



**UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION  
LUCKNOW**

**Petition No. 661 of 2010**

**FILED BY**

**U.P. Jal Vidyut Nigam Limited (UPJVNL)**

**IN THE MATTER OF:**

Determination of Multi Year Tariff (MYT) and approval of Annual Revenue Requirement (ARR) for Hydro Power Stations of U.P. Jal Vidyut Nigam Limited (UPJVNL) for F.Y. 2009-10 to 2013-14

**Rihand**

**Obra**

**Matatila**

**Khara**

**Upper Ganga Canal**

**Belka, Babail & Sheetla**

**Lucknow**

**Dated: 20<sup>th</sup> October, 2011**





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**Petition No. 661 of 2010**

**BEFORE  
THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION  
LUCKNOW**

**Date of Public Hearing : 24.02.2011 and Hearing : 08.03.2011**

**Date of Order : 20.10.2011**

**PRESENT:**

1. Hon'ble Shri Rajesh Awasthi, Chairman
2. Hon'ble Shri Shree Ram, Member
3. Hon'ble Smt. Meenakshi Singh, Member

**IN THE MATTER OF:**

**Determination of Multi Year Tariff (MYT) and approval of Aggregate Revenue Requirement (ARR) for the Hydro Power Stations of U. P. Jal Vidyut Nigam Limited (UPJVNL) for F.Y. 2009-10 to 2013-14.**

**BETWEEN**

UP Jal Vidyut Nigam Limited (UPJVNL),  
12<sup>th</sup> Floor, Shakti Bhawan Ext.,  
14, Ashok Marg, Lucknow – 226 001

-----Petitioner

**AND**

1. The Chairman and Managing Director, U.P. Power Corporation Ltd., 7<sup>th</sup> Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow
2. The Managing Director, Purvanchal Vidyut Vitran Nigam Ltd., 132KV Substation, Bhikharipur, Vidyut Nagar, Varanasi.



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3. The Managing Director, Paschimanchal Vidyut Vitran Nigam Ltd., Victoria Park Meerut.
  4. The Managing Director, Madhyanchal Vidyut Vitran Nigam Ltd., Prag Narain Road, Lucknow.
  5. The Managing Director, Dakchinanchal Vidyut Vitran Nigam Ltd., Gailana Road, Agra.
  6. The Managing Director, Kanpur Electricity Supply Co. Ltd., KESA House, Kanpur
  7. The Chief Executive Officer, Noida Power Company Limited, H Block, Alpha II, Greater Noida.

-----Respondent(s)

**The following were present:**

1. Sri G. S. Sinha, Chief Engineer (O&M), UPJVNL
2. Sri R. K. Johar, Chief Engineer (PPA), UPPCL
3. Sri Jayant Verma, Executive Engineer (PPA), UPPCL
4. Sri S. K. Tripathi, Executive Engineer (Com.), UPJVNL
5. Sri S. Joshi, Executive Engineer, UPJVNL
6. Sri Rajiv Raizada, Assistant Engineer, UPJVNL
7. Sri A. N. Ghosh, Consultant, UPPCL
8. Sri B. S. Goel, Consultant, UPERC
9. Sri Bhusan Rastogi, Consultant, UPJVNL
10. Sri Ramashankar Awasthi
11. Sri P. Choudhary, SE, UPRVUNL
12. Sri Manish Yadav, EE, UPRVUNL
13. Sri P. Khatri, EE, UPJVNL
14. Sri A. K. Mishra, G.M., UPJVNL

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## Order

### 1. FOREWORD

1.1 In accordance with Regulation 5 of UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 the U.P. Jal Vidyut Nigam Limited (UPJVNL) has filed petition for approval of Aggregate Revenue Requirement (ARR) & determination of Multi Year Tariff for FY 2009-10 to FY 2013-14 in respect of UPJVNL Hydro Power Stations namely Rihand (6x50 MW), Obra (3x33 MW), Matatila (3x10 MW), Khara (3x24 MW) and Upper Ganga Canal based small Hydro Power Stations, namely Nirgajini (2x2.5 MW), Chitaura (2x1.5 MW), Salawa (2x1.5 MW) and Bhola (4x0.375 MW + 2x0.6 MW). UPJVNL has also commissioned two small hydro power stations in District Saharanpur, viz. Belka (2x1.5 MW) and Babail (2x1.5 MW) and one small hydro power station in District Jhansi, viz. Sheetla (3x 1.2 MW) but the details of Aggregate Revenue Requirement (ARR) and Tariff proposal were not submitted for determination of MYT for these three power stations. In case of Belka and Babail, information regarding capital cost and Power Purchase Agreement (PPA) etc. was sought for by the Commission vide order dated 23.01.2008 in Petition No.491 of 2007. Similarly for Sheetla, directions were given by the Commission vide order dated 26.03.2007 in Petition No.48 of 2006. Based on preliminary examination of the subject petition, a deficiency note was issued to UPJVNL on July 14, 2010. UPJVNL, vide its reply dated August 31, 2010, informed the Commission that despite their continued follow ups and persuasion, U. P. Power Corporation Limited (UPPCL) did not enter into Power Purchase Agreement (PPA) for Belka, Babail and Sheetla small hydro power stations. UPJVNL had further submitted that UPPCL may be directed by the Commission to complete the process of PPA as early as possible so that the tariff for these small hydro power stations could be proposed to the Commission. The counter affidavit on UPJVNL's Petition was filed by UPPCL, on November 23, 2010. Through this counter affidavit UPPCL sought that the following formalities be completed by UPJVNL.

- (i) Submission of Power House-wise Power Purchase Agreements (PPAs) covering the period from 01.04.2004 to 31.03.2009 & from 01.04.2009 to 31.03.2014.
- (ii) Report compliance regarding converting the high Cost loans by swapping.

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- (iii) Report of Statutory Audit and Audit by the office of Comptroller Auditor General of India (CAG) regarding the consideration of values of Assets to UPRVUNL for period 08.11.2001 to 31.03.2009 as per Ministry of Power, Government of India order no. 42/7/2000 dated 05.11.2001 w.e.f. 08.11.2001.
  - (iv) Calculation of tariff on the basis of applicable orders of UPERC based on the reduced Gross Fixed Assets (GFA) and pass on the credit of excess payment due to reduction in GFA w.e.f. 08.11.2001 to 31.03.2009 to UPRVUNL.
  - (v) Submission of Renovation & Modernization (R&M) Schemes separately as per the provisions of UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009 for the approval of the Commission.
  - (vi) Providing a copy of order of the Ministry of Home Affairs regarding payment of Service Tax by CISF w.e.f. 01.04.2009.

It was noticed by the Commission that the PPAs in respect of Power Stations of UPJVNL, entered between UPPCL and UPJVNL on December 18, 2000 for a term of 3 years was effective from April 01, 2001. The PPA did not include the small hydro power stations. There was a provision in the said PPA that if UPPCL continues to get power from UPJVNL's Hydro Power Generating Stations even after expiry of the agreement without further renewal or formal extension thereof then all the provisions of the agreement would continue to operate till the agreement was formally renewed / extended or replaced. The Commission had observed that the PPAs in general were not in place for the hydro power stations of UPJVNL. UPPCL was taking power from these power stations since long but had never bothered to regularize the supply of power through PPAs. In its counter affidavit the UPPCL has very explicitly pointed out that the PPA dated 18.12.2000 between UPPCL and UPJVNL has become outdated in the present scenario i.e. after the transfer of Dhalipur, Dhakrani, Chhibro, Kulhal, Chilla, Maneribhali, Khodri, Mohammadpur and Pathri hydro power stations to Uttarakhand. Hence the Commission had again directed UPPCL and UPJVNL to submit the PPAs for hydro/small hydro power stations including Belka, Babail and Sheetla for upto atleast the period covering the consideration period of MYT, i.e. upto FY 2013-14 within two months from the date of admittance order. With these directions the ARR and MYT petition filed by UPJVNL was admitted by the Commission vide order dated January 18, 2011 with direction to the Petitioner to publish the



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application in abridged form in atleast two newspapers within 7 days from the date of order giving 7 days time to all concerned for submission of suggestions and objections. The Petitioner got the details published in Dainik Jagaran, Lucknow (Hindi) and Times of India, Lucknow (English) newspapers on 23.01.2011 (Annexure-1). The Petitioner was also directed to put the petitions along with the relevant documents on its website and to make available at its Registered Office hard copies of the same for inspection by any person during office hours.

- 1.2** In the matter a Public Notice was given by the Commission to the stakeholders and interested parties to give opportunity to submit comments/ objections/ suggestions to petition in writing directly to the Commission's Office with an advance copy to the Petitioner, personally or by post. The Public Notice for hearing was published in Amar Ujala, Lucknow (Hindi) and Times of India, Lucknow (English) newspapers on 09.02.2011 (Annexure-2) and hearing in the matter was held in the office of the Commission at 15:00 hrs. on 24.02.2011.
- 1.3** In response to the public notice published in the above mentioned newspapers, the Commission received only one objection/ suggestion/ comment. The lone response was a letter dated 24.2.2011 from one Sri Ramashanker Awasthi. Three points were raised by Sri Awasthi in his letter addressed to the Commission. UPJVNL has submitted their response on 08.03.2011. As per point no.1 it was indicated by Sri Awasthi that according to the award of the Appellate Tribunal for Electricity in Appeal No.56/2010 & 167/2010, Bihar State Hydro Electric Power Corporation Limited v/s Bihar Electricity Regulatory Commission it was ordered that Electricity Tariff may not be determined till the audited balance sheet and complete details are provided. In reply it was informed by UPJVNL that they have submitted the audited accounts up to FY 2007-08 alongwith the MYT Petition. The Audit of the Annual Accounts for FY 2008-09 could not be completed by the time the ARR & MYT Petition was filed and therefore the same was not submitted. The second point raised by Sri Awasthi was related with the True up of the earlier Tariff Orders issued by the Commission on the ARR and Tariff Petition filed by UPJVNL. He was informed that since the earlier UPERC (Terms & Conditions for Generation of Tariff) Regulations, 2004 was not having the provision for True up, therefore, no True up was allowed. His last point was related with the revision of GFA in the MYT petition which has been reduced from ₹ 432.49 Crore to ₹ 320.19 Crore. In

this reference, it is to elucidate that as per the projections provided by UPJVNL, the GFA of the Power Stations located in the geographical area at the time of transfer to Uttarakhand Jal Vidyut Nigam Limited as on 08.11.2001 under U.P. Reorganization Act, 2000 was assessed to ₹ 676.22 Crore leaving the residual GFA worth ₹ 320.19 Crore in U.P. with UPJVNL under the Uttarakhand Transfer Scheme. The first Transfer Scheme had GFA for UPJVNL as ₹ 432.49 Crore therefore earlier the tariff was decided based on this figure. Since the transfer of GFA determined for UPJVNL has been changed under the Uttarakhand Transfer Scheme as ₹ 320.19 Crore which has also been approved by the Board of Directors of UJVNL, it may be taken as provisional figure for determination of tariff, although, it is subject to finalization. UPJVNL has expressed its willingness to consider the reduced GFA for determination of Multi Year Tariff for FY 2009-10 to FY 2013-14 provisionally. However, the same shall be subject to finalization of Transfer of Assets and Liabilities between UPJVNL and UJVNL strictly as per the principles laid down in MoP, Government of India order no.42/ 7 / 2000-R & R dated 05.11.2001 and other related documents.

- 1.4** During the hearing, the Representative of the Petitioner summarized the contents of the petition where as the UPPCL raised the objections as submitted in the counter affidavit. UPJVNL had duly replied the objections raised by UPPCL through a rejoinder vide letter no.115/CE(C&M)/MYT dated 09.02.2011. A copy of which was also endorsed to UPPCL. The UPPCL had further submitted a reply of rejoinder vide letter no.148/CE/PPA/UPJVNL dated 19.02.2011. UPJVNL in turn submitted reply to the Commission vide letter no.199-CE(O&M)/Commercial/MYT dated 08.02.2011 under intimation to UPPCL. The Commission has duly taken the note of all the submissions while taking decision in respect of individual components of the Tariff Structure. Since there were insufficient submissions on the details of R&M proposals and on Belka, Babail & Sheetla small hydro power stations, the Commission decided to hold another hearing on 08.03.2011. UPJVNL was directed to submit the requisite details. Subsequently, UPJVNL filed additional submission and requisite details on 15.04.2011 and 30.05.2011.

## 2. BACKGROUND

### (A) Regulatory Framework

The Uttar Pradesh Electricity Reforms Act, 1999 (UP Act No. 24 of 1999, herein after referred to as the Reforms Act) set off the reforms in the power sector of Uttar Pradesh. According to the provisions of sub-sections (1) and (2) of section 23 of the Reforms Act, vide notification No. 149/P-1/2000-24, Lucknow, January 14, 2000, Uttar Pradesh Electricity Reforms Transfer Scheme, 2000 (hereinafter referred to as the Transfer Scheme) was notified. This transfer scheme had reorganized Uttar Pradesh State Electricity Board (UPSEB) by unbundling it into three entities, i.e. Uttar Pradesh Power Corporation Limited (UPPCL), Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) and Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL) w.e.f. 14.1.2000. UPPCL was vested with the responsibility of transmission and distribution of electricity, UPJVNL with the responsibility of hydro generation and UPRVUNL, the company already existing prior to the date of reorganization of UPSEB, was vested with the responsibility of thermal generation.

The Electricity Act, 2003 (hereinafter referred to as EA, 2003) came into effect from 10<sup>th</sup> June, 2003. This Act repealed all the erstwhile Electricity Acts in the country, viz. Indian Electricity Act, 1910 (9 of 1910), The Electricity (Supply) Act, 1948 (54 of 1948) and the Electricity Regulatory Commissions Act, 1998 (14 of 1998). Since the enforcement of this act, the power sector in India has undergone major organizational and functional changes. EA, 2003 has specified in sub-section (3) of section 185 read with the schedule of enactments that the provisions of Uttar Pradesh Electricity Reforms Act, 1999 shall be applicable where it is relevant as far as it is not inconsistent with EA, 2003.

Under section 61 of EA, 03, the State Electricity Regulatory Commissions are required to specify the terms and conditions for determination of tariff and Section 86 of the Act mandates the Electricity Regulatory Commission to determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State.

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In exercise of powers conferred under section 181 read with the provisions of section 61 of EA 2003, UPERC notified on 18.6.05 the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2004 effective from the date of notification. Before expiry of these Regulations, the Commission had notified the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009 (hereinafter referred to as Generation Regulations, 09) w.e.f. 01.04.2009 and is to remain effective till 31.3.2014, unless reviewed earlier or extended by the Commission.

For the regulation of generation of electricity from Captive and Non-Conventional Energy sources in the State, UPERC has separate Regulations recognized as CNCE Regulations.

**(B) Earlier Tariff Orders**

- (i) ARR and Tariff in respect of hydro power stations for year 2005-06, 2006-07 & 2007-08, was determined and approved by the Commission vide order dated March 26, 2007. However, the same was subsequently revised, on filing of the review petition by UPJVNL, as per Commission's Order dated January 15, 2008.
- (ii) ARR and Tariff in respect of hydro power stations of UPJVNL for FY 2008-09 was determined and approved vide Commission's Order dated April 22, 2009.

