

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 272/2010

Coram

Dr. Pramod Deo, Chairperson

Shri S. Jayaraman, Member

Shri M. Deena Dayalan, Member

Date of Hearing: 16.2.2012

Date of Order: 8.5.2013

In the matter of

Determination of deferred elements of tariff for generation and inter-State transmission of electricity in respect of Damodar Valley Corporation for the period 1.4.2006 to 31.3.2009.

And

In the matter of

Damodar Valley Corporation, Kolkata

.....Petitioner

Vs

1. Department of Energy, Govt. of West Bengal, Kolkata
2. Department of Energy, Govt. of Jharkhand, Ranchi
3. West Bengal State Electricity Distribution Company Ltd, Kolkata
4. Jharkhand State Electricity Board, Ranchi
5. Union of India, Ministry of Power, New Delhi

..... Respondents

6. M/s Bhaskar Shrachi Alloys Ltd, Kolkata
7. M/s SAIL-BSL, Jharkhand

...Objectors

Parties present

1. Shri M.G.Ramachandran, Advocate, DVC
2. Ms. Swapna Seshadri, Advocate, DVC
3. Shri P.Bhattacharya, DVC
4. Shri S.Ganguly, DVC
5. Shri R.B.Sharma, Advocate, JSEB
6. Shri Amit Kapur, Advocate, BSAL
7. Shri Apoorva Misra, Advocate, BSAL
8. Ms. Sugandha Somani, Advocate, BSAL
9. Shri Gautam Shroff, BSAL
10. Shri Rajesh Gupta, BSAL
11. Shri Rajiv Ranjan, Advocate, SAIL-BSL



12. Shri Rajiv Shankar Dwivedi, Advocate, SAIL-BSL
13. Shri B.N.P.Singh, SAIL-BSL
14. Shri Ajay Kumar, SAIL-BSL
15. Ms. Tulika Mukherjee, SAIL-BSL
16. Shri S.K.Francis, SAIL-BSL

ORDER

This petition has been filed by the petitioner, DVC for determination of the elements of tariff for generation and inter-state transmission of electricity for the period 1.4.2006 to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 Tariff Regulations”) on the following:

- (a) Servicing capitalization/additional capitalization undertaken by the petitioner during the period 1.4.2004 to 31.3.2009 and its implication on tariff for the relevant period 1.4.2006 to 31.3.2009. These include certain aspects of capitalization deferred for consideration in separate proceedings and also not considered for want of proper details/justification.
- (b) Impact of revision in salaries, wages, allowances etc. consequent to the implementation of the recommendation of the Sixth Pay Commission;
- (c) The increased liability for contribution to pension, Gratuity and Terminal benefits consequent upon the increase in the salaries, wages, allowances etc. mentioned in (b) above; and
- (d) Impact of additional O&M expenditure actually incurred during the period 1.4.2006 to 31.3.2009

Background

2. The petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (hereinafter referred to as the 'DVC Act') for the development of the Damodar Valley, with three participating Governments, namely, the Central Government, the Government of West Bengal and the Government of Jharkhand. The assets owned by the petitioner and their dates of commercial operation are as mentioned under:

Name of the Stations/ systems	Installed Capacity (MW)	Date of Commercial operation
Bokaro TPS	805	August, 1993
Chandrapura TPS	750	March, 1979
Durgapur TPS	350	September, 1982
Mejia TPS	630	September, 1999
Maithon GPS	82.5	October, 1989
Maithon Hydro Power station	63.2	December, 1958
Panchet Hydro Power station	80	March, 1991
Tilaya Hydro Power station	4	August, 1953
Transmission system	220/132 kV lines	Existing as on 31.3.2004
Distribution system	NA	Existing as on 31.3.2004

3. Petition No. 66/2005 was filed by the petitioner for approval of the revenue requirements and for determining the tariff for electricity related activities, that is, the generation, transmission and distribution of electricity, undertaken by it for the period from 1.4.2004 to 31.3.2009. The Commission by its order dated 3.10.2006 determined tariff in respect of the generating stations and inter-state transmission systems of the petitioner, after allowing a special dispensation to the petitioner to continue with the prevailing tariff till 31.3.2006.

4. Against the Commission's order dated 3.10.2006, the petitioner filed Appeal No.273/2006 before the Appellate Tribunal for Electricity (hereinafter referred to as "the Tribunal") on various issues. Similarly, appeals were also filed before the Tribunal by some of the objectors/consumers, namely, Maithon Alloys Ltd and others (Appeal No.271/2006), Bhaskhar Shrachi Alloys Ltd and others (Appeal No 272/2006), State of Jharkhand (Appeal No.275/2006) and the West Bengal State Electricity Regulatory Commission (Appeal No.8/2007) challenging the order of the Commission dated 3.10.2006 on various grounds. The Tribunal by its judgment dated 23.11.2007 disposed of the said appeals as under:

"113. In view of the above, the subject Appeal No. 273 of 2006 against the impugned order of Central Commission passed on October 3, 2006 is allowed to the extent described in this judgment and we remand the matter to Central Commission for denovo consideration of the tariff order dated October 3, 2006 in terms of our findings and

observations made hereinabove and according to the law. Appeal No. 271, 272 and 275 of 2006 and No. 08 of 2007 are also disposed of, accordingly.”

5. Against the judgment dated 23.11.2007, some of the parties namely, the Central Commission (Civil Appeal No.4289/2008), the West Bengal State Electricity Regulatory Commission (Civil Appeal No.804/2008), M/s Bhaskhar Shrachi Alloys Ltd & ors (Civil Appeal No 971-973/2008), State of Jharkhand (Civil Appeal No.4504-4508/2008) and the State of West Bengal (Civil Appeal No.1914/2008) filed Civil Appeals before the Hon'ble Supreme Court, and the same are pending as on date.

