current year.
- Impact of loss reduction initiatives.
- Estimated growth in sales.
- Share of expected capacity available from various Generators to the licensee.

The Petitioner has mentioned that the cost of energy from Central Sector Station has been derived from tariffs approved by Central Electricity Regulatory Commission. The cost of power purchase from Independent Power Producers (IPPs) within the State has been determined in accordance with UPERC (Terms and Conditions of Generation Tariff) Regulations. Similarly the cost of power purchase from IPPs outside the State has been derived from tariffs and power purchase agreement approved by the Commission. The cost of energy from other sources has been derived from the power purchase / banking / trading agreements and tariffs approved by the Commission.

The Petitioner's submission of power purchased from NTPC generating stations for FY 2012 - 13 is provided in Table 6-19 given below:

Table 6-19: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	419	849	0.72	60.81	3.19	270.41	3.90	331.23	3.90
Auriya	663	1769	0.49	87.32	3.68	650.60	4.17	737.92	4.17
Dadri Thermal	840	642	0.86	55.15	3.28	210.40	4.14	265.55	4.14
Dadri Gas	830	1986	0.54	106.85	4.46	884.98	4.99	991.83	4.99
Dadri Extension	980	1073	1.76	188.63	3.04	325.92	4.79	514.55	4.79
Rihand-I	1000	2828	0.72	202.46	1.89	535.00	2.61	737.46	2.61
Rihand-II	1000	2524	0.94	237.63	1.95	492.77	2.89	730.40	2.89
Singrauli	2000	6420	0.49	311.56	1.73	1,108.73	2.21	1,420.30	2.21
Tanda	440	3276	1.05	342.57	2.48	812.61	3.53	1,155.18	3.53
Unchahar-I	420	1951	0.82	160.26	2.42	472.21	3.24	632.47	3.24
Unchahar-II	420	1090	0.97	105.56	2.43	264.28	3.39	369.84	3.39
Unchahar-III	210	593	1.29	76.53	2.39	141.47	3.68	218.00	3.68
Farakka	1600	251	0.73	18.24	4.17	104.71	4.89	122.95	4.89
Kahalgaon St. I	840	581	0.91	52.71	3.64	211.47	4.55	264.17	4.55
Talchar	0	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	1500	1759	1.18	206.93	3.43	603.92	4.61	810.85	4.61
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	340	1523	-	-	2.85	433.96	2.85	433.96	2.85
Total	**13502**	**29115**		**2,213.19**		**7,523.48**		**9,736.67**	**3.34**

6.5.2 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NTPC generating stations is given in Table 6-20 below:

Table 6-20: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, plant load factor (PLF) and UP state's share in respective power plant. Further the quantum is approved as per Merit order despatch principles.
2	**Power Purchase Quantum and Cost from Rihand III**	As per petitioners submission Rihand III is planned to be commissioned in FY 2012-13, with no precedences to estimates power purchase quantum and cost from Rinand III the Commission accepts the submission made by the petitioner of power purchase quantum and cost form Rihand III.
3	**Fixed Charges**	Fixed charges are computed after considering UP state's allcoated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and ERPC and fixed cost approved by as per CERC order for respective power plants.
4	**Vairable Charges**	Variable cost are considered as provided by as provided by UPPCL in ARR / Tariff petition for FY 2012-13.

Table 6-21: METHODOLOGY FOR POWER PURCHASE FROM NTPC - FY 2012 - 13

S. No.	Particulars	
1	**Plant Load Factor**	PLF is considered to be the average of the PFL recorded at respective power stations for the last three year's (2009-10, 2010-11 and 2011-12). The PLF number for the three years is sourced from Regional Energy Accounting Report and Annual Report of NRPC and ERPC.
2	**UP State's share in power plants**	Allocation of Power from various central generating stations for FY 12-13 both firm and unallocated quota has been considered as per the NRPC circular (NRPC/SE(O) Allocations/2011 - 12) 28.02.2012
3	**Power from Auriya, Dadri Gas, Dadri Thermal,Farakka and Kajalgaon St.I**	Power purchase from Dadri Gas, Dadri Thermal,Auriya, Farakka and Kajalgaon St.I are not considered as they are costiler sources and fall out ot the requirement as per the Merit order despatch principles.

Based on above approach, the summary of approved costs of NTPC generating stations is given in Table 6-22 below:

Table 6-22: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	419	683	0.82	56.35	3.19	217.67	4.01	274.02	4.01
Auriya	663	0	-	113.87	3.68	-	-	113.87	-
Dadri Thermal	840	616	0.92	56.59	3.28	201.76	4.20	258.35	4.20
Dadri Gas	830	0	-	120.75	4.46	-	-	120.75	-
Dadri Extension	980	823	1.96	161.30	3.04	250.05	5.00	411.35	5.00
Rihand-I	1000	2804	0.80	225.22	1.89	530.45	2.70	755.67	2.70
Rihand-II	1000	2587	0.90	232.19	1.95	505.14	2.85	737.33	2.85
Singrauli	2000	6253	0.56	353.22	1.73	1,079.90	2.29	1,433.12	2.29
Tanda	440	3066	1.08	331.74	2.48	760.54	3.56	1,092.27	3.56
Unchahar-I	420	1905	0.88	168.55	2.42	461.14	3.31	629.69	3.31
Unchahar-II	420	1092	1.03	112.20	2.43	264.85	3.45	377.05	3.45
Unchahar-III	210	545	1.39	75.61	2.39	129.99	3.77	205.60	3.77
Farakka	1600	0	-	17.24	4.17	-	-	17.24	-
Kahalgaon St. I	840	0	-	40.76	3.64	-	-	40.76	-
Talchar	1000	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	1000	1143	1.59	181.24	3.43	392.42	5.02	573.65	5.02
Koldam (Hydro)	800	0	-	-	-	-	-	-	-
Rihand-III	340	1523	-	-	2.85	433.96	2.85	433.96	2.85
Total	**14803**	**23040**		**2,246.84**		**5,227.86**		**7,474.70**	**3.24**

6.5.3 The Petitioner's Submission:

The Petitioner's submission of power purchased from NHPC generating stations for FY 2012 - 13 is provided in Table 6-23 given below:

Table 6-23: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera	540	452	1.87	84.45	-	-	1.87	84.45	1.87
Chamera-II	300	459	3.37	154.63	-	-	3.37	154.63	3.37
Chamera-III	46	89	-	-	2.21	19.67	2.21	19.67	2.21
Dhauliganga	280	317	2.35	74.45	-	-	2.35	74.45	2.35
Salal I&II	690	239	0.72	17.17	0.43	10.39	1.15	27.57	1.15
Tanakpur	94	104	1.88	19.58	-	-	1.88	19.58	1.88
Uri	480	534	1.39	74.26	0.73	39.05	2.12	113.31	2.12
Dulhasti	390	584	4.83	282.35	-	-	4.83	282.35	4.83
Sewa-II	120	166	3.50	58.08	-	-	3.50	58.08	3.50
Uri-II	48	210	-	-	3.32	69.61	3.32	69.61	3.32
Parbati ST-III	0	0	-	-	-	-	-	-	-
Total	**2988**	**3155**		**764.98**		**138.72**		**903.69**	**2.86**

6.5.4 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NHPC generating stations is given in Table 6-24 below:

Table 6-24: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, plant load factor (PLF) and UP state's share in respective power plant. Power sourced from these NHPC plants is considered must -run in Merit Order Despatch.
2	**Power Purchase Quantum and Cost from Chamera-III and Uri-II**	The Commission expects Chamera-III and Uri-II to be commissioned in FY 2012-13, however with no precedences to estimates power purchase quantum and cost from Chamera-III and Uri-II, the Commission accepts the submission made by the petitioner for Chamera-III & Uri-II.
3	**Fixed Charges**	Fixed charges are computed after considering UP state's allcoated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRRC and fixed cost approved by as per CERC order for respective power plants.
4	**Vairable Charges**	Variable cost are calculted as per CREC regulations

Table 6-25: METHODOLOGY FOR POWER PURCHASE FROM NHPC - FY 2012 - 13

S. No.	Particulars	
1	**Energy Generation**	Factoring the MW capacity, auxilary consumption and design energy as specified by CERC for respective hydro plants the commission has calculated the energy sourced from each the plant.
2	**UP State's share in power plants**	Allocation of Power from various central generating stations for FY 12-13 both firm and unallocated quota has been considered as per the NRPC circular (NRPC/SE(O) Allocations/2011 - 12) 28.02.2012

Based on above approach, the summary of approved costs of NHPC generating stations is given in Table 6-26 below:

Table 6-26: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera	540	333	0.95	31.53	0.90	30.17	-	61.70	1.85
Chamera-II	300	404	1.39	56.25	1.30	52.36	-	108.61	2.69
Chamera-III	46	89	-	-	2.21	19.67	-	19.67	2.21
Dhauliganga	280	287	1.51	43.26	1.36	39.19	-	82.45	2.87
Salal I&II	690	212	0.47	9.99	0.45	9.50	-	19.48	0.92
Tanakpur	94	101	1.28	12.97	1.07	10.87	-	23.83	2.35
Uri	480	513	0.95	48.56	0.74	38.03	-	86.59	1.69
Dulhasti	390	515	3.15	161.87	2.92	150.07	-	311.93	6.06
Sewa-II	120	148	1.49	22.03	2.07	30.52	-	52.54	3.56
Uri-II	48	210	-	-	3.32	69.61	-	69.61	3.32
Parbati ST-III	520	0	-	-	-	-	-	-	-
Total	**3508**	**2812**		**386.45**		**449.98**		**836.43**	**2.97**

6.5.5 The Petitioner's Submission:

The Petitioner's submission of power purchased from NPCIL generating stations for FY 2012 - 13 is provided in Table 6-27 given below:

Table 6-27: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP	440	596	-	-	2.16	128.92	2.16	128.92	2.16
RAPP #3&4	400	541	-	-	2.65	143.43	2.65	143.43	2.65
RAPP#5&6	440	670	-	-	3.20	214.73	3.20	214.73	3.20
Total	**1280**	**1807**		**-**		**487.08**		**487.08**	**2.70**

6.5.6 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from the NPCIL generating stations is given in Table 6-28 below:

Table 6-28: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, capacity factor and UP state's share in respective power plant. Power sourced from these NPCIL plants is considered must -run in Merit Order Despatch.
2	**Tariff (Single part)**	As provided in ARR / Tariff petition by UPPCL for FY 2012-13.

Table 6-29: METHODOLOGY FOR POWER PURCHASE FROM NPCIL - FY 2012 - 13

S. No.	Particulars	
1	**Capacity Factor**	Capacity factor is considered to be the average of the capacity factor recorded at respective power stations for the last three year's (2009-10, 2010-11 and 2011-12). Capacity factor are sourced from official website of NPCIL.
2	**UP State's share in power plants**	Allocation of Power from various central generating stations for FY 12-13 both firm and unallocated quota has been considered as per the NRPC circular (NRPC/SE(O) Allocations/2011 - 12) 28.02.2012

Based on above approach, the summary of approved costs of NPCIL generating stations is given in Table 6-30 below:

Table 6-30: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP	440	605	-	-	2.16	130.93	2.16	130.93	2.16
RAPP #3&4	440	481	-	-	2.65	127.38	2.65	127.38	2.65
RAPP#5&6	440	854	-	-	3.20	273.80	3.20	273.80	3.20
Total	**1320**	**1940**				**532.11**		**532.11**	**2.74**

6.5.7 The Petitioner's Submission:

The Petitioner's submission of power purchased from IPPs and Joint Ventures (JVs) for FY 2012 - 13 is provided in Table 6-31 given below:

Table 6-31: DETAILS OF POWER PURCHASE COST FROM IPPS / JVs FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri	1500	1365	1.37	187.42	1.14	155.70	2.51	343.12	2.51
VishnuPrayag	400	1774	1.26	223.40	1.14	202.75	2.40	426.14	2.40
Tala Power	1020	184	-	-	2.02	37.17	2.02	37.17	2.02
Tehri Hydro	1000	1241	2.46	305.40	2.50	310.25	4.96	615.65	4.96
Rosa Power	900	4467	1.48	663.26	3.19	1,424.97	4.67	2,088.23	4.67
IGSTPP, Jhajhjhar	100	701	-	-	4.89	342.69	4.89	342.69	4.89
Koteshwar (100 Mar 11, 300 2011-12)	400	342	2.91	99.46	2.18	74.43	5.08	173.89	5.08
Anpara 'C' (600 2011-12, 600 12-13)	600	6263	-	-	3.60	2,254.82	3.60	2,254.82	3.60
Karcham-Wangtoo (2011 - 12)	200	160	-	-	3.70	59.16	3.70	59.16	3.70
Bajaj Hindusthan	180	1971	-	-	4.29	845.56	4.29	845.56	4.29
Rosa Power Project II (300 26-Jun-10)	300	1450	1.53	221.15	3.19	462.55	4.72	683.70	4.72
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-
Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Total	**6600**	**19918**		**1,700.09**		**6,170.06**		**7,870.15**	**3.95**

6.5.8 The Commission's Analysis:

The assumptions considered by Commission while approving the power purchase from IPP's and Joint Ventures (JV's) is given in Table 6-32 below:

Table 6-32: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs - FY 2012 - 13

S. No.	Particulars	Assumption
1	**Power Purchase Quantum**	Net Power Purchase Quantum is considered as provided by UPPCL in ARR / Tariff petition for FY 2012-13. Nathpa-Jhakri, Tehri, Tala & Vishnuprayag are considered as must -run in Merit Order Despatch. Rosa Power Plant & Anpara 'C' are considered as per Merit order principles to the extent
2	**Power from IGSTPP, Jhajhjhar, Karcham-Wangtoo and Bajaj Hindusthan**	Power purchase from IGSTPP, Jhajhjhar and Bajaj Hindusthan are not considered as they are costiler sources and fall out ot the requirement as per the Merit order despatch principles. Similarly power purchase for Anpara C has been considered only to the extent required as it falls outside the last unit to be dispatched as per the Merit order despatch principles
3	**Tariff (Single part & Two part) IPPs (Nathpa-Jhakri, Tehri, Tala and Vishnuprayag) and Rosa Power Plant, and Anpara 'C'**	As provided in ARR / Tariff petition by UPPCL for FY 2012-13, due to paucity of information on cost.

Based on above approach, the summary of approved power purchase costs from IPP’s and Joint Ventures (JV’s) is given in Table 6-33 below:

Table 6-33: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Nathpa Jhakri HPS	1500	1365	1.37	187.42	1.14	155.70	2.51	343.12	2.51
VishnuPrayag	400	1774	1.26	223.40	1.14	202.75	2.40	426.14	2.40
Tala Power	1020	184	-	-	2.02	37.17	2.02	37.17	2.02
Tehri Hydro	1000	1241	2.46	305.40	2.50	310.25	4.96	615.65	4.96
Rosa Power Project I	900	4467	1.48	663.26	3.19	1,424.97	4.67	2,088.23	4.67
IGSTPP, Jhajhjhar	100	0	-	-	4.89	-	4.89	-	-
Koteshwar (100 Mar 11, 300 2011-12)	400	342	2.91	99.46	2.18	74.43	5.08	173.89	5.08
Anpara 'C' (600 2011-12, 600 12-13)	600	1112	-	-	3.60	400.49	3.60	400.49	3.60
Karcham-Wangtoo (2011 -12)	200	160	-	-	3.70	59.16	3.70	59.16	3.70
Bajaj Hindusthan	180	0	-	-	4.29	-	4.29	-	-
Rosa Power Project II (300 26-Jun-10)	300	1450	1.53	221.15	3.19	462.55	4.72	683.70	4.72
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-
Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Total	**6600**	**12096**		**1,700.09**		**3,127.47**		**4,827.56**	**3.99**

6.5.9 The Petitioner's Submission:

The Petitioner's submission of power purchased from Co-generating stations for FY 2012 - 13 is provided in Table 6-34 given below:

Table 6-34: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen	0	2158	-	-	4.30	928.07	4.30	928.07	4.30

6.5.10 The Commission's Analysis:

In an effort to encourage renewable generation the Commission has mandated that the distribution licensees shall, based on availability, procure power to the extent available from the co-generating stations available in the State. Approved power purchased from Co-generating stations for FY 2012 - 13 is provided in Table 6-35 given below.

Table 6-35: APPROVED COST OF POWER PURCHASE: STATE CO-GENERATION FACILITIES FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen	0	2158	-	-	4.30	928.07	4.30	928.07	4.30

The Petitioner's has submitted an estimated of power purchase from bilateral and other sources for FY 2012 - 13 for meeting emergency to the tune of 1819 MU at a cost of Rs. 837.65 Crores The Commission has run merit order despatch considering all possible sources and observes that the purchases from bilateral and UI falls out of the merit order dispatch.

Considering that distribution licensee may need to buy power in exigency to meet immediate and urgent power delivery, the Commission would also like to mention that any quantum of power purchased emergency / other sources should be procured only through bilateral sources / power exchanges or through competitive bidding route to the extent possible.

The Commission in its Distribution Tariff Regulations, 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 understands that the UI mechanism is meant for the purpose of disciplining the grid operations and is not to be treated as a regular source for power purchase. Hence the Commission reiterates that the Petitioner should take due care while overdrawing power from the grid (if any); especially when the UI rates are high. The Commission would also like to caution the Petitioner here that this issue would be dealt with at the time of true-up and at that time any power purchases undertaken in contravention to the provisions of the Distribution Tariff Regulations would be disallowed and the Petitioner would have to bear the cost for the same.

Further, the Commission would like to reiterate that the Petitioner 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.

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

6.6 Fuel & Power Purchase Cost Adjustment Surcharge

For the purpose of Fuel & Power Purchase Cost Adjust (FPPCA) as provided in Regulation 6.9 of the UPERC (Terms and Conditions of Determination of Distribution Tariff) Regulation, Amendment No.3, 2012, the monthly approvals are provided in Table 12-4. The FPPCA will be applicable from the quarter January to March 2013.

6.7 SUMMARY OF POWER PURCHASE

The total power purchase quantum available in MW terms from State owned generating stations, CGS and other sources along with the quantum and cost approval as submitted by Petitioner and approved by Commission for FY 2012 - 13 is presented in Table 6-36 and Table 6-37 below:

Table 6-36: SUMMARY OF POWER PURCHASE COST FY 2012 - 13 - PETITION

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	630	4004	0.58	231.23	1.27	510.47	1.85	741.70	1.85
Anpara B	1000	6333	1.01	637.54	1.29	819.81	2.30	1,457.35	2.30
Harduagunj	220	796	1.96	156.10	2.58	205.31	4.54	361.41	4.54
Obra A	382	1417	1.22	172.76	1.99	282.59	3.21	455.35	3.21
Obra B	1016	3766	1.28	480.43	2.05	771.88	3.33	1,252.31	3.33
Panki	210	1050	1.00	104.52	3.14	329.42	4.13	433.93	4.13
Parichha	220	805	0.86	69.04	3.59	288.97	4.45	358.02	4.45
Parichha Extn.	420	2526	1.48	373.85	2.92	738.60	4.40	1,112.45	4.40
Parichha Extn. Stage II (2X250MW)	500	1639	1.22	200.63	2.92	479.24	4.15	679.87	4.15
Harduaganj Ext. (2X250MW)	500	2568	1.69	433.94	2.83	727.46	4.52	1,161.40	4.52
Sub total - Thermal	**5098**	**24904**		**2860.04**		**5153.76**		**8013.80**	**3.22**
Per unit Avg Rate of Thermal Generation								**3.22**	
Hydro Stations									
Khara	72	208	1.04	21.66	-	-	1.04	21.66	1.04
Matatila	30	67	0.61	4.09	-	-	0.61	4.09	0.61
Obra (Hydel)	99	175	0.70	12.22	-	-	0.70	12.22	0.70
Rihand	300	417	0.88	36.70	-	-	0.88	36.70	0.88
UGC Power Stations	22	25	2.40	6.01	-	-	2.40	6.01	2.40
Belka & Babail	0	11	-	-	2.62	2.89	2.62	2.89	2.62
Sheetla	4	10	-	-	2.98	2.84	2.98	2.84	2.98
Sub total - Hydro	**527**	**912**		**80.68**		**5.72**		**86.41**	**0.95**
Purchase Per unit Avg Rate from hydro generating stations								**0.95**	
Sub-Total Own generation	**5625**	**25816**		**2,940.72**		**5,159.48**		**8,100.20**	**3.14**
Procurement of power from Central Sector Generating Stations									
Anta	419	849	0.72	60.81	3.19	270.41	3.90	331.23	3.90
Auriya	663	1769	0.49	87.32	3.68	650.60	4.17	737.92	4.17
Dadri Thermal	840	642	0.86	55.15	3.28	210.40	4.14	265.55	4.14
Dadri Gas	830	1986	0.54	106.85	4.46	884.98	4.99	991.83	4.99
Dadri Extension	980	1073	1.76	188.63	3.04	325.92	4.79	514.55	4.79
Rihand-I	1000	2828	0.72	202.46	1.89	535.00	2.61	737.46	2.61
Rihand-II	1000	2524	0.94	237.63	1.95	492.77	2.89	730.40	2.89
Singrauli	2000	6420	0.49	311.56	1.73	1,108.73	2.21	1,420.30	2.21
Tanda	440	3276	1.05	342.57	2.48	812.61	3.53	1,155.18	3.53
Unchahar-I	420	1951	0.82	160.26	2.42	472.21	3.24	632.47	3.24
Unchahar-II	420	1090	0.97	105.56	2.43	264.28	3.39	369.84	3.39
Unchahar-III	210	593	1.29	76.53	2.39	141.47	3.68	218.00	3.68

Farakka	1600	251	0.73	18.24	4.17	104.71	4.89	122.95	4.89
Kahalgaon St. I	840	581	0.91	52.71	3.64	211.47	4.55	264.17	4.55
Talchar	0	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	1500	1759	1.18	206.93	3.43	603.92	4.61	810.85	4.61
Koldam (Hydro)	0	0	-	-	-	-	-	-	-
Rihand-III	340	1523	-	-	2.85	433.96	2.85	433.96	2.85
Sub-Total NTPC	**13502**	**29115**		**2,213.19**		**7,523.48**		**9,736.67**	**3.34**
Chamera	540	452	1.87	84.45	-	-	1.87	84.45	1.87
Chamera-II	300	459	3.37	154.63	-	-	3.37	154.63	3.37
Chamera-III	46	89	-	-	2.21	19.67	2.21	19.67	2.21
Dhauliganga	280	317	2.35	74.45	-	-	2.35	74.45	2.35
Salal I&II	690	239	0.72	17.17	0.43	10.39	1.15	27.57	1.15
Tanakpur	94	104	1.88	19.58	-	-	1.88	19.58	1.88
Uri	480	534	1.39	74.26	0.73	39.05	2.12	113.31	2.12
Dulhasti	390	584	4.83	282.35	-	-	4.83	282.35	4.83
Sewa-II	120	166	3.50	58.08	-	-	3.50	58.08	3.50
Uri-II	48	210	-	-	3.32	69.61	3.32	69.61	3.32
Parbati ST-III	0	0	-	-	-	-	-	-	-
Sub-Total NHPC	**2988**	**3155**		**764.98**		**138.72**		**903.69**	**2.86**
NAPP	440	596	-	-	2.16	128.92	2.16	128.92	2.16
RAPP #3&4	400	541	-	-	2.65	143.43	2.65	143.43	2.65
RAPP#5&6	440	670	-	-	3.20	214.73	3.20	214.73	3.20
Sub-Total NPCIL	**1280**	**1807**				**487.08**		**487.08**	**2.70**
Nathpa Jhakri HPS	1500	1365	1.37	187.42	1.14	155.70	2.51	343.12	2.51
VishnuPrayag	400	1774	1.26	223.40	1.14	202.75	2.40	426.14	2.40
Tala Power	1020	184	-	-	2.02	37.17	2.02	37.17	2.02
Tehri Hydro	1000	1241	2.46	305.40	2.50	310.25	4.96	615.65	4.96
Rosa Power Project I	900	4467	1.48	663.26	3.19	1,424.97	4.67	2,088.23	4.67
IGSTPP, Jhajhjhar	100	701	-	-	4.89	342.69	4.89	342.69	4.89
Koteshwar (100 Mar 11, 300 2011-12)	400	342	2.91	99.46	2.18	74.43	5.08	173.89	5.08
Anpara 'C' (600 2011-12, 600 12-13)	600	6263	-	-	3.60	2,254.82	3.60	2,254.82	3.60
Karcham-Wangtoo (2011 -12)	200	160	-	-	3.70	59.16	3.70	59.16	3.70
Bajaj Hindusthan	180	1971	-	-	4.29	845.56	4.29	845.56	4.29
Rosa Power Project II (300 26-Jun-10)	300	1450	1.53	221.15	3.19	462.55	4.72	683.70	4.72
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Sub-Total IPP/JV	**6600**	**19918**				**6,170.06**		**7,870.15**	**3.95**
Captive and Cogen	0	2158	-	-	4.30	928.07	4.30	928.07	4.30
Inter system exchange (Bilateral & PXIL, IEX)	0	1819	-	-	4.61	837.65	4.61	837.65	4.61
Others/UI	0	0	-	-	-	-	-	-	-
Sub-Total : Co-Generation & Other Sources	**0**	**3977**				**1,765.72**		**1,765.72**	
Grand Total of Power Purchase	**29995**	**83788**		**5,918.89**		**21,244.5**		**28,864**	**3.44**