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### 3. METHODOLOGY FOR TARIFF DETERMINATION

Tariff shall be determined in respect of a generating station under UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009. Some Pre-requisites for filing an application, as provided under Regulations, for tariff determination by a generating company are as below:

- (1) The application for determination of tariff shall be filed for a period of 5 years by a generating company, covered under Clause-5 of Regulation-2, on the basis of terms and condition for determination of tariff approved by the Commission in a Power Purchase Agreement.
- (2) In case of the existing generating station, the generating company shall make an application for determination of tariff as per Appendix I (Part-II) of the Regulations.
- (3) In case of a generating station under construction, provisional tariff may be determined in advance based on capital expenditure actually incurred up to the date of making of the application, duly audited and certified by the statutory auditors, which shall be charged from the date of commercial operation. On completion, a fresh application for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the generating station, duly audited and certified by the statutory auditors, as per Appendix-I (Part-II) shall be made by the generating company. The over or under recovery of charges on account of provisional tariff shall be subject to retrospective adjustment along with simple interest calculated at rate equal to short term Prime Lending Rate of State Bank of India prevailing as on 1st April of the relevant year.

Tariff for sale of electricity from a hydro power generating station shall comprise of the annual capacity (fixed) charges consist of –

- (a) Interest on loan capital;
- (b) Depreciation, including Advance Against Depreciation;
- (c) Return on equity;



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- (d) Operation and maintenance expenses including insurance;
  - (e) Interest on working capital.

The methodology for determination of tariff for Belka, Babail & Sheetla small hydro power stations shall be covered separately.



#### 4. MULTI YEAR TARIFF PETITION FOR FY 2009-10 to 2013-14

##### (i) Existing Capacities

The details of existing hydro power generating stations of UPJVNL are listed in table below:

**Table 4. 1**

S.N.	Hydro Power Station	Unit No.	Installed Capacity (in MW)	Date of Commercial Operational	Age of Plant as on 01.04.2009 (In Yrs.)
1	Rihand Power Station	1	50	1962	47
		2	50	1962	47
		3	50	1962	47
		4	50	1962	47
		5	50	1962	47
		6	50	1966	43
		<b>Total Capacity</b>	<b>300</b>	<b>Average Age</b>	<b>46</b>
2	Obra Hydel Power Station	1	33	15-5-70	39
		2	33	7-12-70	38
		3	33	8-4-71	38
		<b>Total Capacity</b>	<b>99</b>	<b>Average Age</b>	<b>38</b>
3	Matatila Power Station	1	10	26-2-65	44
		2	10	2-6-65	44
		3	10	3-9-65	44
		<b>Total Capacity</b>	<b>30</b>	<b>Average Age</b>	<b>44</b>
4	Khara Power Station	1	24	29-12-92	16
		2	24	29-12-92	16
		3	24	29-12-92	16
		<b>Total Capacity</b>	<b>72</b>	<b>Average Age</b>	<b>16</b>
5	Nirgazini Power Station	1	2.5	1937	72
		2	2.5	1937	72
		<b>Total Capacity</b>	<b>5</b>	<b>Average Age</b>	<b>72</b>
6	Chitaura Power Station	1	1.5	1938	71
		2	1.5	1938	71
		<b>Total Capacity</b>	<b>3</b>	<b>Average Age</b>	<b>71</b>
7	Salawa Power Station	1	1.5	1937	72
		2	1.5	1937	72
		<b>Total Capacity</b>	<b>3</b>	<b>Average Age</b>	<b>72</b>

S.N.	Hydro Power Station	Unit No.	Installed Capacity (in MW)	Date of Commercial Operational	Age of Plant as on 01.04.2009 (In Yrs.)
8	Bhola Power Stations	1	0.375	Between 1929-1935	80
		2	0.375		79
		3	0.375		78
		4	0.375		77
		5	0.6		75
		6	0.6		74
		<b>Total Capacity</b>	<b>2.7</b>	<b>Total Capacity</b>	<b>77</b>
<b>Total</b>		<b>514.7</b>		<b>55</b>	

Post the application of Uttarakhand Transfer Scheme, UPJVNL has commissioned the following small hydro power stations:

**Table 4. 2**

Name of the Project	District	Unit Capacities	Capacity (MW)	Date of Commercial Operational
Belka	Saharanpur	2 x 1.5	3.0	2001-02
Babail	Saharanpur	2 x 1.5	3.0	2001-02
Sheetla	Jhansi	3 x 1.2	3.6	2006-07

**(ii) Plan for Renovation and Modernization (R & M)**

The average age of the hydro generating stations of UPJVNL excluding Khara hydro power station is more than 35 years. As the useful life of hydro power plant is considered as 35 years, to cope up with the vintage effect, UPJVNL has planned Renovation & Modernization (R&M) for its Rihand, Obra and Matatila hydro power stations which are under various stages of implementation. A snapshot of the various Ongoing & Proposed R&M Schemes is presented below:

**Renovation & Modernization Schemes  
Ongoing/Proposed R&M Schemes**

**Table 4. 3**

Name of Hydro Power Stations	Nature of Scheme	Capacity	Agency	Project Cost (₹ Cr.)	Benefits from the Scheme
Rihand	R&M	300 MW	BHEL	136.27	Maximization of Peak-hour Generation Increase in Availability Increase in Efficiency



Name of Hydro Power Stations	Nature of Scheme	Capacity	Agency	Project Cost (₹ Cr.)	Benefits from the Scheme
Obra	R&M	99 MW	BHEL	58.80	-do- Life Extension by 20 Years
Matatila	R&M	30 MW	BHEL	10.36	-do-

**(iii) ARR and Tariff submitted by UPJVNL**

Total Fixed Cost (Rs Cr.), Saleable Energy (MU) and Unit Rates (Rs/kWh) of the UPJVNL Hydro power plants for the control period under consideration have been proposed as under:

**For FY 2009-10**

(Amount in ₹ Crore)

Particulars	Rihand	Obra	Matatila	Khara	UGC	Total
Interest on Loan	0.00	0.00	0.00	9.57	0.00	<b>9.57</b>
Depreciation	0.81	0.25	0.15	3.13	0.08	<b>4.41</b>
Return on Equity	2.51	0.87	0.50	11.40	0.17	<b>15.45</b>
O&M Expenses	18.66	9.08	4.14	6.01	4.85	<b>42.72</b>
IoWC	1.00	0.48	0.22	0.80	0.25	<b>2.75</b>
<b>Total</b>	<b>22.97</b>	<b>10.68</b>	<b>5.00</b>	<b>30.91</b>	<b>5.35</b>	<b>74.91</b>
Saleable Energy (MU)	909	276	121	379	32	<b>1,717</b>
<b>Unit Rate (Rs./kWh)</b>	<b>0.25</b>	<b>0.39</b>	<b>0.41</b>	<b>0.82</b>	<b>1.69</b>	<b>0.44</b>

**For FY 2010-11**

(Amount in ₹ Crore)

Particulars	Rihand	Obra	Matatila	Khara	UGC	Total
Interest on Loan	1.90	0.00	0.00	9.18	0.00	<b>11.08</b>
Depreciation	0.81	0.25	0.15	3.13	0.08	<b>4.41</b>
Return on Equity	2.51	0.87	0.50	11.40	0.17	<b>15.45</b>
O&M Expenses	19.72	9.59	4.37	6.35	5.13	<b>45.17</b>
IOWC	1.10	0.50	0.23	0.81	0.26	<b>2.90</b>
<b>Total</b>	<b>26.03</b>	<b>11.22</b>	<b>5.25</b>	<b>30.88</b>	<b>5.64</b>	<b>79.02</b>
Saleable Energy (MU)	909	276	121	379	32	<b>1,717</b>
<b>Unit Rate (Rs./kWh)</b>	<b>0.29</b>	<b>0.41</b>	<b>0.43</b>	<b>0.81</b>	<b>1.78</b>	<b>0.46</b>

**For FY 2011-12**

*(Amount in ₹ Crore)*

<b>Particulars</b>	<b>Rihand</b>	<b>Obra</b>	<b>Matatila</b>	<b>Khara</b>	<b>UGC</b>	<b>Total</b>
Interest on Loan	5.61	0.00	0.00	8.80	0.00	<b>14.40</b>
Depreciation	2.26	0.25	0.15	3.13	0.08	<b>5.87</b>
Return on Equity	4.62	0.87	0.50	11.40	0.17	<b>17.57</b>
O&M Expenses	20.85	10.14	4.62	6.71	5.42	<b>47.75</b>
IOWC	1.30	0.53	0.24	0.82	0.28	<b>3.18</b>
<b>Total</b>	<b>34.64</b>	<b>11.80</b>	<b>5.52</b>	<b>30.87</b>	<b>5.95</b>	<b>88.77</b>
Saleable Energy (MU)	909	276	121	379	32	<b>1,717</b>
<b>Unit Rate (Rs./kWh)</b>	<b>0.38</b>	<b>0.43</b>	<b>0.46</b>	<b>0.81</b>	<b>1.88</b>	<b>0.52</b>

**For FY 2012-13**

*(Amount in ₹ Crore)*

<b>Particulars</b>	<b>Rihand</b>	<b>Obra</b>	<b>Matatila</b>	<b>Khara</b>	<b>UGC</b>	<b>Total</b>
Interest on Loan	9.13	0.00	0.00	8.42	0.00	<b>17.55</b>
Depreciation	3.72	0.25	0.15	3.13	0.08	<b>7.32</b>
Return on Equity	6.73	0.87	0.50	11.40	0.17	<b>19.68</b>
O&M Expenses	22.04	10.72	4.89	7.10	5.73	<b>50.48</b>
IOWC	1.51	0.56	0.26	0.83	0.29	<b>3.45</b>
<b>Total</b>	<b>43.13</b>	<b>12.41</b>	<b>5.79</b>	<b>30.88</b>	<b>6.27</b>	<b>98.49</b>
Saleable Energy (MU)	909	276	121	379	32	<b>1,717</b>
<b>Unit Rate (Rs./kWh)</b>	<b>0.47</b>	<b>0.45</b>	<b>0.48</b>	<b>0.81</b>	<b>1.98</b>	<b>0.57</b>

**For FY 2013-14**

*(Amount in ₹ Crore)*

<b>Particulars</b>	<b>Rihand</b>	<b>Obra</b>	<b>Matatila</b>	<b>Khara</b>	<b>UGC</b>	<b>Total</b>
Interest on Loan	10.54	2.39	0.40	8.03	0.00	<b>21.36</b>
Depreciation	5.17	2.15	0.68	3.13	0.08	<b>11.22</b>
Return on Equity	8.84	0.87	0.50	11.40	0.17	<b>21.79</b>
O&M Expenses	23.30	11.34	5.17	7.50	6.06	<b>53.37</b>
IOWC	1.68	0.68	0.29	0.85	0.31	<b>3.80</b>
<b>Total</b>	<b>49.53</b>	<b>17.43</b>	<b>7.04</b>	<b>30.92</b>	<b>6.62</b>	<b>111.54</b>
Saleable Energy (MU)	909	276	121	379	32	<b>1,717</b>
<b>Unit Rate (Rs./kWh)</b>	<b>0.54</b>	<b>0.63</b>	<b>0.58</b>	<b>0.82</b>	<b>2.09</b>	<b>0.65</b>

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## 5. TARIFF DESIGN

The tariff shall be structured on the basis of following observations of the Commission:

- a. The data of GFA, NFA, Debt, Equity and Accumulated Depreciation as on 31.3.09, as submitted by UPJVNL in the petition, shall be considered as baseline data for calculation of tariff and ARR for the MYT period from FY 2009-10 to 2013-14. The NFA, Debt, Equity and Accumulated Depreciation have been worked back after taking into consideration the amount of accumulated depreciation already allowed by the Commission in earlier orders. In respect of Rihand, Obra, Matatila and Upper Ganga Canal Power Stations the originally employed Capital Outlay has been recovered to the extent of 90% upto 31.3.2009.
- b. Return on Equity shall be considered 15.5 % as provided in the UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009.
- c. Interest on Loans shall be considered equal to the Prime Landing Rate (PLR) of State Bank of India (SBI) as on April 01, 2009 i.e. @ 12.25% as earlier allowed by the Commission vide Tariff Order for FY 2008-09. The UPJVNL has not proposed any new loan to be availed from Financial Institutions. The R&M Schemes being proposed during MYT period under consideration are proposed to be financed through internal resources. Therefore, the rate of interest at 12.25 % shall also be applicable on the normative loans which will be 70% of the amount proposed to be spent on R&M Schemes.
- d. UPJVNL as per ARR and Tariff Petition has claimed depreciation on the prescribed formats after applying the rates of depreciation approved by the Commission as per UPERC (Terms & Conditions for Generation Tariff), Regulations 2009. Since in respect of Rihand, Obra, Matatila and Upper Ganga Canal hydro power stations depreciation equivalent to 90% of initial investment has already been allowed. Hence, the depreciation shall be allowed only on additional capital outlay at the specified rates.

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- e. The O&M expenditures have been claimed by the Petitioner as provided under the Regulations. The same shall be considered for determination of tariff for the period under consideration. The payment of arrears due for earlier years but paid in the FY 2009 - 10 to FY 2013 – 14 on account of pay revision subsequent to application of 6<sup>th</sup> Pay Commission shall be paid additionally as per actuals.
- f. The Working Capital has been considered as submitted by UPJVNL under the provisions of Regulations. The rate of interest on working capital has been taken as per short term prime lending rate of SBI as on 1<sup>st</sup> April of the year.

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## 6. COMMISSION'S APPROACH FOR DETERMINATION OF MYT:

UPJVNL has filed reduced value of GFA in its petition on the basis of Second Transfer Scheme which has also been approved by the Board of Directors of UPJVNL in its 70<sup>th</sup> meeting dated 7<sup>th</sup> August, 2003. UPJVNL has requested the Commission to consider the revised GFA as claimed by them in the petition for determination of MYT and approval of ARR. Hence, the Commission considers the revised GFA as provisional figure for determination of tariff. However, the same shall be subject to revision on finalization of Transfer of Assets and Liabilities between UPJVNL and UJVNL strictly as per the principles laid down in order no.42/ 7 / 2000-R & R dated 05.11.2001 of MoP, Government of India and other related documents. Any over or under recovery shall be adjusted retrospectively with simple interest at the rate equal to short term PLR of SBI prevailing as on 1<sup>st</sup> April of the respective year

UPJVNL has not obtained the prior approval of the Commission for the R&M Schemes under implementation. The Petitioner has, however, provided the complete details of these Renovation & Modernization schemes along with the approval of the Central Electricity Authority (CEA). The scheme for R&M of Rihand was initially proposed to be funded through APDP but subsequently the loan portion was proposed to be availed from PFC. In respect of R&M Schemes of Obra and Matatila, the initial proposal was to avail the loan portion from PFC. Now all the three R&M schemes of Rihand, Obra and Matatila hydro power stations are proposed to be financed through internal accruals taking 30% as Equity and 70% Debts for the purpose of determination of tariff.