6. Thereafter, in terms of the directions contained in the judgment of the Tribunal dated 23.11.2007 in Appeal No.273/2006 and other connected appeals, for a *denovo* consideration of the order dated 3.10.2006, the Petition No. 66/2005 (with I.A. Nos. 19/2009 and 23/2009) was heard by the Commission and tariff of the generation and inter-state transmission systems of the petitioner for the period 2006-09 was re-determined by order dated 6.8.2009, subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court. The annual fixed charges determined by order dated 6.8.2009 for the period from 1.4.2006 to 31.3.2009 was as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Thermal generating stations			
Bokaro			
Depreciation	2816.85	0.00	0.00
Interest on Loan	0.00	0.00	0.00
Return on Equity	3873.18	3873.18	3873.18
Interest on Working Capital	1461.09	1475.97	1551.52
O & M Expenses	11566.00	12028.00	12509.00
Sub-total (A)	19717.13	17377.16	17933.70
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	184.86	175.07	167.11
Total	19901.99	17552.22	18100.81

Chandrapura			
Depreciation	1879.53	378.51	0.00
Interest on Loan	0.00	0.00	0.00
Return on Equity	1667.45	1667.45	1667.45
Interest on Working Capital	851.39	840.54	888.55
O & M Expenses	11817.00	12290.00	12781.00
Sub-total (A)	16215.38	15176.50	15337.00
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	79.26	75.06	71.65
Total	16294.64	15251.56	15408.65
Durgapur			
Depreciation	167.88	0.00	0.00
Interest on Loan	0.00	0.00	0.00
Return on Equity	1358.90	1358.90	1358.90
Interest on Working Capital	944.25	968.56	1012.54
O & M Expenses	9872.00	10267.00	10678.00
Sub-total (A)	12343.03	12594.46	13049.43
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	62.60	59.28	56.59
Total	12405.63	12653.74	13106.02
Mejia (Units 1 to 3)			
Depreciation	9754.61	9754.61	9754.61
Interest on Loan	3437.15	2350.87	1264.36
Return on Equity	6650.65	6650.65	6650.65
Interest on Working Capital	2025.87	1997.13	1955.47
O & M Expenses	7018.00	7298.00	7590.00
Sub-total (A)	28886.27	28051.26	27215.09
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	527.89	499.93	477.19
Total	29414.16	28551.19	27692.28
	2006-07	2007-08	2008-09
Hydro generating stations			
Maithon			
Depreciation	290.22	290.22	290.22
Interest on Loan	95.31	63.17	31.29
Return on Equity	378.00	378.00	378.00
Interest on Working Capital	47.80	48.73	49.75
O & M Expenses	1088.00	1131.00	1176.00
Sub-total (A)	1899.33	1911.12	1925.25
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	13.18	12.49	11.92
Total	1912.52	1923.61	1937.17
Panchet			
Depreciation	268.25	0.00	0.00
Interest on Loan	0.00	0.00	0.00
Return on Equity	345.22	345.22	345.22

Interest on Working Capital	35.11	31.52	32.67
O & M Expenses	718.00	746.00	776.00
Sub-total (A)	1366.58	1122.74	1153.89
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	13.62	12.90	12.32
Total	1380.21	1135.65	1166.21
Tilaiya			
Depreciation	6.25	6.25	6.25
Interest on Loan	0.00	0.00	0.00
Return on Equity	17.95	17.95	17.95
Interest on Working Capital	8.90	9.23	9.62
O & M Expenses	314.00	326.00	340.00
Sub-total (A)	347.10	359.43	373.82
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	0.42	0.40	0.38
Total	347.52	359.83	374.20
Transmission			
Depreciation	4811.01	4811.01	4811.01
Interest on Loan	27.49	0.00	0.00
Return on Equity	3229.39	3229.39	3229.39
Interest on Working Capital	323.44	331.61	340.68
O & M Expenses	4278.00	4449.00	4627.00
Sub-total (A)	12669.32	12821.01	13008.08
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	189.09	179.08	170.93
Total	12858.41	13000.08	13179.01
Annual Fixed Charges			
Depreciation	19994.60	15240.59	14862.08
Interest on Loan	3559.95	2414.04	1295.65
Return on Equity	17520.73	17520.73	17520.73
Interest on Working Capital	5697.85	5703.32	5840.80
O & M Expenses	46671.00	48535.00	50477.00
Sub-total (A)	93444.14	89413.68	89996.26
Additional Charges on account of Return on Equity, Interest on loan, Depreciation of Director's/Central/other offices & Subsidiary activities	1070.94	1014.21	968.08
Pension and Gratuity Contribution	30689.80	30689.80	30689.80
Provision towards Sinking Fund	4043.39	3071.51	2755
Grand Total	129248.26	124189.20	124409.14

7. Against the Commission's order dated 6.8.2009, the petitioner filed Appeal (Appeal No.146/2009) before the Tribunal on various issues, including the question of non-consideration of the different elements for tariff as stated in paragraph 1 above. However, the Tribunal by its judgment dated 10.5.2010 rejected the prayers of the

petitioner and upheld the order of the Commission dated 6.8.2009. The relevant portion of the order is extracted as under:

“106. In view of our conclusions mentioned above, we are to hold that the Central Commission has correctly decided all the issues raised before it after careful consideration, in the light of the findings rendered by this Tribunal and in accordance with law. It must be made clear that the Central Commission has followed and complied with all the directions given by this Tribunal in letter and spirit.

107. Since, we do not find any substance in the grounds raised in the Appeal, we deem it fit to dismiss the Appeal as devoid of merits. Consequently, we direct the Appellant (DVC) to implement the Tariff as determined by the Central Commission vide its order dated 06.08.2009. DVC is also directed to revise the electricity bills raised by it for electricity consumption during April, 2006 onwards of its licensees and HT consumers and refund the excess amount billed and collected along with the interest at the rate of 6% per annum in line with Section 62(6) of The Electricity Act, 2003. Alternatively the Appellant (DVC) may adjust the excess amount recovered, along with interest at the rate of 6% per annum, in 24 equal monthly prospective installments, starting from July, 2010 by giving credit in the monthly bills of the consumers/licensees. Thereafter, the DVC is directed to approach the concerned State Electricity Commissions for getting the final order relating to the Retail Tariff who in turn will fix the retail tariff according to law.

108. With these observations, this Appeal is dismissed as devoid of merits. Consequently all the IAs are disposed of. No order as to costs.”

8. Against the judgment of the Tribunal dated 10.5.2010, the petitioner has filed appeal (Civil Appeal No.4881/2010) before the Hon’ble Supreme Court and the Court by its interim order dated 9.7.2010 has stayed the directions of the Tribunal for refund of excess amount billed, until further orders. However, on 17.8.2010 the Hon’ble Court passed interim order in the said appeal as under:

“The civil appeal shall stand over for four weeks in order to enable the appellant herein to effect service on unserved respondents.

Dasti service, in addition, is permitted. Dasti service by e-mail in addition to normal mode of service is also permitted.

Pending further orders, it is clarified that Damodar Valley Corporation, for Accounting purposes alone, may raise bills on consumers appearing before us so that any recovery made by Damodar Valley Corporation at a lower rate would be subject to the outcome of the pending appeal(s).

Tag Civil Appeal Nos.971-973/2008, 4289/2008 and 804/2008 with this appeal”:

9. The Civil Appeals filed by the parties as aforesaid against the judgments of the Tribunal dated 23.11.2007 and 10.5.2010 has been admitted by the Hon'ble Supreme Court on 6.8.2012 and are pending.

10. In the above background, this petition has been filed by the petitioner with prayer to decide the present petition without prejudice to the rights and contentions of the parties before the Hon'ble Supreme Court.