Table 6-37: SUMMARY OF APPROVED POWER PURCHASE COST FY 2012 - 13

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Procurement of power from State Sector Generating Stations									
Thermal Stations									
Anpara A	630	4040	0.57	230.27	1.26	510.30	1.83	740.57	1.83
Anpara B	1000	6517	0.98	638.71	1.29	842.38	2.27	1,481.09	2.27
Harduagunj	229	1038	2.18	226.29	3.02	313.98	5.20	540.27	5.20
Obra A	382	1900	1.04	197.61	1.77	336.36	2.81	533.97	2.81
Obra B	1080	6052	1.05	635.48	1.65	997.52	2.70	1,633.00	2.70
Panki	210	1055	1.33	140.27	3.10	326.82	4.43	467.09	4.43
Parichha	220	1133	1.04	117.86	2.87	325.65	3.91	443.51	3.91
Parichha Extn.	420	2678	1.49	399.09	2.50	668.62	3.99	1,067.71	3.99
Parichha Extn. Stage II (2X250MW)	500	3388	1.58	535.29	2.47	836.14	4.05	1,371.43	4.05
Harduaganj Ext. (2X250MW)	500	3388	1.71	579.34	2.27	769.67	3.98	1,349.01	3.98
Sub total - Thermal	**5171**	**31190**		**3700.21**		**5927.44**		**9627.64**	**3.09**
Per unit Avg Rate of Thermal Generation								**3.09**	
Hydro Stations									
Khara	72	303	0.71	21.53	-	-	0.71	21.53	0.71
Matatila	30	81	0.51	4.11	-	-	0.51	4.11	0.51
Obra (Hydel)	99	276	0.44	12.14	-	-	0.44	12.14	0.44
Rihand	300	756	0.48	36.27	-	-	0.48	36.27	0.48
UGC Power Stations	14	31	2.02	6.26	-	-	2.02	6.26	2.02
Belka & Babail	6	11	-	-	2.68	2.95	2.68	2.95	2.68
Sheetla	4	10	-	-	2.81	2.81	2.81	2.81	2.81
Sub total - Hydro	**524**	**1468**		**80.32**		**5.76**		**86.08**	**0.59**
Purchase Per unit Avg Rate from hydro generating stations								**0.59**	
Sub-Total Own generation	**5696**	**32657**		**3,780.53**		**5,933.20**		**9,713.72**	**2.97**
Procurement of power from Central Sector Generating Stations									
Anta	419	683	0.82	56.35	3.19	217.67	4.01	274.02	4.01
Auriya	663	0	-	113.87	3.68	-	-	113.87	-
Dadri Thermal	840	616	0.92	56.59	3.28	201.76	4.20	258.35	4.20
Dadri Gas	830	0	-	120.75	4.46	-	-	120.75	-
Dadri Extension	980	823	1.96	161.30	3.04	250.05	5.00	411.35	5.00
Rihand-I	1000	2804	0.80	225.22	1.89	530.45	2.70	755.67	2.70
Rihand-II	1000	2587	0.90	232.19	1.95	505.14	2.85	737.33	2.85
Singrauli	2000	6253	0.56	353.22	1.73	1,079.90	2.29	1,433.12	2.29
Tanda	440	3066	1.08	331.74	2.48	760.54	3.56	1,092.27	3.56
Unchahar-I	420	1905	0.88	168.55	2.42	461.14	3.31	629.69	3.31
Unchahar-II	420	1092	1.03	112.20	2.43	264.85	3.45	377.05	3.45
Unchahar-III	210	545	1.39	75.61	2.39	129.99	3.77	205.60	3.77

Farakka	1600	0	-	17.24	4.17	-	-	17.24	-
Kahalgaon St. I	840	0	-	40.76	3.64	-	-	40.76	-
Talchar	1000	0	-	-	-	-	-	-	-
Kahalgaon St.II Ph.I	1000	1143	1.59	181.24	3.43	392.42	5.02	573.65	5.02
Koldam (Hydro)	800	0	-	-	-	-	-	-	-
Rihand-III	340	1523	-	-	2.85	433.96	2.85	433.96	2.85
Sub-Total NTPC	**14803**	**23040**		**2,246.84**		**5,227.86**		**7,474.70**	**3.24**
Chamera	540	333	0.95	31.53	0.90	30.17	-	61.70	1.85
Chamera-II	300	404	1.39	56.25	1.30	52.36	-	108.61	2.69
Chamera-III	46	89	-	-	2.21	19.67	-	19.67	2.21
Dhauliganga	280	287	1.51	43.26	1.36	39.19	-	82.45	2.87
Salal I&II	690	212	0.47	9.99	0.45	9.50	-	19.48	0.92
Tanakpur	94	101	1.28	12.97	1.07	10.87	-	23.83	2.35
Uri	480	513	0.95	48.56	0.74	38.03	-	86.59	1.69
Dulhasti	390	515	3.15	161.87	2.92	150.07	-	311.93	6.06
Sewa-II	120	148	1.49	22.03	2.07	30.52	-	52.54	3.56
Uri-II	48	210	-	-	3.32	69.61	-	69.61	3.32
Parbati ST-III	520	0	-	-	-	-	-	-	-
Sub-Total NHPC	**3508**	**2812**		**386.45**		**449.98**		**836.43**	
NAPP	440	605	-	-	2.16	130.93	2.16	130.93	2.16
RAPP #3&4	440	481	-	-	2.65	127.38	2.65	127.38	2.65
RAPP#5&6	440	854	-	-	3.20	273.80	3.20	273.80	3.20
Sub-Total NPCIL	**1320**	**1940**				**532.11**		**532.11**	
Nathpa Jhakri HPS	1500	1365	1.37	187.42	1.14	155.70	2.51	343.12	2.51
VishnuPrayag	400	1774	1.26	223.40	1.14	202.75	2.40	426.14	2.40
Tala Power	1020	184	-	-	2.02	37.17	2.02	37.17	2.02
Tehri Hydro	1000	1241	2.46	305.40	2.50	310.25	4.96	615.65	4.96
Rosa Power Project I	900	4467	1.48	663.26	3.19	1,424.97	4.67	2,088.23	4.67
IGSTPP, Jhajhjhar	100	0	-	-	4.89	-	4.89	-	-
Koteshwar (100 Mar 11, 300 2011-12)	400	342	2.91	99.46	2.18	74.43	5.08	173.89	5.08
Anpara 'C' (600 2011-12, 600 12-13)	600	1112	-	-	3.60	400.49	3.60	400.49	3.60
Karcham-Wangtoo (2011 -12)	200	160	-	-	3.70	59.16	3.70	59.16	3.70
Bajaj Hindusthan	180	0	-	-	4.29	-	4.29	-	-
Rosa Power Project II (300 26-Jun-10)	300	1450	1.53	221.15	3.19	462.55	4.72	683.70	4.72
Srinagar (2011-12)	0	0	-	-	-	-	-	-	-

Teesta St-III (2011-12)	0	0	-	-	-	-	-	-	-
Sub-Total IPP/JV	**6600**	**12096**				**3,127.47**		**4,827.56**	
Captive and Cogen	0	2158	-	-	4.30	928.07	4.30	928.07	4.30
Inter system exchange (Bilateral & PXIL, IEX)	0	0	-	-	4.61	-	4.61	-	-
Others/UI	0	0	-	-	-	-	-	-	-
Sub-Total : Co-Generation & Other Sources	**0**	**2158**				**928.07**		**928.07**	**4.30**
Grand Total of Power Purchase	**31926**	**74703**		**6,413.81**		**16,198.7**		**24,312.60**	**3.25**

6.8 APPROVED MERIT DESPATCH ORDER

Merit despatch order as approved by the Commission after evaluating the power purchase cost is given in Table 6-38 below:

Table 6-38: APPROVED MERIT ORDER DESPATCH FY 2012 - 13

Rank	Power Station	Type	Dispatch Mode	Variable Charge (Rs/kWh)	Power Procurement (MU)	Cumulative Procurement (MU)
1	Khara	UPJVNL-Hydro	Must Run	0.00	303	303
2	Matatila	UPJVNL-Hydro	Must Run	0.00	81	384
3	Obra (Hydel)	UPJVNL-Hydro	Must Run	0.00	276	660
4	Rihand	UPJVNL-Hydro	Must Run	0.00	756	1416
5	UGC Power Stations	UPJVNL-Hydro	Must Run	0.00	31	1447
6	Chamera	NHPC	Must Run	0.90	333	1780
7	Chamera-II	NHPC	Must Run	1.30	404	2184
8	Dhauliganga	NHPC	Must Run	1.36	287	2471
9	Tanakpur	NHPC	Must Run	1.07	101	2573
10	Dulhasti	NHPC	Must Run	2.92	515	3087
11	Sewa-II	NHPC	Must Run	2.07	148	3235
12	Salal I&II	NHPC	Must Run	0.45	212	3447
13	Uri	NHPC	Must Run	0.74	513	3960
14	Nathpa Jhakri HPS	IPP/JV/Others -Hydro	Must Run	1.14	1365	5324

15	VishnuPrayag	IPP/JV/Others -Hydro	Must Run	1.14	1774	7099
16	Anpara A	UPRVNL-Thermal	Must Run	1.26	4040	11139
17	Anpara B	UPRVNL-Thermal	Must Run	1.29	6517	17656
18	Tala Power	IPP/JV/Others -Hydro	Must Run	2.02	184	17840
19	NAPP	NPCIL	Must Run	2.16	605	18445
20	Chamera-III	NHPC	Must Run	2.21	89	18534
21	Tehri Hydro	IPP/JV/Others -Hydro	Must Run	2.50	1241	19775
22	RAPP #3&4	NPCIL	Must Run	2.65	481	20256
23	Belka & Babail	UPJVNL-Hydro	Must Run	2.68	11	20267
24	Sheetla	UPJVNL-Hydro	Must Run	2.81	10	20277
25	RAPP#5&6	NPCIL	Must Run	3.20	854	21131
26	Uri-II	NHPC	Must Run	3.32	210	21341
27	Karcham-Wangtoo (2011 -12)	IPP/JV/Others	Must Run	3.70	160	21501
28	Captive and Cogen	IPP/JV/Others -Hydro	Merit	4.30	2158	23659
29	Obra B	UPRVNL-Thermal	Merit	1.65	6052	29711
30	Singrauli	NTPC	Merit	1.73	6253	35964
31	Obra A	UPRVNL-Thermal	Merit	1.77	1900	37864
32	Rihand-I	NTPC	Merit	1.89	2804	40668
33	Rihand-II	NTPC	Merit	1.95	2587	43255
34	Koteshwar (100 Mar 11, 300 2011-12)	IPP/JV/Others -Hydro	Merit	2.18	342	43598
35	Harduaganj Ext. (2X250MW)	UPRVNL-Thermal	Merit	2.27	3388	46986
36	Unchahar-III	NTPC	Merit	2.39	545	47531
37	Unchahar-I	NTPC	Merit	2.42	1905	49435
38	Unchahar-II	NTPC	Merit	2.43	1092	50528
39	Parichha Extn. Stage II (2X250MW)	UPRVNL-Thermal	Merit	2.47	3388	53915
40	Tanda	NTPC	Merit	2.48	3066	56982
41	Parichha Extn.	UPRVNL-Thermal	Merit	2.50	2678	59660
42	Rihand-III	NTPC	Merit	2.85	1523	61183
43	Parichha	UPRVNL-Thermal	Merit	2.87	1133	62316
44	Harduagunj	UPRVNL-Thermal	Merit	3.02	1038	63354
45	Dadri Extension	NTPC	Merit	3.04	823	64177

46	Panki	UPRVNL-Thermal	Merit	3.10	1055	65232
47	Anta	NTPC	Merit	3.19	683	65915
48	Rosa Power Project I	IPP/JV/Others -Thermal	Merit	3.19	4467	70382
49	Rosa Power Project II (300 26-Jun-10)	IPP/JV/Others -Thermal	Merit	3.19	1450	71832
50	Dadri Thermal	NTPC	Merit	3.28	616	72448
51	Kahalgaon St.II Ph.I	NTPC	Merit	3.43	1143	73591
52	Anpara 'C' (600 2011-12, 600 12-13)	IPP/JV/Others -Thermal	Merit	3.60	1112	74703

6.9 ANNUAL REVENUE REQUIREMENT FOR FY 2012 - 13

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

a) Power Purchase cost

b) Transmission Charges

c) SLDC Charges

d) Operation and Maintenance Expenses

- 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 Expenses

k) Contribution to Contingency Reserve

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

6.10 ESCALATION INDEX

The Regulation 4.3 of Distribution Tariff Regulations stipulates the methodology for consideration of the O&M Expenses, wherein such expenses are linked to the inflation index determined under these Regulations. The relevant provisions of the Distribution Tariff Regulation are reproduced below:

> *"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……..."[Emphasis supplied]*

The Commission in accordance with the above stated regulation has calculated the inflation index for the FY 2010 - 11 based on the weighted average index of WPI and CPI. The Commission has considered the WPI and CPI index as available on the website of Economic Advisor, Ministry of Commerce and Industry Ministry of Labour respectively. Accordingly, the Commission has calculated the inflation index for approval of O&M expenses at 8.67% as shown in the Table 6-39 below:

Table 6-39: INFLATION INDEX FOR FY 2012 - 13

Month	Wholesale Price Index			Consumer Price Index			Consolidated Index		
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2010-11	FY 2011-12	FY 2012-13	FY 2010-11	FY 2011-12	FY 2012-13
	A	B	C	D	E	F	G=A*0.6+D*0.4	H=B*0.6+E*0.4	I=C*0.6+F*0.4
April	139	152	-	170	186	-	151	166	-
May	139	152	-	172	187	-	152	166	-
June	140	153	-	174	189	-	153	167	-
July	141	154	-	178	193	-	156	170	-
August	141	155	-	178	194	-	156	171	-
September	142	156	-	179	197	-	157	173	-
October	143	157	-	181	198	-	158	173	-
November	144	157	-	182	199	-	159	174	-
December	146	157	-	185	202	-	162	175	-
January	148	158	-	188	198	-	164	174	-
February	148	158	-	185	199	-	163	175	-
March	150	160	-	185	201	-	164	176	-
Average	143	156	-	180	195	-	158	172	-
Weighted Average of Inflation							((172/158)-1)*100 =		**8.67%**

6.11 POWER PROCUREMENT COST

6.11.1 The Petitioner's Submission:

Petitioner projected that the power purchase cost has been computed on the basis of merit order principle. The Petitioner submits that presently UPPCL is carrying out the function of power procurement for bulk supply to distribution licensees in the state. UPPCL purchases power from various generators i.e. central, state generating station, IPPs etc. and supplies to various distribution licensees of the state at the bulk supply rate as GOUP has yet not allocated individual power share to distribution licensees. The Petitioner further submits projected PGCIL charges levied on projected energy procured from Northern Region have been incorporated in the Power Procurement Cost.

6.11.2 The Commission's Analysis:

The Commission has also run the merit dispatch order schedule for power purchase for the FY 2012 - 13 after considering the availability of power and monthly sales trend projection of the Petitioner. The final merit dispatch order showing the approved power purchase quantum by the Commission for FY 2012 - 13 is given Table 6-38. Taking cognizance of UPPCL's order which allocates power procured from state generating station to state distributing licensees the Commission has factored in Petitioners share in power sourced from state generating station while determining bulk supply rate of the Petitioner. Further aligning with the Petitioner's submission the Commission has grossed up the power purchase costs to include PGCIL charges (inter-state transmission charges) and the determined bulk supply rate is by dividing the cost so computed with the energy input (MU) at transmission-distribution interface. The Petitioner's submission and Commission's approved bulk power supply tariff for FY 2012 - 13 is given in Table 6-40 below:

Table 6-40: CONSOLIDATED BULK SUPPLY TARIFF - PETITION

Particulars		FY 2012-13	
		Petitioner Estimated	Approved
Purchases Required & Billed Energy (MU)	A	83,788	74,703
Periphery Loss (Upto inter connection Point) (%)	B	2.08%	2.08%
Energy Available at State periphery for Transmission(MU)	C=A*(1-B)	82,046	73,150
Intra -state Transmission losses %	D	3.63%	3.63%
Energy Available at State periphery for Transmission(MU)	E=D*(1-D)	79,068	70,495
Power Purchase Cost (Rs. Cr)	F	28,864	24,313
PGCIL (NR) inter-state transmission charges (Rs. Cr)	G	1,127	1,127
Total Power Procurement Cost (Rs. Cr)	H=F+G	29,991	25,440
Bulk Supply Tariff (Rs/unit)	I=(H/E)*10	3.79	3.61

Power Purchase cost being un-controllable component of the ARR the Commission plans to true-up the power procurement cost to actual cost on submission of audited accounts. The Petitioner's submission and Commission's approved power procurement cost for FY 2012 - 13 is given in Table 6-41 below:

Table 6-41: POWER PROCUREMENT COST FOR FY 2012 - 13

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Energy Input into Transmission-Distribution Interface (MU)	25,133	22,318
Bulk Supply Tariff (Rs/kWh)	3.79	3.61
Power Procurement cost from UPPCL (Rs. Cr)	9,533	8,054

6.12 TRANSMISSION AND SLDC CHARGES

6.12.1 Inter-state transmission charges

The Petitioner's Submission:

The interstate transmission charges payable by the UPPCL to PGCIL. The PGCIL charges are levied on energy procured from NTPC, NPCIL, NHPC, SJVNL, Tehri, TALA and others. These charges have been incorporated in Power Procurement Cost. The Petitioner submits that while considering power procurement to meet the State requirement, losses external to its system, i.e. in the Northern Region PGCIL system need to be accounted for. The availability of power for the Petitioner (i.e. at UPPCL system boundary) from these sources gets reduced to the extent of these losses and the Petitioner has accordingly incorporated them while drawing up the energy balance.

The Commission's Analysis:

Commission accepts inter-state transmission charges of Rs. 1127 Crores as estimated by the Petitioner, However reiterates that the actual inter-state transmission charges for FY 2012 - 13 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. As explained in the "Power Procurement Cost" section the inter-state transmission charges of Rs. 1127 Crores are grossed to determine the bulk supply tariff.

6.12.2 Intra-state transmission charges

The Petitioner's Submission:

The intra state transmission charges are payable by Petitioner are based on the actual energy received and uniform charges are to be paid by all the Distribution Licensees in UP state proportionate to the energy delivered to them. Accordingly, licensee has submitted cost of intra state Transmission charges for FY 2012 - 13. The Transmission licensee is also performing the function of SLDC, as such SLDC cost is embedded in the transmission charges.

The Commission's Analysis:

Transmission & SLDC charges for FY 2012 - 13 have been approved in concurrence with the ARR approved for UPPTCL by the Commission. The Commission however reiterates that the actual transmission charges for FY 2012 - 13 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts. The Commission for the purpose of this order has considered the transmission Tariff approved for UPPTCL for FY 2012 - 13 for determination of intra state transmission charges. The Petitioner's submission and Commission's approved Transmission Charges for FY 2012 - 13 are given in Table 6-42 below:

Table 6-42: INTRA STATE TRANSMISSION CHARGES FOR FY 2012 - 13

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Energy Input into Transmission-Distribution Interface (MU)	25,133	22,318
Transmission Tariff (Rs/kWh)	0.16	0.17
Transmission cost (Rs. Cr.)	413	388

6.13 O&M EXPENSES

6.13.1 The Petitioner's Submission:

Operation and Maintenance (O&M) expenses comprise of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure. Absent norm for allowance of O&M expenses, going by the precedence's set in the previous tariff orders the Petitioner has estimated individual components of O&M expenses for FY 2012 - 13. The Petitioner has submitted that it has made detailed examination of the various components that make up employee cost and assessed the extent of retirements as well as the manpower additions planned. Petitioner has projected employee cost for FY2012 - 13 based on un-audited data of FY2010 - 11 and data available to the date of submission of the petition. In line with the recommendation of Sixth Pay Commission & GoUP order has also factored in benefit of Assured Career Progression (ACP) scheme and salary arrears while projecting the employee costs. Projection of various sub-accounts of employee cost is detailed in "Employee Expenses" Section. A&G expenses have been projected considering the impact of inflation and need for addition of more substation and offices. Repair & Maintenance expenses as per provisional accounts of FY 2010 - 11 have been increased by using the escalation index for projecting the expenses for FY2012 - 13. Petitioner has also submitted that in estimating expenses for ensuing years from FY2010 - 11 if there is abnormal increase in expenses from past trends then base year value has also been corrected to get realistic projected figures.

6.13.2 The Commission's Analysis:

The Regulation 4.3 of the Distribution Tariff Regulations stipulates that the O & M expenses of the base year (i.e. FY 2007-08) shall be escalated at inflation rates, notified by the Central Government for different years. The O&M expenses of the base year have not yet been determined, for want of apportioned O&M expenses of UPPCL from FY

2001-02 to FY 2006-07 between the distribution companies and transmission companies. The Commission would like to reiterate that a suitable norm for allowance of O&M expenses could be adopted only after undertaking a thorough study of the O&M expenditure based on the past performances, and the cost drivers of the same, through a separate process. As such the Commission has directed the Petitioner to submit its share of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07.

Employee expenses for FY 2012 - 13 have be approved by escalating FY 2011 - 12 numbers at the escalation factor of 8.67%.

The Commission reiterates that the base year numbers may go under revision based on the true up for the relevant years and would have a cascading effect on the approvals of O&M expenses in subsequent years. The Commission plans to realign approved O&M expenses of FY 2012 - 13 during true-up exercise.

O&M Expenses as submitted by Petitioner and approved by the Commission for FY 2012 - 13 are summarised in Table 6-43 below:

Table 6-43: O&M EXPENSES FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Employee Expenses		
Employee Cost and Provisions	375	365
Incremental Employee Expenses @ 2.5%	5	5
Gross Employee Expenses	**381**	**370**
Employee expenses capitalized	57	55
Net Employee Expenses	**324**	**314**
A&G Expenses		
Admin & Gen Expenses	54	41
Incremental Admin & Gen Expenses @ 2.5%	1	1
Gross Admin & Gen Expenses	**54**	**41**
Admin & Gen expenses capitalized	8	6
Net Admin & Gen Expenses	**46**	**35**
R&M Expenses		
Repair & Maintenance Expenditure	166	214
Incremental R&M Expenses @ 2.5%	2	3
Gross Repair & Maintenance Expenses	**168**	**217**
Total	**538**	**566**

6.14 INCREMENTAL O&M EXPENSES ON ADDITIONS TO ASSETS

6.14.1 The Petitioner's Submission:

Petitioner in accordance with the provisions of Regulation 4.3 (3) of the Distribution Tariff Regulations has claimed incremental O&M expenses of Rs. 8 Crores for FY 2012 - 13 at 2.5% of the capital addition of Rs. 328 Crores made during FY 2011 - 12. The same are allocated across the individual elements of the O&M expenses on the basis of contribution of each element in the gross O&M expenses excluding the incremental O&M charges.

6.14.2 The Commission's Analysis:

Regulation 4.3 (1) stipulates that "*Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year*". Accordingly in addition to the normal O&M expenses the Commission approves incremental O&M expenses of Rs. 8 Crores for FY 2012 - 13 at 2.5% of the approved capital assets additions of Rs. 328

Crores of FY 2011 - 12. 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.

6.15 EMPLOYEE EXPENSES

6.15.1 The Petitioner's Submission:

The Petitioner has submitted estimated employee expenses for the FY 2012 - 13 based on provisional accounts of FY 2010 - 11. The Petitioner submits that it endeavours to control the employee expenses but cost may increase due the factors which are totally beyond the control of the Petitioner like statutory obligation to implement revised pay scale as per the recommendation of Sixth Pay Commission.

Various sub-accounts of employee cost are estimated as follows

- Basic Salary for FY2012 - 13 has been projected to increase by inflation as provided in the regulation.
- Dearness Allowance for FY 2012 - 13 has been linked to inflation.
- Pension & Gratuity, Other Allowances & Relief have been forecasted to increase by inflation index per year over FY2011 - 12 values.
- Medical Reimbursement, LTA, Earn leave encashment, staff welfare expenses and other terminal benefit have been forecasted to increase by inflation index per year over FY 2011 - 12 values.

6.15.2 The Commission's Analysis:

As discussed in the preceding section 6.13.2 the Commission is treating employee expenses for FY 2011 - 12 in a different manner to factor-in the recommendation of the Sixth Pay Commission. The Commission distinct view on the "employee expenses" component is taken in spirits of the Regulation 4.3 (5) "*The Commission may consider additional O&M expenses on account of war, insurgency, and change in laws or like eventualities for a specified period.*" The Commission opines that the impact of Sixth Pay Commission recommendation is a change in law and therefore uncontrollable.

Accordingly the Commission approves to escalate employee expenses approved for FY 2011 - 12 at the escalation factor of 8.67% for FY 2012 - 13.

Petitioner has capitalized employee expenses @ 15% of the total employee expenses for FY 2012 - 13. The Petitioner has failed to adhere with the Commission's direction in its last tariff order to submit an appropriate policy on capitalization of salaries and wages and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has capitalized employee expenses at 15% which in same percentage of capitalization applied by Petitioner for FY 2012 - 13.