In view of above, the Commission opines that keeping in view the vintage of these power stations, the R&M Schemes proposed by UPJVNL may be beneficial as they would enhance the efficiency and increase the life of these plants. The objections raised by the UPPCL regarding the proposed R&M Schemes are overruled as the improved efficiency of the plants, after implementations of the R&M Schemes, are likely to ensure better supply of power from these hydro power stations which have already outlived their normal life. Therefore, the Commission approves the R&M

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Schemes as proposed by UPJVNL and the Multi Year Tariff shall be determined accordingly.

The Multi Year Tariff of Rihand, Obra, Matatila, Khara and Upper Ganga Canal hydro power stations have been considered under the provisions of UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009.

Although, UPJVNL had not submitted the tariff petitions for small hydro power stations namely Belka, Babail & Sheetla, the Commission had decided to go ahead with the determination of tariff for these plants also. The Commission had taken this measure as there is a separate Regulation covering small hydro power stations operating in the state of U.P. The Regulation which covers such plants is called UPERC (Captive and Non-conventional Energy Generating Plants) Regulations, 2009.

UPJVNL has furnished the agreed capital expenditure for Belka & Babail small hydro power stations but the details have not been provided in the prescribed formats as per UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009. Hence, the Commission is not in a position to take up the process of determination of tariff for these projects in this MYT order and the same shall be taken up separately.

UPJVNL has also not submitted the requisite details regarding Sheetla small hydro power station. However, according to the provisions contained in CNCE Regulations, 2009, the Commission considers that the effective tariff for Sheetla small hydro power station during the MYT period shall be as provided under the CNCE Regulations, 2009.

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## 7. APPROVED MULTI YEAR TARIFF AND ARR

Based on the deliberations discussed herein above, the generating station-wise MYT and ARR for FY 2009-10 to FY 2013-14 shall be as detailed in the following sections.

[Section - 1](#) – Rihand hydro power station

[Section - 2](#) – Obra hydro power station

[Section - 3](#) – Matatila hydro power station

[Section - 4](#) – Khara hydro power station

[Section - 5](#) – Upper Ganga Canal hydro power stations

[Section - 6](#) – Belka, Babail and Sheetla small hydro power stations







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**Section -1**

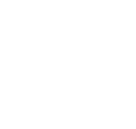
**Multi Year Tariff**

**for**

**Rihand Hydro Power Station**

**for**

**FY 2009-10 to 2013-14**



## ARR and MYT as according to petition

In the Petition, UPJVNL has proposed the fixed charges for the electricity exported as given in the table below:

**Table 7.1. 1**

Rihand Hydro Power Station	2009-10	2010-11	2011-12	2012-13	2013-14
Design Energy (MU)	920	920	920	920	920
Auxiliary Consumption (MU)	11	11	11	11	11
Energy Sent Out (MU)	909	909	909	909	909
Fixed Charges (₹ Cr.)	22.97	26.03	34.64	43.13	49.53
Unit Rate (₹/kWh)	0.25	0.29	0.38	0.47	0.54

Component-wise description of the Fixed Charge has been tabulated as under:

**Table 7.1. 2**

(Amount in ₹ Crore)

S. No.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	0.81	0.81	2.26	3.72	5.17
2	Interest on Loan	0.00	1.90	5.61	9.13	10.54
3	Return on Equity	2.51	2.51	4.62	6.73	8.84
4	Interest on Working Capital	1.00	1.10	1.30	1.51	1.68
5	O & M Expenses	18.66	19.72	20.85	22.04	23.30
	<b>TOTAL:</b>	<b>22.98</b>	<b>26.04</b>	<b>34.64</b>	<b>43.13</b>	<b>49.53</b>

## ARR and MYT as determined by the Commission

### (a) Components of fixed charges:

For determination of components of fixed charges for MYT period of FY 2009-10 to 2013-14, the Commission opines that the parameters provided under UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 shall be considered. Hence, the Commission has decided to allow the fixed charges components as below:

**Table 7.1. 3**

Components of Fixed Charge	Value	Remark
Return on equity	15.5%	As per the Regulations
Interest on Loans	12.25%	Prime Lending Rate of State Bank of India
O & M Expenses	Normative	As per the Regulations
Depreciation	Normative	As per the Regulations
Interest on working capital	12.25 %	As per the Regulations

**(b) R & M of Plant**

Rihand Hydro Power Station (6 x 50 MW) is more than 46 years old. A comprehensive Renovation & Modernization (R&M) scheme has been proposed by UPJVNL. The proposed scheme involves an expenditure of Rs 136.27 Cr in a phased manner. A Detailed Project Report (DPR) has been submitted by UPJVNL for approval of estimated cost to be incurred on R&M during the tariff period. The investment proposal under DPR has been examined and is hereby approved by the Commission. Accordingly, the additional capitalization on R&M scheme for MYT period of FY 2009-10 to 2013-14 as claimed by UPJVNL has been allowed in the tariff order.

**(c) Gross Fixed Assets (GFA) and its Components**

The value of Gross Fixed Assets (GFA) with financing alongwith the value of Net Fixed Assets (NFA) is essential to determine correctly the Return on Equity, Interest on balance Loans and Depreciation at the end of each financial year. Therefore, the GFA and NFA at the end of each financial year commencing from FY 2009-10 FY 2013-14 has been worked out alongwith Equity and Debts taking base figures as claimed by the UPJVNL. The amount of GFA, NFA and Financing thereof are tabulated as under:

**Calculation of GFA & NFA including financing**

**Table 7.1. 4**

*(Amount in ₹ Crore)*

<b>Rihand Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening GFA	53.89	53.89	99.31	144.73	190.15
Additions	0.00	45.42	45.42	45.42	0.00
Closing GFA	<b>53.89</b>	<b>99.31</b>	<b>144.73</b>	<b>190.15</b>	<b>190.15</b>
<b>Financing:</b>					
Opening Equity	16.17	16.17	29.80	43.43	57.06
Additions	0.00	13.63	13.63	13.63	0.00
Closing Equity	<b>16.17</b>	<b>29.80</b>	<b>43.43</b>	<b>57.06</b>	<b>57.06</b>
Opening Accu. Dep.	42.87	43.04	43.21	44.83	47.91
Dep. During the year	0.17	0.17	1.62	3.08	4.53
Closing Accu. Dep.	<b>43.04</b>	<b>43.21</b>	<b>44.83</b>	<b>47.91</b>	<b>52.44</b>
Net Fixed Assets	<b>10.85</b>	<b>56.10</b>	<b>99.90</b>	<b>142.24</b>	<b>137.71</b>
Adjustment in Accu. Dep	<b>9.35</b>	<b>9.35</b>	<b>9.35</b>	<b>9.35</b>	<b>9.35</b>
Adjusted NFA	<b>20.20</b>	<b>65.45</b>	<b>109.25</b>	<b>151.59</b>	<b>147.06</b>

<b>Rihand Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Debts (Normative)	<b>4.20</b>	<b>4.03</b>	<b>35.65</b>	<b>65.82</b>	<b>94.53</b>
Additions	0.00	31.79	31.79	31.79	0.00
Re-payment	0.17	0.17	1.62	3.08	4.53
Closing Debts	<b>4.03</b>	<b>35.65</b>	<b>65.82</b>	<b>94.53</b>	<b>90.00</b>

The opening GFA on 1.4.2009 has been taken from the petition as submitted by UPJVNL. The additions during the tariff period have been made according to the approved capitalization on R&M scheme. Since till the end of FY 2003-04, the depreciation has been duly allowed in the earlier tariff orders by the Commission to the extent of 90% of the GFA excluding cost of land, computation of residual NFA is essential for determination of opening accumulated depreciation as on 1.4.2009. The additional capitalization during FY 2004-05 to FY 2008-09 is amounting to ₹. 6.71 Cr. and repayment of loan ₹ 0.50 Cr.

Additions in GFA during FY 04-05 to FY 08-09 and Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09 as submitted by UPJVNL in the petition is as given below.

**Table 7.1. 5** *(Amount in ₹ Crore)*

<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>TOTAL</b>
Ope. Bal. of Additional Capital Investment	0.00	0.58	6.42	6.46	6.47	<b>19.93</b>
Additional Capital Investment during the year	0.58	5.84	0.04	0.01	0.24	<b>6.71</b>
Closing Bal. of Additional capital Investment	0.58	6.42	6.46	6.47	6.71	<b>26.64</b>
Financing:						
Equity	0.17	1.75	0.01	0.00	0.07	<b>2.01</b>
Normative Loans	0.41	4.09	0.03	0.01	0.17	<b>4.70</b>
Depreciation @2.57% (Considered for Re-payment)	0.00	0.01	0.16	0.16	0.17	<b>0.50</b>
Depreciation already allowed	0.00	0.01	0.16	0.16	0.17	<b>0.50</b>

Empirical formula for determination of opening accumulated depreciation as on 1.4. 2009 has been worked out as follows:

**Op. Accu. Dep. as on 01.04.2009**

$$= (\text{Op. Bal. of GFA as on 01.04.09} - \text{Cost of Land incorporated in GFA} - \text{Additions in GFA during FY 04-05 to FY 08-09}) \times 0.9 + \text{Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09}$$

$$= (\text{₹ 53.89 Cr.} - \text{₹ 0.09 Cr.} - \text{₹ 6.71 Cr.}) \times 0.9 + \text{₹ 0.50 Cr.}$$

$$= \text{₹ 42.87 Cr.}$$

Adjustment in accumulated depreciation has been considered to arrive at the balance debt amount. To ascertain the adjustment amount, the normative debts as 70% of GFA and the repayment of loans on additional capitalization on 1.4.2009 have been subtracted from the accumulated depreciation till end of FY 2008-09. The numerical expression is as below:

$$\text{Adjustment in accumulated depreciation}$$

$$= \text{₹ 42.87 Cr.} - (\text{₹ 53.89 Cr.} - \text{₹ 6.71 Cr.}) \times 0.7 - \text{₹ 0.50 Cr.}$$

$$= \text{₹ 9.35 Cr.}$$

**(d) Return on Equity**

UJVNL has considered 30% of total amount of GFA ₹ 53.89 Cr. as Equity on 1.4.2009. Considering 15.5% as return, the amount of Return on Equity has been worked out as under:

**Details of Return on Equity**

**Table 7.1. 6** (Amount in ₹ Crore)

Sl.No.	Particular	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of Equity	16.17	16.17	29.80	43.43	57.06
2	Additions	0.00	13.63	13.63	13.63	0.00
3	Closing Balance	16.17	29.80	43.43	57.06	57.06
4	Return on Equity	2.51	2.51	4.62	6.73	8.84

**(e) Depreciation**

As the depreciation till the end of FY 2003-04 has been allowed to the extent of 90% of the GFA excluding cost of land in earlier tariff orders of the Commission, only the depreciation on additional capitalization during FY 2004-05 to 2008-09 is

being considered. Therefore, the permissible depreciation for FY 2009-10 to FY 2013-14 has been worked out as given in the following table.

**Details of Depreciation on Gross Fixed Assets**  
Table 7.1. 7 (Amount in ₹ Crore)

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Depreciation as claimed by UPJVNL	0.81	0.81	2.26	3.72	5.17
<b>Less:</b> Part of the Depreciation already allowed	0.64	0.64	0.64	0.64	0.64
Depreciation on additional Cumu. Capital Invest.	0.17	0.17	1.62	3.08	4.53

**(f) Interest on Loans**

Accordingly, the computation of the interest charges is as under:

**Interest on Debts including Normative Loans**  
Table 7.1. 8

Particular	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Opening Balance of Loan	4.20	4.03	35.65	65.82	94.53
Additions	0.00	31.79	31.79	31.79	0.00
Repayment	0.17	0.17	1.62	3.08	4.53
Balance	4.03	35.65	65.82	94.53	90.00
Average	4.12	19.84	50.74	80.18	92.27
<b>Interest @12.25%</b>	<b>0.50</b>	<b>2.43</b>	<b>6.22</b>	<b>9.82</b>	<b>11.30</b>

**(g) O&M Expenditure**

As per the Regulations, the normative values of operation and maintenance expenses including insurance for FY 2009-10 are to be derived by escalating by 10% the values approved by the Commission for FY 2008-09. The value so arrived is to be escalated thereafter by 5.72% per annum for FY 2009-10 onwards. The approved value for FY 2008-09 was ₹ 16.96 Cr. The petitioner has proposed the same in the petition which is hereby approved by the Commission.

Table 7.1. 9

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	18.66	19.72	20.85	22.04	23.30

**(h) Interest on Working Capital:**

The amount of Working Capital and Interest on Working Capital for the control period of F.Y. 2009-10 to 2013-14 as determined by the Commission is as under:-

**Working Capital as determined by the commission**

**Table 7.1. 10 (Amount in ₹ Crore)**

S.N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	O & M Expenses for One month	1.56	1.64	1.74	1.84	1.94
2	Maintenance Spares @ 15% of O&M Exp.	2.80	2.96	3.13	3.31	3.50
3	Receivables equivalent to 2 months of fixed charges	3.81	4.32	5.77	7.20	8.28
4	<b>Working Capital</b>	<b>8.17</b>	<b>8.92</b>	<b>10.64</b>	<b>12.35</b>	<b>13.72</b>
5	Rate of Interest	12.25	12.25	12.25	12.25	12.25
6	<b>I W C</b>	<b>1.00</b>	<b>1.09</b>	<b>1.30</b>	<b>1.51</b>	<b>1.68</b>

**(i) Fixed Charges**

Based on the above description and calculations shown in the tables as incorporated herein above the over all fixed charges in respect of Rihand Hydro Power Station as approved by the Commission are worked out as under:

**Fixed Charges of Rihand Hydro Power Station as approved by the Commission**

**Table 7.1. 11 (Amount in ₹ Crore)**

S N	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	0.17	0.17	1.62	3.08	4.53
2	Interest on Loan	0.50	2.43	6.22	9.82	11.30
3	Return on Equity	2.51	2.51	4.62	6.73	8.84
4	O & M Expenses	18.66	19.72	20.85	22.04	23.30
5	Interest on Working Capital	1.00	1.09	1.30	1.51	1.68
	<b>TOTAL FIXED CHARGES:</b>	<b>22.84</b>	<b>25.92</b>	<b>34.61</b>	<b>43.18</b>	<b>49.65</b>
6	Energy Sent Out (MU)	909	909	909	909	909
7	Fixed Cost per unit	0.25	0.29	0.38	0.48	0.55





## Fixed Charges as claimed by UPJVNL and as approved by the Commission

Table 7.1. 12

Amount in ₹ Crore)