11. During the hearing of the petition on 15.9.2011, the Objector M/s BSAL (an HT consumer) along with some other HT consumers, filed interlocutory Application (I.A.No. 20/2011) before the Commission seeking permission to implead and/or to intervene in the petition, on the ground that they are entitled to be heard before any tariff order is passed by the Commission in respect of the projects of the petitioner. The Commission after hearing the parties disposed of the said application by order dated 30.9.2011 observing as under:

“12. Therefore, keeping in view the provisions of the above said regulations and the nature of the issues involved, we feel that instead of the HT consumers filing applications for impleadment in the matter, no prejudice would be caused if these HT consumers are allowed to participate in the proceedings before us by filing their objections/comments, after obtaining copies of the complete application with annexure, from the petitioner.

13. Accordingly, we direct the petitioner to post the copy of its petition along with its annexures in its web-site to enable the HT consumers to download copies of the same and file its comments/objections. The HT consumers willing to file objections, if any, in the matter shall also have the option to obtain copies of the petition to be made available by the petitioner in compact disc (CD) at its office in Kolkata and Ranchi, up to 17.10.2011. Thereafter, the respondents/HT consumers are directed to file their replies/objections on or before 31.10.2011, with copies to the petitioner, who shall file its rejoinder, if any, by 10.11.2011.”

12. Reply to the said petition has been filed by the Respondent No.4, JSEB. Objections and written submissions have also been filed by the Objectors, M/s SAIL-

BSL and M/s BSAL. The petitioner has also filed its Rejoinder/Written submissions in the matter.

13. Taking into consideration the submissions of the parties and the documents available on record, we now proceed to consider the claims of the petitioner and determine the annual fixed charges for generation and inter-state transmission systems for the period 2006-09, as discussed in the subsequent paragraphs.

14. The petitioner in its petition has submitted that irrespective of the outcome of the final decision of the Hon'ble Supreme Court in the Civil Appeals, the Commission can proceed to consider the tariff elements and revise the tariff for the period 1.4.2006 to 31.3.2009. It has also submitted that the Commission in its order dated 6.8.2009 had not rejected the claim for elements for tariff, but had only deferred its consideration to a future date, thereby acknowledging that the consideration of these elements for tariff determination is to be undertaken. The petitioner has further submitted that it is legitimately entitled to the additional amounts as claimed in the petition and the said expenditure is required to be allowed in tariff.

15. The petitioner has submitted that the details of the capitalization/additional capitalization, pay revision, pension and gratuity contribution etc., as contained in the Interlocutory Application No.19/2009 has been revised, consequent to changes in the actual capital expenditure and the actual O & M expenses based on the audited accounts, which is presently available.

Capital Cost as on 31.3.2006

16. The approved capital cost as on 31.3.2006 in respect of the thermal, hydro generating stations and Transmission & Distribution system of the petitioner in Commission's order dated 6.8.2009 is as under:

	(₹ in lakh)
	Capital cost as on 31.3.2006
Bokaro TPS- B	55434
Chandrapura TPS (Units-I,II & III)	23930
Durgapur TPS	19898
Mejia TPS (Units 1 to III)	158349
Maithon	5491
Panchet	4959
Tilaya	258
Transmission & Distribution system	61594

Additional Capital Expenditure

17. Regulation 18 of the 2004 Tariff Regulations provides for considering the additional capital expenditure as under:

(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17:
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court: and
- (v) On account of change in law.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation.

(2) Subject to the provisions of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after cut-off date may be admitted by the commission, subject to prudence check:

- (i) Deferred liabilities relating to works/services within the original scope of work;
- (ii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (iii) On account of change in law;

(iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost; and

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

(3) Any expenditure on minor items/assets like normal tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, fans, coolers, TV, washing machine, heat-convectors, carpets, mattresses etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut-off date.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original project cost, except such items as are listed in clause (3) of this regulation.

(A) Additional Capital Expenditure for 2004-06

18. The Commission in its order dated 6.8.2009 in Petition No. 66/2005, had disallowed certain assets for additional capitalisation for the period 2004-06, for want of proper justification/details. However, in para 31 of the said order, the Commission while disallowing the claims for additional capital expenditure in respect of some of the assets of inter-state transmission system of the petitioner had given liberty to the petitioner to claim the amounts after submission of proper justification, for consideration of the Commission in accordance with law. Accordingly, the petitioner, in its petition, has submitted that its claim for additional capital expenditure for the period 2004-06, in respect of those elements which were disallowed by the Commission in its order dated 6.8.2009 for want of proper justification and not in respect of assets which have been specifically rejected by the Commission for other reasons.

19. The learned counsel for the Respondent No.4, JSEB has submitted that the claim of the petitioner for the years 2004-05 and 2005-06 are not included in the capital cost. These claims have not been approved by the Commission as additional capital

expenditure and hence the same may be excluded, being outside the scope of the present petition. The learned counsel for the objectors, BSAL and M/s SAIL-BSL, who are HT consumers of the petitioner, have also objected to the claim of the petitioner for additional capital expenditure for the period 2004-05 and 2005-06 and have submitted that the orders of the Commission dated 3.10.2006 and 6.8.2009 have attained finality and the claim for additional capitalization for the said years are not tenable in law or in facts. They have also submitted that the petitioner had not challenged the disallowed additional capital expenditure before the Tribunal and hence the claim of the petitioner during the years 2004-05 and 2005-06 is no longer permissible. It has also been submitted that the principle of *constructive resjudicata* is squarely applicable in this case and the petitioner is barred from raising the issues again, despite the same being disallowed by the Commission by order dated 6.8.2009 and which had been upheld by the Tribunal in its judgment dated 10.5.2010. M/s SAIL-BSL, in support of its contention that the claim of the petitioner is covered by the principle of *resjudicata* has submitted copy of the judgment of the Hon'ble Supreme Court in Ramachandra Sonavane & ors- v-Vithu H. Mahar & ors (2009) 10 SCC 273. In response, the learned counsel for the petitioner has pointed out that the judgment of the Tribunal dated 10.5.2010 which upheld the order of the Commission dated 6.8.2009 does not mention that the items disallowed for want of justification cannot be considered. The learned counsel also submitted that the judgment of the Tribunal cannot be interpreted as a modification of the Commission's order to exclude the consideration of the above items. He further submitted that the observations of the Commission in para 31 of the order dated 6.8.2009 apply not only to transmission assets but also to generation assets wherein similar exclusions have been made by the Commission for want of justification. The learned counsel clarified that the claim for additional capitalisation has been restricted

to generation and transmission assets which were disallowed for want of justification and not in respect of those assets which were disallowed for other reasons.