The Petitioner's submission and Commission's approved employee expense for FY 2012 - 13 is given in Table 6-44 below:

Table 6-44: PaVVNL EMPLOYEE EXPENSES FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Salaries	182	180
Dearness Allowance	105	104
Other Allowances & Relief	10	10
Bonus/Exgratia	5	4
Medical Expenses Reimbursement	6	9
Leave Travel Assistance	0	0
Earned Leave Encashment	11	3
Compensation	0	0
Staff Welfare Expenses	0	1
Pension and gratuity	55	54
Other Terminal benefits	-	-
Expenditure on trust	1	-
Any other employee expenses	2	-
Arrear of Pay Commission/Time Scale	-	-
Additional employee Expenses(@2.5% of incremental GFA)	5	5
Grand Total	**381**	**370**
Employee expenses capitalization %age	15%	15%
Employee expenses capitalized	57	55
Net employee expenses	**324**	**314**

6.16 ADMINISTRATION AND GENERAL EXPENSES (A & G EXPENSES)

6.16.1 The Petitioner's Submission:

The Petitioner has estimated A&G expenses for the FY 2012 - 13 based on provisional accounts of FY 2010 - 11. The Petitioner submits that these expenses are incurred to meet day-to-day expenses related to the administration and general management and are affected by inflationary pressures. In its endeavour to control these costs and to drive operational efficiency improvement licensee has claimed Rs. 3.25 Crores to embrace various information technology (IT) initiatives such as implementation of software solution, networking (both local area network & wide area network), retail billing solution, energy billing system, energy accounting system etc. Petitioner has also claimed regulatory expenses as application fees plus 0.05% of revenue as license fees in A&G expenses.

6.16.2 The Commission's Analysis:

Commission approves the A&G expenses for FY 2012 - 13 based on the escalation factor of 8.63% over the approved figures for FY 2011 - 12. The Commission appreciates the commitment of the Petitioner to keep costs under control and accordingly approves gross A&G expenses of Rs. 41 Crores for FY 2012 - 13 including allocation of additional A&G expenses.

Petitioner has capitalized A&G expenses @ 15% of the total A&G expenses for FY 2012 - 13. The Petitioner has failed to adhere with the Commission's direction in its last tariff order to submit an appropriate policy on capitalization of A&G expenses and develop proper accounting system to capture the same. The Petitioner has failed to adhere with the Commission's direction in its last tariff order to submit an appropriate policy on capitalization of A&G expenses and develop proper accounting system to capture the same. In the absence of a capitalization policy the Commission has considered the A&G capitalization percentage as submitted by Petitioner for FY 2012 - 13.

The Petitioner's submission and Commission's approved A&G expense for FY 2012 - 13 is given in Table 6-45 below:

Table 6-45: PaVVNL A&G EXPENSES FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Administration Expenses		
Rent rates and taxes (Other than all taxes on income and profit)	0.9	0.3
Insurance of employees, assets, legal liability	0.4	0.5
Revenue Stamp Expenses Account	-	-
Telephone,Postage,Telegram, Internet Charges	4.3	3.7
Incentive & Award To Employees/Outsiders	-	-
Consultancy Charges	0.0	0.0
Travelling	3.3	2.4
Technical Fees	-	-
Other Professional Charges	-	-
Conveyance And Travel (vehicle hiring, running)	-	-
UPERC License fee	-	-
Plant And Machinery (for administrative use)	-	-
Security / Service Charges Paid To Outside Agencies	-	-
Other Regulatory Expenses	4.2	3.1
IT related expenses	3.3	1.6
Sub-Total of Administrative Expenses	**16.4**	**11.7**
Other Charges		
Fee And Subscriptions (Books And Periodicals)	3.3	0.7
Printing And Stationery	2.6	2.0
Advertisement Expenses	2.2	1.2
Contributions/Donations To Outside Institute / Association	-	-
Electricity Charges To Offices	9.9	8.3
Water Charges	0.0	0.0
Consultancy expenses /Any Study related expenses	-	-
Miscellaneous Expenses	15.6	14.4
Expenses on Public Interraction Program	-	-
Any Other expenses	0.9	0.8
Sub-Total of other charges	**34.7**	**27.5**
Legal Charges	1.9	1.6
Auditor'S Fee	0.6	0.0
Frieght - Material Related Expenses	-	-
Other Departmental Charges	-	-
Additional A&G expenses(@2.5% of incremental GFA)	0.7	0.5
Total Charges	**54.2**	**41.4**
A&G expenses capitalization %age	15%	15%
Expenses capitalized	8.1	6.2
Net Administrative and General expenses	**46.1**	**35.2**

6.17 REPAIRS AND MAINTENANCE (R&M) EXPENSES

6.17.1 The Petitioner's Submission:

The Petitioner has estimated R&M expenses for the FY 2012 - 13 based on provisional accounts of FY 2010 - 11. The Petitioners submits that increase in cost of raw material and fuel as well increase in the amount of annual maintenance contracts to maintain additional transformers, cables, grid substation, etc. has translated to a higher R&M expenses.

Petitioner also mentions that it has initiated proactive preventive maintenance and capital expenditure to improve the quality of supply in its distribution area and reduction in number of overloaded transformer etc. However due to tight financial position and heavy cash losses, system improvement and preventive maintenance are not achieved to the expected level resulting in frequent breakdowns and supply interruptions.

6.17.2 The Commission's Analysis:

The Commission acknowledges initiatives under taken by the Petitioner in upgrading and maintaining its distribution system given its tight financial position and cash crunch situation. The R&M expenses for FY 2012 - 13 have been determined by applying an escalation factor of 8.63% (inflation index) over the approved figures for FY 2011 - 12 in line with the provisions of the Distribution Tariff Regulations. The Commission thus approves the R&M cost of Rs. 217 Crores as against Rs. 168 Crores submitted by the Petitioner. Further, the Commission also has allows an incremental O&M expenses @ 2.5% of the additions to the assets during the previous year i.e. FY 2011 - 12.

The Commission considers Repairs & Maintenance expenses as critical to operational activities. The approval for these expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudency check with regards to the spending in R&M works over the year. The Petitioner's submission and Commission's approved R&M expense for FY 2012 - 13 is given in Table 6-46 below:

Table 6-46: PaVVNL R&M EXPENSES FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Plant and Machinery	65	74
Building	3	3
Civil Works	-	-
Hydraulic Works	-	-
Transformers	-	-
Lines, Cables Net Works etc.	98	125
Vehicles	-	11
Furniture and Fixtures	0	0
Office Equipments	0	0
Transportation	-	-
Sub station maintenance by private agencies	-	-
Any other items (Capitalisation)	-	-
Additional R&M(@2.5% of incremental GFA)	2	3
Total	**168**	**217**

6.18 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS

6.18.1 The Petitioner's Submission:

Petitioner has submitted that for projecting GFA and CWIP the following assumption are used are as follows:

- The opening GFA and CWIP have been taken as per the closing figures provisional annual accounts of FY 2011 - 12.
- 40% the opening CWIP and 40% of investment made during the year, expenses capitalized & interest capitalized (40% of total investment) has been assumed to get capitalized during the year.
- Investment through "deposit work "has not been taken for capital formation as per policy adopted by commission in previous tariff order.

Petitioner has submitted investment plan for FY 2012 - 13 along with the proposed funding of each component of the investment plan. Petitioner submits that under the

RGGVY programme investment are funded through equity from GoUP. Investments plan for capital formation as submitted by Petitioner shown in Table 6-47 below:

Table 6-47: INVESTMENT PLAN FOR FY 2012 – 13 (Rs Crores)

DISTRIBUTION INVESTMENT PLAN (Rs Cr)	MEERUT DISCOM FY2012-13				
	Equity	Loan	Grant	Deposit	Total
Construction of 33/11kV Subatation.	42.52	99.21			141.73
Replacement of Jajar Tar/Line	29.63				29.63
Replacement of damegaed poles	17.24				17.24
Earthing of Transformer	6.44				6.44
Replacement of 11kV switch gear	35.76				35.76
Capacity enhancement of 33kV substation	107.67				107.67
Construction of 33/11kV Link Line	93.99				93.99
Strengthening of 11kV line	8.42				8.42
Construction of 11kV line	42.85				42.85
Work/Strengthening of LT line & System	10.55				10.55
Strengthening of 11kV line	15.15				15.15
Capacity enhancement of 11kV substation	11.79				11.79
Construction of 11kV Substation	21.34				21.34
Strengthening of 33kV Substation	14.65				14.65
Strengthening of 11/.4kV Substation	14.65				14.65
Misc. Distribution Work	14.65				14.65
Construction of feedes to separate Light & Fan Consumers and PTW Consumers	85.25	198.91			284.15
Replacement of single and three phase meters	73.25				73.25
Double metering of consumers	12.68				12.68
Connection to Sri Kansiram garib awas yojna	36.62				36.62
Extention of MD office	3.66				3.66
Construction of boundary wall of PVVNL	1.46				1.46
Leftover work of previous year	4.39				4.39
Construction of residential houses	4.39				4.39
Construction of road for upgradation of store centre and other civil work	2.20				2.20
Construction,upgradation & renovation of Transformer repair work shop	2.93				2.93
Construction of building for control room for SCADA under R- APDRP(Ghaziabad,Meerut,Saharanpur & Moradabad	0.57	1.33			1.90
Construction of building for desaster recovery centre under R-APDRP at NOIDA	0.24	0.55			0.79
Establish new Pole Construction Units & extention of existing units(Saharanpur, Meerur,Moradabad & Muradnagar Pole Unit)	7.32				7.32
Construction of building for HRD Centre	2.93				2.93
R-APDRP Part-A		72.15			72.15
R-APDRP Part-B		201.50			201.50
Deposit work				204.01	204.01
Total	**725.20**	**573.65**	**0.00**	**204.01**	**1502.86**

6.18.2 The Commission's Analysis:

The Commission in its last tariff order for the FY 2009 - 10 had approved the gross fixed assets (GFA) of Rs. 4,041 Crores as on 31st March 2010 for the Petitioner. The opening balance as per the provisional accounts of FY 2010 - 11 is Rs. 4,525 Crores As the figure for gross fixed assets flows from the previous years, the Commission has adopted the quantum of GFA from the provisional accounts. Further, the same would be subject to revision at the time of true-up for the year.

Based on the provisional accounts the Commission has accepted Petitioner's contention the Investment through "deposit work" has not been taken for capital formation. The capital investments are considered to be funded through on the basis of normative debt-equity ratio instead of debt-equity funding proposed by the Petitioner.

Commission with past experiences is fully aware of the variation from the envisaged capital investment occurring due to certain policy issues as well as non-availability of Government Guarantee for drawal of financial institutional loans. Variation in capital investment plan adversely affects the creation of assets whose effect cascades to depreciation and interest and finance charges components of the ARR. Here, the Commission would like to reiterate that it shall be undertaking true-up exercise for approved figures and the actual expenses incurred for the various years once audited accounts are finalized for past periods.

Table 6-48: PaVVNL CAPITALISATION & WIP OF INVESTMENTS FOR FY 2012 - 13 (Rs. Crores)

Particulars		FY 2012-13	
		Petitioner's Projection	Commission Approved
Opening WIP as on 1st April	A	491	450
Investments	B	1,299	909
Employee Expenses Capitalisation	C	57	55
A&G Expenses Capitalisation	D	8	6
Capitalisated Interest on long term loans	E	33	18
Total Investments	F= A+B+C+D+E	**1,888**	**1,439**
Transferred to GFA (Total Capitalisation)	G=F*40%	755	576
Closing WIP	**H= F-G**	**1,133**	**863**

Table 6-49: PaVVNL INVESTMENT FUNDING FOR FY 2012 - 13 (Rs. Crores)

Particulars		FY 2012-13	
		Petitioner's Projection	Commission Approved
Investment		1,299	909
Less:			
Consumer Contribution and Capital Assets Subsidy		-	-
System Loading Charges		-	-
Total		-	-
Investment funded by debt and equity		1,299	909
Debt Funded	70%	574	636
Equity Funded	30%	725	273

6.19 DEPRECIATION EXPENSE

6.19.1 The Petitioner's Submission:

Petitioner has estimated depreciation for FY 2012 - 13 as Rs. 220 Crores, based on a weighted average depreciation rate of 3.75%.

6.19.2 The Commission's Analysis:

The Commission in its Distribution Tariff Regulations has specified the methodology for the computation of depreciation. The regulation specifies the rates to be used for the purpose of computation of the depreciation charged during the year. Regulation 4.5(9) requires that "*the Licensee will maintain asset registers at each operating circle/division that will capture all necessary details on the asset, including the cost incurred, date of commissioning, location of asset, and all other technical details*".

The Commission has repeatedly vide its order given several directions to the Petitioner to ensure that proper and detailed Fixed Assets Register are maintained at the field offices. Further, the Honorable Appellate Tribunal for Electricity (order to Appeal No. 121 of 2010 & I.A. No. 83 of 2011, Para 7.4, 7.5 & 7.6) has also reinforced Commission views and directed the distribution licensee to comply with the regulation and direction issued by the Commission. However the distribution licensees have failed to produce any records relating to fixed assets registers.

Distribution licensee seems to be ignorant of significance of maintenance of Fixed Asset Register and filing of investment plans with cost benefit of capital expenditure. Components of the ARR viz., depreciation, allowable interest on debt and return on equity are adversely affected by inadvertent misrepresentations of capital assets creation numbers. Non-maintenance of Fixed Asset Register and absence of strict policy framework for under taking capital investment based on cost benefit analysis gives ample room for such misrepresentations.

Given the very sad state of Distribution licensee affairs on the above matter and annoying reluctance to act on repeated direction issued by the Commission, the Commission is severely hindered in its task of undertaking prudence check of ARR components viz., depreciation, and allowable interest on debt and return on equity. On account of lack of details of fixed assets register, the Commission has assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset. Keeping consistency with the approach adopted in its previous tariff orders has considered depreciation rate of 7.84% being the depreciation rate bracket for major class of assets as per the Distribution Tariff Regulations.

Considering the total capitalization approved by the Commission for FY 2012 - 13 as above, the capital formation and depreciation as submitted by the Petitioner vis-à-vis approved by the Commission is given in Table 6-50 and Table 6-51 below:

Table 6-50: PaVVNL GROSS FIXED ASSETS FOR FY 2012 - 13 (Rs. Crores)

Particulars		FY 2012-13	
		Petitioner's Projection	Commission Approved
Depreciation Rate	A	3.75%	7.84%
Opening GFA as on 1st April	B	5,496	5,496
Addition to GFA during the year	C	755	576
Deduction from GFA during the year	D	-	-
Closing GFA as on 31st March	E= B+C-D	6,251	6,071
Opening Accumulated Depreciation	F	2,417	2,817
Depreciation on Opening GFA + Addition during the year	G = B*A+C*A/2	220	453
Depreciation on assets deducted during the year	H	-	-
Closing Accumulated Depreciation	I=F+G-H	2,637	3,270
Opening Net Fixed Assets	J=B-F	3,079	2,679
Closing Net Fixed Assets	K=E-I	3,614	2,801

Table 6-51: PaVVNL DEPRECIATION FOR FY 2012 - 13

Particulars		FY 2012-13	
		Petitioner's Projection	Commission Approved
Depreciation Rate	A	3.75%	7.84%
Opening GFA as on 1st April	B	5,496	5,496
Addition to GFA during the year	C	755	576
Depreciation on Opening GFA + Addition during the year	**D = (A*B)+(C*A/2)**	220	453
Less:			
Depreciation on assets created from Consumer Contribution and Capital Assets Subsidy	E	-	90
Depreciation on Opening GFA + Addition during the year chargeable as ARR component	**F=D-E**	220	363

6.20 INTEREST AND FINANCING COST

6.20.1 Interest on Long Term Loans

The Petitioner's Submission:

Petitioner has submitted estimated interest cost on long term loans to be Rs. 118.42 Crores, for FY 2012 - 13.

The Commission Analysis:

The Commission has computed the interest cost on long term loans for FY 2012 - 13 based on the approved investment and funding scheme described in Table 6-49. The Commission has considered normative debt: equity ratio of 70:30 instead of debt-equity funding proposed by the Petitioner. As the Commission's assumed normative debt equity ratio is higher compared to that submitted by Petitioner, the Commission's approval regarding total long term loan quantum and resulting incidence of interest and finance charges is higher.

Regulation 4.8.1 (c) stipulates that "*Interest on fresh loans shall be allowed only on loan raised for projects approved and undertaken in accordance with the guidelines contained in Regulation 4.5 of these regulations. In case of non-compliance of the stipulated guidelines, no interest shall be allowed by the Commission*." Although the petition contains projection of capital investment vis-à-vis funding plan details of the same have not been submitted for Commissions approval. However considering that fact that capital investment are very essential for keeping the system running and meeting the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply & system reliability. The Commission has taken a lenient view on allowance of interest cost. The Commission has considered the approved debt funded investment as given in Table 6-49, while calculating interest on long term loans.

Interest on long term loans as submitted by the Petitioner vis-à-vis approved by the Commission for FY 2011 - 12 is given in Table 6-52 below:

Table 6-52: PaVVNL INTEREST ON LONG TERM LOANS FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Govt of UP (Loan Transfer Scheme)	10.55	10.55
Govt of UP (WB Aided Project)		
Govt of UP (APDRP)		
Power Finance Corp Ltd (Theft Prevention)	2.99	2.99
Power Finance Corp Ltd (Loan Transfer Scheme)	0.70	0.70
Power Finance Corp Ltd (UPPCL)	-	-
REC Ltd (ABC Loan)	7.84	7.84
REC Ltd (Construction of S/S)	4.92	4.92
REC Ltd (Loan Transfer Scheme)	22.25	22.25
REC Ltd (UPPCL)	-	-
APDRP (PFC)	14.14	14.14
R-APDRP (PFC)	-	-
HUDCO Loans	34.80	34.80
NCRPB	-	47.46
NOIDA	-	-
OTHERS	-	-
UP State Industrial Development Corp	-	-
Feeder Separation Loan	20.25	20.25
Total	**118.42**	**165.89**

6.20.2 Interest on Working Capital

The Petitioner's Submission:

Petitioner has submitted estimated interest cost on working capital loans to be Rs. 24.24. Crores, for FY 2012 - 13. Petitioner submits that its working capital requirement is more than what Commission allows based on normative value. It continues to face severe cash crunch situations and often finds it difficult to meet out even its power purchase obligation from its revenues. On the said argument the Petitioner has submitted before the Commission to allow working capital requirement as requested.

The Commission's Analysis:

Regulation 4.8.2 of the Distribution Tariff Regulations lays down the norms and methodology for calculating interest on working capital. Although the Commission is aware of the financial distress and liquidity crunch of the distribution licensee, the Commission opines that the distribution licensee is eligible only for interest cost on account of normative working capital. Commission views that the Petitioner should manage its day to day affairs pragmatically by improving collection efficiency, reducing bad debts thus strengthening its cash position. The Commission has considered the interest on working capital in line with the provisions of the Distribution Tariff Regulations

Interest costs on working capital loans as submitted by the Petitioner vis-à-vis approved by the Commission based on computation of interest on normative working capital for FY 2012 - 13 is given in Table 6-53 below:

Table 6-53: PaVVNL INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
One month's O&M Expenses	50.23	47.18
One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	-	-
Receivables equivalent to 60 days average billing on consumers	1,298.12	1,241.99
Gross Total	**1,348.36**	**1,289.17**
Less:Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	640.20	640.20
Net Working Capital	**708.15**	**648.97**
Rate of Interest for Working Capital	0.00%	12.50%
Interest on Working Capital	**24.24**	**81.12**

6.20.3 Interest on Consumer Security Deposits

The Petitioner's Submission:

The Licensee has estimated expenditure on account of the interest paid to consumers on security deposits to the tune of Rs. 38.41 Crores in FY 2012 – 13. However the Petitioner has failed to provide details of calculation of the same.

The Commission's Analysis:

In terms of the Regulation 4.8(3) of the Distribution Tariff Regulation, the licensee has to pay interest to the consumers at bank rate or more on the consumer security deposit. Such payment of interest on security deposit is also mandated under the Section 47 (4) of the Electricity Act, 2003. The Petitioner in its petition has not submitted details of calculation of interest on security deposit. As this interest paid to consumers is a part of the tariff and Commission opines to approve them on to be recovered through the ARR. Commission's computation of interest expense based on provisional accounts of 2010 - 11 and additions during FY 2011 - 12 and FY 2012 - 13 as per Petitioner filings is given in table below. The Commission has considered the prevalent bank rate of the Reserve bank of India for approval of the Interest rate applicable for such payments. Accordingly the Commission has approved interest on security deposits for FY 2012 - 13 at Rs. 37.48 Crores

Table 6-54: PaVVNL INTEREST ON SECURITY DEPOSITS FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Opening Balance for Security Deposit	609.28	609.28
Additions During the Year	30.92	30.92
Closing Balance for Security Deposit	640.20	640.20
Rate of Interest	6.00%	6.00%
Interest on Security Deposit	**38.41**	**37.48**

6.20.4 Summary of Interest and Finance Charges

The Commission's Analysis:

The approved interest charges on long term loans have been capitalized at the rate of 23% in consistency with the approach adopted in its previous tariff orders. Absent an Investment capitalization policy, it is very difficult for the Commission to understand the drivers of capitalization of interest expense of Rs. 32.81 Crores as claimed by Petitioner, which works out as 27.71% of interest on long term loans. In its previous order the Commission had directed the Petitioner to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in a separate account typically termed as 'Interest during Construction' (IDC) rather than assuming a standard capitalization percentage. In response to the said direction the Petitioner has stated that it is trying to implement computerized accounting system after which the process of identification of scheme wise capital expenditure would be possible vis-à-vis IDC costs. Considering the history of the Petitioner, it is rather hard for the Commission to guess by when the system will be up and running. The Commission directs the Petitioner to provide monthly report on the progress on computerization of accounting system. Interest and financing charges (net of capitalization) inclusive of Interest on working capital, interest on consumer security deposits, discount to consumers and other approved interest and finance costs approved by the Commission for FY 2012 - 13 is given in Table 6-55 below:

Table 6-55: PaVVNL INTEREST and FINANCE CHARGES FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Interest on Long term Loans	**118.42**	**165.89**
a) Interest on Existing Loans		
b) Interest on New Loans		
Interest on Working Capital Loans	24.24	81.12
Allocation of Interest of loan through UPPCL	0.00	-
Sub Total	142.67	247.01
Interest on Consumer Security Deposits	38.41	37.48
Finance Charges / Guarantee Fees	0.14	12.85
Bank Charges	2.87	2.87
Discount to Consumers	-	-
Sub Total	41.42	53.21
Gross Total Interest & Finance Charges	**184.09**	**300.21**
Less: Capitalization of interest on Long term Loans	32.81	18.30
% Capitalization	27.71%	23.00%
Net Interest & Finance Charges	**151.28**	**281.92**

6.21 PROVISION FOR BAD AND DOUBTFUL DEBTS

6.21.1 The Petitioner's Submission:

In the ARR for FY 2012 - 13, the Petitioner has estimated Bad and Doubtful debts @2% of revenue receivables to the tune of Rs. 20 Crores, as generally accepted accounting principle of provisioning for un-collectable dues in the course of normal operations. Petitioner states that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts during any particular year. Therefore Petitioner maintains that this is a legitimate ARR component and need be allowed.

6.21.2 The Commission's Analysis:

Regulation 4.4 of the Distribution Tariff Regulations provide for expenses under Bad & Doubtful Debts to the extent of 2% of the revenue receivables. However the distribution licensees have to actually identify and write-off the bad debts as per a transparent policy approved by the Commission.

The Commission in its previous tariff orders opined that it is not averse to allowing provision for bad and doubtful debts in the course of normal operations of the distribution licensees. 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. In this regards the Commission in its previous order directed the distribution licensee to submit ten such sample cases of LT & HT consumers where orders have been issued for writing off bad debts clearly depicting the procedure adopted for writing off bad debts along with a policy framework for Commission's approval within a month of issue of this order. In this regard the Petitioner has submitted that action is being taken regularly in cases by way of P.D. and writing off the fictitious arrears at the distribution level. However no such sample was submitted to the commission.

Thus, in view of the above, Commission opines that it is inappropriate to approve the Bad & Doubtful debts without a proper policy in place.

6.22 OTHER INCOME

6.22.1 The Petitioner's Submission:

As per the Petitioner other Income includes income from retail sources, non-tariff income and revenue support from the GoUP. The 'other income from retail sources' includes miscellaneous revenues from consumers. Non-tariff income includes income such as interest on loans and advances to employee, income from fixed rate investment deposits, interest on loans and advances to licensees. Revenue support from the GoUP includes subsidy to partially cover the revenue shortfall arising from below Cost of Service tariffs for the Rural Domestic and Private Tube Well categories. Accordingly, other income has been estimated by the Petitioner at Rs. 1068 Crores for FY 2012 - 13.

