

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.231/GT/2013**

**Coram:**

**Shri Gireesh B.Pradhan,Chairperson  
Shri M.Deena Dayalan, Member  
Shri A.K.Singhal, Member**

**DATE OF HEARING: 01.07.2014**

**DATE OF ORDER: 27.01.2015**

**In the matter of**

Approval of revision of generation tariff in respect of Chamera Hydroelectric Project, Stage-II (3 x 100 MW) for the period from 1.4.2009 to 31.3.2014. Truing up of tariff determined by Commission's order dated 27.1.2012 in Petition No. 66/2010 and Order dated 1.10.2012 in RP No. 9/2012.

**And In the matter of**

NHPC Ltd,  
NHPC Office Complex, Sector 33,  
Faridabad – 121003

**.....Petitioner**

Vs

1. Punjab State Power Corporation Ltd  
The Mall, Secretariat Complex,  
Patiala – 147 001
2. Haryana Power Purchase Centre,  
Shakti Bhawa, Sector 6,  
Panchkula – 134 109
3. BSES Rajdhani Power Ltd  
BSES Bhawan, Nehru Place,  
New Delhi – 110 019
4. Uttar Pradesh Power Corporation Ltd  
Shakti Bhawan, 14, Ashok Road,  
Lucknow – 226 001
5. BSES Yamuna Power Ltd  
BSES Bhawan, Nehru Place,  
New Delhi – 110 019
6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd

Vidyut Bhawan, Janpath, Jyoti Nagar,  
Jaipur – 302 205

7. Jaipur Vidyut Vitran Nigam Ltd  
Vidyut Bhawan, Janpath,  
Jaipur – 302 205

8. Jodhpur Vidyut Vitran Nigam Ltd  
New Power House, Industrial Area,  
Jodhpur – 342 003

9. Ajmer Vidyut Vitran Nigam Ltd  
Old Power House,  
Hatthi Bhatta, Jaipur Road,  
Ajmer – 305 001

10. Tata Power Delhi Distribution Ltd  
33 KV Sub-station, Kingsway Camp  
Delhi – 110 009

11. Uttranchal Power Corporation Ltd  
Urja Bhawan, Kanwali Road,  
Dehradun – 248 001

12. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House,  
Shimla-171004

13. Engineering Department,  
1st Floor, UT Secretariat,  
Sector-9 D, Chandigarh-160009

14. Power Development Department,  
Government of J&K,  
New Secretariat,  
Jammu – 180001

...Respondents

**Parties Present**

Shri Piyush Kumar, NHPC  
Shri. A.K. Pandey, NHPC  
Shri. S.K. Meena, NHPC  
Shri Padamjit Singh, PSPCL  
Shri R.B. Sharma, BRPL  
Ms. Megha Bajpeyi, BRPL

**ORDER**

The Petition has been filed by NHPC Ltd, for revision of tariff in respect of Chamera Hydroelectric Project, Stage-II (3 x 100 MW) (hereinafter referred to as “the generating station”), for the period 1.4.2009 to 31.3.2014 in accordance with clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) after accounting for additional capital expenditure.

2. The generating station comprises of three respectively Units which were commissioned on 2.11.2003, 1.1.2004 and 31.3.2004. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission vide its order dated 9.5.2006 in Petition No 187/2004, based on capital cost of ₹1,95,606 lakh (inclusive of FERV) as on 31.3.2004. Subsequently, by order dated 9.6.2009 in Petition No. 10/2009, the tariff for the generating station was revised after taking into account the impact of additional capital expenditure incurred for the years 2004-05 and 2005-06 respectively. Thereafter, the tariff of the generating station was further revised by Commission’s order dated 7.9.2010 in Petition No. 190/2009 after taking into account the additional capitalization /de-capitalization incurred for the years 2006-07, 2007-08 and 2008-09 respectively, based on the capital cost of ₹2,00,334.77 lakh as on 31.3.2009.

3. The tariff for the period from 1.4.2009 to 31.3.2014 was approved by the Commission vide order dated 27.1.2012 in Petition No.66/2010. Subsequently, vide order dated 1.10.2012 in Review Petition No. 9/2012, the tariff of the above generating station for the period from 1.4.2009 to 31.3.2014 was revised and the following annual fixed charges was approved by the Commission.

(₹ in lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Return on Equity	10738.41	10740.50	10742.25	10743.56	10743.72
Interest on Loan	7133.24	6184.34	5247.76	4289.30	3209.08
Depreciation	10491.66	10493.75	10495.49	10496.80	10496.96
Interest on Working	920.78	919.95	920.43	921.58	921.36
O & M Expenses	6589.78	6966.71	7365.21	7786.50	8231.89
<b>Total</b>	<b>35873.59</b>	<b>35305.25</b>	<b>34771.14</b>	<b>34237.74</b>	<b>33603.01</b>

4. The Petitioner in this petition has claimed revision of tariff for the period 2009-14 based on the actual additional capital expenditure incurred during the period 2009-12 and revised projections for additional capital expenditure for the period 2012-14.

5. Replies to the petition have been filed by Respondent No.3, BSES Rajdhani Power Ltd (BRPL), Respondent No.4 Uttar Pradesh Power Corporation Ltd (UPPCL) and the Respondent No. 9, Ajmer Vidyut Vitran Nigam Ltd (AVVNL). The Petitioner has also filed its rejoinder to the said replies.