20. We have examined the submissions of the parties. The question for consideration is whether the petitioner can be permitted to claim the same expenditure with due justifications which were earlier rejected by the Commission for want of proper justification. The respondents, particularly the HT consumers have opposed the said claims on the ground that these claims are covered by the principle of constructive *resjudicata*. In our view, the objections/ submissions of the respondents/consumers are not sustainable for the following reasons:

(a) Firstly, the provisions of the Civil Procedure Code (CPC) are not applicable in case of the proceedings before the Commission, except to the extent permitted by the Act, though the Commission may adopt the principles of CPC for general guidance. As per section 11 of the CPC, where a suit or issue between the same parties has been heard and finally decided, such decision will operate as a bar in a subsequent suit between the same parties. In our view, the principle of *resjudicata* cannot be applied strictly in case of tariff determination where the claims of the petitioner are made as per the provisions of the Tariff Regulations and the same are allowed/disallowed by the Commission after prudence check and after consideration of the objections / submissions of the parties.

(b) Secondly, Regulation 18(4) of the 2004 Tariff Regulations provides that the impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period including revision of tariff after the cut-off date. Regulation 18(4) does not prohibit the generator to again claim the additional capital expenditure with proper justification, which was earlier rejected for want of justification, provided it is made

within the tariff period. Though in this case, the additional capitalization petition has been filed by the petitioner after the period 2004-09 is over, the same has been filed pursuant to the directions of the Appellate Tribunal dated 10.5.2010 wherein it had directed the petitioner to approach the Commission by a separate petition.

(c) Lastly, the expenditures which have been claimed by the petitioner with fresh justifications have actually been incurred by the petitioner and the beneficiaries have reaped the benefits of such expenditure. Denying the benefit of tariff for the assets which have been capitalized and put to use would result in denying recovery of reasonable cost of supply of electricity to the petitioner.

21. Therefore we are of the view that where the assts have been put to use and capitalized the expenditure thereon should be allowed after considering the justification furnished and due prudence check. Next, we proceed to consider the claim of the petitioner for additional capital expenditure for the period 2004-06, in terms of the provisions of the 2004 Tariff Regulations, after prudence check, based on the justifications submitted by the petitioner, as stated in the succeeding paragraphs.

(A) Thermal Generating Stations

Bokaro TPS

22. The petitioner has claimed additional capital expenditure for ₹65.02 lakh for 2004-05 and ₹65.52 lakh for 2005-06 for assets which were disallowed for various reasons.

23. An expenditure of ₹2.88 lakh towards purchase of AC compressor as insurance spare due to damage of compressor during 2004-05 and ₹11.79 lakh towards replacement of transformer oil filter during 2005-06 were disallowed by Commission order dated 6.8.2009, as the value of the replaced assets had not been de-capitalized. Similarly, an amount of ₹63.33 lakh during 2004-05 and ₹53.72 lakh for 2005-06 on

other assets for improving the working condition and to maintain efficiency of the plant and on account of wrong bookings for the period 2003-04 was also disallowed for want of proper justification.

24. The claim of the petitioner has been examined. As regards purchase of AC compressor during 2004-05, the petitioner has submitted that this is a new compressor in the control room and associated panel bays, as the existing compressor was not working efficiently to maintain proper cooling parameters in the control room. The justification furnished by the petitioner is found to be in order and ₹2.88 lakh during 2004-05 is allowed for successful & efficient operation of the generating station under Regulation 18(2)(iv) of the 2004 Tariff Regulations. As regards replacement of transformer oil filter machine, the petitioner has submitted the gross value of ₹4.74 lakh for old unserviceable oil filter machine which was put to use in 1993-94. In view of this, the capitalisation of transformer oil filter machine for a net amount of ₹7.05 lakh (11.79–4.74) has been allowed under Regulation 18 (2)(iv) of the 2004 Tariff Regulations. As regards the amount of ₹62.14 lakh during 2004-05 (earlier claimed for ₹63.33 lakh) and ₹53.72 lakh for 2005-06, incurred on other assets for improving the working condition and to maintain efficiency of the plant and on account of wrong bookings for the period 2003-04 which were disallowed for want of proper justification, the petitioner has submitted the details of assets which include office furniture, computer, air conditioner, books etc., Since, these are in the nature of minor assets, the capitalisation of the same is not considered in terms of Regulation 18(3) of the 2004 Tariff Regulations.

Chandrapura TPS

25. The petitioner has claimed additional capital expenditure of ₹1358.52 lakh for the year 2004-05 and ₹1422.58 lakh for the year 2005-06.

26. In our order dated 6.8.2009, an expenditure of ₹1326.19 lakh during 2004-05, towards repair of turbine rotor was disallowed as the expenditure related to O & M expenses. Similarly, an expenditure of ₹23.44 lakh incurred on other assets for the year 2004-05 and ₹64.06 lakh for the year 2005-06 in order to improve the working condition and maintain efficiency of the plant was disallowed for want of proper details/justification.

27. On prudence check, the expenditure of ₹1326.19 lakh during 2004-05 towards refurbishment of turbine rotor is found justified as this pertains to renovation of old turbine rotor which had outlived its useful life since its inception during 1979. Since, the gross value of old turbine rotor is ₹265.24 lakh, the net amount of ₹1060.95 lakh (1326.19-265.24) is allowed towards the refurbishment of old turbine rotor during 2004-05 under Regulation 18(2)(iv). The expenditure of ₹8.89 lakh during 2004-05 towards fire fighting equipment has been allowed considering the requirement of this asset against any fire hazards and for safety of plant & personnel, in a generating station which is 40 years old. In view of this, a total expenditure of ₹1069.84 lakh is allowed to be capitalised during 2004-05. As regards the expenditure of ₹23.44 lakh for 2004-05 and ₹64.06 lakh for 2005-06 claimed on 'other assets' which have been disallowed, the petitioner has submitted the details of assets which include office furniture, computer, air conditioner, books etc. Since, these are in the nature of minor assets, the capitalisation of the same has not been considered in terms of Regulation 18(3) of the 2004 Tariff Regulations.

Durgapur TPS

28. The petitioner has claimed additional capital expenditure for ₹4.78 lakh for 2004-05 and ₹7.78 lakh for 2005-06 incurred towards other assets to improve the working

condition and maintain efficiency of the generating station which had been disallowed for want of proper justification by order dated 6.8.2009. In justification of the claim, the petitioner has submitted that these assets viz. computers, furniture, air conditioners and books are essential for LAN & IT application. From the details of the assets furnished, it is found that these include office furniture, computer, air conditioner, and books etc. which are in the nature of minor assets. Hence, the expenditure on these assets is not considered for capitalisation in terms of Regulation 18(3) of the 2004 Tariff Regulations.