6.22.2 The Commission's Analysis:

The Commission has approved the total other Income as submitted by the Petitioner at Rs. 1068 Crores

Table 6-56: PaVNL OTHER INCOME FOR FY 2012 - 13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Income from Investment	-	-
Non Tariff Income	22	22
Sub Total	22	22
GoUP Subsidy - Rural Domestic & PTW	1,046	1,046
Total	1,068	1,068

6.23 RETURN ON EQUITY

6.23.1 The Commission Analysis:

The Petitioner has not claimed any return on equity for the year under review. The Petitioner has stated that they do not want to burden the consumers by proposing return on equity as it will further increase the gap. Moreover, Petitioner has submitted that to bridge revenue shortfall it would have to ask for more GoUP subsidy and resort to short term loans from market apart from other measures to be initiated for productivity improvement. Hence the Commission considering the plea of the Petitioner, has not approved return on equity for FY 2012 - 13. However, Commission's calculation of return on equity only for the purpose of representation is given in Table 6-57 below:

Table 6-57: PaVVNL RETURN ON EQUITY FOR 2012 - 13 (Rs. Crores)

Particulars		FY 2012-13	
		Petitioner's Projection	Commission Approved
Return on Equity			
Regulatory equity at the beginning of the year	a	1,935	1,864
Capitalised assets during the year	b	755	909
Equity portion of expenditure on capitalised assets	c=b*30%	227	273
% of Equity		-	30%
Regulatory Equity at the end of the year	**d=a+c**	**2,161**	**2,136**
Return Computation		-	-
Return Regulatory equity at the beginning of the year @ 16%	e=a*16%	310	298
Return on Equity portion of capital expenditure on capitalised assets	f=c*16%/2	18	22
Total Return on Regulatory Equity	**g=e+f**	**328**	**320**

6.24 CONTRIBUTION TO CONTINGENCY RESERVE

6.24.1 The Commission Analysis:

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.

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

Commission accepts the views of the Petitioner. Commission’s estimated amount on account of Contribution to Contingency Reserve for representation purpose only is Rs. 27.48 Crores for FY 2012 - 13, the calculation are given in Table 6-58 below:

Table 6-58: PaVVNL CONTRIBUTION TO CONTINGENCY RESERVE FOR 2011-13 (Rs. Crores)

Particulars	FY 2012-13	
	Petitioner's Projection	Commission Approved
Opening Balance of GFA	5,495.91	5,495.91
Contribution	0.5%	0.5%
Contribution to Contingency Reserve	**27.48**	**27.48**

6.25 REVENUE FROM SALE OF ELECTRICITY

6.25.1 Petitioner's Submission:

For FY 2012 - 13, the Petitioner has estimated the overall revenue from tariffs of Rs. 7,789 Crores, based on tariffs as per tariff order dated 31st March, 2010. Further, Petitioner has also proposed changes in tariff which result in a revenue of Rs. 9,988 Crores.

6.25.2 The Commission Analysis:

The Commission has computed the revenue at existing tariffs by applying the tariff rates as per tariff order dated 31st March, 2010 to approve consumption parameters for FY 2012 - 13. Further, the Commission has also approved tariffs and computed resultant revenue by applying the approved tariff rates to approved consumption parameters for FY 2012 - 13. The following table summarizes the revenue approved by Commission for FY 2012 - 13 at both existing as well as approved tariffs.

Table 6-59: EXISTING & APPROVED TARIFF REVENUES: FY 2012 - 13 (Rs. Crores)

Consumer categories	Existing tariffs		Approved tariffs	
	Petitoner	Commission	Petitoner	Commission
LMV-1: Domestic	2247	1942	2265	1947
LMV-2:Non-Domestic	673	591	878	635
LMV-3: Public Lamps	103	85	122	94
LMV-4: Institutions	258	118	364	140
LMV-5: Private Tube Wells	242	236	242	236
LMV 6: Small and Medium Power	725	672	1002	664
LMV-7: Public Water Works	164	121	209	149
LMV-8: State Tube Wells	110	111	132	123
LMV-9: Temporary Supply	30	31	41	45
LMV-10: Departmental Employees	14	13	14	13
HV-1: Non-Industrial Bulk Loads	357	343	591	414
HV-2: Large and Heavy Power	2855	3168	4112	3647
HV-3: Railway Traction	12	22	16	26
HV-4: Lift Irrigation	0	0	0	0
Sub-total	**7789**	**7452**	**9988**	**8134**
Extra state & Bulk	0	0	0	0
Total	**7789**	**7452**	**9988**	**8134**

6.26 APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP

In the preceding sections, the Commission has detailed out expenses under various heads as per the petition of the Petitioner as well as those approved by the Commission. The Commission has also approved the revenue from existing tariffs. Based on these, the approved ARR, revenue from tariffs and resultant gap for FY 2012 - 13 is summarized in the Table 6-60 below:

Table 6-60: ARR, REVENUE AND GAP SUMMARY FOR FY 2012 - 13 (Rs. Crores)

S. No.	Item	FY 2012-13		
		Petitioner's Projection	Commission Approved	% of ARR
1	Power Purchase Expenses (incl PGCIL charges)	9,533	8,054	94%
2	Transmission Charges - Intra state (incl SLDC Charges)	413	388	5%
3	Employee cost	381	370	4%
4	A&G expenses	54	41	0%
5	R&M expenses	168	217	3%
6	Interest & Finance charges	184	300	3%
7	Depreciation	220	363	4%
8	**Total Expenditure**	**10,953**	**9734**	**113%**
Less	**Expense capitalization**	98	80	1%
9	*Employee cost capitalized*	57	55	1%
10	*Interest capitalized*	33	18	0%
11	*A&G expenses capitalized*	8	6	0%
12	**Net Expenditure**	**10,855**	**9,654**	**112%**
Add	**Special Appropriations**	-	-	0%
13	*Provision for Bad & Doubtful debts*	20	-	0%
14	*Provision for Contingency Reserve*	-	-	0%
15	*Other (Misc.) - Net Prior Period Credit*	-	-	0%
16	*OTS Waivers*	-	-	0%
17	**Total net expenditure with provisions**	**10,875**	**9654**	**112%**
18	Add: Return on Equity	-	-	0%
19	Less: Non Tariff Income	22	22	0%
20	Less: Subsidy from Govt	1,046	1,046	12%
21	**Annual Revenue Requirement (ARR)**	**9,808**	**8586**	**100%**
22	Revenue from existing tariffs	7,789	7,452	0%
23	Gap for current year at existing tariffs	2,019	1,134	0%
24	Gap carried forward from previous years (from FY 2009-10 to FY 2011-12)	3,049	3,487	0%
25	**Annual Revenue Requirement (ARR)**	**9,808**	**8,586**	
26	Revenue from Proposed tariffs	9,988	8,134	
27	Gap for current year at Proposed tariffs	(180)	452	
28	Gap carried forward from previous years (from FY 2009-10 to FY 2011-12)	3,049	3,487	
29	Total Gap (from FY 2009-10 to FY 2011-13) at Proposed tariffs	2,869	3,939	

7 OPEN ACCESS CHARGES

7.1 BACKGROUND:

7.1.1 The Commission has issued Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (in short 'UPERC Open Access Regulations') vide notification no. UPERC/Secy./Regulations/05-249 dated 7.6.05 to operationalize long term and short term open access in the state. The Regulations also provides that effective from 1st April, 2008 any consumer with demand of above 1 MW can avail open access of transmission and distribution systems.

7.1.2 Subsequently, the Commission has also made / finalized the necessary regulatory framework as below:

a. UPERC (Terms and Conditions for Open Access) (First Amendment) Regulations, 2009 that includes among others detailed procedure(s) for Long-Term Open Access and Short-Term Open Access for use of distribution system, with or without transmission system;
b. Model Bulk Power Wheeling Agreement (BPWA) for availing wheeling services of distribution licensee(s);
c. Procedures for Scheduling, Despatch, Energy Accounting, UI Accounting and Settlement System of electricity transmitted through the State grid for the electricity drawn by distribution licensee(s) from outside and/or within the State.

Further, the Commission has also directed SLDC to develop procedure for energy accounting of electricity drawn from the grid by an open access consumer who is connected with the distribution system or electricity injected into the grid by a generating station embedded in the distribution system.

7.2 WHEELING CHARGES

7.2.1 Clause 2.1 (2) & (3) of the Distribution Tariff Regulations provide that ARR / Tariff filing by the Distribution Licensee shall separately indicate Aggregate Revenue Requirement (ARR) for Wheeling function and Retail Supply function embedded in the distribution function and that till such time complete segregation of accounts between Wheeling and Retail Supply function takes place, ARR proposals for Wheeling and Retail Supply function shall be submitted on the basis of an allocation statement left to be prepared by the distribution licensee to the best of their judgment.

7.2.2 The Petitioner in its petition has followed the segregation in accordance with the approach followed by the Commission in the previous order. As there is no basis submitted by the Petitioner in its filing the Commission finds merit to consider the segregation into Retail Supply and Wheeling Function as per the methodology adopted in previous tariff order. The approved ARR for DVVNL, MVVNL, PuVVNL & PaVVNL into wheeling function and retail function is Rs. 3,269 Crores and Rs. 25,911 Crores respectively as detailed below. The retail sales approved by Commission for DVVNL, MVVNL, PuVVNL & PaVVNL are 49,652 MUs.

Table 7-1: WHEELING & RETAIL SUPPLY ARR FOR FY 2012 - 13 (Rs. Crores)

S.No.	Particulars	Approved FY 2012-13 (Rs.crs)	Allocation ratios		Allocation FY 2012-13 (Rs.crs)	
			Wheeling	Supply	Wheeling	Supply
1	Power Purchase Exp. (incl PGCIL charges)	24,035.19	0%	100%	-	24,035.19
2	Transmission Ch.: Intra state (incl SLDC)	1,158.90	0%	100%	-	1,158.90
3	Employee cost	1,741.99	60%	40%	1,045.19	696.80
4	A&G expenses	162.72	40%	60%	65.09	97.63
5	R&M expenses	607.05	90%	10%	546.35	60.71
6	Interest & Finance charges	876.23	90%	10%	788.61	87.62
7	Depreciation	1,146.99	90%	10%	1,032.29	114.70
8	**Total Expenditure**	**29,729.08**			**3,477.53**	**26,251.55**
Less	**Expense capitalization**	**331.93**			**208.14**	**123.79**
9	*Employee cost capitalized*	261.30	60%	40%	156.78	104.52
10	*Interest capitalized*	46.22	90%	10%	41.60	4.62
11	*A&G expenses capitalized*	24.41	40%	60%	9.76	14.65
12	**Net Expenditure**	**29,397.15**			**3,269.39**	**26,127.76**
Add	**Special Appropriations**	-			-	-
13	*Provision for Bad & Doubtful debts*	-	0%	100%	-	-
14	*Provision for Contingency Reserve*	-	0%	100%	-	-
15	*Other (Misc.) - Net Prior Period Credit*	-	0%	100%	-	-
16	*OTS Waivers*	-	0%	100%	-	-
17	**Total net expenditure with provisions**	**29,397.15**			**3,269.39**	**26,127.76**
18	Add: Return on Equity	-	90%	10%	-	-
19	Less: Non Tariff Income	217.00	0%	100%	-	217.00
20	**Annual Revenue Requirement (ARR)**	**29,180.15**			**3,269.39**	**25,910.76**

7.2.3 Based on the above, the wheeling charges for FY 2012 - 13 are Rs. 0.658 /kWh (11% increase over Rs. 0.594 /kWh which was approved in previous tariff order for FY 2009 - 10) as detailed in below:

Table 7-2: WHEELING CHARGES FOR FY 2012 - 13

S.No.	Particulars	Units	Approved
1	Wheeling ARR	Rs. crs	3,269.39
2	Retail sales	MU	49,652
3	Average Wheeling charge	Rs. /unit	0.658

7.2.4 The Commission in order to encourage Open Access transactions in the State has further tried to segregate the wheeling charges payable by consumers seeking Open Access based on the voltage levels at which they are connected to the distribution network. However, in absence of voltage level wise break-up of expenses and asset details, the Commission has considered an interim allocation of costs at various voltage levels and approved the following wheeling charges payable by Open Access customers based on the voltage level at which they are connected with the distribution network.

7.2.5 The charges have been worked out on the assumption that the wheeling expenses at 11 kV voltage level shall be 80% of the average wheeling charges determined for the Wheeling function of all DISCOMS and that for wheeling at voltages above 11 kV shall be 50% of the average wheeling charges. The wheeling charges for the short term open access customers have been assumed at 25% of Long term charges.

Table 7-3: APPROVED VOLTAGE-WISE WHEELING CHARGES FOR FY 2012 - 13

S.No.	Particulars	Units	Approved
1	Connected at 11 kV		
i	Long Term (@ 80% of Avg wheeling charge)	Rs. /unit	0.527
ii	Short Term (@ 25% of Long Term charges)	Rs. /unit	0.132
2	Connected above 11 kV		
i	Long Term (@ 50% of Avg wheeling charge)	Rs. /unit	0.329
ii	Short Term (@ 25% of Long Term charges)	Rs. /unit	0.082

7.2.6 In addition to the payment of wheeling charges, the customers also have to bear the wheeling losses in kind. The Commission has been seeking voltage level loss data from the utility but the same has not been forthcoming. Further, it is also logical that the open access customers have to bear only the technical losses in the system, and should not be asked to bear any part of the commercial losses.

7.2.7 The Commission has estimated that the technical losses at 11 kV voltage level would be in the range of 8% to 9%, and the technical losses above 11 kV voltage level and upto 132 kV would be in the range of 7% to 8%. Hence, the Commission has decided that the wheeling loss applicable for Open Access transactions entailing drawal at 11 kV voltage level shall be 8%, and that for drawal at voltages above 11 kV voltage level shall be 7%.

7.2.8 The open access charges and the losses to be borne by the Open Access customers may be reviewed by the Commission on submission of the relevant information by the licensee.

7.2.9 The wheeling charges determined above shall not be payable if the Open Access customer is availing supply directly from the state transmission network.

7.3 CROSS SUBSIDY SURCHARGE

7.3.1 The Commission has computed the cross-subsidy surcharge for Open Access consumers in accordance with the methodology specified in clause 6.6 of UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulation-2006.

7.3.2 As per clause 6.6, the cross subsidy surcharge is to be computed based on the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the distribution licensee could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the Commission has computed the cost of supply to the consumer for this purpose as the aggregate of (a) the weighted average of power purchase costs (inclusive of fixed and variable charges) of top 5% power at the margin, excluding liquid fuel based generation, in the merit order approved by the UPERC adjusted for average loss compensation of the relevant voltage level and (b) the distribution wheeling charges as determined in the preceding section.

7.3.3 The Commission has computed the cross subsidy surcharge for the relevant consumer categories using the following formula:

$$S = T - [C (1 + L / 100) + D]$$

Where

S is the cross subsidy surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power. In case of UP, this works out to Rs. 4.43 /kWh considering the cost of marginal power purchase sources of Rosa Power Project II, Dadri Thermal, Kahalgaon St.II Ph.I and Anpara 'C'.

D is the average wheeling charges for transmission and distribution of power which is Rs. 0.658 /kWh

L is the system Losses for the applicable voltage level, expressed as a percentage, which is computed as 30%.

7.3.4 The Cross subsidy surcharge for all relevant categories as computed is Nil.

7.3.5 The impact of migration of consumers from the network of the incumbent distribution licensee on the consumer mix and revenues of a particular distribution licensee shall be reviewed by the Commission from time to time as may be considered appropriate.

7.4 ADDITIONAL SURCHARGE

7.4.1 For the present order, additional surcharge is determined to be zero

7.5 OTHER CHARGES

7.5.1 The Open Access Regulations, 2008 notified by CERC specifies:

> "Unless specified otherwise by the concerned State Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for under-drawals or over generation) of UI rate at the periphery of regional entity."

And which further provides that:

"In an interconnection (integrated A.C. grid), since MW deviations from schedule of an entity are met from the entire grid, and the local utility is not solely responsible for absorbing these deviations, restrictions regarding magnitude of deviations (except on account of over-stressing of concerned transmission or distribution system), and charges other than those applicable in accordance with these regulation (such as standby charges, grid support charges, parallel operation charges) shall not be imposed by the State Utilities on the customers of inter-State open access."

7.5.2 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 Open Access consumer.

8 TARIFF PHILOSPHY AND CATEGORY WISE TARIFF

8.1 TARIFF PHILOSOPHY

8.1.1 The Commission has determined the retail tariff for FY 2012 - 13 in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy, the comments / suggestions of the stakeholders in this regard and the Petitioner's submission as discussed above. The Commission has always laid emphasis on adoption of factors that encourages economy, efficiency, effective performance and improved conditions of supply. On these lines the Commission, in this order too, has applied similar principles keeping in view the ground realities.

8.1.2 As regards to the linkage of Tariff with the Cost of Service, the UPERC Distribution Tariff Regulations state as follows:

"1. The tariffs for various categories/voltages shall progressively reflect licensee's cost to serve a particular category at a particular voltage. Allocation of all costs prudently incurred by the distribution licensee to different category of consumers shall form the basis of assessing cost
to serve of a particular category. Pending availability of information that reasonably establishes the category-wise/voltage-wise cost to serve, average cost of supply shall be used for determining tariffs
taking into account the fact that existing cross subsidies will be reduced gradually. Every Licensee shall provide to the Commission an accurate cost to serve study for its area. The category-wise/ voltage wise cost to serve should factor in such characteristics as supply hours, the load factor, voltage, extent of technical and commercial losses etc.

2. To achieve the objective that the tariff progressively reflects the cost of supply of electricity, the Commission may notify a roadmap with a target that latest by the end of year 2010-2011 tariffs are within ± 20 % of the average cost of supply. The road map shall also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."

8.1.3 In terms of the UPERC Distribution Tariff Regulation, Tariff Policy and the Electricity Act, 2003, the Commission opines that in the ideal scenario, the tariff of any category should be linked to the cost imposed on the system by the said category. In this regard, the Commission has been directing the Petitioner to conduct Cost of Service studies to have a tool for alignment of costs and charges. The Petitioner has not submitted any details regarding the cost of service studies for each category or voltage level. The paucity of data in this regard has restricted the Commission linkage of tariff to average cost of supply.

8.1.4 Accordingly, while determination of tariff for each category the Commission has looked into the relation between the tariff and average cost of supply for FY 2012 - 13. In case the tariff is at 120% or beyond of the average cost of supply, no increase has been approved, as they are already at maximum of the band. However, effort is being made to move the tariff of appropriate consumer categories, towards the band to meet the declared objectives of Tariff Policy and the Electricity Act, 2003.

8.1.5 The Commission does understand that though there is an urgent need for ensuring recovery of cost of service from consumers to make the sector viable. At the same time the Commission is also aware that some minimum level of support is required to make electricity affordable for household of the very poor category as electricity is a basic minimum need and an essential driver of growth in an agrarian economy of the State.

8.1.6 Keeping in view of the above, Commission has determined the retail tariff keeping in the mind the guiding principles as stated in Section 61 of the Electricity Act, 2003 and has determined the tariff of FY 2012 - 13. The accumulated gap till FY 2012 - 13 is Rs. 4621 Crores (refer Table 6-60). The increase in tariff required to amortise the entire gap would be to the tune of 62%. The Commission feels that such an increase would result in a tariff shock to the consumers. However, the increase in tariff is inevitable keeping in view the increase in cost of supply over the period and in the absence of cost reflective tariff. Therefore the Commission has decided to increase the tariff as detailed in the subsequent tariff to ensure part recovery of revenue gap.

8.1.7 The Electricity Act, 2003 mandates that the supply to any consumer should be through a correct meter only. The Commission in its pursuit of achieving the mandate of 100% metering is consciously increasing the tariff of un-metered consumers vis-à-vis metered consumers to discourage unmetered connections. In this regard, for example, the Commission has increased the rates for unmetered category in LMV - 3 (PUBLIC LAMPS) by about 30%.

8.1.8 Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers. Thus it is mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff for LMV-6 & HV-2 consumers.

8.1.9 The Commission in the subsequent sections briefly discusses the tariff rationalization measures and approved tariff for each category of consumer. However, the applicability, character and point of supply and other terms & conditions of different consumer categories have been defined in the Rate Schedule given in ANNEXURE 12.2. In case of any inconformity, the Rate Schedule shall prevail over the details given in the various sections of this order.

8.2 CATEGORY-WISE TARIFF

1. LMV-1: DOMESTIC LIGHT, FAN AND POWER:

A. DOMESTIC RURAL CONSUMERS:

The Commission has retained the tariff for consumers getting supply under rural schedule of LMV-1 at existing levels which is in line with the proposal of the Petitioner. The tariff for rural consumers has been kept lower than their urban counterparts owing to paying capacity, poor supply conditions and lesser hours of supply.

Description	Existing	Proposed	Approved
i) Un-metered			
Fixed Charge	Rs. 125 / connection / month	Rs. 125 / connection / month	Rs. 125 / connection / month
Energy Charge	Nil	Nil	Nil
ii) Metered			
Fixed Charge	Rs. 15 / kW / month	Rs. 15 / kW / month	Rs. 15 / kW / month
Energy Charge	Rs. 1.00 / kWh	Rs. 1.00 / kWh	Rs. 1.00 / kWh

B. SUPPLY AT SINGLE POINT FOR BULK LOADS:

The category deals with the consumers getting single point supply at 11kV. The Commission understands that costs involved in such connections are lower on account of lower technical losses and higher collection efficiencies as compared to other domestic consumers. Accordingly the Commission has designed the tariff for this category corresponding to the cost of service for this category. The Commission has increased the fixed charges from Rs. 40 / Kw / month to Rs. 50 / kW /month and energy charges from Rs. 3.20 / kWh to Rs. 3.75 / kWh for this category of consumers.

Description	Existing	Proposed	Approved
	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Cantonments (Mixed Loads without any load restriction), defence installation outside the cantonment with predominantly domestic load (domestic load more than 50%)	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Cantonments (Mixed Loads without any load restriction), defence installation outside the cantonment with predominantly domestic load (domestic load more than 50%)	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).
Fixed Charge	Rs. 40.00 / kW/ month	Rs. 50.00 / kW/ month	Rs. 50.00 / kW/ month
Energy	Rs. 3.20 / kWh	Rs. 4.15 / kWh	Rs. 3.75 / kWh

C. LIFE LINE CONSUMERS:

The Commission understands that lifeline consumers are one of the most disadvantaged consumers of the state and has thus decided to retain their tariff at existing levels. However, the Commission has introduced some measures (detailed in rate schedule) to eliminate / minimise misuse of the subsidised tariffs applicable to such consumers.

Description	Existing		Proposed		Approved	
	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh / Month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh / month (101 to 150 kWh / month)	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh / Month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month (101 to 150 kWh / month)	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh / Month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month (101 to 150 kWh / month)
Fixed Charge	Rs. 50.00 / kW / month		Rs. 50.00 / kW / month		Rs. 50.00 / kW / month	
Energy Charge	Rs. 1.90 / kWh	Rs. 2.50 / kWh	Rs. 1.90 / kWh	Rs. 2.50 / kWh	Rs. 1.90 / kWh	Rs. 2.50 / kWh

D. OTHER METERED (URBAN) DOMESTIC CONSUMERS:

The Commission opines that the domestic tariff in the state of Uttar Pradesh is lower than its peers. The Commission has analyzed the existing slabs in the domestic category from the perspective of linkage with cost of supply, economic drivers and paying capacity of different strata of domestic consumers. The present schematics of the tariff for domestic consumers not aligned with the average cost of supply.

Accordingly the Commission retains the existing tariff as shown in the table below:

Description	Existing	Proposed	Approved
i) Upto 200 units / month			
Fixed Charge	Rs. 65.00 / kW / month	Rs. 65.00 / kW / month	Rs. 65.00 / kW / month
Energy Charge	Rs. 3.45 / kWh	Rs. 3.45 / kWh	Rs. 3.45 / kWh
ii) Above 200 kWh / Month			
Fixed Charge	Rs. 65.00 / kW/ month	Rs. 65.00 / kW/ month	Rs. 65.00 / kW/ month
Energy Charge	Rs. 3.80 / kWh	Rs. 3.80 / kWh	Rs. 3.80 / kWh

2. LMV-2: NON-DOMESTIC LIGHT, FAN AND POWER:

A. NON-DOMESTIC RURAL:

As regards to rural non - domestic unmetered and metered consumers the fixed charges as well as energy charges have been retained at existing levels as has been proposed by the distribution companies.

Description	Existing	Proposed	Approved
i) Unmetered:			
Fixed Charge	Rs. 200 / connection / month	Rs. 200 / connection / month	Rs. 200 / connection / month
Energy Charge	Nil	Nil	Nil
ii) Metered:			
Fixed Charge	Rs. 50 / kW / month	Rs. 50 / kW / month	Rs. 50 / kW / month
Energy Charge	Rs. 1.90 per kWh	Rs. 1.90 per kWh	Rs. 1.90 per kWh

B. PRIVATE ADVERTISING / SIGN POSTS / SIGN BOARDS / GLOW SIGNS / FLEX:

The Petitioner has proposed a substantial increase in the tariff for the captioned category. The Commission also opines that the increase is justified in the wake of the fact that the activities are totally commercial in nature. However, the Commission opines the increase proposed by the Petitioner would result in a tariff shock to this category of consumers.

Therefore, the Commission has decided to increase the energy charge from Rs. 10.00 / kWh to Rs. 14.00 / kWh only.