6. The first proviso to Regulation 6 of the 2009 Tariff Regulations provides as under:

*"6. Truing up of Capital Expenditure and Tariff*

*- The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.*

*- Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff."*

7. The annual fixed charges as claimed by the Petitioner for the period 2009-14 is as under:

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
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Return on Equity	14420.93	14250.94	14086.93	10906.87	11426.72
Interest on Loan	6994.19	4384.38	4441.55	4325.65	3244.92
Depreciation	10322.45	10322.87	10325.13	10487.51	10487.83
Interest on Working	991.11	952.04	967.79	925.55	936.15
O & M Expenses	6589.78	6966.71	7365.21	7786.50	8231.89
<b>Total</b>	<b>39318.47</b>	<b>36876.93</b>	<b>37188.60</b>	<b>34432.08</b>	<b>34327.51</b>

## CAPITAL COST

8. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides as under:

*"Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff."*

9. As stated above, the Commission vide its order dated 27.01.2012 in Petition No. 66/2010 had approved the capital cost of ₹2,00,334.77 lakh as on 31.3.2009, after taking into account the additional capital expenditure for the period 2006-09. Accordingly, in terms of the above proviso, the capital cost of ₹2,00,334.77 lakh as on 31.3.2009 has been considered as the opening capital cost as on 1.4.2009.

## Additional Capital Expenditure

10. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, provides as under:

**"9. Additional Capitalization.** (1) *The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

(i) *Un-discharged liabilities;*

(ii) *Works deferred for execution;*

(iii) *Procurement of initial capital spares within the original scope of work, subject to the*

provisions of regulation 8;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(v) Change in law:

*Provided that the details of works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.*

(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

*Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.*

(vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.

*Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.*

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialization of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.

(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility." (B) Additional Capital Expenditure for 2009-14."

11. The additional capital expenditure for 2009-14 allowed after adjustment of un-discharged liabilities vide order dated 27.1.2012 in Petition No. 66/2010 is as under:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capitalization allowed (prior to adjustment on account of un-discharged liabilities)	17.88	16.71	50.00	0.00	5.98
(+) Liabilities discharged	44.95	0.00	0.00	0.00	0.00
<b>Additional Capitalization allowed for the purpose of tariff</b>	<b>62.83</b>	<b>16.71</b>	<b>50.00</b>	<b>0.00</b>	<b>5.98</b>

12. The Petitioner in the present petition has claimed following actual additional capital expenditure:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capitalization (before adjustment on account of un-discharged liabilities)	(-)62.22	(-)78.77	53.74	0.00	5.98
Less : Un-discharge liability during the year	7.11	6.23	6.28	0.00	0.00
Add : Liability discharged during the year	0.00	7.11	6.23	4.56	1.72
Add : Liabilities discharged during the year (related to un-discharged liability as on 31.03.2009)	40.69	4.26	0.00	0.00	0.00
<b>Additional Capital expenditure claimed</b>	<b>(-)28.64</b>	<b>(-)73.62</b>	<b>53.68</b>	<b>4.56</b>	<b>7.70</b>

13. The respondent BRPL in its reply has submitted that the Petitioner shall be directed to file complete details of the additional capital expenditure incurred for the period 2009-10 to 2011-12 duly audited and certified by auditors as per Regulation 6(3) of the 2009 Tariff Regulations. We notice that the Petitioner, in compliance with our direction dated 15.7.2013 has submitted the audited statement of additional capitalization on 12.8.2013.

14. The reconciliation of the actual additional capital expenditure claimed with respect to the additional capital expenditure as per books of accounts, duly certified by auditor for the period 2009-12 is as under:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12
Additions as per books (a)	1049.91	(-)76.71	1285.61
Additions claimed - (b)			
Additions against works already approved	17.02	3.41	0.00
Additions not projected / not allowed but incurred and claimed due to actual site requirement	53.85	20.40	46.01
Capitalization against works allowed in certain year but work actually completed in subsequent years	0.00	13.00	10.91
IUT transfer	1.87	6.56	0.00
<b>Total (b)</b>	<b>72.75</b>	<b>43.37</b>	<b>56.92</b>
<b>Deletions (c)</b>	<b>(-)134.96</b>	<b>(-)122.14</b>	<b>(-)3.18</b>
Exclusions in additions (incurred, capitalized in books but not to be claimed for tariff purpose) (d1)	1140.37	290.22	1280.44
Exclusions in deletions (de- capitalized in books but not to be considered for tariff purpose) (d2)	(-)28.24	(-)288.15	(-)48.57
<b>Net value of exclusions (d=d1+d2)</b>	<b>1112.13</b>	<b>2.06</b>	<b>1231.87</b>
<b>Net additional capitalization as per books of accounts (e)=(b)+(c)+(d)</b>	<b>1049.91</b>	<b>(-)76.71</b>	<b>1285.61</b>
<b>Net Add-cap to be claimed for tariff purpose</b>			
Net claim before un-discharged/ discharged liabilities (f)=(b)+(c)	(-)62.22	(-)78.77	53.74
<b>Add:</b> Liabilities existed as on 31.3.2009, discharged during the year	40.69	4.26	0
<b>Add:</b> Liabilities discharged during the year for add cap of 2009-14	0.00	7.11	6.23
<b>Less:</b> Un-discharged liabilities for the Add cap during 2009-14	7.11	6.23	6.28
<b>Additional Capital Expenditure claimed</b>	<b>(-)28.64</b>	<b>(-)73.62</b>	<b>53.68</b>



15. Based on the above reconciliation, the year-wise admissibility of the works, the expenditure allowed by the Commission for these works, the actual expenditure against these works along with admissibility of the actual expenditure in terms of the 2009 Tariff Regulations for 2009-10, 2010-11 and 2011-12 under various heads taking into consideration the submission of the parties is discussed in the subsequent paragraphs.