Mejia TPS (Units I to III)

29. The petitioner has claimed additional capital expenditure of ₹13.05 lakh for 2004-05 and ₹28.82 lakh for 2005-06 towards other assets which were disallowed by order dated 6.8.2009 for want of proper details/justification. In justification of its claim, the petitioner has submitted that these assets viz. computers, furniture, air conditioners and books are essential for LAN & IT application. Since, these assets are minor in nature, the same is not allowed to be capitalised in terms of Regulation 18(3) of the 2004 Tariff Regulations.

(B) Hydro generating stations

Maithon

30. The Commission vide its order dated 6.8.2009 had disallowed expenditure of ₹1.07 lakh and ₹51.42 lakh during 2004-05 and 2005-06 respectively in respect of other assets, for want of proper details and justification. In this petition, the petitioner has claimed expenditure of ₹2.40 lakh and ₹51.42 lakh during 2004-05 and 2005-06 respectively, in respect of items which have been disallowed for various reasons. On scrutiny of the assets claimed during 2004-05, it is observed that an expenditure of ₹1.07 lakh disallowed vide order dated 6.8.2009 are in respect of other assets like office

furniture, computer, AC etc. The petitioner has justified the expenditure on the ground that these are "essential for IT Application & LAN". Since these assets are minor in nature, the expenditure claimed has not been allowed for the purpose of tariff in terms of Regulation 34 (3) of the 2004 Tariff Regulations. The difference of ₹1.33 lakh between the claimed amount of ₹2.40 lakh and the expenditure of ₹1.07 lakh earlier disallowed, is either towards new assets or assets disallowed with reasons in our order dated 6.8.2009. As such, the same are not being considered afresh. As regards the claim for ₹51.42 lakh during 2005-06 for assets like office furniture, computers, A.Cs, library books etc., it is noticed that these assets are of minor nature. In view of this, the expenditure claimed has not been allowed for the purpose of tariff in terms of Regulation 34 (3) of the 2004 Tariff Regulations.

Panchet

31. The petitioner has claimed expenditure of ₹0.22 lakh and ₹0.65 lakh during 2004-05 and 2005-06 respectively. The expenditure for assets like furniture, computer, A.C. etc are minor in nature and hence not allowed for capitalisation in terms of Regulations 34 (3) of the 2004 Tariff Regulations.

Tilaiya

32. The petitioner has claimed amounts of ₹0.32 lakh and ₹0.34 lakh during 2004-05 & 2005-06 respectively. However, the expenditure claimed on assets like furniture, computer, A.C. etc are minor in nature and hence not allowed as per Regulations 34 (3) of the 2004 Tariff Regulations.

33. In view of the above discussions, no additional capital expenditure over and above the capitalisation allowed in order date 6.8.2009, has been allowed for the years 2004-

05 and 2005-06 respectively in this order, in respect of the hydro generating stations of the petitioner.

(b) Transmission and distribution system

34. Regulation 53 of the 2004 regulations provides for considering the additional capital expenditure for tariff purposes as under:

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission subject to prudence check.

- (i) Deferred liabilities,
- (ii) Works deferred for execution,
- (iii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 52,
- (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and
- (v) On account of change in law.

Provided that original scope of works along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of generating station.

(2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cutoff date may be admitted by the Commission subject to prudence check:

- (i) Deferred liabilities relating to works/services within the original scope of work;
- (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court;
- (iii) On account of change in law; and
- (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.

(3) Any expenditure incurred on acquiring minor items/assets like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, T.V, washing machine, heat-convectors, mattresses, carpets, etc brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

Note

The list of items is illustrative and not exhaustive.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut-off date.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 54.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original capital cost.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 54.

Note 4

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 54 after writing off the original amount of the replaced assets from the original capital cost."

35. The claim of the petitioner for additional capital expenditure for the period 2004-06 under different heads is as under:

	<i>(₹ in lakh)</i>	
	2004-05	2005-06
Transmission A-N	2854.42	9732.81
Main Division	54.24	1.32
CE Stores	19.75	12.44
Total	2928.41	9746.57

36. In response to the letter of the Commission dated 11.3.2011, the petitioner has filed additional information on 8.4.2011 and has submitted that addition of sub-stations, transmission lines, elements of Transmission and Distribution (T&D) network are undertaken by the petitioner in order to meet the entire load growth in the DVC command area, which are spread over the two States (i.e the State of West Bengal and Jharkhand) and also to strengthen its T&D network for stability and reliability of the

system. Accordingly, the petitioner has submitted that all the sub-stations, transmission lines constructed and commissioned during the period 2006-09 have been considered for additional capital expenditure in terms of Regulation 53 (2) (iv) of the 2004 Tariff Regulations, towards additional works/ services which have become necessary for efficient and successful operation of the project. The petitioner has also submitted that pooled power to all consumers is supplied through its integrated and composite T&D network and specific consumer or a specific group of consumer can be identified with reference to any particular transmission segment, sub-stations or receiving stations for sale of power to consumers located in two contiguous states viz. State of West Bengal and Jharkhand. It has further been submitted that the benefit of strengthening the system either by adding sub-stations/transmission line or augmentation of the existing sub-stations/ transmission lines are shared by all the consumers of the petitioner and hence, the entire grid network of the petitioner may be considered as a single T&D system as whole. We now examine the claims of the petitioner for additional capital expenditure for the years 2004-05 and 2005-06 in the succeeding paragraphs.

Transmission A-N

2004-05

37. As stated, the Commission in its order dated 6.8.2009, while disallowing certain assets for capitalization under this head for want of justification, had given liberty to the petitioner to claim the same with proper justification. The petitioner has claimed additional capital expenditure of ₹2854.42 lakh during the year 2004-05 in respect of items which had been disallowed for various reasons. On prudence check, the claim of the petitioner for additional capital expenditure of ₹2711.53 lakh is allowed under this head. An expenditure of ₹18.50 lakh claimed under this head has not been allowed as the asset has been commissioned during the year 2007-08. Similarly, an expenditure of

₹124.19 lakh in respect of Transmission A-N stage has not been allowed as the details regarding de-capitalization of old assets have not been furnished. Also, an expenditure of ₹0.21 lakh for work/assets under this head has not been considered for capitalization since the details of work undertaken in respect of the concerned assets has not been provided by the petitioner. Accordingly, a total expenditure of ₹2711.53 lakh has only been allowed to be capitalized for 2004-05.