Description	Existing	Proposed	Approved
Fixed Charge	Nil	Nil	Nil
Energy Charge	Rs. 10.00 / kWh	Rs. 20.00 / kWh	Rs. 14.00 / kWh
Minimum Charge	Rs. 1000 / kW / month	Rs. 2000 / kW / month	Rs. 1000 / kW / month

C. NON-DOMESTIC URBAN:

The tariff for other metered consumers under LMV-2 has been proposed by the Petitioner to be bifurcated into two slabs via “Upto 300 kWh / Month” and “Above 300 kWh” and there has been a proposed upward revision in the tariff for the category of consumer. The Commission has accepted the proposal of the Petitioner regarding the bifurcation of the category into two slabs.

It has been observed that many consumers/ stakeholders have objected to the minimum charges in the tariff structure and have suggested abolishing such charges. The Commission has also placed reliance on Section 45 (1) of the Electricity Act, 2003 and Section 8.4 of the Tariff Policy, which promulgates two part tariff viz. Fixed and Variable Charges. The rationale for levying Fixed Charges is to recover a part of the fixed cost of the utility through Fixed Charges, so that at least a part of the fixed cost is recovered, even if there is no consumption by the consumer. The Commission observes that the fixed charges are already inbuilt in the tariff which ensures the recovery of fixed cost, though partly but the objective of the tariff design is achieved by levy of such charge. The Commission therefore opines that the minimum charges in wake of the fixed charges already levied are not sustainable. Accordingly, the Commission has decided to abolish the minimum charges for this category of consumers

The Commission also recognized the need of the increase in tariff in wake of the increasing cost of supply and surmounting regulatory gap of previous years in order to make the sector viable. Therefore the Commission has accepted the tariff proposal of the Petitioner for this category which is given in the table below:

Description	Existing	Proposed	Approved
For All Loads			
Fixed Charge	Rs. 115 / kW / month		
Energy Charge	Rs. 4.95 / kWh		
Minimum Charge	Rs. 345 / kW / month		
Upto 300 kWh / Month			
Fixed Charge		Rs. 300 / kW / month	Rs. 200 / kW / month
Energy Charge		Rs. 5.75 / kWh	Rs. 5.75 / kWh
Minimum Charge		Rs. 500 / kW / month	Rs. 345 / kW / month
Above 300 kWh / Month			
Fixed Charge		Rs. 300 / kW / month	Rs. 200 / kW / month
Energy Charge		Rs. 6.00 / kWh	Rs. 6.00 / kWh
Minimum Charge		Rs. 500 / kW / month	Rs. 345 / kW / month

3. LMV –3: PUBLIC LAMPS:

The Petitioner is mandated by the Electricity Act, 2003 to provide connection only through a meter connection. The Commission is concerned with the number of un-metered connection existing in the Petitioner's area of supply and the pace of transition of the unmetered connection to the metered connections. In this regard the Petitioner is directed to propose a road map for 100% metering in his licensed area of supply. The said road map shall include the cost of metering the consumers and year wise target for reduction of unmetered connections. To discourage wasteful use of electricity, the Commission has introduced TOD rates for this category.

The Commission in order to discourage the unmetered supply has increased its tariff by approximately 30%. The approved tariff structure has been tabulated below:

A. UN-METERED SUPPLY:

Description	Existing	Proposed	Approved
To be billed on the basis of total connected load calculated as the summation of individual points			
a) Gram Panchayat:			
Fixed Charge	Rs. 1200 per kW or part thereof per month	Rs. 1500 per kW or part thereof per month	Rs. 1600 per kW or part thereof per month
b) Nagar Palika and Nagar Panchayat:			
Fixed Charge	Rs. 1500 per kW or part thereof per month	Rs. 1800 per kW or part thereof per month	Rs. 1900 per kW or part thereof per month
c) Nagar Nigam:			
Fixed Charge	Rs. 1800 per kW or part thereof per month	Rs. 2300 per kW or part thereof per month	Rs. 2400 per kW or part thereof per month

As regards to the metered supply, the Commission has accepted the Petitioner's proposal regarding Fixed Charges whereas for Energy Charges it has increased the rates in view of increase in cost of supply.

B. METERED SUPPLY:

Description	Existing	Proposed	Approved
a) Gram Panchayat:			
Fixed Charge	Rs. 115 / kW/ month	Rs. 120 / kW/ month	Rs. 120 / kW/ month
Energy Charge	Rs. 4.00 / kWh	Rs. 5.00 / kWh	Rs. 5.20 / kWh
b) Nagar Palika and Nagar Panchayat:			
Fixed Charge	Rs. 120 / kW / month	Rs. 150 / kW / month	Rs. 150 / kW / month
Energy Charge	Rs. 4.50 / kWh	Rs. 5.30 / kWh	Rs. 5.50 / kWh
c) Nagar Nigam:			
Fixed Charge	Rs. 125 / kW / month	Rs. 160 / kW / month	Rs. 160 / kW / month
Energy Charge	Rs. 4.90 / kWh	Rs. 5.50 / kWh	Rs. 5.70 / kWh

4. LMV– 4: PUBLIC & PRIVATE INSTITUTION

This category has two sub-categories, viz. LMV-4 (A) light, fan and power for public institutions and LMV-4 (B) – light, fan and power for private institutions.

This category constitutes of institutions which can be considered at par with the Commercial categories. However, looking into the nature of public institution which are non-profit making organizations, the tariff approved for such category is lower than the private institutions. The approved tariff for the said category is shown below:

Description	Existing	Proposed	Approved
A) For Public Institutions:			
Fixed Charge	Rs. 100 / kW / month	Rs. 150 / kW / month	Rs. 150 / kW / month
Energy Charge	Rs. 4.60 / kWh	Rs. 6.50 / kWh	Rs. 6.20 / kWh
(B) For Private Institutions:			
Fixed Charge	Rs. 110 / kW / month	Rs. 180 / kW / month	Rs. 200 / kW / month
Energy Charge	Rs. 4.95 / kWh	Rs. 6.75 / kWh	Rs. 6.75 / kWh

5. LMV– 5: SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:

For rural un-metered PTW consumers, the rates have not been revised by the Commission as the usage of energy by this category is primarily for irrigation purposes; the same has also been proposed by the Petitioner.

Also, lighting load under this category has been retained at 120 Watt levels.

A. FOR CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:

UN-METERED SUPPLY:

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 75 / BHP / month	Rs. 75 / BHP / month	Rs. 75 / BHP / month
Energy Charge	NIL	NIL	NIL
Minimum Charge	NIL	NIL	NIL
	Consumer under this category will be allowed a maximum lighting load of 120 Watts	Consumer under this category will be allowed a maximum lighting load of 120 Watts	Consumer under this category will be allowed a maximum lighting load of 120 Watts

METERED SUPPLY:

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 15 / BHP / month	Rs. 15 / BHP / month	Rs. 15 / BHP / month
Energy Charge	Rs. 0.75 / kWh	Rs. 0.75 / kWh	Rs. 0.75 / kWh
Minimum Charge	Rs. 65 / BHP / month	Rs. 65 / BHP / month	Rs. 65 / BHP / month

B. FOR CONSUMERS GETTING SUPPLY AS PER URBAN SCHEDULE:

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 30 / BHP / month	Rs. 30 / BHP / month	Rs. 30 / BHP / month
Energy Charge	Rs. 2.00 / kWh	Rs. 2.00 / kWh	Rs. 2.00 / kWh
Minimum Charge	Rs. 130 / BHP / month	Rs. 130 / BHP / month	Rs. 130 / BHP / month

6. LMV– 6: SMALL AND MEDIUM POWER:

The Commission taking into account the proposal of the Petitioner has considered the increase in fixed and variable charges small and medium power category. The Commission would like to move towards a regime of two part tariff viz., fixed and variable and eliminate minimum charges gradually as explained in detail at paragraph 8.11.5 of this order. Therefore, the Commission has abolished the minimum charges for this category.

Further, the Petitioner has proposed ToD rate structure for this category of consumers. The Commission has approved ToD rate structure for this category the similar to that of HV-2 consumers.

Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers and is thus mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff as also has been proposed by the DISCOMS.

A. CONSUMERS GETTING SUPPLY OTHER THAN RURAL SCHEDULE:

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 115 / KW / month	Rs. 230 / KW / month	Rs. 225 / KW / month
Energy Charge	Rs. 4.95 / kWh	Rs. 6.25 / kWh	Rs. 5.85 / kWh
Minimum Charge	Rs. 500 / KW / month	Rs. 800 / KW / month	Rs. 500 / KW / month

B. CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:

The Consumers getting supply as per rural schedule shall be entitled to a rebate of 15% on the fixed charges and energy charges as indicated above.

7. RATE SCHEDULE LMV– 7: PUBLIC WATER WORKS:

The Petitioner has proposed to implement ToD tariff for consumers under this category. The Commission finds no merit in the petitioner's proposal as the Commission feels that it may not be possible for the consumers under this category to shift their load to other than existing time blocks. However, the Commission has decided to increase the fixed as well as variable charges of the category which are depicted below:

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 90 per kW / month	Rs. 150 per kW / month	Rs. 230 per kW / month
Energy Charge	Rs. 4.40 / kWh	Rs. 5.50 / kWh	Rs. 6.10 / kWh

Consumers getting supply as per rural schedule shall be eligible for rebate of 15% on the Fixed Charges and the Energy Charges indicated above.

8. RATE SCHEDULE LMV – 8:

STATE TUBE WELLS / PANCHAYATI RAJ TUBE WELL & PUMPED CANALS:

The Fixed Charges and Energy Charges for this category have been revised from Rs. 100 / BHP / month to Rs. 150 / BHP / month and from Rs. 4.40 / kWh to Rs. 5.75 / kWh respectively. For un-metered consumers under this category, the Commission has decided to increase the tariff from Rs. 1000 / BHP / month from Rs. 1200 / BHP / month; the same has also been proposed by the Petitioner.

Description	Existing	Proposed	Approved
i) Metered:			
Fixed Charge	Rs. 100 / BHP / month	Rs. 100 / BHP / month	Rs. 150 / BHP / month
Energy Charge	Rs. 4.40 / kWh	Rs. 5.50 / kWh	Rs. 5.75 / kWh
ii) Unmetered:			
Fixed Charge	Rs. 1000 / BHP / month	Rs. 1200 / BHP/ month	Rs. 1200 / BHP/ month
Energy Charge	Nil	Nil	Nil

9. RATE SCHEDULE LMV - 9: TEMPORARY SUPPLY:

For un-metered consumers under this category, the Commission has revised the charges upwards with a view to encourage metering.

A. UN-METERED:

Description	Existing	Proposed	Approved
Unmetered:			
i) Fixed charges for illumination / public address / ceremonies for load up to 20 kW per connection plus Rs.100 per kW per day for each additional kW			
Fixed Charge	Rs. 1800 per day	Rs. 2500 per day	Rs. 2500 per day
(ii) Fixed charges for temporary shops set-up during festivals / melas or otherwise and having load up to 2KW			
Fixed Charge	Rs. 120 per day / shop	Rs. 180 per day / shop	Rs. 170 per day / shop

For metered consumers under this category, the Commission has accepted the proposed rates by the Petitioner.

B. METERED:

Description	Existing	Proposed	Approved
(i) Individual Residential construction			
Fixed Charge	Nil	Nil	Nil
Energy Charge	Rs. 4.00 / kWh	Rs. 5.50 / kWh	Rs. 5.50 / kWh
Minimum Charge	Rs. 115 / kW / week	Rs. 150 / kW / week	Rs. 115 / kW / week
(ii) Others			
Fixed Charge	Nil	Nil	Nil
Energy Charge	Rs. 5.75 / kWh	Rs. 6.50 / kWh	Rs. 6.50 / kWh
Minimum Charge	Rs. 115 / kW / week	Rs. 150 / kW / week	Rs. 115 / kW / week

10. RATE SCHEDULE LMV– 10: DEPARTMENTAL EMPLOYEES AND PENSIONERS:

As proposed by the Petitioner the Commission has increased fixed charges by about 16% in this category. Further, the charges payable for using Air Conditioners during the period of six months i.e. April to September has been hiked from Rs. 450 / AC / Month to Rs. 500 / AC / Month.

Further, the Commission directs the Petitioner to install electronic meters in the residential premises of the employees. However, the concessional rate given for the metered category shall continue to be valid.

Description	Existing		Proposed		Approved	
	Fixed Charge / month	Energy Charge/ Monthly	Fixed Charge / month	Energy Charge/ Monthly	Fixed Charge / month	Energy Charge/ Monthly
Class IV employees / Operating staff	Rs. 65.00	Rs. 75.00	Rs. 75.00	Rs. 75.00	Rs. 75.00	Rs. 75.00
Class III employees	Rs. 65.00	Rs. 105.00	Rs. 75.00	Rs. 105.00	Rs. 75.00	Rs. 105.00
Junior Engineers & equivalent posts	Rs. 135.00	Rs. 220.00	Rs. 155.00	Rs. 220.00	Rs. 155.00	Rs. 220.00
Assistant Engineers & equivalent posts	Rs. 135.00	Rs. 345.00	Rs. 155.00	Rs. 345.00	Rs. 155.00	Rs. 345.00
Executive Engineers & equivalent posts	Rs. 135.00	Rs. 370.00	Rs. 155.00	Rs. 370.00	Rs. 155.00	Rs. 370.00
Superintending Engineers /Deputy General Managers & equivalent posts	Rs. 340.00	Rs. 450.00	Rs. 400.00	Rs. 450.00	Rs. 400.00	Rs. 450.00
Chief Engineers (I & II) / General Managers and above	Rs. 340.00	Rs. 550.00	Rs. 400.00	Rs. 550.00	Rs. 400.00	Rs. 550.00
Additional charge for using A.C. (April to September)	Rs. 450/- per month per Air conditioner		Rs. 500/- per month per Air conditioner		Rs. 500/- per month per Air conditioner	

11. HV– 1: NON INDUSTRIAL BULK LOADS:

The Commission has tried to balance the existing rates and the rates proposed by the Petitioner keeping in mind the existing cost of service while determining the tariff for this category.

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:

Commercial Loads / Private Institutions / Non domestic bulk power consumer above 75 kW load getting supply at Single Point on 11 kV & above voltage levels and feeding multiple individuals:						
Description	Existing		Proposed		Approved	
	For supply at 11 kV	For supply at 33 kV & above	For supply at 11 kV	For supply at 33 kV & above	For supply at 11 kV	For supply at 33 kV & above
Demand Charges	Rs. 195 / kVA / month	Rs. 185 / kVA / month	Rs. 400 / kVA / month	Rs. 350 / kVA / month	Rs. 270 / kVA / month	Rs. 250 / kVA / month
Energy Charges	Rs. 4.30 / kVAh	Rs. 4.20 / kVAh	Rs. 6.50 / kVAh	Rs. 6.30 / kVAh	Rs. 6.00 / kVAh	Rs. 5.90 / kVAh

B. Public Institutions above 75 kW load getting supply at Single Point on 11 kV & above voltage levels and feeding multiple individuals:

Description	Existing		Proposed		Approved	
	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above
Demand Charges	Rs. 165 / kVA / month	Rs. 155 / kVA / month	Rs. 400 / kVA / month	Rs. 350 / kVA / month	Rs. 250 / kVA / month	Rs. 240 / kVA / month
Energy Charges	Rs. 4.05 / kVAh	Rs. 3.95 / kVAh	Rs. 6.50 / kVAh	Rs. 6.30 / kVAh	Rs. 5.90 / kVAh	Rs. 5.60 / kVAh

12. HV– 2: LARGE AND HEAVY POWER:

The Commission has tried to balance the existing rates and the rates proposed by the Petitioner keeping in mind the existing cost of service while determining the rates for this category.

The Consumers getting below 11 kV Supply under the category will charged at a rate which is higher by 7.5% over the rate applicable to consumers at 11kV supply instead of the existing 15%.

Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers and are thus mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff as has also been proposed by the Petitioner.

A. Urban Schedule:

Description	Existing	Proposed	Approved
i) For supply at 11kV:			
Fixed Charge	Rs. 230 / kVA / month	Rs. 350 / kVA / month	Rs. 250 / kVA / month
Energy Charge	Rs. 4.60 / kVAh	Rs. 6.15 / kVAh	Rs. 5.90 / kVAh
(ii) For supply at 11kV & up to & including 66 kV:			
Fixed Charge	Rs. 220 / kVA / month	Rs. 300 / kVA / month	Rs. 240 / kVA / month
Energy Charge	Rs. 3.85 / kVAh	Rs. 6.00 / kVAh	Rs. 5.60 / kVAh
(iii) For supply above 66 kV and up to & including 132 kV			
Fixed Charge	Rs. 200 / kVA / month	Rs. 280 / kVA / month	Rs. 220 / kVA / month
Energy Charge	Rs. 3.75 / kVAh	Rs. 5.75 / kVAh	Rs. 5.40 / kVAh
(iii) For supply above 132 kV			
Fixed Charge	Rs. 200 / kVA / month	Rs. 250 / kVA / month	Rs. 220 / kVA / month
Energy Charge	Rs. 3.75 / kVAh	Rs. 5.60 / kVAh	Rs. 5.20 / kVAh
TOD Rate (Common to all Voltage Levels)			
2200 – 0600 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%
0600 – 1700 hrs	0%	0%	0%
1700 – 2200 hrs	(+) 15%	(+) 15%	(+) 15%

B. CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:

The Consumers getting supply as per rural schedule will continue to be entitled to a rebate of 15% on Fixed Charge and Energy Charges; the same has also been proposed by the Petitioner.

13. RATE SCHEDULE HV – 3:

A. RAILWAY TRACTION:

This schedule shall apply to the Railways for Traction loads only. The Petitioner have proposed an increase in the Energy Charges as well as in Fixed Charge also. The Commission has keeping in view the rise in cost of supply has increased the Energy Charges, Fixed Charges are increased to levels proposed by Petitioner.

In this category, the UPPCL on behalf of the Petitioner have submitted that they have entered into an agreement with the Railways that billing would be done on the basis of total simultaneous maximum demand and to record energy drawal at different points, the existing energy meters shall be replaced by summation meters. In wake of the aforesaid agreement the Commission approves simultaneous metering of maximum demand.

Description	Existing	Proposed	Approved
i) For supply at and above 132 kV:			
Fixed Charge	Rs. 180 / kVA / month	Rs. 250 / kVA / month	Rs. 250 / kVA / month
Energy Charge	Rs. 3.75 / kVAh	Rs. 4.85 / kVAh	Rs. 5.15 / kVAh
Minimum Charge	Rs. 425 / kVA / month	Rs. 550 / kVA / month	Rs. 550 / kVA / month
ii) Below 132 kV:			
Fixed Charge	Rs. 200 / kVA / month	Rs. 260 / kVA / month	Rs. 260 / kVA / month
Energy Charge	Rs. 3.85 / kVAh	Rs. 5.00 / kVAh	Rs. 5.30 / kVAh
Minimum Charge	Rs. 425 / kVA / month	Rs. 550 / kVA / month	Rs. 550 / kVA / month

B. DELHI METRO RAIL:

This schedule shall apply to the DMRC (Delhi Metro Railway Corporation). The tariff of this category is kept lower than railway traction as railways earns greater revenue through freight charges than through passenger fare. Moreover, Delhi Metro Rail is a Greenfield project and an essential service that needs to be supported. The Commission approves Energy Charges at Rs. 5.00 / kVAh and Minimum Charge at Rs. 550 / kVA /

month with a penalty of Rs. 540 / kVA if the demand load exceeds the contracted load as proposed by Petitioner.

Description	Existing	Proposed	Approved
Fixed Charge	-	-	-
Energy Charge	Rs. 3.80 / kVAh	Rs. 4.80 / kVAh	Rs. 5.00 / kVAh
Minimum Charge	Rs. 425 / kVA / month	Rs. 550 / kVA / month	Rs. 550 / kVA / month
Note: Penalty @ Rs. 540 / kVA will be charged on excess demand, if demand load exceeds contracted load.			

14. RATE SCHEDULE HV – 4: LIFT IRRIGATION WORKS:

The Commission has tried to balance the existing rates and the rates proposed by the Petitioner keeping in mind the existing cost of service while determining the rates for this category

This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW). The Commission approved, Petitioner proposed and existing charges are tabulated below.

Description	Existing	Proposed	Approved
i) For supply at 11 kV:			
Fixed Charge	Rs. 250 / kVA / month	Rs.350 / kVA / month	Rs.250 / kVA / month
Energy Charge	Rs. 4.80 / kVAh	Rs. 5.80 / kVAh	Rs. 5.90 / kVAh
Minimum Charge	Rs. 500 / kVA / month	Rs. 800 / kVA / month	Rs. 500 / kVA / month
(ii) For supply at 11 kV & 66kV:			
Fixed Charge	Rs. 240 / kVA / month	Rs. 300 / kVA / month	Rs.240 / kVA / month
Energy Charge	Rs. 4.00 / kVAh	Rs. 5.50 / kVAh	Rs. 5.60 / kVAh
Minimum Charge	Rs. 500 / kVA / month	Rs. 800 / kVA / month	Rs. 500 / kVA / month
(iii)Supply above 66 kV and upto 132 kV			
Fixed Charge	Rs. 220 / kVA / month	Rs. 320 / kVA / month	Rs.220 / kVA / month
Energy Charge	Rs. 3.90/ kVAh	Rs. 5.30/ kVAh	Rs. 5.40 / kVAh
Minimum Charge	Rs. 500 / kVA / month	Rs. 800 / kVA / month	Rs. 500 / kVA / month

9 REVENUE AT PROPOSED TARIFF AND REVENUE GAP:

9.1 REVENUE FROM SALE OF POWER AT APPROVED TARIFF

9.1.1 The Commission as detailed in the previous chapter has increased the tariff for different categories. The revised tariff shall be effective from 1st October 2012 and shall remain valid till revised through a separate order. The revenue at revised tariff for FY 2012 - 13 considering the existing tariff would be applicable for 6 months and the approved tariff for 6 months works out as under:

Table 9-1: PaVVNL - REVENUE FROM SALE OF POWER AT APPROVED TARIFF - FY 2012 - 13 (Rs. Crores)

Consumer categories	PaVVNL
LMV-1: Domestic	1947
LMV-2:Non-Domestic	635
LMV-3: Public Lamps	94
LMV-4: Institutions	140
LMV-5: Private Tube Wells	236
LMV 6: Small and Medium Power	664
LMV-7: Public Water Works	149
LMV-8: State Tube Wells	123
LMV-9: Temporary Supply	45
LMV-10: Departmental Employees	13
HV-1: Non-Industrial Bulk Loads	414
HV-2: Large and Heavy Power	3647
HV-3: Railway Traction	26
HV-4: Lift Irrigation	0
Sub-total	**8134**
Extra state & Bulk	0
Total	**8134**

The revenue increase due to approved tariff would be Rs. 682 Crores (Rs. 8134 crores – Rs. 7452 crores) (refer Table 6-59).

The estimated gap/surplus after incorporating impact of revised tariff for FY 2012 - 13:

Table 9-2: PaVVNL: ESTIMATION OF ARR GAP/SURPLUS AT REVISED TARIFF FOR FY 12 - 13 (Rs. Crores)

Particulars	FY 2012-13 (Petition)	FY 2012-13 (Approved)
Gross ARR	10854	9632
Revenue from Existing Tariff	7789	7452
Net Revenue Gap	3065	2180
Funded Through:		
Revenue from Proposed / Approved Tariff	9988	8134
Tariff Increase	2199	682
Government Subsidy	1046	1046
Loan support committed by GoUP #	-180	452
Net Revenue Gap Carried Forward		
# Additional subsidy from Government of UP/ Loan from Bank & Financial Institutior		

The Petitioner in its petition has proposed to amortize the regulatory gap through additional support/ subsidy from the government and loans from banks and financial institutions. Accordingly the Commission has accepted the contention of the Petitioner to fund the balance regulatory gap.

9.2 AVERAGE COST OF SUPPLY

The Commission has taken into consideration the percentage increase in tariff with respect to Average Cost of supply while approving the tariffs. For instance during FY 2012 - 13, the average unit revenue rate at existing tariffs would have been Rs. 3.84/unit, while the average cost of supply is Rs. 5.87/unit, thus the tariff would have been 65% of ACOS. After revision of the tariff of FY 2012 - 13, as brought out in this order, the average unit revenue rate would be Rs. 4.51/unit, thus the tariff would be 77% of ACOS, which is a step towards achieving the tariff within +/- 20% of Average Cost of Supply as per the Tariff Policy.

In the instant tariff order, the cross subsidy structure has not undergone any significant change. No category is adversely affected; vis-à-vis the average cost of supply and the relative benefit / burden of subsidized / subsidizing class has been maintained.