### **Additions against Works approved in Orders dated 27.1.2012**

16. The year-wise actual additional capital expenditure claimed by the Petitioner vis-à-vis the additional capital expenditure allowed by the Commission on projected basis in orders dated 27.1.2012 in Petition No. 66/2010 is as under:

<b>Particulars</b>	(₹ in lakh)		
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Additional capital expenditure <b>allowed</b> in Petition No. 66/2010	62.83	16.71	50.00
Additional capital expenditure <b>claimed</b> in the present petition	(-) 28.64	(-) 73.62	53.68

17. The Petitioner has clarified that the variation in respect of the additional capital expenditure allowed by Commission on projected basis to the actual expenditure incurred in case of certain assets/works is higher, on account of the competitive rates quoted by the bidders.

### **2009-10**

(₹ in lakh)

<b>Sl.No</b>	<b>Assets/works</b>	<b>Amount allowed by order dated 27.01.2012 on projected basis</b>	<b>Actual expenditure incurred/ claimed</b>	<b>Decision on admissibility</b>
1.	Providing Acoustic enclosure, AMF panel for 1 MVA diesel generator	12.00	9.87	<b>Allowed</b> under Regulation 9(2) (iv) as already approved works to meet environment requirement.

2.	Purchase of oxygen concentrator, SWD, ultrasonic therapy unit, etc. for hospital	5.00	7.15	<b>Allowed</b> under the Regulation 9(2) (iv) as already approved works, for the benefit of employees which in turn has a bearing on successful and efficient operation of the plant.
3.	<b>Total claimed</b>		<b>17.02</b>	
4.	<b>Total allowed</b>			<b>17.02</b>

**2010-11**

(₹ in lakh)

Sl.No.	Assets/works	Projected expenditure allowed by order dated 27.1.2012 on projected basis	Actual exp. incurred/ claimed	Decision on admissibility
1	Construction of security huts at surge shaft, Audit-II & desilting chamber	3.00	3.41	<b>Allowed</b> under Regulation 9(2) (iv) as already approved works for security purpose at remote project locations which contributes to the successful and efficient operation of the plant.
	<b>Total claimed</b>	<b>3.00</b>		
	<b>Total allowed</b>			<b>3.41</b>

**2011-12**

Sl.No.	Assets/works	Projected expenditure allowed by order dated 27.1.2012	Actual exp. incurred/ claimed	Justification for admissibility of expenditure
	<b>Total claimed</b>		<b>Nil</b>	

**Works allowed in 2009-10 but capitalized in 2010-11**

(₹ in lakh)

Sl.No.	Assets/works	Projected expenditure allowed by order dated 27.1.2012	Actual exp. incurred/ claimed	Justification for admissibility of expenditure
1	Construction of canteen building at dam	8.00	8.55	<b>Allowed</b> under Regulation 9(2) (iv) for already approved works for the benefit of employees located at remote location of dam.

2.	Security barrier for CISF	5.00	4.45	<b>Allowed</b> under Regulation 9(2) (iv) as expenditure already approved for works necessary for security of the plant.
	<b>Total expenditure claimed</b>		<b>13.00</b>	
	<b>Total expenditure allowed in 2010-11</b>			<b>13.00</b>

**Work allowed in 2010-11 but capitalized in 2011-12**

(₹ in lakh)

Sl.No.	Assets/works	Projected expenditure allowed by order dated 27.1.2012	Actual exp. incurred/ claimed	Justification for admissibility of expenditure
1	Purchase of 1 no. vehicle for HOP	8.00	10.91	Allowed under Regulation 9(2) (iv) as already approved works against replacement of vehicle.
	<b>Total</b>	<b>8.00</b>	<b>10.91</b>	
	<b>Total allowed 2011-12</b>			<b>10.91</b>

**Capital expenditure not projected but incurred and claimed in 2009-10**

(₹ in lakh)

Sl.No.	Assets/works	Actual expenditure incurred/ claimed	Justification for admissibility of expenditure
1	Single mode 6-core / 12-core armored optical fibre cable with steel wire (2 nos.)	3.00	<b>Allowed</b> under Regulation 9(2)(iv) to upgrade existing communication between remotely located dam, PH & Administrative building
2	24-port Gigabit stackable management switch (2 nos.)	2.52	<b>Not allowed</b> under Regulation 9(2)(iv) as the assets are in the nature of O&M.
3	Network security UTM Firewall	1.75	<b>Allowed</b> under Regulation 9(2)(iv) for safeguarding the internet/network and for efficient functioning.