S.N.	Particulars	FY 2009-10			FY 2010-11		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	0.00	0.50	0.50	1.90	2.43	0.53
2	Depreciation	0.81	0.17	-0.64	0.81	0.17	-0.64
3	Return on Equity	2.51	2.51	0.00	2.51	2.51	0.00
4	O & M Expenses	18.66	18.66	0.00	19.72	19.72	0.00
5	Interest on Working Capital	1.00	1.00	0.00	1.10	1.09	-0.01
	<b>Total :</b>	<b>22.98</b>	<b>22.84</b>	<b>-0.14</b>	<b>26.04</b>	<b>25.92</b>	<b>-0.12</b>
6	Ex-bus Energy Sent Out (MU)	909	909	0.00	909	909	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.25</b>	<b>0.25</b>	<b>0.00</b>	<b>0.29</b>	<b>0.29</b>	<b>0.00</b>

S.N.	Particulars	FY 2011-12			FY 2012-13		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	5.61	6.22	0.61	9.13	9.82	0.69
2	Depreciation	2.26	1.62	-0.64	3.72	3.08	-0.64
3	Return on Equity	4.62	4.62	0.00	6.73	6.73	0.00
4	O & M Expenses	20.85	20.85	0.00	22.04	22.04	0.00
5	Interest on Working Capital	1.30	1.30	0.00	1.51	1.51	0.00
	<b>Total :</b>	<b>34.64</b>	<b>34.61</b>	<b>-0.03</b>	<b>43.13</b>	<b>43.18</b>	<b>0.05</b>
6	Ex-bus Energy Sent Out (MU)	909	909	0.00	909	909	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.38</b>	<b>0.38</b>	<b>0.00</b>	<b>0.47</b>	<b>0.48</b>	<b>0.01</b>

S.N.	Particulars	FY 2013-14		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	10.54	11.30	0.76
2	Depreciation	5.17	4.53	-0.64
3	Return on Equity	8.84	8.84	0.00
4	O & M Expenses	23.30	23.30	0.00
5	Interest on Working Capital	1.68	1.68	0.00
	<b>Total :</b>	<b>49.53</b>	<b>49.65</b>	<b>0.12</b>
6	Ex-bus Energy Sent Out (MU)	909	909	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.54</b>	<b>0.55</b>	<b>0.01</b>





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**Section -2**

**Multi Year Tariff**

**for**

**Obra Hydro Power Station**

**for**

**FY 2009-10 to 2013-14**



## ARR and MYT as according to petition

In the Petition, UPJVNL has proposed the fixed charges for the electricity sent out as given in the table below:

**Table 7.2. 1**

<b>Obra Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Design Energy (MU)	279	279	279	279	279
Auxiliary Consumption (MU)	3	3	3	3	3
Energy Sent Out (MU)	276	276	276	276	276
Fixed Charges (₹ Cr.)	10.68	11.22	11.80	12.41	17.43
Unit Rate (₹/kWh)	0.39	0.41	0.43	0.45	0.63

Component-wise description of the Fixed Charges has been tabulated as under:

**Table 7.2. 2**

*Amount in ₹ Crore)*

<b>S N</b>	<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
1	Depreciation	0.25	0.25	0.25	0.25	2.16
2	Interest on Loan	0.00	0.00	0.00	0.00	2.39
3	Return on Equity	0.87	0.87	0.87	0.87	0.87
4	Interest on Working Capital	0.48	0.50	0.53	0.56	0.68
5	O & M Expenses	9.08	9.59	10.14	10.72	11.34
	<b>TOTAL:</b>	<b>10.68</b>	<b>11.21</b>	<b>11.79</b>	<b>12.40</b>	<b>17.44</b>

## ARR and MYT as determined by the Commission

### Capacity (Fixed) Charges

#### (a) Components of fixed charges:

For determination of components of fixed charges for MYT period of FY 2009-10 to 2013-14, the Commission opines that the parameters provided under UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 shall be considered. Hence, the Commission has decided to allow the components of fixed charges as below:

**Table 7.2. 3**

*Amount in ₹ Crore)*

<b>Components of Fixed Charge</b>	<b>Value</b>	<b>Remark</b>
<b>Return on equity</b>	15.5%	As per the Regulations
<b>Interest on Loans</b>	12.25%	Prime Lending Rate of State Bank of India

Components of Fixed Charge	Value	Remark
O & M Expenses	Normative	As per the Regulations
Depreciation	Normative	As per the Regulations
Interest on working capital	12.25 %	As per the Regulations

**(b) R & M of Plant**

Obra Hydro Power Station (3 x 33 MW) is more than 38 years old for which a comprehensive Renovation & Modernization (R&M) scheme has been proposed by UPJVNL. The proposed scheme involves an expenditure of Rs 58.80 Cr in phased manner. A Detailed Project Report (DPR) has been submitted by UPJVNL for approval of estimated cost incurred on R&M during the tariff period. The investment proposal under DPR has been examined and hereby approved by the Commission. Accordingly, the additional capitalization on R&M scheme for MYT period of FY 2009-10 to 2013-14 as claimed by UPJVNL has been allowed in the tariff order.

**(c) Gross Fixed Assets (GFA) and its Components**

The value of Gross Fixed Assets (GFA) with financing alongwith the value of Net Fixed Assets (NFA) is essential to determine the Return on Equity, Interest on balance Loans and Depreciation correctly at the end of each financial year. Therefore, the GFA and NFA at the end of each financial year commencing from FY 2009-10 FY 2013-14 has been worked out alongwith Equity and Debts taking base figures as claimed by the UPJVNL. The amount of GFA, NFA and Financing thereof are tabulated as under:

**Calculation of GFA & NFA including financing**

**Table 7.2. 4**

*Amount in ₹ Crore)*

Obra Hydro Power Station	2009-10	2010-11	2011-12	2012-13	2013-14
Opening GFA	18.79	18.79	18.79	18.79	18.79
Additions	0.00	0.00	0.00	0.00	58.80
Closing GFA	<b>18.79</b>	<b>18.79</b>	<b>18.79</b>	<b>18.79</b>	<b>77.59</b>
<b>Financing of GFA:</b>					
Opening Equity	5.64	5.64	5.64	5.64	5.64
Additions	0.00	0.00	0.00	0.00	17.64
Closing Equity	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>23.28</b>
Opening Accu. Dep.	16.33	16.35	16.37	16.39	16.41
Dep. During the year	0.02	0.02	0.02	0.02	1.93
Closing Accu. Dep.	<b>16.35</b>	<b>16.37</b>	<b>16.39</b>	<b>16.41</b>	<b>18.34</b>

Obra Hydro Power Station	2009-10	2010-11	2011-12	2012-13	2013-14
Net Fixed Assets	2.44	2.42	2.40	2.38	59.25
Adjustment in Accu. Dep.	3.61	3.61	3.61	3.61	3.61
Adjusted NFA	6.05	6.03	6.01	5.99	62.86
Opening Debts (Normative)	0.43	0.41	0.39	0.37	0.35
Additions	0.00	0.00	0.00	0.00	41.16
Re-payments	0.02	0.02	0.02	0.02	1.93
Debts (Normative)	<b>0.41</b>	<b>0.39</b>	<b>0.37</b>	<b>0.35</b>	<b>39.58</b>

The opening GFA on 1.4.2009 has been taken from the petition as submitted by UPJVNL. The additions during the tariff period have been made according to the approved capitalization on R&M scheme. Since till the end of FY 2003-04, the depreciation has been duly allowed in the earlier tariff orders by the Commission to the extent of 90% of the GFA excluding cost of land, computation of residual NFA is essential for determination of opening accumulated depreciation as on 1.4.2009. The additional capitalization during FY 2004-05 to FY 2008-09 is amounting to ₹ 0.63 Cr. and repayment of loan ₹ 0.01 Cr.

Additions in GFA during FY 04-05 to FY 08-09 and Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09 as submitted by UPJVNL in the petition is as given below.

**Table 7.2. 5**

*Amount in ₹ Crore)*

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL
Ope. Bal. of Additional Capital Investment	0.00	0.02	0.10	0.11	0.50	<b>0.73</b>
Additional Capital Investment during the year	0.02	0.08	0.01	0.39	0.13	<b>0.63</b>
Closing Bal. of Additional capital Investment	0.02	0.10	0.11	0.50	0.63	<b>1.36</b>
Financing:						
Equity	0.01	0.02	0.00	0.12	0.04	<b>0.19</b>
Normative Loans	0.01	0.06	0.01	0.27	0.09	<b>0.44</b>
Depreciation @2.57% (Considered for Re-payment)	0.00	0.00	0.00	0.00	0.01	<b>0.01</b>
Depreciation already allowed	0.00	0.00	0.00	0.00	0.01	<b>0.01</b>

Empirical formula for determination of opening accumulated depreciation as on 1.4. 2009 has been worked out as follows:

**Op. Accu. Dep. as on 01.04.2009**

$$\begin{aligned}
 &= (\text{Op. Bal. of GFA as on 01.04.09} - \text{Cost of Land incorporated in GFA} - \\
 &\quad \text{Additions in GFA during FY 04-05 to FY 08-09}) \times 0.9 + \text{Repayment of} \\
 &\quad \text{Loans on additional capitalization during FY 05-06 to FY 08-09} \\
 &= (\text{₹ 18.79 Cr.} - \text{₹ 0.03 Cr.} - \text{₹ 0.63 Cr.}) \times 0.9 + \text{₹ 0.01 Cr.} \\
 &= \text{₹ 16.33 Cr.}
 \end{aligned}$$

Adjustment in accumulated depreciation has been considered to arrive at the balance debt amount. To ascertain the adjustment amount, the normative debts as 70% of GFA and the repayment of loans on additional capitalization on 1.4.2009 have been subtracted from the accumulated depreciation till end of FY 2008-09. The numerical expression is as below:

**Adjustment in accumulated depreciation**

$$\begin{aligned}
 &= \text{₹ 16.33 Cr.} - (\text{₹ 18.79 Cr.} - \text{₹ 0.63 Cr.}) \times 0.7 - \text{₹0.01 Cr.} \\
 &= \text{₹ 3.61 Cr.}
 \end{aligned}$$

**(d) Return on Equity**

UJVNL has considered 30% of total amount of GFA ₹ 18.79 Cr. as Equity on 1.4.2009. Considering 15.5% as return, the amount of Return on Equity has been worked out as under:

**Details of Return on Equity**

**Table 7.2. 6**

*Amount in ₹ Crore)*

S.N.	Particular	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of Equity	5.64	5.64	5.64	5.64	5.64
2	Additions	0.00	0.00	0.00	0.00	17.64
3	Closing Balance	5.64	5.64	5.64	5.64	23.28
4	Return on Equity	0.87	0.87	0.87	0.87	0.87



**(e) Depreciation**

As the depreciation till the end of FY 2003-04 has been allowed to the extent of 90% of the GFA excluding cost of land in earlier tariff orders of the Commission, only the depreciation on additional capitalization during FY 2004-05 to 2008-09 is being considered. Therefore, the permissible depreciation for FY 2009-10 to FY 2013-14 has been worked out as given in the following table.

**Details of Depreciation on Gross Fixed Assets**

**Table 7.2. 7**

*Amount in ₹ Crore)*

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Depreciation as claimed by UPJVNL	0.25	0.25	0.25	0.25	2.16
<b>Less:</b> Part of the Depreciation already allowed	0.23	0.23	0.23	0.23	0.23
Depreciation on additional Cumu. Capital Invest.	0.02	0.02	0.02	0.02	1.93

**(f) Interest on Loans**

Accordingly, the computation of the interest charges is as under:

**Interest on Debts including Normative Loans**

**Table 7.2. 8**

*Amount in ₹ Crore)*

Particular	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Opening Balance of Loan	0.43	0.41	0.39	0.37	0.35
Additions	0.00	0.00	0.00	0.00	41.16
Repayment	0.02	0.02	0.02	0.02	1.93
Balance	0.41	0.39	0.37	0.35	39.58
Average	0.42	0.40	0.38	0.36	19.97
<b>Interest @12.25%</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.04</b>	<b>2.45</b>

**(g) O&M Expenditure**

As per the Regulations, the normative values of operation and maintenance expenses including insurance for FY 2009-10 are to be derived by escalating by 10% the values approved by the Commission for FY 2008-09. The value so arrived is to be escalated thereafter by 5.72% per annum for FY 2009-10

onwards. The approved value for FY 2008-09 was ₹ 8.25 Cr. The petitioner has proposed the same in the petition which is hereby approved by the Commission.

**Table 7.2. 9**

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	9.08	9.60	10.15	10.73	11.34

**(h) Interest on Working Capital:**

The amount of Working Capital and Interest on Working Capital for the control period of F.Y. 2009-10 to 2013-14 as determined by the Commission are as under:-

**Working Capital as determined by the commission**

**Table 7.2. 10**

*Amount in ₹ Crore)*

S. N	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	O & M Expenses for One month	0.76	0.80	0.85	0.89	0.95
2	Maintenance Spares @ 15% of O&M Exp.	1.36	1.44	1.52	1.61	1.70
3	Receivables equivalent to 2 months of fixed charges	1.75	1.84	1.94	2.04	2.88
4	<b>Working Capital</b>	<b>3.87</b>	<b>4.08</b>	<b>4.30</b>	<b>4.54</b>	<b>5.53</b>
5	Rate of Interest	12.25	12.25	12.25	12.25	12.25
6	<b>I W C</b>	<b>0.47</b>	<b>0.50</b>	<b>0.53</b>	<b>0.56</b>	<b>0.68</b>

**(i) Fixed Charges**

Based on the above description and calculations shown in the tables as incorporated herein above the overall fixed charges in respect of Obra Hydro Power Station as approved by the Commission is worked out as under:

**Fixed Charges of Obra Hydro Power Station as approved by the Commission**

**Table 7.2. 11**

*Amount in ₹ Crore)*

S. N	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	0.02	0.02	0.02	0.02	1.93
2	Interest on Loans	0.05	0.05	0.05	0.04	2.45
3	Return on Equity	0.87	0.87	0.87	0.87	0.87
4	O & M Expenses	9.08	9.60	10.15	10.73	11.34
5	Interest on Working Capital	0.47	0.50	0.53	0.56	0.68
	<b>TOTAL FIXED</b>	<b>10.50</b>	<b>11.04</b>	<b>11.62</b>	<b>12.23</b>	<b>17.27</b>



S. N	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
	<b>CHARGES:</b>					
6	Energy Sent Out (MU)	276	276	276	276	276
7	Fixed Cost per unit	0.38	0.40	0.42	0.44	0.63

**Fixed Charges as claimed by UPJVNL and as approved by the Commission**

**Table 7.2. 12**

*Amount in ₹ Crore)*

S.N	Particulars	FY 2009-10			FY 2010-11		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	0.00	0.05	0.05	0.00	0.05	0.05
2	Depreciation	0.25	0.02	-0.23	0.25	0.02	-0.23
3	Return on Equity	0.87	0.87	0.00	0.87	0.87	0.00
4	O & M Expenses	9.08	9.08	0.00	9.59	9.60	0.01
5	Interest on Working Capital	0.48	0.47	-0.01	0.50	0.50	0.00
	<b>Total :</b>	<b>10.68</b>	<b>10.50</b>	<b>-0.18</b>	<b>11.21</b>	<b>11.04</b>	<b>-0.17</b>
6	Ex-bus Energy Sent Out (MU)	276	276	0.00	276	276	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.39</b>	<b>0.38</b>	<b>-0.01</b>	<b>0.41</b>	<b>0.40</b>	<b>-0.01</b>