Table 9-3: REVENUE REALIZED AS % OF ACOS

Consumer categories	Existing Tariff		Proposed Tariff	
	Avg Revenue (Rs /unit)	Avg Revenue /unit % of ACOS	Avg Revenue (Rs /unit)	Avg Revenue /unit % of ACOS
LMV-1: Domestic	2.91	49.5%	2.92	49.7%
LMV-2:Non-Domestic	4.99	85.0%	5.65	96.2%
LMV-3: Public Lamps	5.04	85.9%	6.18	105.3%
LMV-4: Institutions	4.98	84.8%	6.79	115.7%
LMV-5: Private Tube Wells	1.15	19.5%	1.15	19.5%
LMV 6: Small and Medium Power	6.77	115.2%	6.96	118.6%
LMV-7: Public Water Works	4.46	75.9%	6.47	110.2%
LMV-8: State Tube Wells	5.66	96.3%	6.94	118.1%
LMV-9: Temporary Supply	5.70	97.1%	10.00	170.3%
LMV-10: Departmental Employees	1.51	25.7%	1.60	27.2%
HV-1: Non-Industrial Bulk Loads	4.89	83.2%	6.86	116.8%
HV-2: Large and Heavy Power	5.22	88.9%	6.81	116.0%
HV-3: Railway Traction	3.83	65.2%	5.24	89.3%
HV-4: Lift Irrigation	4.51	76.7%	6.16	104.9%
Extra state & Bulk	N/a	N/a	N/a	N/a
Total	**3.99**	**67.9%**	**4.69**	**79.8%**

9.3 REGULATORY SURCHARGE

9.3.1 The Commission believes that the revenue gaps / regulatory assets of the Petitioner are getting accumulated year after year, resulting into cash flow deficit. The problem is compounded because of the Petitioner not submitting true-up petitions in time due to which Commission is not able to reduce the gap through tariffs. As can be seen in the past that the heavy burden of regulatory gaps / regulatory assets year after year coupled with heavy borrowings to finance the same along with interest, the revenue gap is burgeoning with every passing year resulting into higher interest cost, which in turn cascades into higher cost of service to the consumers. Therefore, any delay in recovery of revenue gap burdens the consumers for carrying cost; therefore, speedy recovery of the same is essential.

9.3.2 Various government and autonomous agencies are stressing on timely and accurate revision of tariffs for the survival of distribution companies. Even the

Appellate Tribunal for Electricity, while dealing with a suo-motto petition, OP No. 1 of 2011, on the letter received from Ministry of Power (judgment passed on 11th November 2011), has emphasized on timely recovery of regulatory assets. The relevant observation of the Hon'ble Tribunal in the said matter is as under:

"66…… (iv) In determination of ARR / Tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff policy and the Regulations. ***The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferable within Control period. Carrying Cost of the Regulatory Asset should be allowed to utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the Distribution Licensee."*** *(at page 75 of the Order)*

9.3.3 In view of the above, it would be relevant to note that recently, the Delhi Electricity Regulatory Commission, in the cases of TPDDL, BYPL and BRPL, in their tariff orders, while approving Annual Revenue Requirement for the MYT period from F Y 2012 - 13 to F Y 2014-15, has allowed a regulatory surcharge @ 8% for recovery of past accumulated regulatory asset.

9.3.4 Thus, for meeting carrying cost of the revenue gap and liquidation of revenue gap, the Commission would be introducing a regulatory surcharge in the future once the true ups have been done and the values of revenue gaps / regulatory assets have been approved by the Commission.

10 DIRECTIVES

10.1 DIRECTIVES PROVIDED BY COMMISSION AND THEIR COMPLIANCE BY PETITIONER

10.1.1 The Commission had issued several directives to the Petitioner in the previous Tariff Order. This chapter deliberates upon the status of compliance of those directives. The Petitioner, in the ARR and Tariff petition for FY 2010 - 11 & FY 2011 - 12, provided the status on compliance of the directives. In the ARR and Tariff petition for FY 2012 - 13, the Petitioner did not provide any updated status on compliance of the directives.

10.1.2 The Commission once again directs the Petitioner to comply with the balance directives issued in the previous Tariff Order. The compliance report on the said directives shall be submitted to the Commission within two months from the date of issue of this Tariff Order.

10.1.3 Further, some of the directives issued by the Commission in the present Tariff Order are in continuation or similar to the directives issued in the previous Tariff Order. In case the licensees have not complied with the same earlier, it shall be necessary for them to provide reasons for non - compliance and further comply with the same as per the time-lines prescribed in the present Tariff Order.

10.1.4 The directives to the Petitioner as issued under the present Tariff Order along with the time frame for compliance are given in the table below:

TABLE 10-1: DIRECTIVES

S. N	Description of Directive	Time Period for compliance from the date of issue of the tariff order
1	Commission directs UPPCL to pressingly pursue the proposal for allocation of PPAs to DISCOMS with GoUP and expedite the processes allocation.	Immediate
2	The Commission directs the Petitioner to ensure finalisation of	Along with

S. N	Description of Directive	Time Period for compliance from the date of issue of the tariff order
	audited accounts for the past years at the earliest and for the future years within a reasonable time frame. Further, Petitioner is directed to ensure that the annual audited accounts of FY 2009 - 10, FY 2010 - 11 and FY 2011 - 12 are submitted along with the next ARR / Tariff filing to enable true up process to be undertaken.	the petition for FY 2013-14
3	Commission direct the Petitioner to carry out the energy audit / estimation study with voltage wise break up of distribution losses into technical loss and commercial loss. The Commission directs the Petitioner to report the status of the metering at all the interface points as well as the distribution transformers and feeders as we as submit an implementation plan for 100% metering in its respective licensed area.	Within 6 months from the date of the issue of the said tariff order
4	The Commission directs the Petitioner to submit the details of power procured below 49.2 Hz between 1st April 2010 to 31st March 2012 along with costs during the submission of next ARR / Tariff petition.	Along with the petition for FY 2013-14
5	The Commission directs Petitioner to adopt a transparent procedure based on competitive bidding for procuring power on short term basis.	Immediate
6	Commission has direct Petitioner to submit its share of apportioned O&M expenses of UPPCL from FY 2001-02 to FY 2006-07, for truing up O&M costs from FY 2006-07.	Within 1 month of this order
7	The Commission directs Petitioner to suggest an appropriate policy on capitalization of salaries & wages.	Along with the petition for FY 2013-14
8	The Commission directs Petitioner to submit the Fresh Actuarial Valuation Study Report in respect to employee expenses.	Along with the petition for FY 2013-14
9	Commission also directs the Petitioner to maintain necessary sub-account to capture the impact of pay revisions which are uncontrollable in nature.	Within 6 months from the date of

S. N	Description of Directive	Time Period for compliance from the date of issue of the tariff order
		the issue of the said tariff order
10	The Commission directs Petitioner to capitalise the expenditure based on the actual A&G expenses incurred / projected to be incurred. Further Petitioner should have proper accounting system to capture the expenses related to capital schemes rather than assuming a standard capitalisation %age.	Along with the petition for FY 2013-14
11	The Commission reiterates its direction to the Petitioner to ensure proper maintaining of detailed fixed assets registers to work out the depreciation expense as specified in the Distribution Tariff Regulations and directs the Petitioner to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.	Along with the petition for FY 2013-14
12	The Commission directs Petitioner to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in separate account typically called as 'Interest during Construction' (IDC) rather than assuming a standard capitalisation % age.	Along with the petition for FY 2013-14
13	The Commission directs the Petitioner to provide monthly report on the progress on computerization of accounting system which will ensure accurate collection and classification of cost and revenues under various account / sub-account leading to more pragmatic ARR / Tariff filings.	Monthly
14	As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component. Commission directs to Petitioner to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts clearly depicting the procedure adopted for writing off bad debts such sample along with policy framework for managing bad debts for Commission perusal.	Within a month
15	Petitioner in its latest ARR submission has submitted distribution loss reduction trajectory for FY 2011 - 12 to FY 2015-16, however the same is not supported by any rationale and measures through	Within 2 months

S. N	Description of Directive	Time Period for compliance from the date of issue of the tariff order
	the same will be achieved. Commission directs Petitioner to submit a detailed report explaining the data source, the scope of work, methodology adopted in arriving at distribution loss reduction trajectory so submitted.	
17	The Commission direct Petitioner to conduct Cost of Service studies to have a tool for alignment of costs and charges and submit details regarding the cost of service studies for each category or voltage level. The paucity of data in this regard has restricted the Commission linkage of tariff to average cost of supply.	Within 6 months
18	Commission directs the Petitioner to submit a road map for 100% metering in its licensed area.	Within 2 months
19.	The Commission directs the Petitioner to submit details of the planned implementation of prepaid meters, including details of the consumer categories and areas proposed to be covered and the timeframe involved.	Within 2 months
20	The Commission directs the Petitioner to shift HT consumers from LV side to HV side and submit quarterly progress on the same.	Within one month from end of quarter
21	The Commission directs the Petitioner to increase awareness amongst the consumers regarding levy of power factor surcharge and the means to improve power factor by various means like installation of capacitors etc.	Regular
22	The Commission directs the Petitioner to install electronic meters in the residential consumers under LMV-10 category and submit a progress report every quarter.	Within one month from end of quarter
23	The Commission directs the Petitioner to initiate immediate steps to procure more long term power at reasonable rates to mitigate the demand supply gap.	Within 2 months
24	The Commission directs Petitioner to initiate concrete steps to purchase power from renewable sources of energy so as to meet its Renewable Purchase Obligation under the UPERC (Promotion of	Along with the petition for FY 2013-

S. N	Description of Directive	Time Period for compliance from the date of issue of the tariff order
	Green Energy through Renewable Purchase Obligation) Regulations, 2010.	14

10.1.5 The Commission would like to mention here that the list given above may not be exhaustive and the Petitioner is directed to comply with all directives given in the text of this Tariff Order.

11 APPLICABILITY OF THE ORDER

The licensee, in accordance to Section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, shall arrange to get published within one week from the date of issue of this Order, the tariffs approved herein by the Commission. Petitioner shall ensure that the same is published in atleast two daily newspapers (one English and one Hindi) having circulation in the area of supply. The tariffs so published shall become the notified tariffs applicable in the area of supply and shall be effective from 1st October, 2012 and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order.

(Meenakshi Singh)	**(Shree Ram)**
Member	**Member**

Dated: 19th October, 2012
Lucknow

12 ANNEXURE

12.1 COMMISSION'S FORECAST OF CONSUMPTION PARAMETERS FOR FY 2012 – 13:

Table 12-1: COMMISSION'S APPROVAL OF NUMBER OF CONSUMERS FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-1: Domestic								
Rural (unmetered)	806940	875092	879400	978953	1054591	7%	7%	1071195
Rural (metered)	213932	243992	186580	141978	171885	-5%	5%	236858
Bulk Load	127	68069	18801	214	1982	99%	5%	2081
Other Metered	1088125	1195807	1262146	1350418	1440560	7%	7%	1545235
BPL	538	977	12294	143160	149091	308%	4%	155268
SUBTOTAL (LMV-1)	**2109662**	**2383937**	**2359220**	**2614723**	**2818109**			**3010637**
LMV-2:Non-Domestic								
Rural (unmetered)	9064	8877	9187	3787	3896	-19%	3%	3808
Rural (metered)	46756	47722	45650	37601	36397	-6%	-3%	35432
Advertising	0	0	308	13660	16922	-	5%	17768
Other Metered	217358	233564	249808	265169	274009	6%	6%	290344
SUBTOTAL (LMV-2)	**273178**	**290163**	**304953**	**320217**	**331224**			**347352**
LMV-3: Public Lamps								
Unmetered - Gram Panchayat	7	189	169	233	243	143%	4%	241
Unmetered - Nagar Palika & Pancha	87	140	153	165	144	13%	-7%	128
Unmetered - Nagar Nigam	97	83	61	55	35	-22%	-5%	32
Metered - Gram Panchayat	206	0	0	0	16	-47%	5%	29
Metered - Nagar Palika & Panchaya	147	105	77	93	92	-11%	-1%	98
Metered - Nagar Nigam	133	140	163	222	226	14%	2%	232
SUBTOTAL (LMV-3)	**677**	**657**	**623**	**768**	**756**			**760**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-4: Institutions								
Public	4120	5417	6167	9599	10863	27%	13%	12293
Private	1812	2290	2304	1883	2029	3%	8%	2186
SUBTOTAL (LMV-4)	**5932**	**7707**	**8471**	**11482**	**12892**			**14479**
LMV-5: Private Tube Wells								
Rural (unmetered)	305793	315186	317388	339142	347123	3%	3%	340385
Rural (metered)	176	1323	966	332	1265	64%	5%	19243
Urban (metered)	3017	2414	2646	3216	2882	-1%	-10%	2583
SUBTOTAL (LMV-5)	**308986**	**318923**	**321000**	**342690**	**351270**			**362211**
LMV 6: Small and Medium Power								
Power Loom: Rural	2309	2022	2358	1845	2161	-2%	-5%	2053
Power Loom: Urban	6990	6226	5660	3050	3530	-16%	16%	4086
Others: Rural	4756	6078	5628	7939	7804	13%	-2%	7671
Others: Urban	22861	24923	29532	31945	35394	12%	12%	39481
SUBTOTAL (LMV-6)	**36916**	**39249**	**43178**	**44779**	**48889**			**53291**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-7: Public Water Works								
Rural: Jal Nigam	145	156	149	182	190	7%	7%	203
Rural: Jal Sansthan	93	42	56	42	79	-4%	-5%	75
Rural: Other PWWs	112	175	180	191	211	17%	6%	225
Urban: Jal Nigam	69	59	75	96	105	11%	9%	115
Urban: Jal Sansthan	101	129	128	162	93	-2%	-5%	88
Urban: Other PWWs	954	1082	1408	1626	1812	17%	17%	2127
SUBTOTAL (LMV-7)	**1474**	**1643**	**1996**	**2299**	**2490**			**2833**
LMV-8: State Tube Wells								
Metered STW	393	481	298	292	161	-20%	-5%	399
Unmetered STW	4284	4169	4198	4247	4534	1%	7%	4598
Unmetered Laghu Dal Nahar	64	70	45	0	68	2%	5%	68
SUBTOTAL (LMV-8)	**4741**	**4720**	**4541**	**4539**	**4763**			**5065**
LMV-9: Temporary Supply								
Metered: Individual residential	972	1562	123	721	496	-15%	-5%	471
Metered: Others	0	0	1342	1476	1268	-	-14%	1089
Unmetered: Ceremonies	30	1	17	221	5	-36%	5%	5
Unmetered: Temp shops	0	0	27	0	17	-	5%	18
SUBTOTAL (LMV-9)	**1002**	**1563**	**1509**	**2418**	**1786**			**1583**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-10: Departmental Employees								
Class IV	3601	3401	3394	4724	4030	3%	-15%	3438
Class III	6199	6230	6364	5465	6424	1%	5%	6745
Junior Engineers	558	578	630	605	615	2%	2%	630
Assistant Engineers	242	256	290	300	281	4%	4%	292
Executive Engineers	457	485	498	169	164	-23%	-3%	159
Deputy General Manager	24	28	31	32	31	7%	7%	33
CGM/GM	8	10	45	10	10	6%	6%	11
Pensioners	8058	7900	8312	9320	9661	5%	5%	10109
SUBTOTAL (LMV-10)	**19147**	**18888**	**19563**	**20625**	**21216**			**21417**
HV-1: Non-Industrial Bulk Loads								
Urban: 11 kV	0	0	386	316	395	-	5%	415
Urban: Above 11 kV & upto 66 kV	0	0	105	192	12	-	5%	13
Urban: Above 66 kV & upto 132 kV	0	0	12	0	0	-	0%	0
Urban: Above 132 kV	0	0	3	0	0	-	0%	0
Rural: At 11 kV	0	0	6	651	2	-	5%	2
Rural: Above 11 kV & upto 66 kV	0	0	5	13	0	-	0%	0
SUBTOTAL (HV-1)	**0**	**0**	**517**	**1172**	**409**			**430**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
HV-2: Large and Heavy Power								
Urban: 11 kV	3483	3862	3644	3679	4759	8%	8%	5145
Urban: Above 11 kV & upto 66 kV	199	307	274	229	338	14%	5%	355
Urban: Above 66 kV & upto 132 kV	1	16	22	2	2	19%	0%	2
Urban: Above 132 kV	13	1	2	1	1	-47%	0%	1
Rural: At 11 kV	14	8	20	7	3	-32%	-5%	3
Rural: Above 11 kV & upto 66 kV	3	1	2	0	2	-10%	5%	2
SUBTOTAL (HV-2)	**3713**	**4195**	**3964**	**3918**	**5105**			**5508**
HV-3: Railway Traction								
At 132 kV and above	0	0	0	1	2	-	5%	2
Below 132 kV	0	0	0	0	0	-	0%	0
Metro traction	0	0	0	1	1	-	5%	1
SUBTOTAL (HV-3)	**0**	**0**	**0**	**2**	**3**			**3**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
HV-4: Lift Irrigation								
At 11kV	2	2	2	2	2	0%	5%	2
Above 11kV & upto 66kV	0	0	0	0	0	-	5%	0
Above 66 kV & upto 132kV	0	0	0	0	0	-	5%	0
SUBTOTAL (HV-4)	**2**	**2**	**2**	**2**	**2**			**2**
Bulk & Extra State								
Extra state & others	0	0	0	0	0	-	5%	0
Bulk supply - NPCL	1	1	1	0	0	-100%	5%	0
Bulk supply - KESCO	0	0	0	0	0	-	5%	0
Bulk supply - Others	0	0	0	0	0	-	5%	0
SUBTOTAL (Bulk & Extra State)	**1**	**1**	**1**	**0**	**0**			**0**
GRAND TOTAL	**2765431**	**3071648**	**3069536**	**3369634**	**3598914**			**3825571**

Table 12-2: COMMISSION'S APPROVAL OF CONNECTED LOAD (KW) FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-1: Domestic								
Rural (unmetered)	1473372	1654799	1634007	1769641	1902094	7%	7%	1926129
Rural (metered)	445343	504977	343318	256199	300470	-9%	5%	416869
Bulk Load	50136	208688	118238	91978	99314	19%	8%	107235
Other Metered	2529182	2526099	2881514	3280326	3481686	8%	11%	3874682
BPL	269	977	17771	139389	145139	382%	4%	151126
SUBTOTAL (LMV-1)	**4498302**	**4895540**	**4994848**	**5537533**	**5928703**			**6476041**
LMV-2:Non-Domestic								
Rural (unmetered)	18917	19411	19705	7346	7713	-20%	5%	7693
Rural (metered)	103379	119858	91326	117243	114166	3%	-3%	111575
Advertising	0	0	928	31282	39551	-	5%	41529
Other Metered	504983	538281	617878	661959	696491	8%	8%	754788
SUBTOTAL (LMV-2)	**627279**	**677550**	**729837**	**817830**	**857921**			**915585**
LMV-3: Public Lamps								
Unmetered - Gram Panchayat	48	89	822	712	516	81%	-5%	466
Unmetered - Nagar Palika & Pancha	4492	7700	6545	7458	7229	13%	-3%	6657
Unmetered - Nagar Nigam	1644	10624	9167	11474	9414	55%	-5%	8496
Metered - Gram Panchayat	514	0	13	0	499	-1%	5%	548
Metered - Nagar Palika & Panchaya	6781	6173	6501	6984	6581	-1%	-6%	6552
Metered - Nagar Nigam	16095	7530	9269	14205	19198	5%	5%	20605
SUBTOTAL (LMV-3)	**29574**	**32116**	**32317**	**40833**	**43437**			**43324**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-4: Institutions								
Public	50594	55839	50820	59294	58653	4%	-1%	58019
Private	27261	21752	18274	15782	16912	-11%	7%	18123
SUBTOTAL (LMV-4)	**77855**	**77591**	**69094**	**75076**	**75565**			**76142**
LMV-5: Private Tube Wells								
Rural (unmetered)	1678788	1741739	1671077	1836969	1900870	3%	3%	1862795
Rural (metered)	826	5600	4253	1596	9329	83%	5%	107837
Urban (metered)	14133	11589	12693	15877	21448	11%	5%	22520
SUBTOTAL (LMV-5)	**1693747**	**1758928**	**1688023**	**1854442**	**1931647**			**1993153**
LMV 6: Small and Medium Power								
Power Loom: Rural	15614	15887	14632	16518	23534	11%	5%	24711
Power Loom: Urban	58846	69351	56602	43876	45609	-6%	4%	47410
Others: Rural	41826	53154	48126	62151	62451	11%	0%	62752
Others: Urban	330486	348046	385772	426576	451027	8%	8%	487489
SUBTOTAL (LMV-6)	**446772**	**486438**	**505132**	**549121**	**582621**			**622363**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-7: Public Water Works								
Rural: Jal Nigam	2981	3295	3416	4073	5097	14%	14%	5828
Rural: Jal Sansthan	2509	766	994	850	1593	-11%	5%	1673
Rural: Other PWWs	2562	3793	4189	5897	6151	24%	4%	6416
Urban: Jal Nigam	3310	4257	4321	5590	5236	12%	-6%	4904
Urban: Jal Sansthan	3056	3158	3105	3654	2599	-4%	-5%	2469
Urban: Other PWWs	37835	39868	44360	49355	58229	11%	11%	64856
SUBTOTAL (LMV-7)	**52253**	**55137**	**60385**	**69419**	**78905**			**86147**
LMV-8: State Tube Wells								
Metered STW	5308	5905	4166	3784	2319	-19%	-5%	5480
Unmetered STW	62836	60163	53846	55971	61030	-1%	6%	61725
Unmetered Laghu Dal Nahar	765	955	524	0	536	-9%	5%	535
SUBTOTAL (LMV-8)	**68909**	**67023**	**58537**	**59755**	**63885**			**67740**
LMV-9: Temporary Supply								
Metered: Individual residential	7005	14370	815	7928	6174	-3%	-5%	5865
Metered: Others	0	0	10158	50481	46032	-	-9%	41975
Unmetered: Ceremonies	155	0	345	1582	100	-10%	-5%	95
Unmetered: Temp shops	0	0	160	0	122	-	-5%	116
SUBTOTAL (LMV-9)	**7160**	**14370**	**11478**	**59991**	**52428**			**48051**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
LMV-10: Departmental Employees								
Class IV	10292	10137	11166	16653	13815	8%	-5%	13124
Class III	18887	19639	20676	17632	22391	4%	5%	23511
Junior Engineers	1936	2027	2273	2268	2545	7%	7%	2725
Assistant Engineers	980	1053	1229	1285	1204	5%	-6%	1128
Executive Engineers	1786	1984	2092	815	791	-18%	-3%	768
Deputy General Manager	96	121	145	155	147	11%	-5%	139
CGM/GM	32	40	217	40	40	6%	0%	40
Pensioners	25309	23238	23897	29185	30367	5%	5%	31782
SUBTOTAL (LMV-10)	**59318**	**58239**	**61694**	**68033**	**71300**			**73217**
HV-1: Non-Industrial Bulk Loads								
Urban: 11 kV	0	0	150385	118354	143716	-	5%	150902
Urban: Above 11 kV & upto 66 kV	0	0	90146	118857	29788	-	-5%	28299
Urban: Above 66 kV & upto 132 kV	0	0	13412	0	0	-	0%	0
Urban: Above 132 kV	0	0	1725	0	0	-	0%	0
Rural: At 11 kV	0	0	1681	141924	450	-	5%	473
Rural: Above 11 kV & upto 66 kV	0	0	613	53778	0	-	0%	0
SUBTOTAL (HV-1)	**0**	**0**	**257962**	**432913**	**173954**			**179673**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
HV-2: Large and Heavy Power								
Urban: 11 kV	986793	1025305	972184	1040750	1431195	10%	10%	1570605
Urban: Above 11 kV & upto 66 kV	284687	429879	384469	532468	644638	23%	5%	676870
Urban: Above 66 kV & upto 132 kV	6035	54973	51343	16830	16830	29%	0%	16830
Urban: Above 132 kV	15562	27084	28917	27084	27084	15%	0%	27084
Rural: At 11 kV	6201	1978	4950	1183	366	-51%	-5%	348
Rural: Above 11 kV & upto 66 kV	6146	150	2477	0	21000	36%	5%	22050
SUBTOTAL (HV-2)	**1305424**	**1539369**	**1444341**	**1618315**	**2141113**			**2313787**
HV-3: Railway Traction								
At 132 kV and above	0	0	225	2700	7700	-	5%	8085
Below 132 kV	0	0	0	0	0	-	5%	0
Metro traction	0	0	0	6300	9000	-	5%	9450
SUBTOTAL (HV-3)	**0**	**0**	**225**	**9000**	**16700**			**17535**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	5-yr CAGR	Adopted growth rate	Approved for FY 12-13
HV-4: Lift Irrigation								
At 11kV	311	311	311	311	311	0%	0%	311
Above 11kV & upto 66kV	0	0	0	0	0	-	-	0
Above 66 kV & upto 132kV	0	0	0	0	0	-	-	0
SUBTOTAL (HV-4)	**311**	**311**	**311**	**311**	**311**			**311**
Bulk & Extra State								
Extra state & others	0	0	0	0	0	-	-	0
Bulk supply - NPCL	45000	45000	45000	0	0	-100%	-	0
Bulk supply - KESCO	0	0	0	0	0	-	-	0
Bulk supply - Others	0	0	0	0	0	-	-	0
SUBTOTAL (Bulk & Extra State)	**45000**	**45000**	**45000**	**0**	**0**			**0**
GRAND TOTAL	**8911904**	**9707612**	**9959183**	**11192572**	**12018490**			**12913068**