4	New DG room at PH	(-)0.03	<b>Allowed</b> under Regulation 9(2)(iv) as these expenses pertain to adjustment in the final bill for assets capitalised during 2008-09.
5	Capitalization of multipurpose hall at Karian	(-)0.09	
6	Laying of RCC pipe near school at Karian	(-)0.03	
7	Security hut of CISF at township Karian	3.81	<b>Allowed</b> under Regulation 9(2)(iv) following recommendations of State Police Authorities for security purpose which eventually increase the efficiency of the plant.
8	Scissor lifting platform capacity 2500 KG	5.68	<b>Allowed</b> under Regulation 9(2)(iv) for efficient operation of the plant as the Petitioner has submitted that in the absence of such equipment, a lot of time is wasted on account of repairs leading to downtime of machine.
9	Hydraulically operated beam/ boom barriers (2 numbers)	1.7	<b>Allowed</b> under Regulation 9(2)(iv) for security purpose as hydraulically operated beam/ boom barriers were installed at power house and dam complex following the recommendations of the security agency.
10	Water supply in A-type quarters at Karian	0.001	<b>Allowed</b> under Regulation 9(2)(iv) as these expenses pertain to adjustment in the final bill of the assets capitalized during 2008-09.
11	Sewage treatment equipment 20 CMD	12.79	<b>Allowed</b> under Regulation 9(2)(iv) as the expenditure will increase the efficiency of the plant and also ensure the compliance of norms of HP Pollution Control Board.
12	OS windows vista business English international	0.13	<b>Not allowed</b> under Regulation 9(2)(iv) as the assets are minor in nature and therefore, not allowed after the cut off date.
13	Antivirus software	0.44	<b>Not allowed</b> under Regulation 9(2)(iv) as the assets are minor in nature.
14	Ohm meter	3.01	<b>Not allowed</b> under Regulation 9(2)(iv) since the expenditure is in the nature of tools & tackles.

15	Protection work to muck disposal at village Rakh	(-)0.57	<b>Allowed</b> under Regulation 9(2)(iv) for efficient operation of plant as expenditure pertain to adjustment in the final bill of the assets capitalized during 2008-09.
16	Providing protection to muck disposal site near Rakh.	19.74	<b>Allowed</b> under Regulation 9(2)(iv) as the expenditure will increase the efficiency of the plant has also ensure the compliance of norms of HP Pollution Control Board.
<b>Total claimed</b>		<b>53.85</b>	
<b>Total allowed</b>			<b>50.27</b>

### 2010-11

(₹ in lakh)

	<b>Assets/works</b>	<b>Actual expenditure incurred / claimed</b>	<b>Justification for admissibility of expenditure</b>
1	Nonclog sub-mersible pumpset 5 HP with 20 m cable length (3 nos.)	2.39	<b>Allowed</b> under Regulation 9(2)(iv) for safe and efficient operation of power station as the Petitioner has submitted that due to excessive silt passing through the turbine, the wearing rings got damaged resulting in excessive accumulation of silt water on the top cover. This can flood the power station if not drained out timely especially when leakages are high. To safe guard the machines, additional pumps were installed on top covers to avoid flooding of top cover. Further, one submersible pump became non-functional and was replaced with new KSB submersible pump.
2	Nonclog sub-mersible pumpset 5 HP with 20 m cable length	0.80	
3	KSB submersible bore pump	0.28	
4	Const. of two additional rooms in NHPC Kendriya Vidyala, Karian	6.57	<b>Allowed</b> under Regulation 9(2)(iv) as the expenditure incurred is for the benefit of employees located at remote location.

5	ACB 1250 A, 4 pole manual OPER drawout (2 nos.)	1.97	<b>Allowed</b> under Regulation 9(2)(iv) to enhance safety & reliability of distribution system as the petitioner has submitted that system improvements are to be carried out over a period of time considering operational/ maintenance difficulties being observed or to mitigate deficiencies in existing system to ensure efficient operation. ACBs & PCCs were installed to meet power supply requirement with improved service, reliable for vital electrical installations like tail Additional Capital Expenditure tunnel, crane, etc.
6	Power control centre (PCC) panel 1250 A (2 nos.)	4.21	
7	Buffalo Terastation	0.68	<b>Not Allowed</b> under Regulation 9(2)(iv) as asset is of minor nature.
8	Licence for RX LINX software	0.73	
9	Antivirus software	0.98	
10	Tubular inside micrometers	1.13	
11	SQ frame level	0.66	<b>Not allowed</b> under Regulation 9(2)(iv) as the asset in the nature of tools & tackles .
	<b>Total claimed</b>	<b>20.40</b>	
	<b>Total allowed</b>		<b>16.23</b>

## 2011-12

(₹ in lakh)

Sl.No.	Assets/works	Actual expenditure incurred/ claimed	Justification for admissibility of expenditure
1	Civil store at Karian	6.36	<b>Allowed</b> under Regulation 9(2)(iv) for safe and efficient operation of power station as the civil store was essential for storage of civil items for catering to site emergencies for safety of power plant structure.
2	Const. of two additional rooms in NHPC Kendriya Vidyala, Karian.	0.02	<b>Allowed</b> under Regulation 9(2)(iv) adjustment of final bill of the work capitalized in 2010-11.
3	Const. of staff canteen at dam site.	0.003	
4	Submersible bore pump, 2 HP (2 nos.)	0.41	<b>Allowed</b> under Regulation 9(2)(iv) against replacement of old pumps.
5	Submersible pump, 1 HP (6 nos.)	1.65	