S.N	Particulars	FY 2011-12			FY 2012-13		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	0.00	0.05	0.05	0.00	0.04	0.04
2	Depreciation	0.25	0.02	-0.23	0.25	0.02	-0.23
3	Return on Equity	0.87	0.87	0.00	0.87	0.87	0.00
4	O & M Expenses	10.14	10.15	0.01	10.72	10.73	0.01
5	Interest on Working Capital	0.53	0.53	0.00	0.56	0.56	0.00
	<b>Total :</b>	<b>11.79</b>	<b>11.62</b>	<b>-0.17</b>	<b>12.40</b>	<b>12.23</b>	<b>-0.17</b>
6	Ex-bus Energy Sent Out (MU)	276	276	0.00	276	276	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.43</b>	<b>0.42</b>	<b>-0.01</b>	<b>0.45</b>	<b>0.44</b>	<b>-0.01</b>

S.N.	Particulars	FY 2013-14		
		As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
1	Interest on Loan	2.39	2.45	0.06
2	Depreciation	2.16	1.93	-0.23
3	Return on Equity	0.87	0.87	0.00
4	O & M Expenses	11.34	11.34	0.00
5	Interest on Working Capital	0.68	0.68	0.00
	<b>Total :</b>	<b>17.44</b>	<b>17.27</b>	<b>-0.17</b>
6	Ex-bus Energy Sent Out (MU)	276	276	0.00
7	<b>Fixed Cost per Unit</b>	<b>0.63</b>	<b>0.63</b>	<b>0.00</b>





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**Section -3**

**Multi Year Tariff**

**for**

**Matatila Hydro Power Station**

**for**

**FY 2009-10 to 2013-14**



## ARR and MYT as according to petition

In the Petition, UPJVNL has proposed the fixed charges for the electricity sent out as given in the table below:

**Table 7.3. 1**

<b>Matatila Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Design Energy (MU)	123	123	123	123	123
Auxiliary Consumption (MU)	2	2	2	2	2
Energy Sent Out (MU)	121	121	121	121	121
Fixed Charges (₹ Cr.)	5.01	5.25	5.51	6.23	7.95
Unit Rate (₹/kWh)	0.41	0.43	0.46	0.51	0.66

Component-wise description of the Fixed Charges has been tabulated as under:

**Table 7.3. 2**

*Amount in ₹ Crore)*

<b>S. N.</b>	<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
1	Depreciation	0.15	0.15	0.15	0.15	0.68
2	Interest on Loan	0.00	0.00	0.00	0.43	0.83
3	Return on Equity	0.50	0.50	0.50	0.50	0.98
4	Interest on Working Capital	0.22	0.23	0.24	0.26	0.29
5	O & M Expenses	4.14	4.37	4.62	4.89	5.17
	<b>TOTAL:</b>	<b>5.01</b>	<b>5.25</b>	<b>5.51</b>	<b>6.23</b>	<b>7.95</b>

## ARR and MYT as determined by the Commission

### Capacity (Fixed) Charges

#### (a) Components of fixed charges:

For determination of components of fixed charges for MYT period of FY 2009-10 to 2013-14, the Commission opines that the parameters provided under UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 shall be considered. Hence, the Commission has decided to allow the components of fixed charges as below:

**Table 7.3. 3**

*Amount in ₹ Crore)*

<b>Components of Fixed Charge</b>	<b>Value</b>	<b>Remark</b>
<b>Return on equity</b>	15.5%	As per the Regulations
<b>Interest on Loans</b>	12.25%	Prime Lending Rate of State Bank of India
<b>O &amp; M Expenses</b>	Normative	As per the Regulations
<b>Depreciation</b>	Normative	As per the Regulations
<b>Interest on working capital</b>	12.25 %	As per the Regulations

**(b) R & M of Plant**

Matatila Hydro Power Station (3 x 10 MW) is more than 44 years old for which a comprehensive Renovation & Modernization (R&M) scheme has been proposed by UPJVNL. The proposed scheme involves an expenditure of Rs 10.36 Cr in phased manner. A Detailed Project Report (DPR) has been submitted by UPJVNL for approval of estimated cost incurred on R&M during the tariff period. The investment proposal under DPR has been examined and hereby approved by the Commission. Accordingly, the additional capitalization on R&M scheme for MYT period of FY 2009-10 to 2013-14 as claimed by UPJVNL has been allowed in the tariff order.

**(c) Gross Fixed Assets (GFA) and its Components**

The value of Gross Fixed Assets (GFA) with financing alongwith the value of Net Fixed Assets (NFA) is essential to determine the Return on Equity, Interest on balance Loans and Depreciation correctly at the end of each financial year. Therefore, the GFA and NFA at the end of each financial year commencing from FY 2009-10 FY 2013-14 has been worked out alongwith Equity and Debts taking base figures as claimed by the UPJVNL. The amount of GFA, NFA and Financing thereof are tabulated as under:

**Calculation of GFA & NFA including financing**

(Place holder1)

Table 7.3. 4

*Amount in ₹ Crore*

<b>Matatila Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening GFA	10.73	10.73	10.73	10.73	21.09
Additions	0.00	0.00	0.00	10.36	0.00
Closing GFA	<b>10.73</b>	<b>10.73</b>	<b>10.73</b>	<b>21.09</b>	<b>21.09</b>
<b>Financing</b>					
Opening Equity	3.22	3.22	3.22	3.22	6.33
Additions	0.00	0.00	0.00	3.11	0.00
Closing Equity	<b>3.22</b>	<b>3.22</b>	<b>3.22</b>	<b>6.33</b>	<b>6.33</b>
Opening Accu. Dep.	9.45	9.46	9.47	9.48	9.49
Dep. During the year	0.01	0.01	0.01	0.01	0.54
Closing Accu. Dep.	<b>9.46</b>	<b>9.47</b>	<b>9.48</b>	<b>9.49</b>	<b>10.03</b>
Net Fixed Assets	1.27	1.26	1.25	11.60	11.06



Matatila Hydro Power Station	2009-10	2010-11	2011-12	2012-13	2013-14
Adjusted in Accu. Dep.	2.09	2.09	2.09	2.09	2.09
Adjusted NFA	3.36	3.35	3.34	13.69	13.15
Opening Debts (Normative)	0.15	0.14	0.13	0.12	7.36
Additions	0.00	0.00	0.00	7.25	0.00
Re-payments	0.01	0.01	0.01	0.01	0.54
Closing Debts	<b>0.14</b>	<b>0.13</b>	<b>0.12</b>	<b>7.36</b>	<b>6.82</b>

The opening GFA on 1.4.2009 has been taken from the petition as submitted by UPJVNL. The additions during the tariff period have been made according to the approved capitalization on R&M scheme. Since till the end of FY 2003-04, the depreciation has been duly allowed in the earlier tariff orders by the Commission to the extent of 90% of the GFA excluding cost of land, computation of residual NFA is essential for determination of opening accumulated depreciation as on 1.4.2009. The additional capitalization during FY 2004-05 to FY 2008-09 is amounting to ₹ 0.21 Cr.

Additions in GFA during FY 04-05 to FY 08-09 and Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09 as submitted by UPJVNL in the petition is as given below.

**Table 7.3. 5** *Amount in ₹ Crore*

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL
Ope. Bal. of Additional Capital Investment	0.00	0.10	0.11	0.18	0.18	<b>0.57</b>
Additional Capital Investment during the year	0.10	0.01	0.07	0.00	0.03	<b>0.21</b>
Closing Bal. of Additional capital Investment	0.10	0.11	0.18	0.18	0.21	<b>0.78</b>
Financing:						
Equity	0.03	0.00	0.02	0.00	0.01	<b>0.06</b>
Normative Loans	0.07	0.01	0.05	0.00	0.02	<b>0.15</b>
Depreciation @2.57% (Considered for Re-payment)	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
Depreciation already allowed	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>

Empirical formula for determination of opening accumulated depreciation as on 1.4. 2009 has been worked out as follows:

**Op. Accu. Dep. as on 01.04.2009**

$$= (\text{Op. Bal. of GFA as on 01.04.09} - \text{Cost of Land incorporated in GFA} - \text{Additions in GFA during FY 04-05 to FY 08-09}) \times 0.9 + \text{Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09}$$

$$= (\text{₹ } 10.73 \text{ Cr.} - \text{₹ } 0.02 \text{ Cr.} - \text{₹ } 0.21 \text{ Cr.}) \times 0.9 + 0.00$$

$$= \text{₹ } 9.45 \text{ Cr.}$$

Adjustment in accumulated depreciation has been considered to arrive at the balance debt amount. To ascertain the adjustment amount, the normative debts as 70% of GFA and the repayment of loans on additional capitalization on 1.4.2009 have been subtracted from the accumulated depreciation till end of FY 2008-09. The numerical expression is as below:

Adjustment in accumulated depreciation

$$= \text{₹ } 9.45 \text{ Cr.} - (\text{₹ } 10.73 \text{ Cr.} - \text{₹ } 0.21 \text{ Cr.}) \times 0.7$$

$$= \text{₹ } 2.09 \text{ Cr.}$$

**(d) Return on Equity**

UJVNL has considered 30% of total amount of GFA ₹ 10.73 Cr. as Equity on 1.4.2009. Considering 15.5% as return, the amount of Return on Equity has been worked out as under:

**Details of Return on Equity**

**Table 7.3. 6** *Amount in ₹ Crore)*

S.N.	Particular	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of Equity	3.22	3.22	3.22	3.22	6.33
2	Additions	0.00	0.00	0.00	3.11	0.00
3	Closing Balance	3.22	3.22	3.22	6.33	6.33
4	Return on Equity	0.50	0.50	0.50	0.50	0.98

**(e) Depreciation**

As the depreciation till the end of FY 2003-04 has been allowed to the extent of 90% of the GFA excluding cost of land in earlier tariff orders of the Commission,

only the depreciation on additional capitalization during FY 2004-05 to 2008-09 is being considered. Therefore, the permissible depreciation for FY 2009-10 to FY 2013-14 has been worked out as given in the following table.

### Details of Depreciation on Gross Fixed Assets

Table 7.3. 7

Amount in ₹ Crore)

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Depreciation as claimed by UPJVNL	0.15	0.15	0.15	0.15	0.68
<b>Less:</b> Part of the Depreciation already allowed	0.14	0.14	0.14	0.14	0.14
Depreciation on <b>additional Cumu. Capital Invest.</b>	0.01	0.01	0.01	0.01	0.54

#### (f) Interest on Loans

Accordingly, the computation of the interest charges is as under:

### Interest on Debts including Normative Loans

Table 7.3. 8

Amount in ₹ Crore)

Particular	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Opening Balance of Loan	0.15	0.14	0.13	0.12	7.36
Additions	0.00	0.00	0.00	7.25	0.00
Repayment	0.01	0.01	0.01	0.01	0.54
Balance	0.14	0.13	0.12	7.36	6.82
Average	0.15	0.14	0.13	3.74	7.09
<b>Interest @12.25%</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.46</b>	<b>0.87</b>

#### (g) O&M Expenditure

As per the Regulations, the normative values of operation and maintenance expenses including insurance for FY 2009-10 are to be derived by escalating by 10% the values approved by the Commission for FY 2008-09. The value so arrived is to be escalated thereafter by 5.72% per annum for FY 2009-10 onwards. The approved value for FY 2008-09 was ₹ 3.76 Cr. The petitioner has proposed the same in the petition which is hereby approved by the Commission.

Table 7.3. 9

Amount in ₹ Crore)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	4.14	4.38	4.63	4.89	5.17

**(h) Interest on Working Capital:**

The amount of Working Capital and Interest on Working Capital for the control period of F.Y. 2009-10 to 2013-14 as determined by the Commission are as under:-

**Working Capital as determined by the commission**  
Table 7.3. 10 Amount in ₹ Crore)

S.N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	O & M Expenses for One month	0.35	0.36	0.39	0.41	0.43
2	Maintenance Spares @ 15% of O & M Exp.	0.62	0.66	0.69	0.73	0.78
3	Receivables equivalent to 2 months of fixed charges	0.81	0.86	0.90	1.02	1.31
4	<b>Working Capital</b>	<b>1.78</b>	<b>1.88</b>	<b>1.98</b>	<b>2.16</b>	<b>2.52</b>
5	Rate of Interest	12.25	12.25	12.25	12.25	12.25
6	<b>I W C</b>	<b>0.22</b>	<b>0.23</b>	<b>0.24</b>	<b>0.27</b>	<b>0.31</b>

**(i) Fixed Charges**

Based on the above description and calculations shown in the tables as incorporated herein above the over all fixed charges in respect of Matatila Hydro Power Station as approved by the Commission are worked out as under:

**Fixed Charges of Matatila Hydro Power Station as approved by the Commission**  
Table 7.3. 11 Amount in ₹ Crore)

S. N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	0.01	0.01	0.01	0.01	0.54
2	Interest on Loans	0.02	0.02	0.02	0.46	0.87
3	Return on Equity	0.50	0.50	0.50	0.50	0.98
4	O & M Expenses	4.14	4.38	4.63	4.89	5.17
5	Interest on Working Capital	0.22	0.23	0.24	0.27	0.31
	<b>TOTAL FIXED CHARGES:</b>	<b>4.89</b>	<b>5.13</b>	<b>5.39</b>	<b>6.13</b>	<b>7.87</b>
6	Energy Sent Out (MU)	121	121	121	121	121
7	Fixed Cost per unit	0.40	0.42	0.45	0.51	0.65

**Fixed Charges as claimed by UPJVNL and as approved by the Commission**

**Table 7.3. 12**

*Amount in ₹ Crore)*

Particulars	FY 2009-10			FY 2010-11		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.00	0.02	0.02	0.00	0.02	0.02
Depreciation	0.15	0.01	-0.14	0.15	0.01	-0.14
Return on Equity	0.50	0.50	0.00	0.50	0.50	0.00
O & M Expenses	4.14	4.14	0.00	4.37	4.38	0.01
Interest on Working Capital	0.22	0.22	0.00	0.23	0.23	0.00
<b>Total :</b>	<b>5.01</b>	<b>4.89</b>	<b>-0.12</b>	<b>5.25</b>	<b>5.13</b>	<b>-0.12</b>
Ex-bus Energy Sent Out (MU)	121	121	0.00	121	121	0.00
<b>Fixed Cost per Unit</b>	<b>0.41</b>	<b>0.40</b>	<b>-0.01</b>	<b>0.43</b>	<b>0.42</b>	<b>-0.01</b>

Particulars	FY 2011-12			FY 2012-13		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.00	0.02	0.02	0.43	0.46	0.03
Depreciation	0.15	0.01	-0.14	0.15	0.01	-0.14
Return on Equity	0.50	0.50	0.00	0.50	0.50	0.00
O & M Expenses	4.62	4.63	0.01	4.89	4.89	0.00
Interest on Working Capital	0.24	0.24	0.00	0.26	0.27	0.01
<b>Total :</b>	<b>5.51</b>	<b>5.39</b>	<b>-0.12</b>	<b>6.23</b>	<b>6.13</b>	<b>-0.10</b>
Ex-bus Energy Sent Out (MU)	121	121	0.00	121	121	0.00
<b>Fixed Cost per Unit</b>	<b>0.46</b>	<b>0.45</b>	<b>-0.01</b>	<b>0.51</b>	<b>0.51</b>	<b>-0.01</b>