2005-06

38. The petitioner has claimed capitalization of an expenditure of ₹9732.81 lakh in respect of certain assets disallowed by order dated 6.8.2009 for various reasons. Out of this, the expenditure for ₹9431.79 lakh is allowed as the justification furnished by the petitioner is found to be in order. An expenditure of ₹183.68 lakh towards transmission A-N stage has not been allowed as the details of de-capitalization of old assets have not been furnished. Expenditure of ₹76.10 lakh towards transmission A-N stage has not been allowed as the details of the work done has not been furnished by the petitioner. Similarly, the expenditure for ₹41.24 lakh in respect of transmission A-N stage has not been allowed since proper justification along with details of the work done has not been furnished by the petitioner. Accordingly, expenditure of ₹9431.79 lakh has been allowed to be capitalized during 2005-06.

Transmission Main division

2004-05

39. The petitioner has claimed capitalization of an expenditure of ₹54.24 lakh during the said year for assets under transmission main division, in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. It is observed that the expenditure claimed is in respect of assets like Office furniture, computer, air conditioner and library books etc.,

which are minor in nature. Accordingly, in terms of Regulation 53(3) of the 2004 Tariff Regulations, the capitalisation of expenditure on minor assets brought after the cut-off date for the year 2004-05 has not been allowed.

2005-06

40. The petitioner has claimed capitalisation of an expenditure for ₹1.32 lakh towards assets under transmission main division in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. Since, details along with proper justification for the work i.e. building have not been furnished by the petitioner, the expenditure claimed has not been allowed.

CE, Stores and Construction Establishment

2004-05

41. The petitioner has claimed capitalization of an expenditure of ₹19.75 lakh in respect of assets like Office furniture, computer, Air-conditioner, Library books etc., in terms of Regulation 53 (2) (iv) of the 2004 Tariff Regulations. It is observed that the expenditure claimed is in respect of assets which are minor in nature. Accordingly, in terms of Regulation 53(3) of the 2004 Tariff Regulations, capitalisation of expenditure on minor assets brought after the cut-off date for the year 2004-05 is not allowed.

2005-06

42. The petitioner has claimed capitalization of an expenditure of ₹12.45 lakh in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. It is observed that the expenditure claimed in respect of assets like Office furniture, computer, air conditioner, library books etc, are minor in nature. Accordingly, in terms of Regulation 53(3) of the 2004 Tariff Regulations, the capitalisation of expenditure on minor assets brought after the cut-off date for the year 2005-06 is not allowed.

43. Based on the above discussions, the total additional capital expenditure for the period 2004-06 allowed on gross basis under different heads of Transmission & Distribution system is as under:

	(₹ in lakh)	
	2004-05	2005-06
Transmission A-N	2711.53	9431.79
Main Division	0.00	0.00
CE Stores	0.00	0.00
Total	2711.53	9431.79

44. After accounting for gross block of de-capitalized assets of ₹73.90 lakh in 2004-05 and ₹79.14 lakh in 2005-06, the additional capital expenditure on net basis for the period 2004-06 works out as mentioned under:

	(₹ in lakh)	
	2004-05	2005-06
Additional capital expenditure for Transmission and distribution system	2711.53	9431.79
Additional capital expenditure on net basis	2637.62	9352.65

45. Accordingly, the additional capital expenditure allowed for the period 2004-06 on net basis in respect of thermal, hydro generating and transmission & distribution systems of the petitioner are summarized as under:

	(₹ in lakh)	
	2004-05	2005-06
Bokaro TPS- B	2.88	7.05
Chandrapura TPS Units-I to III	1069.84	0.00
Durgapur TPS	0.00	0.00
Mejia TPS Units-I to III	0.00	0.00
Hydro generating stations	0.00	0.00
Transmission & Distribution system	2637.62	9352.65

Capital Cost

46. In view of the above, the capital cost as on 31.3.2006 approved in order dated 6.8.2009 is revised as under:

	(₹ in lakh)
	Capital cost as on 31.3.2006
Bokaro TPS- B	55443.53
Chandrapura TPS Units- 1,II & III	24999.34
Durgapur TPS	19898.11
Mejia TPS, Units-I to III	158348.76

Maithon	5490.82
Panchet	4958.83
Tilaiya	258.42
Transmission & Distribution system	73584.35

47. The closing capital cost as on 31.3.2006 is considered as the opening capital cost as on 1.4.2006 for the purpose of tariff. We shall now proceed to consider the additional capital expenditure claimed by the petitioner for the period 2006-09.

(B) Additional Capital expenditure during 2006-09

(i) Thermal generating stations

48. The additional capital expenditure claimed by the petitioner for the period 2006-09 is as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Bokaro TPS- B	3045.47	101.24	181.22
Chandrapura TPS	519.26	590.51	1274.72
Durgapur TPS	987.24	(-) 628.37	664.01
Mejia TPS (Units I to III)	398.47	411.25	1869.07

49. The Respondent No 4, JSEB while objecting to the capitalisation of assets (station-wise), has mainly submitted that the additional capital expenditure in respect of items where the value of replaced assets has not been de-capitalised may not be allowed. It has also submitted that capitalisation of items only after deduction of gross value of replaced assets could be allowed in terms of Note-2 to Regulation 18 of the 2004 Tariff Regulations. It has further submitted that the works covered under original scope of work which are still pending for completion and assets which are minor in nature and expenditure wherein no proper justification has been submitted are all liable to be rejected. The Objector, M/s BSAL has submitted that expenses after the cut-off date towards works within the original scope of work and capitalisation of minor assets is not allowable in terms of Regulations 18(1) and 18(3) and 53(3) of the 2004 Tariff Regulations. It has also submitted that the issue of additional capital expenditure may

be dealt with by conducting prudence check strictly in terms of the provisions of the 2004 Tariff Regulations. The objector has further submitted that inadequate justifications provided in respect of additional capital expenditure claimed by the petitioner and expenses which are not related to the generation of electricity may be disallowed, on prudence check. The other Objector, M/s SAIL-BSL while objecting to the capitalisation of assets (station-wise) has submitted that the additional capital expenditure wherein no justification/details have been provided by the petitioner and which do not form part of the generation of power and has not been certified to be included in the original scope of work, cannot be allowed. It has also submitted that capitalisation of assets which are minor in nature should not be permitted to be capitalised in terms of Regulation 18(3) of the 2004 Tariff Regulations. Moreover, assets which do not pass on benefits to consumers and which do not fall under the provisions of the 2004 Tariff Regulations shall not be allowed to be capitalised.

50. After examining the asset-wise details and the justification submitted by the petitioner, the additional submissions, the reply and the written submissions filed in the matter and by applying prudence check, the admissibility of additional capital expenditure is discussed as under:

Bokaro TPS

2006-07

51. The petitioner has claimed additional capital expenditure of ₹3045.47 lakh for 2006-07. The objector, M/s SAIL-BSL has submitted that expenditure for additional Electro Static Precipitator (ESP) may not be allowed as no certificate of the Pollution Control Board has been submitted.