7	24-port Gigabit stackable management switch (2 number)	0.74	<b>Not allowed</b> under Regulation 9(2)(iv) as the assets are in the nature of O&M expenses.
8	24-port ethernet 10/100/1000 Gigabit switch	1.75	
9	Biphasis defibrilator with printer	4.32	<b>Allowed</b> under Regulation 9(2)(iv) since Biphasis defibrilator is an emergency equipment used to revive the heart by giving shock in case of cardiac failure. However, the asset is essential for hospital for emergency treatment of employees located in remote project location.
10	Hospital equipment - Linear probe.	2.11	<b>Allowed</b> under Regulation 9(2)(iv) for attending to the emergencies of the employees of power station located in remote location.
11	Universal Relay test kit	18.10	<b>Allowed</b> under Regulation 9(2)(iv) the universal relay kit was purchased to improve power plant performance, efficiency of operation and to enhance the availability of machines. It is also observed that there was no relay test kit available at power station.
12	Automatic weather station with sensors & accessories	6.17	<b>Allowed</b> under Regulation 9(2)(iv) against replacement of old asset.
13	Construction of security hut at Karian	0.12	<b>Allowed</b> under Regulation 9(2)(iv) towards adjustment of final bill of the work capitalized in 2010-11.
14	Construction of security hut at Adit- II.	0.03	<b>Allowed</b> under Regulation 9(2)(iv) towards adjustment of final bill of the work capitalized in 2010-11.
15	Construction of Ramp near Administrative Building for physically disabled persons	4.26	<b>Allowed</b> under Regulation 9(2)(iv) for benefit of employees and to comply with the guidelines of Ministry of Social Justice.
	<b>Total claimed</b>	<b>46.01</b>	
	<b>Total allowed</b>		<b>43.55</b>

### Inter Unit Transfers (IUT)

18. The petitioner has claimed following Additional Capital Expenditure on account of Inter-Unit Transfers.

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12
Other additions (IUT)	1.87	6.56	0.00

19. On scrutiny of the details, it is observed that these assets are minor assets, transferred from other stations/offices of the Petitioner. The capitalization of such minor assets like MS Office, Servers, etc. is not allowed after the cut-off date in terms of proviso to the Regulation 9(2)(iv). Hence, the above additional capitalization claimed on account of Inter-Unit Transfer has not been allowed.

### **Deletions**

20. The petitioner has claimed following amounts towards year wise de-capitalization on account of replacement of assets, deletion of assets on account of sale and deletion due to inter unit transfer (out) of assets etc. The de-capitalized assets include inspection vehicles, Tata Sumo cars, Weather station and accessories, pumps etc. The de-capitalization under Inter-Unit Transfer (IUT) pertains to assets such as EDR office building at Banikhet, boundary wall in EDR building, etc.

(₹ in lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Deletions	(-)134.96	(-)122.14	(-)3.18

21. The de-capitalization of the above amounts as affected in books of accounts have been allowed for the purpose of tariff since the corresponding assets are not rendering any useful service in the operation of the plant.

### **Exclusions in additions (incurred, capitalized in books but not to be claimed for tariff purpose)**

22. The petitioner has prayed that following positive entries towards purchase of minor assets, purchase of capital spares, inter head adjustments, assets transferred to obsolete head, additions on account of inter-unit transfers and ERV capitalized, may be excluded/ ignored for the purpose of tariff:



(₹ in lakh)			
Description	2009-10	2010-11	2011-12
Purchase of minor assets, purchase of capital spares capitalized in books but not claimed for tariff purposes	48.63	254.88	250.39
Capitalization on account of ERV	1065.23		1031.67
Transfer to obsolete head (at WDV/NRV/notional value)	0.00	4.28	(-)2.07
Inter head adjustments	25.86	30.91	0.09
IUT	0.65	0.15	0.35
<b>Total Exclusions in additions</b>	<b>1140.37</b>	<b>290.22</b>	<b>1280.44</b>

23. Capitalization of expenditure on procurement /replacement of minor assets as also procurement of capital spares after the cut-off date, are not admissible under capital cost for the purpose of tariff as per Regulation 9(2)(iv) of the 2009 Tariff Regulations. Accordingly, we find that exclusions of the positive entries under the head are in order and therefore the same have been allowed.

24. Similarly, the Petitioner has prayed that the positive entries arising due to ERV has been allow to be excluded / ignored for the purpose of tariff as the ERV gain/loss is being billed directly to the beneficiaries as per 2009 Tariff Regulation. The same has accordingly been allowed.

25. With regard to positive entries arising due to transferring of unserviceable assets to obsolete head, the petitioner has submitted that the positive entries in books of accounts after de-capitalization of unserviceable assets at gross value of the asset, need to be ignored/excluded for the purpose of tariff as they will cause servicing of the asset not in use at WDV/NRV/notional value which is not desirable. Accordingly, such exclusion/ignoring of these positive entries has been allowed for the purpose of tariff.

26. Exclusion of positive entries corresponding to Inter head adjustments has been allowed the corresponding negative entries of same values are allowed under exclusions in deletions, thus having no impact on tariff.

27. Positive entries corresponding to Inter unit transfer of minor assets have been allowed to be excluded for the purpose of tariff as the capitalization of minor assets is not allowed for the purpose of tariff as per the provisions of the 2009 Tariff Regulations after the cut-off date.

28. Accordingly, following Exclusions in additions (incurred, capitalized in books but not claimed for tariff purpose) as claimed by the Petitioner has been allowed:

(₹ in lakh)

Description	2009-10	2010-11	2011-12
Total Exclusions in additions allowed	1140.37	290.22	1280.44

**Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose)**

29. Petitioner has de-capitalized following amounts in books of accounts on account of (a) consumption of capital spares (b) Minor assets such as pulling & lifting machine, angle grinder, aqua guard, drill machine, weighing scale, computers, club equipment, vacuum cleaner, on becoming unserviceable/obsolete (c) Inter head adjustments (d) IUT Transfer of minor asstes / deletion on account of sale.