Particulars	FY 2013-14		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.83	0.87	0.04
Depreciation	0.68	0.54	-0.14
Return on Equity	0.98	0.98	0.00
O & M Expenses	5.17	5.17	0.00
Interest on Working Capital	0.29	0.31	0.02
<b>Total :</b>	<b>7.95</b>	<b>7.87</b>	<b>-0.08</b>
Ex-bus Energy Sent Out (MU)	121	121	0.00
<b>Fixed Cost per Unit</b>	<b>0.66</b>	<b>0.65</b>	<b>-0.01</b>





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**Section - 4**

**Multi Year Tariff**

**for**

**Khara Hydro Power Station**

**for**

**FY 2009-10 to 2013-14**





## ARR and MYT as according to petition

In the Petition, UPJVNL has proposed the fixed charges for the electricity sent out as given in the table below:

**Table 7.4. 1**

Khara Hydro Power Station	2009-10	2010-11	2011-12	2012-13	2013-14
Design Energy (MU)	385	385	385	385	385
Auxiliary Consumption (MU)	6	6	6	6	6
Energy Sent Out (MU)	379	379	379	379	379
Fixed Charges (₹ Cr.)	30.91	30.87	30.86	30.88	30.91
Unit Rate (₹/kWh)	0.82	0.81	0.81	0.81	0.82

Component-wise description of the Fixed Charges has been tabulated as under:

**Table 7.4. 2**

*Amount in ₹ Crore)*

S. No.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	3.13	3.13	3.13	3.13	3.13
2	Interest on Loan	9.57	9.18	8.80	8.42	8.03
3	Return on Equity	11.40	11.40	11.40	11.40	11.40
4	Interest on Working Capital	0.80	0.81	0.82	0.83	0.85
5	O & M Expenses	6.01	6.35	6.71	7.10	7.50
	<b>TOTAL:</b>	<b>30.91</b>	<b>30.87</b>	<b>30.86</b>	<b>30.88</b>	<b>30.91</b>

## ARR and MYT as determined by the Commission

### Capacity (Fixed) Charges

#### (a) Components of fixed charges:

For determination of components of fixed charges for MYT period of FY 2009-10 to 2013-14, the Commission opines that the parameters provided under UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 shall be considered. Hence, the Commission has decided to allow the components of fixed charges as below:

**Table 7.4. 3**

*Amount in ₹ Crore)*

Components of Fixed Charge	Value	Remark
Return on equity	15.5%	As per the Regulations
Interest on Loans	12.25%	Prime Lending Rate of State Bank of India
O & M Expenses	Normative	As per the Regulations
Depreciation	Normative	As per the Regulations
Interest on working capital	12.25 %	As per the Regulations

**(b) R & M of Plant**

Khara Hydro Power Station (3 x 24 MW) as installed in December, 1992. It was the only Hydro Power Station of erstwhile U. P. State Electricity Board vested in UPJVNL on its unbundling on 14.01.2000 which did not complete its normal life. Therefore, UPJVNL has not proposed R&M.

**(c) Gross Fixed Assets (GFA) and its Components**

The value of Gross Fixed Assets (GFA) with financing alongwith the value of Net Fixed Assets (NFA) is essential to determine the Return on Equity, Interest on balance Loans and Depreciation correctly at the end of each financial year. Therefore, the GFA and NFA at the end of each financial year commencing from FY 2009-10 FY 2013-14 has been worked out alongwith Equity and Debts taking base figures as claimed by the UPJVNL. The amount of GFA, NFA and Financing thereof are tabulated as under:

**Calculation of GFA & NFA including financing**

**Table 7.4. 4**

*Amount in ₹ Crore)*

<b>Khara Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening GFA	245.26	245.26	245.26	245.26	245.26
Additions	0.00	0.00	0.00	0.00	0.00
Closing GFA	<b>245.26</b>	<b>245.26</b>	<b>245.26</b>	<b>245.26</b>	<b>245.26</b>
<b>Financing</b>					
Opening Equity	73.58	73.58	73.58	73.58	73.58
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	<b>73.58</b>	<b>73.58</b>	<b>73.58</b>	<b>73.58</b>	<b>73.58</b>
Opening Accu. Dep.	122.46	125.59	128.72	131.85	134.98
Dep. During the year	3.13	3.13	3.13	3.13	3.13
Closing Accu. Dep.	<b>125.59</b>	<b>128.72</b>	<b>131.85</b>	<b>134.98</b>	<b>138.11</b>
Net Fixed Assets	<b>119.67</b>	<b>116.54</b>	<b>113.41</b>	<b>110.28</b>	<b>107.15</b>
Opening Debts (Normative)	49.22	46.09	42.96	39.83	36.70
Additions	0.00	0.00	0.00	0.00	0.00
Re-payments	3.13	3.13	3.13	3.13	3.13
Closing Debts	<b>46.09</b>	<b>42.96</b>	<b>39.83</b>	<b>36.70</b>	<b>33.57</b>

**(d) Return on Equity**

UJVNL has considered 30% of total amount of GFA ₹ 245.26 Cr. as Equity on 1.4.2009. Considering 15.5% as return, the amount of Return on Equity has been worked out as under:

### Details of Return on Equity

**Table 7.4. 5** *Amount in ₹ Crore)*

S. N.	Particular	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of Equity	73.58	73.58	73.58	73.58	73.58
2	Additions	0.00	0.00	0.00	0.00	0.00
3	Closing Balance	73.58	73.58	73.58	73.58	73.58
4	Return on Equity	11.40	11.40	11.40	11.40	11.40

#### (e) Depreciation

The commission has allowed depreciation for FY 2009-10 to FY 2013-14 as claimed by UPJVNL in the petition as given in the following table:

#### Details of Depreciation on Gross Fixed Assets

**Table 7.4. 6** *Amount in ₹ Crore)*

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Depreciation as claimed by UPJVNL	3.13	3.13	3.13	3.13	3.13
<b>Net Depreciation allowed</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>

#### (f) Interest on Loans

Accordingly, the computation of the interest charges is as under:

#### Interest on Debts including Normative Loans

**Table 7.4. 7** *Amount in ₹ Crore)*

Particular	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Opening Balance of Loan	49.22	46.09	42.96	39.83	36.70
Additions	0.00	0.00	0.00	0.00	0.00
Repayment	3.13	3.13	3.13	3.13	3.13
Balance	46.09	42.96	39.83	36.70	33.57
Average	47.66	44.53	41.40	38.27	35.14
<b>Interest @12.25%</b>	<b>5.84</b>	<b>5.45</b>	<b>5.07</b>	<b>4.69</b>	<b>4.30</b>

#### (g) O&M Expenditure

As per the Regulations, the normative values of operation and maintenance expenses including insurance for FY 2009-10 are to be derived by escalating by 10% the values approved by the Commission for FY 2008-09. The value so arrived is to be escalated thereafter by 5.72% per annum for FY 2009-10

onwards. The approved value for FY 2008-09 was ₹ 5.46 Cr. The petitioner has proposed the same in the petition which is hereby approved by the Commission.

**Table 7.4. 8** *Amount in ₹ Crore)*

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	6.01	6.35	6.72	7.10	7.51

**(h) Interest on Working Capital:**

The amount of Working Capital and Interest on Working Capital for the control period of F.Y. 2009-10 to 2013-14 as determined by the Commission are as under:-

**Working Capital as determined by the commission**

**Table 7.4. 9** *Amount in ₹ Crore)*

S.N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	O & M Expenses for One month	0.50	0.53	0.56	0.59	0.63
2	Maintenance Spares @ 15% O & M Exp.	0.90	0.95	1.01	1.07	1.13
3	Receivables equivalent to 2 months of fixed charges	4.52	4.51	4.51	4.51	4.52
4	<b>Working Capital</b>	<b>5.92</b>	<b>5.99</b>	<b>6.08</b>	<b>6.17</b>	<b>6.27</b>
5	Rate of Interest	12.25	12.25	12.25	12.25	12.25
6	<b>I W C</b>	<b>0.73</b>	<b>0.73</b>	<b>0.74</b>	<b>0.76</b>	<b>0.77</b>

**(i) Fixed Charges**

Based on the above description and calculations shown in the tables as incorporated herein above the over all fixed charges in respect of Khara Hydro Power Station as approved by the Commission are worked out as under:

**Fixed Charges of Khara Hydro Power Station as approved by the Commission**

**Table 7.4. 10** *Amount in ₹ Crore)*

S. N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	3.13	3.13	3.13	3.13	3.13
2	Interest on Loans	5.84	5.45	5.07	4.69	4.30
3	Return on Equity	11.40	11.40	11.40	11.40	11.40
4	O & M Expenses	6.01	6.35	6.72	7.10	7.51
5	Interest on Working Capital	0.73	0.73	0.74	0.76	0.77
	<b>TOTAL FIXED CHARGES:</b>	<b>27.11</b>	<b>27.07</b>	<b>27.06</b>	<b>27.08</b>	<b>27.12</b>
6	Energy Sent Out (MU)	379	379	379	379	379
7	Fixed Cost per unit	0.72	0.71	0.71	0.71	0.72



**Fixed Charges as claimed by UPJVNL and as approved by the Commission**  
**Table 7.4. 11** **Amount in ₹ Crore)**

Particulars	FY 2009-10			FY 2010-11		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	9.57	5.84	-3.73	9.18	5.45	-3.73
Depreciation	3.13	3.13	0.00	3.13	3.13	0.00
Return on Equity	11.40	11.40	0.00	11.40	11.40	0.00
O & M Expenses	6.01	6.01	0.00	6.35	6.35	0.00
Interest on Working Capital	0.80	0.73	-0.07	0.81	0.73	-0.08
<b>Total :</b>	<b>30.91</b>	<b>27.11</b>	<b>-3.80</b>	<b>30.87</b>	<b>27.07</b>	<b>-3.80</b>
Ex-bus Energy Sent Out (MU)	379	379	0.00	379	379	0.00
<b>Fixed Cost per Unit</b>	<b>0.82</b>	<b>0.72</b>	<b>-0.10</b>	<b>0.81</b>	<b>0.71</b>	<b>-0.10</b>

Particulars	FY 2011-12			FY 2012-13		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	8.80	5.07	-3.73	8.42	4.69	-3.73
Depreciation	3.13	3.13	0.00	3.13	3.13	0.00
Return on Equity	11.40	11.40	0.00	11.40	11.40	0.00
O & M Expenses	6.71	6.72	0.01	7.10	7.10	0.00
Interest on Working Capital	0.82	0.74	-0.08	0.83	0.76	-0.07
<b>Total :</b>	<b>30.86</b>	<b>27.06</b>	<b>-3.80</b>	<b>30.88</b>	<b>27.08</b>	<b>-3.80</b>
Ex-bus Energy Sent Out (MU)	379	379	0.00	379	379	0.00
<b>Fixed Cost per Unit</b>	<b>0.81</b>	<b>0.71</b>	<b>-0.10</b>	<b>0.81</b>	<b>0.71</b>	<b>-0.10</b>

Particulars	FY 2013-14		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	8.03	4.30	-3.73
Depreciation	3.13	3.13	0.00
Return on Equity	11.40	11.40	0.00
O & M Expenses	7.50	7.51	0.01
Interest on Working Capital	0.85	0.77	-0.08
<b>Total :</b>	<b>30.91</b>	<b>27.12</b>	<b>-3.79</b>
Ex-bus Energy Sent Out (MU)	379	379	0.00
<b>Fixed Cost per Unit</b>	<b>0.82</b>	<b>0.72</b>	<b>-0.10</b>





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**Section - 5**

**Multi Year Tariff**

**for**

**Upper Ganga Canal Hydro Power Stations**

**for**

**FY 2009-10 to 2013-14**





## ARR and MYT as according to petition

In the Petition, UPJVNL has proposed the fixed charges for the electricity sent out as given in the table below:

**Table 7.5. 1** *Amount in ₹ Crore)*

<b>Upper Ganga Canal Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Design Energy (MU)	32	32	32	32	32
Auxiliary Consumption (MU)	0	0	0	0	0
Energy Sent Out (MU)	32	32	32	32	32
Fixed Charges (₹ Cr.)	5.35	5.64	5.95	6.27	6.62
Unit Rate (₹/kWh)	1.69	1.78	1.88	1.98	2.09

Component-wise description of the Fixed Charges has been tabulated as under:

**Table 7.5. 2** *Amount in ₹ Crore)*

<b>S. N.</b>	<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
1	Depreciation	0.08	0.08	0.08	0.08	0.08
2	Interest on Loan	0.00	0.00	0.00	0.00	0.00
3	Return on Equity	0.17	0.17	0.17	0.17	0.17
4	Interest on Working Capital	0.25	0.26	0.28	0.29	0.31
5	O & M Expenses	4.85	5.13	5.42	5.73	6.06
	<b>TOTAL:</b>	<b>5.35</b>	<b>5.64</b>	<b>5.95</b>	<b>6.27</b>	<b>6.62</b>

## ARR and MYT as determined by the Commission

Small Hydro Power Stations namely Nirgajini (2 x 2.5 MW) installed in 1937, Chittaura (2 x 1.5 MW) installed in 1938, Salawa (2 x 1.5 MW) installed in 1937 and Bhola (4 x 0.375 MW + 2 x 0.6 MW) installed in 1929 to 1935 are located at the Bank of Upper Ganga Canal in District Muzaffarnagar and Meerut. Although these plants are small but being covered for the determination of tariff under the UPJVNL tariff orders by the Commission.

### Capacity (Fixed) Charges

#### (a) Components of fixed charges:

For determination of components of fixed charges for MYT period of FY 2009-10 to 2013-14, the Commission opines that the parameters provided under UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009 shall be considered. Hence, the Commission has decided to allow the components of fixed charges as follows:

**Table 7.5. 3**

*Amount in ₹ Crore)*

<b>Components of Fixed Charge</b>	<b>Value</b>	<b>Remark</b>
Return on Equity	15.5%	As per the Regulations
Interest on Loans	12.25%	Prime Lending Rate of State Bank of India
O & M Expenses	Normative	As per the Regulations
Depreciation	Normative	As per the Regulations
Interest on Working Capital	12.25 %	As per the Regulations

**(b) R & M of Plant**

Despite the fact that these small hydro power plants have outlived their life, UPJVNL has not submitted any proposal of R&M for the consideration of the Commission. The Commission strongly feels that existing hydro power stations should be considered for life extension and improved performance. Therefore, refurbishment of these plants may be planned.