52. Considering the submission of the parties and after prudence check, capitalisation of expenditure for ₹3.32 lakh, ₹2.19 lakh and ₹2.44 lakh towards Switch Room for electric supply to vendors of central market, compound wall of post office & garage building for cars in quarters respectively, has not been admitted in terms of Regulation 18(3) of the 2004 Tariff Regulations. An expenditure for ₹10.06 lakh towards RLA study of 'A' plant has been disallowed, as it has been the consistent approach of the Commission to allow such expenditure only after the R & M works based on RLA studies are incurred and the benefits passed on to the consumers. An expenditure of ₹197.55 lakh during 2006-07 for construction of Ash Pond No.IV is found justified and has been allowed under Regulation 18(2)(v) of the 2004 Tariff Regulations. Similarly, the expenditure for ₹2225.69 lakh towards installation of an additional ESP is found justified and is allowed in terms of Regulation 18(2)(iii) of the 2004 Tariff Regulations as the same is in compliance with the directions of the State Pollution Control Board to bring down the emission level of the generating station from 614 mg/Nm³ to 150 mg/Nm³. However, the petitioner is directed to submit to the Commission, the details of actual emission from the generating station after the installation of the ESP. An expenditure for ₹230.92 lakh towards Plant & Machinery viz. Cooling tower, boiler accessories, power house plant & machinery which were Works in Progress (WIP) and capitalised during 2006-07 has been allowed in terms of Regulation 18(2)(iv) of the 2004 Tariff Regulations, as the same are required for successful and efficient operation of the generating station. In respect of the claim for expenditure of ₹373.30 lakh claimed on other assets, only an expenditure of ₹355.46 lakh is found justified and is allowed under Regulation 18(2)(iv) of the 2004 Tariff Regulations. The expenditure for ₹17.83 lakh on other assets, includes Air-conditioner, chairs, fans, books, mobile, storewell, beauty parlour chair, water heater etc., are in the nature of minor assets and is not allowed in

terms of Regulation 18(3) of the 2004 Tariff Regulations. Accordingly, the total expenditure of ₹3009.62 lakh has been allowed to be capitalised during 2006-07.

2007-08

53. A total expenditure of ₹101.24 lakh has been claimed during this year. On prudence check, the expenditure towards concretisation of floors of cable yard, open yard near godown etc., development of central market, construction of garage, providing grill in verandah of school, construction of cycle stand in DVC school, Digital multimeter and Infrared digital non conduct thermometer etc., amounting to ₹30.79 lakh is disallowed as these assets are in the nature of minor assets or works of O&M nature which do not provide any direct benefit to the beneficiaries. Expenditure for ₹6.46 lakh towards Consultancy charges for up-gradation of Coal Handling Plant (CHP) is disallowed as it has been the consistent approach of the Commission to allow such expenditure only after the R & M works based on RLA studies are incurred and benefits passed on to the consumers. An expenditure for ₹151.24 lakh during 2007-08 towards the construction of building for new magazine room, compound wall in BTPS colony, revamping of cooling towers, vibration analysers, universal PCB diagnosis system etc. has been allowed under Regulation 18(2) (iv) on the ground that these assets are required for successful and efficient operation of the plant. An expenditure for ₹64.72 lakh during 2007-08 , towards replacement of old type panel with microprocessor based control panel, battery banks has been allowed, after deduction of the gross value of old assets, in terms of Note-2 of Regulation 18 of the 2004 Tariff Regulations. Out of an expenditure of ₹51.22 lakh claimed on other assets, an expenditure of ₹6.98 lakh has been found justified on prudence check and is allowed under Regulation 18(2)(iv) of the 2004 Tariff Regulations. The expenditure disallowed is in respect of assets which include mainly furniture, fan, books, almirah, AC, cooler, computer accessories required

for LAN, printers etc. The petitioner by way of negative entry has adjusted an amount of ₹221.34 lakh during 2007-08 which has been considered. Accordingly, the total expenditure of ₹1.60 lakh has been allowed to be capitalised during 2007-08.

2008-09

54. The petitioner has claimed an expenditure of ₹181.22 lakh during the year. On prudence check, expenditure for ₹18.61 lakh towards the installation of overhead water tank in building and laying of ERW steel rising from Bokaro to Simla house is disallowed as these are extra facilities provided to the occupants. Also, an expenditure of ₹22.32 lakh for providing chain link fencing & concreting of base at yard, verandah in DVC school, cycle shed, switch room in central market etc. have been disallowed, as the expenditure are of minor nature or in the nature of O&M works which do not provide any direct benefit to the beneficiaries. An expenditure of ₹5.19 lakh towards replacement of CT fan motors for cooling of circulating water has been allowed, after deduction of the gross value of the old assets. An expenditure for ₹63.31 lakh towards the Construction of new store building, face lifting of hospital, construction of oil soak pit for transformer, roads etc., is allowed under Regulation 18(2)(iv) of the 2004 Tariff Regulations towards the successful and efficient operation of the generating station. Out of an expenditure of ₹70.46 lakh claimed on other assets, only an expenditure of ₹31.58 lakh is found justified after prudence check and is allowed under Regulation 18(2)(iv) of the 2004 Tariff Regulations. Other assets disallowed include office furniture, books, magazine, computer table, printer, refrigerator, colour T.V. etc., which are minor in nature. Accordingly, total expenditure for ₹100.08 lakh has been allowed to be capitalised during 2008-09.

Chandrapura TPS

2006-07

55. The petitioner has claimed an expenditure of ₹519.26 lakh during the year. On prudence check, an expenditure of ₹30.62 towards consultancy charges for improvement of plant performance and R&M work has been disallowed as it has been the consistent approach of the Commission to allow such expenditure only after R & M works based on RLA studies are incurred and benefits passed on to the consumers. An expenditure for ₹6.12 lakh towards the purchase of excitation panel and construction of room for placement of excitation panel for Unit-4 has been disallowed, as Unit-4 remained under shut down from 29.5.2003 and is likely to be retired with effect from 13.8.2010. An expenditure for ₹14.97 lakh towards monitoring particulate emission and smoke is in compliance with the norms of the Central Pollution Control Board and is allowed under Regulation 18(2)(iii). An expenditure for ₹14.27 lakh towards grill at officers hostels and school for safety of employees and their wards, different tests carried out on transformers such as lighting impulse test, temperature raise test, sound level measurement test etc., construction of car garage in officers' quarters etc. has been allowed under Regulation 18 (2) (iv) considering the fact that the generating station has outlived its useful life and renovation of school, hostel and car garage and the different tests on transformer are necessary for successful and efficient operation of the generating station and towards safety against any catastrophic failure. An expenditure for ₹1532.22 lakh towards Electric Overhead Travelling (EOT) crane for maintenance work, construction of oil water separator tank, various R&M works transferred to fixed assets etc. has been allowed for successful and efficient operation of the generating station under Regulation 18(2)(iv) of the 2004 Tariff Regulations. Expenditure of ₹264.80 lakh towards the replacement of old C&I system and Generator