(₹ in lakh)

Description	2009-10	2010-11	2011-12
De-capitalization of minor assets, tools and tackles which are not considered	(-)1.52	(-)53.84	(-)9.80
De-capitalization of capital spares not in capital base for the purpose of tariff	0.00	(-)160.96	(-)27.97
Inter head adjustments etc.	(-)25.86	(-)30.91	(-)0.09
IUT Transfer of minor assets / deletion on account of sale	(-)0.87	(-)42.45	(-)10.71
<b>Total Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose)</b>	<b>(-)28.24</b>	<b>(-)288.15</b>	<b>(-)48.57</b>

30. Regarding de-capitalization of minor assets, the Petitioner has prayed that the negative entries as above may be ignored / excluded for the purpose of tariff as the corresponding positive entries for purchase of such minor assets are not being allowed for the purpose of tariff in terms of the provisions of the 2009 Tariff Regulations. In support of its prayer, the Petitioner has referred to the observations of the Commission in its order dated 7.9.2010 in Petition No. 190/2009 pertaining to determination of impact of Additional Capital Expenditure for the years 2006-07, 2007-08 and 2008-09 in respect of this generating station as under:

*“Replaced Minor assets*

*20. After careful consideration, we are of the view that the cost of minor assets originally included in the capital cost of the projects and replaced by new assets should not be reduced from the gross block, if the cost of the new assets is not considered on account of implication of the regulations. In other words, the value of the old assets would continue to form part of the gross block and at the same time the cost of new assets would not be taken into account. The generating station should not be debarred from servicing the capital originally deployed on account of procurement of minor assets, if the services of those assets are being rendered by similar assets which do not form part of the gross block.”*

31. Accordingly, the Petitioner has prayed that in view of the above order, negative entries arising out of de-capitalization of minor assets may be allowed to be excluded/ignored for the purpose of tariff except in case of following assets:

- a) De-capitalization of Surge shaft road amounting to (-) ₹43.53 lakhs during the year 2010-11. The exclusion is not allowed as the de-capitalized amount is recoverable from insurance company as per submission of the Petitioner.
- b) De-capitalization of weather station & accessories amounting to (-) ₹2.81 lakhs during the year 2010-11. The exclusion is not allowed as the replacement with new asset has been allowed in the year 2011-12.

c) De-capitalization of Submersible pump amounting to (-) ₹2.25 lakhs during the year 2011-12. The exclusion is not allowed as the de-capitalized asset is neither a minor asset nor a capital spare.

32. The negative entry of (-) ₹160.96 lakh and (-) ₹27.97 lakh in the years 2010-11 and 2011-12 corresponding to de-capitalization of capital spares can be excluded/ignored for the purpose of tariff provided that the de-capitalized spares are the ones which are not in the capital base for the purpose of tariff i.e. they were procured after the cut-off and disallowed for the purpose of tariff. The Petitioner vide its affidavit dated 03.10.2013 has provided the details of the de-capitalized spares.

33. It is observed that these spares were procured during the years 2010-11 or 2011-12 and are not included in the capital base as the positive entry corresponding to their purchase has also been excluded /ignored for the purpose of tariff. Accordingly, the exclusion/ignoring of negative entries of (-) ₹160.96 lakh and (-) ₹27.97 lakh in the year 2010-11 & 2011-12, arising due to de-capitalization of capital spares have been allowed. Further, the exclusion of negative entries arising due to inter head adjustments may be allowed as the positive adjustment has also been excluded / ignored for the purpose of tariff. The exclusion of negative entries arising due to sale of obsolete assets have been allowed as the whole treatment after de-capitalization of assets i.e. transferring to obsolete head and sale of asset etc. are not considered for the purpose of tariff.

34. Further, the Petitioner has sought exclusion for an amount of (-) ₹10.50 lakh on account of IUT out of VSAT with Hub during 2011-12. The exclusion/ignoring of this negative entry has not been allowed for the purpose of tariff as the above asset is

neither a minor asset nor a capital spare procured after cut-off date whose capitalization has been denied for the purpose of tariff in the past. Accordingly, the capital base of the generating station has been allowed to be reduced by ₹10.50 lakh.

35. Accordingly, based on the above discussions, the exclusions which have been allowed and disallowed for the purpose of tariff are as follows:

(₹ in lakh)

Description	2009-10	2010-11	2011-12
Total Exclusions in deletions as claimed (de-capitalized in books but not to be considered for tariff purpose)	(-)28.24	(-)288.15	(-)48.57
<b>Exclusions disallowed</b>	<b>0.00</b>	<b>(-)46.34</b>	<b>(-)12.75</b>
<b>Exclusions allowed</b>	<b>(-)28.24</b>	<b>(-)241.81</b>	<b>(-)35.82</b>

#### **Un-discharged liabilities and discharge of liabilities**

36. The Petitioner has claimed following Un-discharged liabilities/ discharge of liabilities during the period 2009-12:

(₹ in lakh)

Description	2009-10	2010-11	2011-12
Liabilities existed as on 31.3.2009, discharged during the year	40.69	4.26	0.00
Liabilities discharged during the year for additional capitalization of 2009-14	0.00	7.11	6.23
Un-discharged liabilities for the additional capitalization during 2009-14	7.11	6.23	6.28

#### **Additional Capital Expenditure during 2012-13 and 2013-14**

37. As against the Additional Capital Expenditure allowed on projected basis by order dated 27.1.2012 in Petition no. 66/2010, the Petitioner has not revised the projected Additional Capital Expenditure claim during 2012-13 as 2013-14. Hence, the same has been considered. This is subject to truing-up in time in term of Regulation 6(1) of the 2009 Tariff Regulations.