Table 12-3: COMMISSION'S APPROVAL OF ENERGY SALES (MU) FOR FY 2012 - 13

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Approved for FY 12-13
LMV-1: Domestic						
Rural (unmetered)	1269	1348	1386	1432	1577	1664
Rural (metered)	347	535	249	188	296	414
Bulk Load	55	154	151	114	144	159
Other Metered	2303	2305	2607	2883	3137	3505
BPL	0	0	14	128	169	185
SUBTOTAL (LMV-1)	**3974**	**4343**	**4407**	**4745**	**5323**	**5926**
LMV-2:Non-Domestic						
Rural (unmetered)	18	18	16	8	6	7
Rural (metered)	97	111	88	154	159	164
Advertising	0	0	1	5	31	31
Other Metered	600	544	658	681	801	861
SUBTOTAL (LMV-2)	**715**	**673**	**763**	**848**	**997**	**1062**
LMV-3: Public Lamps						
Unmetered - Gram Panchayat	0	1	2	2	1	2
Unmetered - Nagar Palika & Panch	17	30	24	24	28	24
Unmetered - Nagar Nigam	6	53	33	25	31	37
Metered - Gram Panchayat	2	1	0	0	0	0
Metered - Nagar Palika & Panchay	28	22	28	27	28	33
Metered - Nagar Nigam	62	19	33	59	64	71
SUBTOTAL (LMV-3)	**115**	**125**	**120**	**137**	**152**	**166**
LMV-4: Institutions						
Public	163	151	141	161	179	200
Private	60	42	33	27	34	38
SUBTOTAL (LMV-4)	**223**	**193**	**173**	**187**	**213**	**239**
LMV-5: Private Tube Wells						
Rural (unmetered)	1927	1855	1832	1928	2062	2049
Rural (metered)	1	37	5	4	7	115
Urban (metered)	16	24	17	26	26	27
SUBTOTAL (LMV-5)	**1944**	**1917**	**1855**	**1958**	**2095**	**2191**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Approved for FY 12-13
LMV 6: Small and Medium Power						
Power Loom: Rural	16	20	16	23	32	32
Power Loom: Urban	71	90	70	66	80	96
Others: Rural	44	58	65	70	83	84
Others: Urban	527	555	610	636	674	717
SUBTOTAL (LMV-6)	**657**	**722**	**760**	**796**	**869**	**929**
LMV-7: Public Water Works						
Rural: Jal Nigam	5	12	6	6	12	13
Rural: Jal Sansthan	10	3	2	2	2	2
Rural: Other PWWs	6	12	10	10	11	11
Urban: Jal Nigam	7	11	18	18	17	17
Urban: Jal Sansthan	13	18	7	8	10	9
Urban: Other PWWs	122	128	152	173	184	204
SUBTOTAL (LMV-7)	**164**	**184**	**196**	**217**	**235**	**258**
LMV-8: State Tube Wells						
Metered STW	19	18	13	13	12	23
Unmetered STW	184	185	181	181	196	197
Unmetered Laghu Dal Nahar	3	3	2	1	0	3
SUBTOTAL (LMV-8)	**206**	**206**	**196**	**195**	**209**	**222**
LMV-9: Temporary Supply						
Metered: Individual residential	6	18	2	8	11	11
Metered: Others	0	0	20	30	45	41
Unmetered: Ceremonies	5	1	0	1	0	0
Unmetered: Temp shops	0	0	0	0	0	0
SUBTOTAL (LMV-9)	**11**	**19**	**22**	**40**	**56**	**52**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Approved for FY 12-13
LMV-10: Departmental Employees						
Class IV	5	16	12	13	14	12
Class III	8	31	22	25	27	25
Junior Engineers	1	4	3	3	4	5
Assistant Engineers	1	2	2	3	3	3
Executive Engineers	2	2	2	2	2	2
Deputy General Manager	0	0	0	0	0	0
CGM/GM	0	0	0	0	0	0
Pensioners	26	36	45	45	54	60
SUBTOTAL (LMV-10)	**43**	**90**	**87**	**91**	**104**	**107**
HV-1: Non-Industrial Bulk Loads						
Urban: 11 kV	0	0	329	229	253	238
Urban: Above 11 kV & upto 66 kV	0	0	234	171	160	160
Urban: Above 66 kV & upto 132 kV	0	0	54	20	0	0
Urban: Above 132 kV	0	0	5	0	0	0
Rural: At 11 kV	0	0	4	100	187	206
Rural: Above 11 kV & upto 66 kV	0	0	1	45	115	115
SUBTOTAL (HV-1)	**0**	**0**	**626**	**565**	**714**	**718**
HV-2: Large and Heavy Power						
Urban: 11 kV	2445	2377	2129	2219	2681	2744
Urban: Above 11 kV & upto 66 kV	957	1285	1284	1927	2067	1923
Urban: Above 66 kV & upto 132 kV	26	249	289	86	77	69
Urban: Above 132 kV	73	76	80	100	165	173
Rural: At 11 kV	16	12	10	112	20	18
Rural: Above 11 kV & upto 66 kV	32	14	9	32	7	7
SUBTOTAL (HV-2)	**3550**	**4013**	**3801**	**4476**	**5017**	**4935**
HV-3: Railway Traction						
At 132 kV and above	0	0	0	10	25	25
Below 132 kV	0	0	0	0	4	4
Metro traction	0	0	0	13	17	17
SUBTOTAL (HV-3)	**0**	**0**	**0**	**23**	**46**	**45**

Consumer categories	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Approved for FY 12-13
HV-4: Lift Irrigation						
At 11kV	0	0	0	0	0	0
Above 11kV & upto 66kV	0	0	0	0	0	0
Above 66 kV & upto 132kV	0	0	0	0	0	0
SUBTOTAL (HV-4)	**0**	**0**	**0**	**0**	**0**	**0**
Bulk & Extra State						
Extra state & others	0	0	0	0	0	0
Bulk supply - NPCL	346	348	353	0	0	0
Bulk supply - KESCO	0	0	0	0	0	0
Bulk supply - Others	0	0	0	0	0	0
SUBTOTAL (Bulk & Extra State)	**346**	**348**	**353**	**0**	**0**	**0**
GRAND TOTAL	**11948**	**12834**	**13360**	**14278**	**16031**	**16852**

12.2 RATE SCHEDULE FOR FY 2012 - 13

RETAIL TARIFFS FOR FINANCIAL YEAR 2012 - 13:

GENERAL PROVISIONS:

These provisions shall apply to all categories unless specified otherwise and are integral part of the Rate Schedule.

1. NEW CONNECTIONS:

(i) All new connections shall be given as per the applicable provisions of Electricity Supply Code and shall be released in multiples of KW only, excluding consumers of Rate Schedule LMV-5 & LMV-8. Further, for tariff application purposes fractional kW loads (if any) of already existing consumers shall be treated as next higher kW load;

(ii) New connection of 10 kW & above and 13.4 BHP & above loads shall be given with installation of demand recording Static Tri-vector Meter (TVM) or TOD meters as may be appropriate. Licensee shall ensure installation of Tri-vector Meter (TVM) or TOD meters (Demand Recording Meters), (as may be appropriate) on all existing consumers with load of 10 kW / 13.4 BHP and above as the case may be and for all consumers of Rate Schedule where TOD rates have been specified.

2. READING OF METERS:

As per applicable provisions of Electricity Supply Code.

3. BILLING WHEN METER IS NOT ACCESSIBLE OR NOT READ (NA / NR BILLS - PROVISIONAL PAYMENT):

As per the provisions of applicable Electricity Supply Code with a provision of penalty of Rs. 50 / kW / month for the purposes of Clause 6.2 (c) of applicable Electricity Supply Code.

4. BILLING IN CASE OF DEFECTIVE METERS:

As per the applicable provisions of Electricity Supply Code.

5. KVAH TARIFF:

'kVAh based tariffs' shall be applicable on all consumers having contracted load of 10 kW & above for Light, Fan & Power and 13.4 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 and Energy Charges by an average power factor of 0.90. Similarly, the Fixed / Demand Charges expressed in BHP can be converted into respective kVA rates in accordance with formula given below:

Demand Charges in kVA = (Demand Charges in BHP * 0.90) / 0 .746

By applying the same formula Fixed Charges can also be calculated.

Note: If the power factor of a consumer is leading and is within the range of 0.95 -1.00, then for tariff application purposes such leading power factor shall be treated as unity. The bills of such consumers shall be prepared accordingly. However, if the leading power factor is below 0.95 (lead) then the consumer shall be billed as per the kVAh reading indicated by the meter. However, the aforesaid provision of treating power factor below 0.95 (lead) as the commensurate lagging power factor for the purposes of billing shall not be applicable on HV-3 category and shall be treated as unity. Hence, for HV-3, lag + lead logic of the meter should not be used and "lag only" logic of the meter should be provided which blocks leading kVARh thereby treating leading power factor as unity and registering instantaneous kWh as instantaneous kVAh in case of leading power factor.

6. BILLABLE DEMAND:

For all consumers having static Tri-vector Meter / TOD Meters (Demand Recording Meters) installed, the billed demand during a month shall be the actual maximum demand as indicated by TVM / TOD meter (can be in parts of kVA) or 75% of the contracted load, whichever is higher. The contracted load in kW shall be divided by a power factor of 0.90 to work out the equivalent contracted load in kVA and rounded off to nearest integer.

7. SURCHARGE / PENALTY:

(i) DELAYED PAYMENT:

If a consumer fails to pay his electricity bill by the due date specified therein, a late payment surcharge shall be levied at 1.25 % per month; up-to first three months and subsequently @ 1.5% per month. Late payment surcharge shall be calculated proportionately for the number of days for which the payment is delayed beyond the due date specified in the bill and levied on the unpaid amount of the bill excluding surcharge. Imposition of this surcharge is without prejudice to the right of the licensee to disconnect the supply or take any other measure permissible under the law.

(ii) CHARGES FOR EXCEEDING CONTRACTED DEMAND:

Charges as per Electricity Supply Code. 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.

8. POWER FACTOR SURCHARGE:

(i) It shall be obligatory for all consumers to maintain an average power factor of more than 0.85 during any billing period. No new connections of motive power loads / inductive loads above 3 kW, other than under LMV-1 and LMV-2 category, and / or of welding transformers above 1kVA shall be given, unless shunt capacitors having I.S.I specifications of appropriate ratings are installed, as described in ANNEXURE 12.4.

(ii) In respect of the consumers with or without static TVMs, excluding consumers under LMV-1 category up to connected load of 10 kW and LMV-2 category up to connected load of 5 kW, if on inspection it is found that capacitors of appropriate rating are missing or in-operational and licensee can prove that the absence of capacitor is bringing down the power factor of the consumer below the obligatory norm of 0.85; then a surcharge of 15% of the amount of bill shall be levied on such consumers. Licensee may also initiate action under the relevant provisions of the Electricity Act, 2003, as amended from time to time.

Notwithstanding above the licensee also has a right to disconnect the power supply, if the power factor falls below 0.75.

(iii) Power factor surcharge shall however, not be levied during the period of disconnection on account of any reason whatsoever and where consumer is being billed on kVAh consumption basis.

9. 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 for which no approval of the Commission shall be required. The impact of such surcharge waiver shall not be allowed as pass through in the next ARR / Tariff or true-ups. Further, the licensee may launch a surcharge waiver scheme without any restrictions on quantum of surcharge waiver provided the State Government provides an advance subsidy to compensate the loss of the licensee arising out of surcharge waiver.

10. PROTECTIVE LOAD:

Consumers getting supply on independent feeder at 11kV & above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the licensee, except under emergency rostering. An additional charge @ 100% of base demand charges fixed per month shall be levied on the contracted protective (as per Electricity Supply Code) 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. Consumers of LMV-4 (A) - Public Institutions will however pay the additional charge @ 25% only.

11. ROUNDING OFF:

All bills will be rounded off to the nearest rupee.

12. OPTION OF MIGRATION TO HV2 CATEGORY:

The consumer under LMV-1, LMV-2, LMV-4 and LMV-6 with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-2 category. Furthermore, the consumers shall have an option of migrating back to the original category as per charges prescribed in Cost Data Book for change in voltage level.

13. PRE-PAID METERS / AUTOMATIC METER READING SYSTEM:

In line with the directive given in the last Tariff Order, the Commission directs the licensees to expedite the process of introduction of pre-paid meters on all government connections and public institutions wanting to opt for with loads below 45 kW and installation of automatic meter reading systems for loads above 45 kW.

14. Consumers not covered under any rate schedule or expressly excluded from any category:

For consumers of light, fan & power (excluding motive power loads) not covered under any rate schedule or expressly excluded from any LMV rate schedule will be categorized under LMV-2.

15. Wherever, the billing is based on fixed charges there the fixed charge will be computed on the basis of contracted load.

RATE SCHEDULE LMV – 1:

DOMESTIC LIGHT, FAN & POWER:

1. APPLICABILITY:

This schedule shall apply to:

a) Premises for residential / domestic purpose, Janata Service Connections, Kutir Jyoti Connections, Places of Worship e.g. Temples, Mosques, Gurudwaras, Churches and Electric Crematoria.

b) Mixed Loads

i. 50 kW and above

a. Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with the condition that 70% of the total contracted load shall be exclusively for the purposes of domestic light, fan and power. The above mixed load, within 70%, shall also include the load required for lifts, water pumps and common lighting,

b. Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).

ii. Less than 50 kW

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

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate 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' (other than Tehsil Head Quarters, Nagar Palikas and Nagar Panchayat Areas):

Description	Fixed charge	Energy charge)
i) Un-metered	Rs. 125 / connection / month	Nil
ii) Metered	Rs. 15 / kW / month	Rs. 1.00 / kWh

(b) Supply at Single Point for bulk loads:

Description	Fixed Charge	Energy Charge
For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).	Rs. 50.00 / kW / Month	Rs. 3.75 / 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. If the consumer's consumption exceeds 150 kWh in a month, then for such excess consumption the consumer shall be billed as per the category 'Other Metered Domestic Consumers' (as shown in '2. Others' below). If the consumption exceeds 150 kWh in a month for 3 consecutive months, then the consumer will be permanently shifted to the category 'Other Metered Domestic Consumers' (as shown in '2. Others' below).

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

Description	Fixed Charge	Energy Charge
Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh / month (101 to 150 kWh / month)		Rs. 2.50 / kWh

2. **Others:** Other than life line consumers (i.e. consumers who do not qualify under the criteria laid down for lifeline consumers.)

Description	Consumption Range	Fixed Charge	Energy Charge
All loads	Upto 200 kWh / month	Rs. 65.00 / kW / month	Rs. 3.45 / kWh
	Above 200 kWh / month		Rs. 3.80 / kWh

Note:

1. For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand.

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 Centres, Photo Copiers, Cyber Café, Private Diagnostic Centres including X-Ray Plants, MRI Centres, CAT Scan Centres, Pathologies and Private Advertising / Sign Posts / Sign Boards, Commercial Institutions / Societies, Automobile Service Centres, Coaching Institutes, Private Museums, Power Looms with less than 5 kW load and for all companies registered under Companies Act-1956 with loads less than 75 kW and getting supply at low voltages.

2. Character and Point of Supply:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate 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' (other than Tehsil Head Quarters, Nagar Palikas and Nagar Panchayat Areas):

Description	Fixed Charge	Energy charge
(i) Un-metered	Rs. 200 / connection / month	Nil
(ii) Metered	Rs. 50 / kW / month	Rs. 1.90 / kWh

(b) Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex:

For all commercial (road side / roof tops of buildings) advertisement hoardings such as Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex, the rate of charge shall be as below:

Description	Fixed Charge	Energy Charge	Minimum Charge
Metered	-	Rs. 14.00 / kWh	Rs. 1000/kW/Month

Note:

For application of these rates licensee shall ensure that such consumption is separately metered.

(c) In all other cases, including urban consumers and consumers getting supply through rural feeders but exempted from scheduled rostering / restrictions or through co-generating radial feeders in villages / towns.

<table>
<tr><th>Consumption Range</th><th>Fixed Charge</th><th>Energy Charge</th><th>Minimum Charge</th></tr>
<tr><td>Upto 300 kWh / month</td><td rowspan="2">Rs. 200.00 / kW / month</td><td>Rs. 5.75 / kWh</td><td rowspan="2">Rs. 345.00 / kW / month</td></tr>
<tr><td>Above 300 kWh / month (From 301st unit onwards)</td><td>Rs. 6.00 / kWh</td></tr>
</table>

Note:

1. For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand.

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 Bastis and Rural Areas are also covered by this rate schedule.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate, gives the fixed 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) 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. 1600 per kW or part thereof per month	Rs. 1900 per kW or part thereof per month	Rs. 2400 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. 120 / kW / month	Rs. 5.20 / kWh	Rs. 150 / kW / month	Rs. 5.50/ kWh	Rs. 160/ kW / month	Rs. 5.70 / kWh

TOD Rates applicable for the metered supply (% of Energy Charges):

18:00 hrs – 06:00 hrs	0%
06:00 hrs – 18:00 hrs	(+) 20%

4. For 'Maintenance Charges', 'Provision of Lamps' and 'Verification of Load' refer ANNEXURE 12.2.2**.**

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) Railway Establishments (excluding railway traction, industrial premises & Metro) such as Booking Centres, Railway Stations & Railway Research and Development Organization, Railway rest houses, Railway holiday homes, Railway inspection houses.

(e) All India Radio and Doordarshan.

LMV-4 (B) - PRIVATE INSTITUTIONS:

This schedule shall apply to non-Government hospitals, nursing homes / dispensaries / clinics, private research institutes, and schools / colleges / educational institutes & charitable institutions / trusts not covered under **(A)** above**.**

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate 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. 150 / kW / month	Rs. 6.20 / kWh
(B) For Private Institutions	Rs. 200 / kW / month	Rs. 6.75 / kWh

RATE SCHEDULE LMV– 5:

SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:

1. APPLICABILITY:

This schedule shall apply to all power consumers getting supply as per Rural / Urban Schedule for Private Tube-wells / Pumping Sets for irrigation purposes having a contracted load upto 25 BHP and for additional agricultural processes confined to Chaff-Cutter, Thresher, Cane Crusher and Rice Huller. All new connections under this category shall necessarily have the ISI marked energy efficient mono-bloc pump sets with power factor compensation capacitors of adequate rating to qualify for the supply. All existing pump sets shall be required to install power factor compensation capacitors.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

(A) For consumers getting supply as per **Rural Schedule**:

(i) Un-metered Supply

Fixed Charge	Energy Charge
Rs. 75 / BHP / month	Nil
Consumer under this category will be allowed a maximum lighting load of 120 Watts.	

(ii) Metered Supply

Fixed Charge	Minimum Charges	Energy Charge
Rs. 15 / BHP / month	Rs. 65 / BHP / month	Rs. 0.75 / kWh

NOTE: *Minimum bill payable by a consumer under Rural Schedule (Metered Supply) shall be Rs. 65 per BHP per month, till the installation of the meter.*

(B) For consumers getting supply as per **Urban Schedule** (Metered Supply) including consumers getting supply through rural feeders exempted from scheduled rostering or through co-generating radial feeders in villages and towns.

Fixed Charge	Minimum Charges	Energy Charge
Rs. 30 / BHP / month	Rs. 130 / BHP / month	Rs. 2.00 / kWh

NOTE: *Minimum bill payable by a consumer under Urban Schedule (Metered Supply) shall be Rs. 130 per BHP per month, till the installation of the meter.*

Rate Schedule LMV– 6:

SMALL AND MEDIUM POWER:

1. **APPLICABILITY:**

   This schedule shall apply to all consumers of electrical energy having a contracted load upto 100 HP (75 kW) for industrial / processing or agro-industrial purposes, power loom (load of 5 kW and above) and to other power consumers, not covered under any other rate schedule. Floriculture / Mushroom farming units having loads up-to 100 BHP (75kW) shall also be covered under this rate schedule. This schedule shall also apply to pumping sets above 25 BHP.

2. **CHARACTER AND POINT OF SUPPLY:**
   As per the applicable provisions of Electricity Supply Code.

3. **RATE:**

   Rate, gives the fixed 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) Consumers getting supply other than Rural Schedule:

Consumption Range	Fixed Charge	Energy Charge	Minimum Charge
For all Consumption	Rs. 225.00 / kW / month	Rs. 5.85 / kWh	Rs. 500/kW/month

TOD Rates (% of Energy Charges):

22:00 hrs – 06:00 hrs	(-) 7.5%
06:00 hrs – 17:00 hrs	0%
17:00 hrs – 22:00 hrs	(+) 15%

(B) Consumers getting supply as per Rural Schedule:

The consumer under this category shall be entitled to a rebate of 15% on demand & energy charges as given for under urban schedule without TOD rates.

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 13.4 BHP (for motive power loads) & 10 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. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

5. REBATE TO POWER LOOMS:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 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 centres, 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 applicable provisions of Electricity Supply Code.

3. RATE:

(A) Consumers getting supply other than "Rural Schedule":

Rate gives the fixed 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:

Fixed Charge	Energy Charge
Rs. 230 / kW / month	Rs. 6.10/ kWh

(B) Consumers getting supply as per "Rural Schedule":

The consumer under this category shall be entitled to a rebate of 15% on demand & energy charges as given for under other than rural schedule.

Rate Schedule LMV – 8:

STATE TUBE WELLS / PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:

1. APPLICABILITY:

(i) This schedule shall apply to supply of power for all State Tubewells, including Tubewells operated by Panchayti Raj, W.B Tubewells, Indo Dutch Tubewells, Pumped Canals and Lift Irrigation schemes having a load upto 100 BHP.

(ii) Laghu Dal Nahar having load above 100 BHP.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate 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. 150 / BHP / month	Rs. 5.75/ kWh
Un-metered	Rs. 1200 / BHP / month	Nil

4. For finding out net additional load during any quarter of the year for this category refer ANNEXURE 12.2.3**.**

RATE SCHEDULE LMV – 9:

TEMPORARY SUPPLY:

1. APPLICABILITY:

A) Un-metered Supply for Illumination/ Public Address/ Temporary Shops in Melas:

This schedule shall apply to temporary supply of light, fan & power up to 20 KW, Public address system and illumination loads during functions, ceremonies and festivities and temporary shops, not exceeding three months.

B) Metered Supply for all other purposes:

This schedule shall apply to all temporary supplies of light, fan and power load for the purpose other than mentioned in (A) above.

This schedule shall also apply for power taken for construction purposes not exceeding two years, including civil work by all consumers and Govt. Departments.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE (SEPARATELY FOR EACH POINT OF SUPPLY):

Rate 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. 2500 / day
(ii) Fixed charges for ***temporary shops*** set-up during festivals / melas or otherwise and having load up to 2KW	Rs. 170 / day / shop

B. Metered:

Description	Minimum Charge	Energy Charge
Individual Residential construction	Rs. 115/kW/week	Rs. 5.50 / kWh
Others		Rs. 6.50 / 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 (including the cases of retired / voluntary retired 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 spouse of employees served under licensees / successor entities of erstwhile UPSEB.

2. RATE:

Un-metered: Rate, 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. 75.00	Rs. 75.00
Class III employees	Rs. 75.00	Rs. 105.00
Junior Engineers & equivalent posts	Rs. 155.00	Rs. 220.00
Assistant Engineers & equivalent posts	Rs. 155.00	Rs. 345.00
Executive Engineers & equivalent posts	Rs. 155.00	Rs. 370.00
Superintending Engineers / Deputy General Managers & equivalent posts	Rs. 400.00	Rs. 450.00
Chief Engineers (I & II) / General Managers and above	Rs. 400.00	Rs. 550.00
Additional charge for employees using Air Conditioners. (April to September)	Rs. 500.00 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 retired / voluntary retired or deemed retired employees, the rate of charge shall be the same as applicable to the post from which he / she has retired.

4. For 'Other Provisions' and 'Mode of Payment' for Departmental Employees refer ANNEXURE 12.2.1

Section 23 (7) of Electricity Reforms Act, 1999 provides that "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. The rates and charges indicated above for this category are strictly in adherence of above statutory provisions.

RATE SCHEDULE HV– 1:

NON INDUSTRIAL BULK LOADS:

1. APPLICABILITY:

This rate schedule shall apply to:

(a) Commercial loads (as defined within the meaning of LMV-2) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.

(b) Private institutions (as defined within the meaning of LMV-4 (b)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.

(c) Non domestic bulk power consumer (other than industrial loads covered under HV-2) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and feeding multiple individuals (owners / occupiers / tenants of some area within the larger premises of the bulk power consumer) through its own network and also responsible for maintaining distribution network.

(d) Public institutions (as defined within the meaning of LMV-4 (a)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels. The institution / consumer seeking the supply at Single point for non-industrial bulk loads under this category shall be considered as a deemed franchisee of the Licensee.