**(c) Gross Fixed Assets (GFA) and its Components**

The value of Gross Fixed Assets (GFA) with financing alongwith the value of Net Fixed Assets (NFA) is essential to determine the Return on Equity, Interest on balance Loans and Depreciation correctly at the end of each financial year. Therefore, the GFA and NFA at the end of each financial year commencing from FY 2009-10 FY 2013-14 has been worked out alongwith Equity and Debts taking base figures as claimed by the UPJVNL. The amount of GFA, NFA and Financing thereof are tabulated as under:

**Calculation of GFA & NFA including financing**

**Table 7.5. 4**

*Amount in ₹ Crore)*

<b>Upper Ganga Canal Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening GFA	3.68	3.68	3.68	3.68	3.68
Additions	0.00	0.00	0.00	0.00	0.00
Closing GFA	<b>3.68</b>	<b>3.68</b>	<b>3.68</b>	<b>3.68</b>	<b>3.68</b>
<b>Financing</b>					
Opening Equity	1.10	1.10	1.10	1.10	1.10
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>
Opening Accu. Dep.	2.61	2.63	2.65	2.67	2.69

<b>Upper Ganga Canal Hydro Power Station</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Dep. during the year	0.02	0.02	0.02	0.02	0.02
Closing Accu. Dep.	<b>2.63</b>	<b>2.65</b>	<b>2.67</b>	<b>2.69</b>	<b>2.71</b>
Net Fixed Assets	<b>1.05</b>	<b>1.03</b>	<b>1.01</b>	<b>0.99</b>	<b>0.97</b>
Adjusted in Accu. Dep.	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>
Adjusted NFA	<b>1.61</b>	<b>1.59</b>	<b>1.57</b>	<b>1.55</b>	<b>1.53</b>
Opening Debts (Normative)	0.53	0.51	0.49	0.47	0.45
Additions	0.00	0.00	0.00	0.00	0.00
Re-payments	0.02	0.02	0.02	0.02	0.02
Closing Debts	<b>0.51</b>	<b>0.49</b>	<b>0.47</b>	<b>0.45</b>	<b>0.43</b>

The opening GFA on 1.4.2009 has been taken from the petition as submitted by UPJVNL. The additions during the tariff period have been made according to the approved capitalization on R&M scheme. Since till the end of FY 2003-04, the depreciation has been duly allowed in the earlier tariff orders by the Commission to the extent of 90% of the GFA excluding cost of land, computation of residual NFA is essential for determination of opening accumulated depreciation as on 1.4.2009. The additional capitalization during FY 2004-05 to FY 2008-09 is amounting to ₹ 0.85 Cr. and repayment of loan ₹ 0.07 Cr.

Additions in GFA during FY 04-05 to FY 08-09 and Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09 as submitted by UPJVNL in the petition is as given below.

**Table 7.5. 5** *Amount in ₹ Crore)*

<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>TOTAL</b>
Ope. Bal. of Additional Capital Investment	0.00	0.49	0.77	0.85	0.85	<b>2.96</b>
Additional Capital Investment during the year	0.49	0.28	0.08	0.00	0.00	<b>0.85</b>
Closing Bal. of Additional capital Investment	0.49	0.77	0.85	0.85	0.85	<b>3.81</b>
Financing:						
Equity	0.15	0.08	0.02	0.00	0.00	<b>0.26</b>
Normative Loans	0.34	0.20	0.06	0.00	0.00	<b>0.60</b>
Depreciation @2.57% (Considered for Re-payment)	0.00	0.01	0.02	0.02	0.02	<b>0.07</b>
Depreciation already allowed	0.00	0.01	0.02	0.02	0.02	<b>0.07</b>

Empirical formula for determination of opening accumulated depreciation as on 1.4. 2009 has been worked out as follows:

**Op. Accu. Dep. as on 01.04.2009**

$$= (\text{Op. Bal. of GFA as on 01.04.09} - \text{Cost of Land incorporated in GFA} - \text{Additions in GFA during FY 04-05 to FY 08-09}) \times 0.9 + \text{Repayment of Loans on additional capitalization during FY 05-06 to FY 08-09}$$

$$= (\text{₹ 3.68 Cr.} - \text{₹ 0.01 Cr.} - \text{₹ 0.85 Cr.}) \times 0.9 + \text{₹ 0.07 Cr.}$$

$$= \text{₹ 2.61 Cr.}$$

Adjustment in accumulated depreciation has been considered to arrive at the balance debt amount. To ascertain the adjustment amount, the normative debts as 70% of GFA and the repayment of loans on additional capitalization on 1.4.2009 have been subtracted from the accumulated depreciation till end of FY 2008-09. The numerical expression is as below:

$$\text{Adjustment in accumulated depreciation}$$

$$= \text{₹ 2.61 Cr.} - (\text{₹ 3.68 Cr.} - \text{₹ 0.85 Cr.}) \times 0.7 - \text{₹ 0.07 Cr.}$$

$$= \text{₹ 0.56 Cr.}$$

**(d) Return on Equity**

UJVNL has considered 30% of total amount of GFA ₹ 3.68 Cr. as Equity on 1.4.2009. Considering 15.5% as return, the amount of Return on Equity has been worked out as under:

**Details of Return on Equity**

**Table 7.5. 6**

*Amount in ₹Crore)*

S.N.	Particular	2009-10	2010-11	2011-12	2012-13	2013-14
1	Opening Balance of Equity	1.10	1.10	1.10	1.10	1.10
2	Additions	0.00	0.00	0.00	0.00	0.00
3	Closing Balance	1.10	1.10	1.10	1.10	1.10
4	Return on Equity	0.17	0.17	0.17	0.17	0.17

**(e) Depreciation**

As the depreciation till the end of FY 2003-04 has been allowed to the extent of 90% of the GFA excluding cost of land in earlier tariff orders of the Commission, only the depreciation on additional capitalization during

FY 2004-05 to 2008-09 is being considered. Therefore, the permissible depreciation for FY 2009-10 to FY 2013-14 has been worked out as given in the following table.

**Details of Depreciation on Gross Fixed Assets**  
Table 7.5. 7 *Amount in ₹ Crore)*

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Depreciation as claimed by UPJVNL	0.08	0.08	0.08	0.08	0.08
<b>Less:</b> Part of the Depreciation already allowed	0.06	0.06	0.06	0.06	0.06
<b>Depreciation on additional Cumu. Capital Invest.</b>	0.02	0.02	0.02	0.02	0.02

**(f) Interest on Loans**

Accordingly, the computation of the interest charges is as under:

**Interest on Debts including Normative Loans**  
Table 7.5. 8 *Amount in ₹ Crore)*

Particular	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Opening Balance of Loan	0.53	0.51	0.49	0.47	0.45
Additions	0.00	0.00	0.00	0.00	0.00
Repayment	0.02	0.02	0.02	0.02	0.02
Balance	0.51	0.49	0.47	0.45	0.43
Average	0.52	0.50	0.48	0.46	0.44
<b>Interest @12.25%</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.05</b>

**(g) O&M Expenditure**

As per the Regulations, the normative values of operation and maintenance expenses including insurance for FY 2009-10 are to be derived by escalating by 10% the values approved by the Commission for FY 2008-09. The value so arrived is to be escalated thereafter by 5.72% per annum for FY 2009-10 onwards. The approved value for FY 2008-09 was ₹ 4.41 Cr. The petitioner has proposed the same in the petition which is hereby approved by the Commission.

**Table 7.5. 9** *Amount in ₹ Crore)*

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	4.85	5.13	5.42	5.73	6.06

**(h) Interest on Working Capital:**

The amount of Working Capital and Interest on Working Capital for the control period of F.Y. 2009-10 to 2013-14 as determined by the Commission are as under:-

**Working Capital as determined by the Commission**

**Table 7.5. 10**

*Amount in ₹ Crore)*

S.N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	O & M Expenses for One month	0.40	0.43	0.45	0.48	0.50
2	Maintenance Spares @ 15% of O & M Exp.	0.73	0.77	0.81	0.86	0.91
3	Receivables equivalent to 2 months of fixed charges	0.89	0.94	0.99	1.04	1.10
4	<b>Working Capital</b>	<b>2.02</b>	<b>2.14</b>	<b>2.26</b>	<b>2.38</b>	<b>2.52</b>
5	Rate of Interest	12.25	12.25	12.25	12.25	12.25
6	<b>I W C</b>	<b>0.25</b>	<b>0.26</b>	<b>0.28</b>	<b>0.29</b>	<b>0.31</b>

**(i) Fixed Charges**

Based on the above description and calculations shown in the tables as incorporated herein above the over all fixed charges in respect of Upper Ganga Canal Hydro Power Station as approved by the Commission are worked out as under:

**Fixed Charges of Upper Ganga Canal Hydro Power Station as approved by the Commission**

**Table 7.5. 11**

*Amount in ₹ Crore)*

S. N.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Depreciation	0.02	0.02	0.02	0.02	0.02
2	Interest on Loans	0.06	0.06	0.06	0.06	0.05
3	Return on Equity	0.17	0.17	0.17	0.17	0.17
4	O & M Expenses	4.85	5.13	5.42	5.73	6.06
5	Interest on Working Capital	0.25	0.26	0.28	0.29	0.31
	<b>TOTAL FIXED CHARGES:</b>	<b>5.35</b>	<b>5.64</b>	<b>5.95</b>	<b>6.27</b>	<b>6.61</b>
6	Energy Sent Out (MU)	31	31	31	31	31
7	Fixed Cost per unit	1.73	1.82	1.92	2.02	2.13



## Fixed Charges as claimed by UPJVNL and as approved by the Commission

Table 7.5. 12

Amount in ₹ Crore)

Particulars	FY 2009-10			FY 2010-11		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.00	0.06	0.06	0.00	0.06	0.06
Depreciation	0.08	0.02	-0.06	0.08	0.02	-0.06
Return on Equity	0.17	0.17	0.00	0.17	0.17	0.00
O & M Expenses	4.85	4.85	0.00	5.13	5.13	0.00
Interest on Working Capital	0.25	0.25	0.00	0.26	0.26	0.00
<b>Total :</b>	<b>5.35</b>	<b>5.35</b>	<b>0.00</b>	<b>5.64</b>	<b>5.64</b>	<b>0.00</b>
Ex-bus Energy Sent Out (MU)	32	31	-1.00	32	31	-1.00
<b>Fixed Cost per Unit</b>	<b>1.69</b>	<b>1.73</b>	<b>0.04</b>	<b>1.78</b>	<b>1.82</b>	<b>0.04</b>

Particulars	FY 2011-12			FY 2012-13		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.00	0.06	0.06	0.00	0.06	0.06
Depreciation	0.08	0.02	-0.06	0.08	0.02	-0.06
Return on Equity	0.17	0.17	0.00	0.17	0.17	0.00
O & M Expenses	5.42	5.42	0.00	5.73	5.73	0.00
Interest on Working Capital	0.28	0.28	0.00	0.29	0.29	0.00
<b>Total :</b>	<b>5.95</b>	<b>5.95</b>	<b>0.00</b>	<b>6.27</b>	<b>6.27</b>	<b>0.00</b>
Ex-bus Energy Sent Out (MU)	32	31	-1.00	32	31	-1.00
<b>Fixed Cost per Unit</b>	<b>1.88</b>	<b>1.92</b>	<b>0.04</b>	<b>1.98</b>	<b>2.02</b>	<b>0.04</b>

Particulars	FY 2013-14		
	As claimed by UPJVNL	As determined by the Commission	Diff. (if any)
Interest on Loan	0.00	0.05	0.05
Depreciation	0.08	0.02	-0.06
Return on Equity	0.17	0.17	0.00
O & M Expenses	6.06	6.06	0.00
Interest on Working Capital	0.31	0.31	0.00
<b>Total :</b>	<b>6.62</b>	<b>6.61</b>	<b>-0.01</b>
Ex-bus Energy Sent Out (MU)	32	31	-1.00
<b>Fixed Cost per Unit</b>	<b>2.09</b>	<b>2.13</b>	<b>0.04</b>







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**Section - 6**

**Multi Year Tariff**

**for**

**Belka, Babail & Sheetla Small Hydro Power Stations**

**for**

**FY 2009-10 to 2013-14**



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## 1. Tariff for Belka & Babail

Earlier on petition no. 491/07 filed by UPJVNL for determination of Tariff for Belka (2x1.5 MW) and Babail (2x1.5 MW) small hydro power stations, the Commission had observed that neither the capital cost had then been decided nor the PPAs had been entered. In the ARR and Tariff Petition filed by UPJVNL no Tariff proposals for determination of Tariff in respect of these small hydro power stations have been submitted. Subsequently in the meetings between UPJVNL and UPPCL consensus has been reached in respect of Capital Cost of Belka and Babail Power Stations which were commissioned as far back as in the year 2001-02. Although UPJVNL has furnished the details of capital expenditure vide letter dated 30.05.2011 the categorization of assets has not been provided in the prescribed formats as per UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009. In this reference UPJVNL, vide letter dated: 19.08.2011, has submitted that they have initiated the process for filing of tariff formats as prescribed under the Regulations. Hence, the Commission decides to take up the process of determination of tariff for Belka & Babail separately. UPJVNL is hereby directed to file the requisite details on prescribed formats for finalization of tariff for Belka & Babail under the pending petition no. 491 / 07.

## 2. Tariff for Sheetla small hydro power station

UPJVNL has not submitted the requisite information regarding Sheetla (3x1.2 MW) small hydro power station which was put on commercial load in FY 2006-07. According to the provisions contained in UPERC (Captive and non-conventional Energy generating Plants) Regulations, 2009, it comes within the category of “small hydro plants – old projects”. UPJVNL, vide letter dated: 19.08.2011, has accepted the operation of this power station under CNCE Regulations, 2009. Therefore, the Commission decides that the effective tariff for Sheetla small hydro power station during the MYT period shall be as provided under the CNCE Regulations, 2009, as follows:



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## Effective Tariff of Sheetla small hydro power station

Table 6. 1

S. N.	Name of Hydro Power Station	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
1.	Sheetla	3.06	2.97	2.89	2.81	2.73



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## 8. OTHER PROVISIONS

### (A) Recovery of Statutory Fees, Income Tax and Cess etc.

In addition to the above tariff the UPJVNL is allowed to recover the Regulatory Fee paid to the Commission on production of details of actual payments duly supported with the certificate of the Statutory Auditors. Income Tax along with the Surcharge and Education Cess, etc. shall be allowed on actuals as applicable. The payment of Service Tax on services provided by CISF shall not be allowed separately because the same has already been included in norms of O & M Expenses.

### (B) Elements of Arrears of Sixth Pay Commission.

The element of Sixth Pay Commission has been considered in approved O&M expenditures for the financial years 2009-10 to 2013-14 as per the UPERC (Terms & Conditions of Generation Tariff) Regulations, 2009. However, the payment of arrears for the period from 1st January, 2006 to March 31, 2009 shall be claimed by UPJVNL from the beneficiaries on providing the details of actual payments in the following manner:

- a. Arrears for the period 1st Jan, 2006 to 31st March, 2006 in F.Y. 2010-11.
- b. Arrears for the period 1st April, 2006 to 31st March, 2007 in F.Y. 2011-12.
- c. Arrears for the period 1st April, 2007 to 31st March, 2008 in F.Y. 2012-13.
- d. Arrears for the period 1st April, 2008 to 31st March, 2009 in F.Y. 2013-14.