**Additional Capital Expenditure allowed for 2009-14 excluding un-discharged/discharged liabilities**

38. The Additional Capital Expenditures allowed for the purpose of tariff for 2009-14 after adjustment of discharge and un-discharge of liabilities, are summarized as under:

(₹ in lakh)

Sl. No.	PARTICULARS	2009-10	2010-11	2011-12	2012-13	2013-14
		ACTUAL			PROJECTED	
	<b>Addition</b>					
1	Addition against work already approved by Commission	17.02	3.41	0.00	0.00	5.98
2	Capitalization against works allowed in previous year but actually incurred in subsequent years	0.00	13.00	10.91	0.00	0.00
3	Addition not projected earlier but incurred and claimed	50.27	16.23	43.55	0.00	0.00
4	<b>Total Addition (1+2+3)</b>	<b>67.29</b>	<b>32.64</b>	<b>54.46</b>	<b>0.00</b>	<b>5.98</b>
	<b>Deletions</b>					
5	Deletion allowed	(-)134.96	(-)122.14	(-)3.18	0.00	0.00
6	Exclusions not allowed	0.00	(-)46.34	(-)12.75	0.00	0.00
7	<b>Total Additional Capital Expenditure allowed before adjustment of discharge / un-discharge of liabilities (4+5+6)</b>	<b>(-)67.67</b>	<b>(-)135.84</b>	<b>38.53</b>	<b>0.00</b>	<b>5.98</b>
8	<b>Less:</b> Un-discharged liabilities in the allowed Additional Capital Expenditure	7.11	6.23	6.28	0.00	0.00
9	<b>Add:</b> Liabilities discharged during the year out of Additional Capital Expenditure during 2009-12	0.00	7.11	6.23	0.00	0.00
10	<b>Add:</b> Liabilities discharged during the year (Related to un-discharged liabilities as on 31-03-2009)	40.69	4.26	0.00	0.00	0.00
11	<b>Additional Capital Expenditure allowed (7-8+9+10)</b>	<b>(-)34.09</b>	<b>(-)130.70</b>	<b>38.48</b>	<b>0.00</b>	<b>5.98</b>

## Capital Cost considered for Tariff

39. The Capital Cost allowed for the purpose of Annual Fixed Charges (AFC) is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	200334.77	200300.68	200169.98	200208.46	200208.46
Additional Capitalization allow	(-)34.09	(-)130.70	38.48	0.00	5.98
Capital Cost as on 31st March of the year	200300.68	200169.98	200208.46	200208.46	200214.44

## Debt-Equity Ratio

40. Regulation 12 of the 2009 Tariff Regulations provides as under:

*“(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.*

*Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.*

*Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.*

*Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.*

*(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.*

*(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as Additional Capital Expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”*

41. The Petitioner has submitted that the Additional Capital Expenditure has been financed through internal resources. In terms of the above said regulations, the debt-equity ratio of 70:30 has been considered on the Additional Capital Expenditure allowed for the purpose of tariff.

## Return on Equity

42. Regulation 15 of the 2009 Tariff Regulations provides as under:

*“15. **Return on Equity.** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

*(2) Return on Equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:*

*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II:*

*Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.*

*(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.*

*(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:*

*Rate of pre-tax return on equity = Base rate / (1-t)*

*Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.*

*(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:*

*Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.*

### **Illustration.-**

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity =  $15.50 / (1 - 0.1133) = 17.481\%$

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity =  $15.50 / (1 - 0.3399) = 23.481\%$ ”



43. The Petitioner has claimed Rate of Return on Equity as follows:

	2009-10	2010-11	2011-12	2012-13	2013-14
	ACTUAL			PROJECTED	
Base Rate	15.5%	15.5%	15.5%	15.5% / 16.5%	16.5%
Applicable Tax Rate	33.990%	33.218%	32.445%	11.330%	11.330%
Tax Rate	30%	30%	30%	10%	10%
Surcharge	10%	7.50%	5%	10%	10%
Education cess	3%	3%	3%	3%	3%
Rate of ROE (pre-tax)	23.481%	23.210%	22.944%	17.762%	18.608%

44. Accordingly, the above rates have been considered and the Return on Equity has been computed as follows:

	2009-10	2010-11	2011-12	2012-13	2013-14
	(₹ in lakh)				
Gross Notional Equity	61419.63	61409.40	61370.19	61381.74	61381.74
Addition due to Additional Capital Expenditure	-10.23	-39.21	11.54	0.00	1.79
Closing Equity	61409.40	61370.19	61381.74	61381.74	61383.53
Average Equity	61414.52	61389.80	61375.97	61381.74	61382.64
Rate of ROE (pre-tax)	23.481%	23.210%	22.944%	17.762%	18.608%
<b>Return on Equity</b>	<b>14420.74</b>	<b>14248.57</b>	<b>14082.10</b>	<b>10902.62</b>	<b>11422.08</b>