(e) For UPPCL / UPRVUNL / UPJVNL Offices / Buildings / Guesthouses having loads above 75 kW and getting supply at 11 kV & above voltages.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

(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. 270 / kVA / month	Rs. 250 / kVA / month
Energy Charges	Rs. 6.00 / kVAh	Rs. 5.90 / 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. 250 / kVA / month	Rs. 240 / kVA / month
Energy Charges	Rs. 5.90 / kVAh	Rs. 5.60 / 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 400 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 as long as they are in line with the existing Regulations & Acts.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

3. RATE:

Rate 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 11 kV	For supply above 11 kV and upto & including 66 kV	For supply above 66 kV and upto & including 132 kV	For supply above 132 kV
BASE RATE				
Demand Charges	Rs. 250 / kVA / month	Rs. 240 / kVA / month	Rs. 220 / kVA / month	Rs. 220 / kVA / month
Energy Charges	Rs. 5.90 / kVAh	Rs. 5.60 / kVAh	Rs. 5.40 / kVAh	Rs. 5.20 / kVAh
TOD RATE				
22:00 hrs – 06:00 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%	(-) 7.5%
06:00 hrs – 17:00 hrs	0%	0%	0%	0%
17:00 hrs – 22:00 hrs	(+) 15%	(+) 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 demand & energy charges 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 as per schedule applicable to 11 kV consumers under HV-2 category.

4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

i. The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.

ii. Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration/execution of agreement mentioning the period of operation unambiguously.

iii. The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.

iv. The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail licensees supply for miscellaneous loads and other non-process loads.

v. The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh / kVAh) for such industries during off-season period will be the same as for normal period. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

5. LOAD FACTOR REBATE:

For any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the table below, a graded rebate is provided on the energy charges for such excess consumption. This rebate will be available on monthly basis and will be given to the consumer for each slab.

Description	Rebate on Energy charges
For all consumption over 396 kVAh per kVA up to 432 kVAh per kVA per month	7.5% on the consumption over 396 kVAh / kVA / month and up to 432 kVAh / kVA / month
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab *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.

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 centres, compound lighting, etc. No separate connection for the same shall be provided.

RATE SCHEDULE HV – 3:

A: RAILWAY TRACTION:

1. APPLICABILITY:

This schedule shall apply to the Railways for Traction loads only.

2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the licensee. The supply at each sub-station shall be separately metered and charged.

3. RATE:

Rate, 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. 250 / kVA / month
Below 132 kV	Rs. 260 / kVA / month
(b) Energy Charge (all consumption in a month)	
For supply at and above 132 kV	Rs. 5.15 / kVAh
Below 132 kV	Rs. 5.30 / kVAh
(c) Minimum Charge	Rs. 550 / kVA/ month

4. LOAD FACTOR REBATE:

For any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the table below, a graded rebate is provided on the energy charges for such excess consumption. This rebate will be available on monthly basis and will be given to the consumer for each slab.

Description	Rebate on Energy charges
For all consumption over 396 kVAh per kVA up to 432 kVAh per kVA per month	7.5% on the consumption over 396 kVAh / kVA / month and up to 432 kVAh / kVA / month
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab *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* 15% on the consumption over 504 kVAh / kVA / month

5. DETERMINATION OF THE DEMAND:

Demand measurement at a particular time will be made on basis of simultaneous maximum demands recorded in summation kilovolt-ampere meter installed at contiguous substation serviced by same grid transformer.

The demand for any month shall be defined as the highest average load measured in Kilo Volt –amperes during any fifteen consecutive minutes period of the month.

B: DELHI METRO RAIL:

1. APPLICABILITY:

This schedule shall apply to the DMRC (Delhi Metro Rail Corporation).

2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the licensee. The supply at each sub-station shall be separately metered and charged.

3. RATE:

Rate, gives the energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

Energy Charges	Rs. 5.00 / kVAh
Minimum charge	Rs. 550 / kVA / month

- Penalty @ Rs. 540 / kVA will be charged on excess demand, if demand exceeds contracted load.
- This category has been made as per the agreement between DMRC and NOIDA Administration.

4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of delivery. The demand for any month shall be defined as the highest average load measured in Kilo Volt-Amperes during any fifteen consecutive minutes period of the month.

RATE SCHEDULE HV – 4:

LIFT IRRIGATION WORKS:

1. APPLICABILITY:

This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW).

2. CHARACTER OF SERVICE & POINT OF SUPPLY:

As per applicable provisions of Electricity Supply Code.

3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

(a) Demand Charges:

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 250 / kVA / month
For supply at 33 kV and 66 kV	Rs. 240 / kVA/ month
For supply at 132 kV	Rs. 220 / kVA / month

(b) Energy Charges :

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 5.90 / kVAh
For supply at 33 kV and 66 kV	Rs. 5.60 / kVAh
For supply at 132 kV	Rs. 5.40 / kVAh

c) Minimum Charges:

Rs. 500 / kVA / month irrespective of supply voltage

4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of supply. In the absence of suitable demand indicator, the demand as assessed by the Licensee shall be final and binding. If, however, the number of circuits is more than one, demand and energy measurement will be done on the principle of current transformer summation metering.

12.2.1 DEPARTMENTAL EMPLOYEES:

1. OTHER PROVISIONS:

(i) For serving / retired and their spouse, the supply will only be given at one place where Licensee's mains exist. The electric supply under this tariff will be given only at one place, within the area of erstwhile UPSEB / its successor companies.

(ii) In the event of transfer of the employee, this tariff shall be applied at the new place of posting only when a certificate has been obtained from the concerned Executive Engineer of the previous place of posting, that the supply under this tariff has been withdrawn at previous place of posting. Further, the employee shall also be required to submit an affidavit that he is not availing the benefit of LMV-10 connection anywhere else in the state.

(iii) Those who are not availing this tariff shall also give a declaration to this effect. This declaration shall be pasted / kept in his service book / personal file / Pensioners record. If the declaration is found wrong, necessary action against the employee shall be taken as per the provisions of service rules. If declaration has already been given at the present place of posting then further declaration is not necessary due to this revision. Pensioners shall also have to give a similar declaration for availing departmental tariff at only one place. In case this declaration is found wrong, this tariff shall be withdrawn forever.

(iv) No other concession shall be admissible on this tariff.

(v) The schedule of miscellaneous charges as appended with Licensee's General Tariff as amended from time to time and Electricity Supply (Consumers) Regulation, 1984 as enforced from time to time shall also be applicable on the employee / pensioner receiving supply under this schedule.

(vi) Retired employees drawing pension from the Treasury / Bank will have to pay the monthly electricity charges as per the rates given in the rate schedule applicable to their category.

(vii) In case of Multi-Storied / Societies where the electricity connection are provided at single point with HT metering, the employees / pensioners /

family pensioners, shall be provided through a separate meter and shall be given adjustment towards HT side metered energy at single point. One percent of energy consumed by LMV-10 consumer shall also be added towards transformation losses for giving adjustment.

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.

12.2.2 PUBLIC LAMPS:

1. MAINTENANCE CHARGE:

In addition to the “Rate of Charge” mentioned above, a sum of Rs. 10.00 per light point per month will be charged for operation and maintenance of street lights. This Maintenance Charge will cover only labour charges, where all required materials are supplied by the local bodies. However, the local bodies will have an option to operate and maintain the public lamps themselves and in such case, no maintenance charge shall be recovered. This charge shall not apply to the consumers with metered supply.

2. PROVISION OF LAMPS:

Streets where distribution mains already exist, the Licensee will provide a separate single-phase, 2-wire system for the street lights including light fitting and incandescent lamps of rating not exceeding 100 Watts each. In case the above maintenance charge is being levied, the labour involved in replacements or renewal of lamps shall be provided by the licensee. However, all the required materials shall be provided by the local bodies. The cost of all other types of street light fittings shall be paid by the local bodies.

The cost involved in extension of street light mains (including cost of sub - stations, if any) in areas where distribution mains of the licensee have not been laid, will be paid for by the local bodies.

3. VERIFICATION OF LOAD:

The number of light points including that of traffic signals together with their wattage will be verified jointly by the representatives of Licensee and Town Area / Municipal Board / Corporation at least once in a year. However, additions will be intimated by the Town Area / Municipal Board / Corporation on monthly basis. The Licensee will carry out the checking of such statements to satisfy themselves of the correctness of the same. The monthly bills shall be issued on the basis of verified number of points at the beginning of the year and additions, if any, during the months as intimated above. The difference, if any, detected during joint verification in the following year shall be reconciled and supplementary bills shall be issued.

Further, if the authorized representative of concerned local body does not participate in the work of verification of light points, a notice will be sent by concerned Executive Engineer in writing to such local bodies for deputing representative on specific date(s), failing which the verification of the light points shall be done by the concerned representative of Licensee which shall be final and binding upon such local body.

12.2.3 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 31st March of the preceding year will be worked out on the basis of 'Net additional load' reported by the Executive Engineers of concerned Divisions after joint inspection and verification of the same by the concerned officers of the State Government / Panchayat, joint meter reading shall also be taken during the inspection on quarterly basis. The monthly bills for three months of the first quarter will be issued on the connected load worked out as such at the above rates. The same process shall be repeated for subsequent quarters.

12.3 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 & 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:		
	a. At 400 V / 230 V	Per Job	100.00
	b. At 11 kV and above.	Per Job	200.00

CHARGES FOR TATKAL VIDYUT SANYOJAN (TATKAL CONNECTION):

For urban consumers of LMV-1, LMV-2 and LMV-9 categories, desirous of getting connection within 24 hours of making the application, provided such release of connection does not require extension of distribution mains or commissioning of sub-station or augmenting capacity of transformers, shall have to pay following additional charges apart from the regular connection charges:

1. **FOR PERMANENT ELECTRICITY CONNECTION:**
   a. Single Phase Domestic light and fan : Rs. 500 per connection
   b. Three Phase Domestic light and fan : Rs. 750 per connection
   c. Single Phase Commercial : Rs. 750 per connection
   d. Three Phase Commercial : Rs. 1000 per connection

2. **FOR TEMPORARY ELECTRICITY CONNECTION:**
   a. Single Phase (Upto 4 kW) : Rs. 750 per connection
   b. Three Phase (from 5 kW to 24 kW) : Rs. 1000 per connection

12.4 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
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

Sl. No.	Name Plate Rating in KVA of Individual Welding Transformer	Capacity of the Capacitors (KVAR)
33.	33	25
34.	34	26
35.	35	27

12.5 LIST OF PERSONS WHO ATTENDED PUBLIC HEARINGS

List of Persons who attended Public Hearing in Lucknow on 11 September, 2012		
S.N	**Name**	**Organization**
1	A.K. Arora	NPCL
2	B.B.Jindal	Consultant
3	M.P.Sharma	Pvt Business
4	Deven Kumar	IIA
5	Manish Goel	IIA
6	D.S.Verma	IIA
7	Prashant Bhatia	IIA
8	Avadesh Kumar Verma	Upabhokta Parishad
9	Pradeep Kumar Misra	Rolia Icecream,Purani Tikoli Lucknow
10	Mohd.Ghufran	R.A.U
11	V.K.Agarwal	Pvt Business
12	A.K. Singh	MMVNL
13	Col. M.C Pal	Veteran
14	Prof. Rakesh Goel	Akhil Bharatiya Matadhikari Sangh
15	Manish Garg	General Consumer
16	J.P.Arya (Advocate)	Indira Nagar Adhikarata Sangh
17	R.S.Bhadawria (IFS retd)	President, Janhet Manch
18	Mohd. Yonus Siddiqui	Industries Welfare Association UP
19	Syed Mohd Farhat	Industries Welfare Association UP
20	A.K.Kansal	MVVNL
21	Dr. Satyabrat	Farmer
22	Dr. Anil Chaudhary	Ex-MLA (RLD)
23	S.Johari	UPPCL
24	P.K.Johari	SE, UPPCL
25	Brijesh Kumar	Atul Advertising
26	Atul Kumar	Shobha Publicity
27	V.K.Saxsena	NTPC
28	N.S. Hanspal	IIA
29	G.C.Chaturvedhi	IIA
30	M.K.Tiwari	Individual (Domestic Consumer)
31	S.P.Singh	IIA
32	Shiv Shankar Awasthi	IIA
33	Vijay Pratap	UPPCL (Retd)
34	Harish Chandel	CE (Retd) UPSEB/UPPCL
35	BML Garg	A to Z Group
36	Dharmendra Gupta	A to Z Group

List of Persons who attended Public Hearing in Lucknow on 11 September, 2012		
S.N	**Name**	**Organization**
37	Prashant Chaturvedhi	NTPC
38	Nitishwar Kumar	MD,MVVNL
39	M.C. Aggarwal	SE MVVNL
40	Sunil Kumar Misra	
41	M.S.Gulati	Big Apple
42	M.K.Rastogi	
43	V.K.S. Tewari	MVVNL
44	Ravi Shrivastava	MVVNL

List of Persons who attended Public Hearing in Allahabad on 23 August, 2012		
S.N	**Name**	**Organization**
1	Dr G.S. Darbari	President, Eastern UP Chamber of Commerce & Industry
2	V.K.Tandon	Secy. Eastern UP Chamber of Commerce & Industry
3	V.D.Singh	EE UPPCL
4	Sanjay Sharma	SDO UPPCL
5	O.P.Mishra	SDO Civil Lines
6	Arvind Yadav	SDO
7	Ashwani K R	EE CBSC
8	K.N.Pandey	UPPCL
9	Chandprakesh, Gangapur Parshad	Gangapur ex-Parshad
10	Lal Ranvijay Gupta	Hindusthan Times
11	Raj Kumar Srivastava	Jan Sandesh Times
12	Ashutosh	Amar Ujala
13	Arivind Singh	Amar Ujala
14	A.R.Verma	EE UPPCL
15	Br. R.R.Pal	EE UPPCL
16	Ashish Asthana	EE UPPCL
17	Er. N.K.Singh	EE UPPCL
18	Sr.A.K.Dubey	SE UPPCL
19	Mukesh Kumar	EE UPPCL
20	B.K.Chaudhary	EE UPPCL
21	A.K.Verma	SE UPPCL
22	Anil Mital	CE (TE) UPPCL
23	S.Agrawal	SE UPPCL
24	Mohd. Ghufran	SE UPPCL
25	M.L.Sharma	CE
26	C.B.S. Rathore	CE Retd
27	Durgaprasad	Farmer
28	Vinod	
29	Ajay Kumar	
30	Sudeep Kumar Mishra	General Consumer
31	Vikas Kapoor	EE,UPPCL
32	Jeevan Prakash	EE EDD
33	A.S.Raghuvansy	EE EUDD
34	L.K.Projapati	JE - Civil
35	A.K.Singh	
36	Dr. L.Singh	

List of Persons who attended Public Hearing in Allahabad on 23 August, 2012		
S.N	**Name**	**Organization**
37	Pankaj	Sadhana News
38	Rohit Srivastava	Shri News
39	Rakesh Das	
40	Rajesh Kumar	
41	G.P.Verma	

List of Persons who attended Public Hearing in Noida on 18 August, 2012		
S.N	**Name**	**Organization**
1	M.K.Jain	M/s Bhushan Sheet Ltd
2	R.R.Puri	Ghaziabad Industrial Association
3	R.K.Jain	Western UP Chamber of Commerce & Industry
4	S.P.Chauhan	SBP. Industrial Association
5	Anil Gupta	Industrial Area MFRS Association
6	S.K.Maheshwari	Sr. Vice President Industries Federation
7	Arun Sharma	President Industries Federation
8	Vijay Narain Gupta	Ghaziabad Industrial Association
9	Alok Gupta	Noida Enterprises Association
10	Kamal Kumar	Noida Enterprises Association
11	Pradeep Mehta	Noida Enterprises Association
12	Vipin Malhan	Noida Enterprises Association
13	Harish Taneja	Noida Enterprises Association
14	Amarjeet	Noida Enterprises Association
15	V.K.Seth	Priya Plastics
16	S.C.Jain	R.J.Enterprises
17	Dharamveer Sharma	N.E.A
18	Sushil Agarwal	FONRWA
19	N.P.Supti	FONRWA
20	A.N.Dhawan	FONRWA
21	C.L.Dhir	Industries Forum Ghaziabad
22	R.K.Suri	
23	Rahesh Gupta	PEPL
24	Rajeev Bansal	PEPL
25	D.C.Verma	UPPCL
26	V.K.Singh	UPPCL
27	Pratap Bhan	UPPCL
28	Rajnish Kumar	Shri Ram Pistong & Rugs Ltd
29	Yogesh Goel	UP Steel
30	R.C.Mishra	UP Steel
31	Ashok Aggarwal	Baishano Steel Pvt, Muzzafurnagar
32	Sudhir Goyal	IIA, Muzzafurnagar
33	Rama Shankar Awasthi	General Consumer
34	S.C.Jain	Wazi Industries, Muzzafarnagar
35	Kamalsheel Maheshwari	Shri Rathi Steel Ltd
36	P.K.Goel	SE PVVNL
37	R.P.Singh	CE PVVNL

List of Persons who attended Public Hearing in Noida on 18 August, 2012		
S.N	**Name**	**Organization**
38	S.K.Gupta	SE PVVNL
39	Rajesh Sharma	SDO III, Nioda
40	S.M.Singh	Vice President, Rajya Vidhut Prishad J.E's Santhan
41	R.K.Bhatia	Jr. Engg Noida
42	A.Rajesh	UPPCL
43	M.K.Pallak	UPPCL
44	Rajesh Kumar	UPPCL
45	Ranjeet Singh Yadav	UPPCL
46	K K Teofia	UPPCL
47	A.P.Singh	UPPCL
48	Anshul Agarwala	UPPCL
49	P.K.Metha	UPPCL
50	A.K.Singh	UPPCL
51	D.K.Jain	UPPCL
52	Sahil Yadav	UPPCL
53	J.S.Yadav	UPPCL
54	C.L.Gupta	UPPCL

List of Persons who attended Public Hearing in Greater Noida on 18 August, 2012		
S.N	**Name**	**Organization**
1	Dharmveer Singh	Kanpur
2	Rama Shankar Awasthi	Lucknow
3	Vikram Singh	Alpha II
4	Bhimraj	Kanpur
5	Mahavir	Kanpur
6	P.K.Tiwari	IIA, Greater Noida
7	Ajay Bhati Pradhan	Bisrahka
8	Naveen	Janpath
9	Manoj Bhatt	Bisrahka
10	Subhash Bhati	Janpath
11	Mahesh Tygi	IIA, Greater Noida
12	S.P. Shan	IIA, Greater Noida
13	Dalip Singh	Association of Energy Engineering, Delhi NCR
14	Azad Kumar	
15	Sunrendra Ram	Natioanl Duniya

List of Persons who attended Public Hearing in Kanpur on 25 August, 2012		
S.N	**Name**	**Organization**
1	Rama Shankar Awasthi	General Consumer
2	Atul Seth	PIA
3	J.P.Gupta	PIA
4	Mohd.Ghufrani	R.A.U
5	P.K.Johari	SE, UPPCL
6	Bhushan Rastogi	Consultant KESCO
7	Pankaj S	Dy. CEO KESCO
8	Rajesh Grover	Gen.Sec IIA
9	Manmohan Rajpal	Div. Chairman IIA
10	G.R.Ambwani	Advisory - IIA
11	Sheshnarayan Triwedi	President Kapada Committee.
12	V.P.Handgil	IIA
13	Gurdeep Singh	IIA
14	A.S.Kotwal	Secy. Coop Estate DADA Nagr
15	Brijendrakumar	KESCO
16	Suresh Chandra Guha	PIA
17	Arun RR Jain	Coop Estate DADA Nagar
18	A.A.Khan	CE (RAU) UPPCL
19	S.K.Verma	SE, KESCO
20	Sushil Garg	EE, KESCO
21	Jai Prakash Aggarwal	President, Laghu Udyog Bharati
22	Subodh Pramodaka	UP Industrial Estate Manufacturers Association
23	Ladli Prasad	Laghu Udyog Bharati
24	Hardeep Singh Rakhra	IIA
25	Rohit Baijpuria	IIA
26	A.K.S Chaudhari	KESCO
27	Mahesh Medhani	
28	Vijay Udasi	S B Pri P.Rd. U.M
29	Anurag Mishra	Dinik Jagaran
30	Poroshatam Triwedi	Hindusthan Times
31	Shubham	E.TV News (UP)
32	Abhishek	
33	Mr. Ravindra Kumar	CE - KESCO
34	Mr. R.S. Pandey	Managing Director, KESCO
35	OmPrakash	KESCO

List of Persons who attended Public Hearing in Agra on 16 August, 2012		
S.N	**Name**	**Organization**
1	Chaudhari Buddha Singh	Pradhan, Bharati Kisan Union, Mathura
2	Rahguveer Prasad Pachori	Farmer
3	Bhishampal Singh	Landlord, Farmer
4	Rama Shankar Awasthi	General Consumer
5	Pradeep Singal	RCS Rallies Elec Mills Ltd
6	O.P.Rathi	
7	V.K.Mittal	
8	Vijay Singh	
9	Lal Singh	
10	Prakask Baghal	Farmer
11	Subhash Chandra Pal	Farmer
12	Ranjeet Kumar	Farmer
13	Chaudhari Omprakash Singh	Farmer
14	ChaudhariMahavir Singh	Farmer
15	Shivkumar Verma	Farmer
16	Pancham Singh	Farmer
17	Yojendra Singh	Farmer
18	Rajpal Singh	Farmer
19	Layak Singh	Farmer
20	Sardar Singh	Farmer
21	Rambabu Singh	Farmer
22	Thakur Kaluram	Farmer
23	Chandraveer Singh	Farmer
24	Jagveer Singh	Farmer
25	Omkar Singh	Farmer
26	Hari Singh	Farmer
27	Dharmapal Singh	Farmer
28	Jagdish Parsad	Farmer
29	Omveer Singh	Farmer
30	Saheb Singh	Farmer
31	Veerpal Singh	Farmer
32	Bacchu Singh	Farmer
33	Mohan Singh	Farmer
34	Narayan	Farmer
35	Bhagwan Singh	Farmer
36	Gopal	Farmer
37	Puran Singh	Farmer

List of Persons who attended Public Hearing in Agra on 16 August, 2012		
S.N	**Name**	**Organization**
38	Vijendra Singh	Farmer
39	Mohan Singh Chahar	Farmer
40	Atra Singh	Farmer Leader
41	Kishanpal Singh	Farmer
42	Narendra Singh	Farmer
43	Rameshbabu	Farmer
44	Hari Singh	Farmer
45	Rajendra Singh	Farmer
46	Shahibhushan Mishra	Upabhokta Sarakahan & Kalyan Samiti
47	Mukul Pandey	Upabhokta Sarakahan & Kalyan Samiti
48	Prempal Sharma	Farmer
49	M.M.Sharma	DVVNL
50	Rajiv Jain	DVVNL
51	Ajay Chopra	Agra Vyapar Mandal Sangathan, Agra
52	Mohan Singh	Nagla Raddo Noogawan
53	Omprakash	Farmer
54	Rambabu	Farmer
55	Rameshchandra	Farmer
56	Mohan Singh	Farmer
57	Than Singh	Farmer
58	Deven Singh	Farmer
59	Chaudhari Mahaveer Singh	Farmer
60	Radhacharan Singh	Farmer
61	Kale Khan	Farmer
62	Ramveer Singh	Farmer
63	D.C.Sharma	Farmer
64	V.B.Agarawal	National Chamber of Industries & Commerce
65	S.S.Goyal	National Chamber of Industries & Commerce
66	B.K.Aggarwal	Factory Owner Association
67	Rajesh Goyal	Agra Cold Storage Association, IIA Agra
68	Ravindra Pal Singh	President, Savdaan Vyapari Federation
69	Govind Agarwal	President, Agra Mandal Vyapari Sangthan
70	Kamal Agarwal	Agra Cold Storage Association
71	Kiran Dhawan	Foundry Nagar Industries Association

12.6 FUEL & POWER PURCHASE COST ADJUSTMENT SURCHARGE

Table 12-4 : APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2012 - 13: FPPCA

DVVNL	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Purchase (MU)	**1143**	**1269**	**1399**	**1334**	**1396**	**1327**	**1357**	**1309**	**1497**	**1513**	**1410**	**1596**	**16549**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	372	413	455	434	454	432	442	426	487	492	459	519	5386

	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
MVVNL													
Allocation of Purchases Energy (MU)	**920**	**1022**	**1126**	**1074**	**1124**	**1068**	**1093**	**1054**	**1205**	**1218**	**1135**	**1285**	**13325**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	300	333	367	350	366	348	356	343	392	396	369	418	4337

	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
PuVVNL													
Allocation of Purchases Energy (MU)	**1178**	**1308**	**1442**	**1375**	**1439**	**1367**	**1398**	**1349**	**1542**	**1559**	**1453**	**1645**	**17054**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	383	426	469	447	468	445	455	439	502	507	473	535	5550

	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
PaVVNL													
Allocation of Purchases Energy (MU)	**1634**	**1813**	**1999**	**1906**	**1995**	**1896**	**1939**	**1871**	**2139**	**2162**	**2014**	**2281**	**23651**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	532	590	651	620	649	617	631	609	696	703	656	742	7697

	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
KESCO													
Allocation of Purchases Energy (MU)	**260**	**289**	**318**	**303**	**317**	**302**	**309**	**298**	**340**	**344**	**320**	**363**	**3763**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	85	94	104	99	103	98	100	97	111	112	104	118	1225

	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
NPCL													
Allocation of Purchases Energy (MU)	**25**	**28**	**31**	**29**	**30**	**29**	**30**	**29**	**33**	**33**	**31**	**35**	**361**
Approved average power power per unit (Rs/Unit)													3.25
Allocated Approved Power Purchase Cost (Rs. Crs)	8	9	10	9	10	9	10	9	11	11	10	11	118