### (C) Incentive

Incentive shall be calculated according to Regulations 40 of UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009. Incentive does not form a component of tariff. It would be recoverable only at the end of the year based on the PLF actually achieved by the concerned power station.

### (D) Billing & Payment

Billing and Payment of Capacity Charges shall be done under provisions of Regulation 48 of UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009.

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**(E) Payment of Dues**

The Petitioner shall endeavour to realize dues from the Respondents and it may approach the Commission, for default in payments, for necessary relief including proposal for Regulation of Supply associated with alternative sale potential of such regulated power under Regulation 44 of the Generation Regulations.

**(F) Truing up of Capital Expenditure and Tariff**

- (i) The Commission shall carry out truing up exercise alongwith the tariff petition filed for the next tariff period with respect to the Capital Expenditure incurred up to 31.03.2014, as admitted by the Commission after prudence check at the time of truing up. Provided that the UPJVNL may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff.
- (ii) UPJVNL shall make an application as per Appendix-I, Part - II of UPERC (Terms & Conditions of Generation Tariff) Regulation, 2009 for carrying out truing up exercise.
- (iii) UPJVNL shall submit details of duly audited and certified Capital Expenditure and Additional Capital Expenditure incurred for the period from 01.04.2009 to 31.03.2014 for the purpose of truing up.
- (iv) Any over or under recovery shall be adjusted retrospectively with simple interest at the rate equal to short term PLR of SBI as on 1<sup>st</sup> April of the respective year.

**(G) Commission's Directives**

- (i) As most of the Generating Plants of UPJVNL are old plants having completed their useful life, it is directed to UPJVNL to undertake a detailed financial viability analysis of these projects before submitting any other R & M proposal for approval of the Commission.
- (ii) The UPJVNL has not entered into Power Purchase Agreements (PPAs) with the Respondents for the control period of MYT or even for earlier period. As these Generating Stations are state owned and the generated

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power is utilized by the people of the state through DISCOMs the MYT has been approved by the Commission for up to FY 2013-14 on petitions filed by UPJVNL even though the required PPAs are not in place. Nevertheless, **UPPCL is directed to submit the PPAs with UPJVNL at least for the period up to FY 2013-14 for the approval of the Commission within three months from the date of this order. UPJVNL shall ensure timely submission of PPAs as per the Commission's directive.**

- (iii) The Commission also directs UPJVNL for swapping or one time settlement of balance of the LIC loans.
- (iv) As per the PPA dated 18.12.2000, the obligation of supply of power to some other States, as per the mutual agreement entered into or to be entered into in the future was to be discharged by UPPCL. In generation of Rihand and Matatila hydro power stations the share of Madhya Pradesh State is 15% and 33 1/3 % respectively and the energy to the extent of their share is being drawn through the Western Regional Load Dispatch Centre (WRLDC) and Northern Regional Load Dispatch Centre (NRLDC). The supply has been resumed w.e.f. 01.04.2008 as per directives of the Central Electricity Regulatory Commission (CERC) under order dated: 27.02.2008 in Petition no.107 of 2007. Although the supply has been resumed and continued till date but neither any PPA has been entered with MPTRADECO nor any billing has been done for the supplied energy. Similar is the situation with 20% share of Himachal Pradesh from Khara hydro power station. **In this issue, the Commission directs UPJVNL and UPPCL to ensure the necessary PPAs for supply of energy with MP & HP within 3 months from the date of this Tariff Order.**







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## 9. IMPLEMENTATION OF ORDER

This order shall be effective for the period 1.4.2009 to 31.03.2014 for the Multi Year Tariff period of F.Y. 2009-10 to F.Y 2013-14. UPJVNL is entitled to raise the bills as per the tariff order under provisions of UPERC (Terms & Conditions of Generation Tariff) Regulation, 2009 and CNCE Regulations, 2009.

(Meenakshi Singh)  
Member

(Shree Ram)  
Member

(Rajesh Awasthi)  
Chairman

Place : Lucknow

Dated: 20.10.2011



# Annexure -1

आमरणकामुतासुर निगोशिएवान/ कणिकिके यारो को पाएगी। सीपी निगम के प्रबन्ध निदेशक को दिनांक काएर बाएर एके या समस्त निविदाओं को निरस्त करने का अधिकार सुरक्षित होना। प्रबन्ध निदेशक

**U.P. JAL VIDYUT NIGAM LTD.**  
 (A Govt. of Uttar Pradesh Enterprise)  
 12th Floor, Shakti Bhawan Extension  
 14-Ashok Marg, Lucknow - 226 001  
 Phone : (0522) 2635800, 2288308; Fax : (0522) 2635800, 2288103

**PUBLIC NOTICE**  
 The UTTAR PRADESH JAL VIDYUT NIGAM LIMITED (UPJVNL) has filed the Petition for Approval of Tariff delimitation in respect of Hydro Power Stations namely Rihand (860 MW), Odra (3x33 MW), Metaitla (3x10 MW), Khara (3x24 MW) and Upper Ganga Canal based Hydro Power Stations namely Nirgaoni (2x2.5 MW), Chitaura (2x1.5 MW), Balawa (2x1.5 MW) and Dhola (4x0.375 MW + 2x0.6 MW) for the Multi Year Tariff (MYT) for the Control Period FY 2008-10 to FY 2013-14 before the Uttar Pradesh Electricity Regulatory Commission (UPERC) under the provisions of Electricity Act, 2003 and UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009. The Commission has admitted the Petition on January 18, 2011 and directed UPJVNL to publish a Public Notice under Section 64 (2) of the Electricity Act 2003.

The salient features of the Petition are provided below:  
 Table - Aggregate Revenue Requirement of UPJVNL for existing stations.

Particulars	Unit	FY 10	FY 11	FY 12	FY 13	FY 14
Interest on loan	Rs. Crs.	0.57	11.00	14.40	17.55	21.30
Depreciation	Rs. Crs.	4.41	4.41	5.87	7.32	11.22
Return on Equity	Rs. Crs.	16.46	16.46	17.57	19.98	21.79
O & M Expenses	Rs. Crs.	42.72	46.17	47.75	60.48	63.37
Interest on Working Capital	Rs. Crs.	2.76	2.80	3.18	3.45	3.60
Total Fixed Cost	Rs. Crs.	74.91	79.92	88.77	98.40	111.64
Salable Energy	MU	1,717	1,717	1,717	1,717	1,717
Unit Rates	Rs./kWh	0.44	0.46	0.52	0.57	0.65

Copies of ARR and Tariff Petitions as submitted to U.P. Electricity Regulatory Commission by UPJVNL may be obtained on any working day from the Office of Executive Engineer (Commercial), UPJVNL, 12th Floor, Vikas Deep Building, 22-Station Road, Lucknow on payment of Rs. 1000/- (Rupees One Thousand Only) through cash or Demand Draft. Demand Draft should be in favour of "U.P. Jal Vidyut Nigam Ltd., Lucknow", payable at Lucknow. The detailed ARR and Tariff Petitions are also available at the website of UPJVNL at [www.upjvn.org](http://www.upjvn.org).

All concerned Consumers, Individuals and Organizations, Licensees and Departments of State Government may send their objections, if any, along with notarized affidavit in Six copies. Four Copies may be sent to Secretary, U.P. Electricity Regulatory Commission, Kisan Mandi Bhawan, 2nd Floor, Vibhuti Khand, Gomti Nagar, Lucknow and two copies to the Chief Engineer (O&M), UPJVNL, 12th Floor, Shakti Bhawan Extn., 14-Ashok Marg, Lucknow-226001 within 07 days from the date of the publication of the Public Notice.

**CHIEF ENGINEER (O&M)**

"Save Electricity for Nation"  
 Website : [www.upjvn.org](http://www.upjvn.org)

Dattik Jagan, Lucknow, 23-01-2011

Controller of Stores & Purchase

**U.P. JAL VIDYUT NIGAM LTD.**  
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The salient features of the Petition are provided below:  
 Table - Aggregate Revenue Requirement of UPJVNL for existing stations.

Particulars	Unit	FY 10	FY 11	FY 12	FY 13	FY 14
Interest on loan	Rs. Crs.	9.57	11.00	14.40	17.55	21.30
Depreciation	Rs. Crs.	4.41	4.41	5.87	7.32	11.22
Return on Equity	Rs. Crs.	16.46	16.46	17.57	19.98	21.79
O & M Expenses	Rs. Crs.	42.72	46.17	47.75	60.48	63.37
Interest on Working Capital	Rs. Crs.	2.76	2.80	3.18	3.45	3.60
Total Fixed Cost	Rs. Crs.	74.91	79.92	88.77	98.40	111.64
Salable Energy	MU	1,717	1,717	1,717	1,717	1,717
Unit Rates	Rs./kWh	0.44	0.46	0.52	0.57	0.65

Copies of ARR and Tariff Petitions as submitted to U.P. Electricity Regulatory Commission by UPJVNL may be obtained on any working day from the Office of Executive Engineer (Commercial), UPJVNL, 12th Floor, Vikas Deep Building, 22-Station Road, Lucknow on payment of Rs. 1000/- (Rupees One Thousand Only) through cash or Demand Draft. Demand Draft should be in favour of "U.P. Jal Vidyut Nigam Ltd., Lucknow", payable at Lucknow. The detailed ARR and Tariff Petitions are also available at the website of UPJVNL at [www.upjvn.org](http://www.upjvn.org).

All concerned Consumers, Individuals and Organizations, Licensees and Departments of State Government may send their objections, if any, along with notarized affidavit in Six copies. Four Copies may be sent to Secretary, U.P. Electricity Regulatory Commission, Kisan Mandi Bhawan, 2nd Floor, Vibhuti Khand, Gomti Nagar, Lucknow and two copies to the Chief Engineer (O&M), UPJVNL, 12th Floor, Shakti Bhawan Extn., 14-Ashok Marg, Lucknow-226001 within 07 days from the date of the publication of the Public Notice.

**CHIEF ENGINEER (O&M)**

"Save Electricity for Nation"  
 Website : [www.upjvn.org](http://www.upjvn.org)

The Trace of India, Lucknow, 23-01-2011

Sl. No.	Name of Work	Estimated Cost	Completion Period
1	Construction of New Control Tower cum Technical Blocks at Mahajana Airport	1684.65 Lac	11 Months
2	Construction of Cargo Terminal cum associated Electrical works at Srinagar International Airport, Binsar	813.58 Lac	14 Months

For detailed information and eligibility criteria visit [www.airportsindia.org.in](http://www.airportsindia.org.in) or [www.sai.aero](http://www.sai.aero) or Contact on Ph. 2518 for Sl. No. 1 & Extn. 2649 for Sl. No. 2. Further clarification/condendum in this regard, if any, will be put up in a separate Condendum.

**pstcl Punjab State Transmission Corp.**  
 Regd. Office: PSEB, Head Office, The M. Office of the Engineer-in-Chief/Substation, PSTCL, C-1, Shakti V. **CORRIGENDUM-I**  
 The extended dates regarding PSTCL specification No. 2 Nos. Truck Mounted Mobile Crenas capable transformers of dimensions 5500 mm (Length) x 5500 4000 mm (Height) of weight 68 MT from a distance of 9 Last date & time for sale of tender documents : 14.02.2011 Last date & time for receipt of tenders : 16.02.2011 Date & time of opening of tenders : 16.02.2011 All other terms & conditions of original NIT remain unch. Detailed NIT may be down-loaded from our website unch. Replace bills with CFLs to reduce your electricity bill. C-1/3/10 Dy. C PSTCL

**pstcl Punjab State Transmission Corp.**  
 Regd. Office: PSEB, Head Office, The Office of the Chief Engineer/TL, Design Transmission, B-2, Shakti Telephones: Chief Engineer/TL: 2303876 (Direct). Dy. CE/Trans. De. Addl. SE/TS-II: 2220777-83 & 2220688-98 Extn. Telegram: PUNJDESTTRAN E-mail: [dir-design-trans@pstcl.in](mailto:dir-design-trans@pstcl.in)  
**SPECIFICATION NO. STQ-2008/1**  
 Tender Notice for supply of HTGSS Earth wire of 21 Tender Enquiry No./Year : STQ-2008/2011 Quantity : 7/2 24 mm = 11 Last date and time for i) Sale of Tenders : 10.03.2011 up to ii) Receipt of tenders : 15.03.2011 up to iii) Opening of tenders : 15.03.2011 at iv) Price of tender documents : Rs. 1,000/- Detailed NIT may be down loaded from [www.pstcl.in](http://www.pstcl.in) and [punjabidc.org](http://punjabidc.org) Dy. SAVE ELECTRICITY TO REDUCE POWER CUTS C-56/11 for CE/





## Annexure -2

**U.P. ELECTRICITY REGULATORY COMMISSION**  
 11nd Floor, Kisan Mandi Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow  
 Ph.: 2720426, 2720427 Fax: 0522-2720423, E-mail : secretary@uperc.org, website : www.uperc.org

No. UPERC/ Secy./ D(G)/2011/1610 Lucknow; Dated : 08.02.2011

**PUBLIC NOTICE**  
 In the matter of:  
 Petition No. 661 of 2010 filed by UP Jal Vidyut Nigam Limited (UPJVNL)  
 And  
 Petition No. 706 of 2010 filed by Rosa Power Supply Company Limited (RPSCCL)  
 2x300 MW Rosa Thermal Power Project (Phase-1)  
 for Determination of Multi Year Tariff (MYT) for FY 2009-10 to 2013-14

Whereas the Commission has admitted the petitions on 18th January, 2011 with the direction to the petitioner to publish the applications in abridged form in the newspapers within seven days from the date of order with seven days time for submission of suggestions and objections from all concerned.

And, the Petitioners were also directed to put the above mentioned petitions along with the relevant documents on their websites [www.upjvn.org](http://www.upjvn.org) and [www.rel.co.in](http://www.rel.co.in) respectively and also to make available hard copies of the same, for inspection by any person during office hours, at their Registered Offices at UP Jal Vidyut Nigam Limited, 12th Floor, Shakti Bhawan Ext., 14 Ashok Marg, Lucknow, U.P. and Rosa Power Supply Company Limited (RPSCCL) Administrative Block, Hardoi Road, P.O. Rosar Kothi, Tehsil Sadar, Distt. Shahjahanpur respectively.

Notice is hereby given to the stakeholders and interested parties to **submit comments/objections/suggestions to the above petitions in writing** directly to the Commission at Kisan Mandi Bhawan, 2<sup>nd</sup> Floor, Gomti-Nagar, Lucknow, **with an advance copy to the petitioner**, personally or by post so as to reach before 16.2.11 in the matter.

The hearing in the matter shall be held on 24.2.11 at 15:00 hrs. in the office of the Commission.

**Secretary**

← Times of India  
 9.2.11  
 Pg - 11

**U.P. ELECTRICITY REGULATORY COMMISSION**  
 11nd Floor, Kisan Mandi Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow  
 Ph.: 2720426, 2720427 Fax: 0522-2720423, E-mail : secretary@uperc.org, website : www.uperc.org

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**Secretary**

← Amar Ujala  
 9.2.11  
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