#### Interest on Loan:

45. The salient features of computation of interest on loan allowed in tariff are summarized below:

- a. The opening gross normative loan as on COD of each unit has been arrived at in accordance with Regulation 16 of the 2009 Tariff Regulation. The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project. The repayment for the year of the tariff period 2009-14 has been considered equal to the depreciation allowed for that year. The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

b. The Interest on Loan has been calculated as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	138703.72	138679.86	138588.37	138615.30	138615.30
Cumulative Repayment up to Previous Year	55191.76	65514.07	75835.19	86156.70	96640.11
Net Loan-Opening	83511.96	73165.78	62753.17	52458.60	41975.19
Repayment during the year	10322.31	10321.12	10321.51	10483.41	10483.56
Addition due to Additional Capitalization(2009-14)	(-)23.86	(-)91.49	26.94	0.00	4.19
Net Loan-Closing	73165.78	62753.17	52458.60	41975.19	31495.82
Average Loan	78338.87	67959.48	57605.89	47216.90	36735.50
Weighted Average Rate of Interest on Loan	8.928%	6.449%	7.704%	9.151%	8.821%
<b>Interest</b>	<b>6993.83</b>	<b>4382.63</b>	<b>4437.72</b>	<b>4320.74</b>	<b>3240.56</b>

### Depreciation:

46. The weighted average rate of depreciation of 5.153%, 5.154% and 5.156% for the year 2009-10, 2010-11 and 2011-12 respectively have been considered for the calculation of depreciation.

47. Asset amounting to ₹134.96 lakh, ₹168.48 lakh and ₹15.93 lakh have been de-capitalized during 2009-10, 2010-11 & 2011-12 respectively. As per the prevailing practice, the amount of cumulative depreciation allowed in tariff against those de-capitalized assets has been calculated on pro-rata basis. The same has been adjusted from the cumulative depreciation of the year of de-capitalization.

Depreciation has been calculated as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31-03-2009	200334.77	200300.68	200169.98	200208.46	200208.46
Additional Capital Expenditure during 2009-14	-34.09	-130.70	38.48	0.00	5.98
Closing gross block	200300.68	200169.98	200208.46	200208.46	200214.44
Average gross block	200317.73	200235.33	200189.22	200208.46	200211.45
Land related Cost	611.15	611.15	611.15	611.15	611.15
Rate of Depreciation	5.153%	5.154%	5.156%	5.236%	5.236%

Depreciable Value	179811.01	179736.85	179695.35	179712.67	179715.36
Remaining Depreciable Value	126896.32	116542.44	106241.64	95944.11	85463.40
<b>Depreciation</b>	<b>10322.31</b>	<b>10321.12</b>	<b>10321.51</b>	<b>10483.41</b>	<b>10483.56</b>

#### **Operation & Maintenance Expenses:**

48. The O & M Expenses allowed vide order dated 1.10.2012 in Review Petition No.9/2012 has been considered in the tariff, which is as follows:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
<b>O &amp; M Expenses</b>	6589.78	6966.71	7365.21	7786.50	8231.89

#### **Interest on Working Capital:**

49. The Petitioner is entitled to claim interest on working capital as per Regulation 18 of the 2009 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder.

##### **(i) Receivables**

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital are equivalent to two months' of fixed cost. In the tariff being allowed, receivables have been worked out on the basis of 2 months' fixed cost.

##### **(ii) Maintenance spares**

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses as part of the working capital.

The value of maintenance spares has accordingly been worked out.

##### **(iii) O & M expenses**

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The Petitioner has claimed O&M expenses for 1 month of the respective year. This has

been considered in the working capital.

**(iv) Rate of interest on working capital**

In accordance with clause (3) of Regulation 18 of the tariff regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later. Accordingly, in the instant case, SBI PLR of 12.25% as on 1.4.2009 has been considered in for working out Interest on Working Capital.

50. Necessary computations in support of interest on working capital are appended hereunder:

	(₹ in lakh)				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Maintenance Spares	988.47	1045.01	1104.78	1167.98	1234.78
O & M expenses	549.15	580.56	613.77	648.88	685.99
Receivables	6552.96	6145.16	6196.01	5736.43	5718.99
<b>Total</b>	<b>8090.58</b>	<b>7770.72</b>	<b>7914.56</b>	<b>7553.28</b>	<b>7639.77</b>
<b>Interest on Working Capital @12.25%</b>	<b>991.10</b>	<b>951.91</b>	<b>969.53</b>	<b>925.28</b>	<b>935.87</b>

**Annual Fixed Charge**

51. The Annual Fixed Charges approved for the generating station for the period from 1.4.2009 to 31.3.2014 is as under:

	(₹ in lakh)				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Return on Equity	14420.74	14248.57	14082.10	10902.62	11422.08
Interest on Loan	6993.83	4382.63	4437.72	4320.74	3240.56
Depreciation	10322.31	10321.12	10321.51	10483.41	10483.56
Interest on Working Capital	991.10	951.91	969.53	925.28	935.87
O & M Expenses	6589.78	6966.71	7365.21	7786.50	8231.89
<b>Total</b>	<b>39317.76</b>	<b>36870.94</b>	<b>37176.07</b>	<b>34418.55</b>	<b>34313.96</b>

52. The recovery of the Annual Fixed Charges shall be subject to truing up in terms of Regulation 6(i) of the 2009 Tariff Regulations.

53. The difference between the Annual Fixed Charges already recovered by the Petitioner and the annual fixed charges determined under this order shall be adjusted in terms of the clause (6) of Regulation 6 of the 2009 Tariff Regulations.

54. Petition No. 231/GT/2013 stands disposed of in terms of the above.

**Sd/-**  
**[A.K.Singhal]**  
**Member**

**Sd/-**  
**[M. Deena Dayalan]**  
**Member**

**Sd/-**  
**[Gireesh B.Pradhan]**  
**Chairperson**