Transformer for improvement of plant performance has been allowed after deduction of gross value of old assets under Regulation 18(2)(iv). An expenditure of ₹9.91 lakh incurred for building of Ash bund has been allowed under Regulation 18(2)(v). Out of an expenditure of ₹361.37 lakh claimed on other assets, an expenditure for ₹161.97 lakh is found justified on prudence check and is allowed under Regulation 18(2)(iv). The negative entry of ₹1788.83 lakh includes an amount of ₹30.27 lakh which form part of the amount of ₹ 30.62 lakh disallowed by the Commission towards additional capitalization sought for by the petitioner during 2006-07 towards NTPC consulting charges for Units I to VI. Accordingly, ₹30.27 lakh has been added in the adjustment of (-) ₹1788.83 lakh. Further, the negative entry of ₹1788.83 lakh includes an amount of (-) ₹19.13 lakh on "other assets" which has been allowed. The amount claimed under head "other assets" is on net of positive entries and negative entries. As ₹19.13 lakh has been shown as negative entry in the other assets, it has been included in the adjustment of (-) ₹1788.83 lakh as positive entry (contra-entry). Thus, an amount of (-) ₹1758.56 lakh $(-1788.83+30.27)$ due to reversal of provision has been allowed. Accordingly, total expenditure for ₹239.58 lakh has been allowed to be capitalised for 2006-07.

2007-08

56. Out of the expenditure for ₹590.51 lakh claimed during the year, an expenditure of ₹0.65 lakh for blower, CCD camera, turbidity meter has been disallowed under Regulation 18(3) being minor assets. An expenditure of ₹2409.95 lakh claimed towards transfer from CWIP to fixed asset for R&M works of Unit Nos. IV to VI has been disallowed as these units are under shut down from 29.5.2003 and likely to be retired from 13.8.2010 and its expenditure cannot be booked to Unit Nos. I to III of this generating station. An expenditure of ₹111.66 lakh incurred towards renovation of SBI

building, construction of grills in hostel and quarters, construction of car garage in officer's quarters, colony filter water pump, construction of overhead water tanks in residential quarters for non-stop supply of water, portable dissolved gas analyser, push button switch control wire rope, electrical hoist, machine checker, circuit breaker time interval meter, control pump with motors for DM plant, test charges for generator transformer, transformer oil filtration machine, EOT crane etc. have all been allowed under Regulation 18(2)(iv) towards the successful and efficient operation of the generating station, considering that these assets are required for a generating station which has outlived its useful life. An expenditure of ₹12.87 lakh towards the construction of Water Bound Macadam (WBM) road over dyke of Ash Pond is justified and is allowed under Regulation 18(2)(v). An expenditure of ₹330.62 lakh, towards replacement of old assets viz. colony distribution transformers, dewatering pump with motors, complete CW pump with motor, Control cable with PVC insulator, 2000 KVA transformer, Heat Exchanger etc. has been allowed after deduction of gross value of old assets under Regulation 18(2)(iv). Out of an expenditure of ₹85.82 lakh claimed on other assets, an amount of ₹29.48 lakh has only been found justified after prudence check and has been allowed under Regulation 18(2)(iv). The petitioner by way of negative entry has adjusted an amount of ₹2451.05 lakh during this year due to reversal of provisions. This negative adjustment of ₹2451.05 lakh include an amount of ₹2409.95 lakh in respect of assets transferred from CWIP to fixed assets for R&M of Unit Nos IV to VI which has been disallowed in the capital addition during 2007-08 and ₹4.32 lakh for provision of Microprocessor based static excitation equipment with AVR in Unit-IV which has been disallowed during 2006-07. In view of this, an amount of ₹2414.27 lakh (2409.95+4.32) has been added back in the adjustment of (-) ₹2451.05 lakh. Thus, the amount of (-) ₹36.78 lakh (-2451.05+2414.27) due to reversal of

provision has been allowed. Accordingly, total expenditure for ₹447.85 lakh is allowed to be capitalised during 2007-08.

2008-09

57. Out of the expenditure for ₹1274.72 lakh during 2008-09, an expenditure of ₹1.85 lakh towards the purchase of digital insulation tester, digital clamp meter, bolt hex etc. has been disallowed being minor assets. An expenditure of ₹70.20 lakh towards the renovation of quarters, face lifting of old officers hostel, construction of dustbins, construction of overhead water tanks in residential quarters etc. has been allowed under Regulation 18(2)(iv), considering the fact that the generating station has outlived its useful life and these assets are required for successful and efficient operation of the generating station. An expenditure of ₹671.84 lakh towards supply & providing crushed stones at 132 kV switchyard, dewatering pump, machine health checker for condition monitoring of rotating equipment, 100 kVA distribution transformer, Transformer oil filtration machine, 2000 KVA transformer, electronic gauging system and nozzle assembly, bulldozer, wheel loader for smooth operation in CHP & other area, circuit breaker time interval meter complete with test leads & inbuilt printers, oil centrifuge, dissolved gas analyser etc., have all been allowed towards the successful and efficient operation of the generating station in terms of Regulation 18(2)(iv). An expenditure of ₹300.12 lakh towards replacement of old assets viz. Current Transformer, Heat Exchanger, Pin rack assembly and pinion gear, 1250 kVA oil filled transformer, Vertical turbine pump and solid shaft motor, microprocessor based air compressor, Induction motor, Cable control with PVC insulator & BFP motor etc., have been allowed after deduction of gross value of old assets under Regulation 18(2)(iv). An expenditure of ₹92.45 lakh towards the construction of Ash Pond-E is justified and is allowed under

Regulation 18(2)(v). Out of an expenditure for ₹116.70 lakh claimed on other assets, an expenditure of ₹ 92.71 lakh is found justified after prudence check and is allowed under Regulation 18(2)(iv). The assets disallowed under other assets include computers, table, chair, vertical filling cabinet, book shelves, fax machine, vacuum cleaner, PH meter, refrigerator, fans, coolers, LCD TV etc., as these are minor in nature. The petitioner by way of negative entry has adjusted an amount of ₹0.0051 lakh during 2008-09 which has been allowed. Accordingly, total expenditure for ₹1227.28 lakh has been allowed to be capitalised during 2008-09.

Durgapur TPS

58. The petitioner has claimed expenditure of ₹987.24 lakh for 2006-07, (-) ₹628.37 for 2007-08 and ₹664.01 lakh for 2008-09.

2006-07

59. Out of the expenditure for ₹987.24 lakh claimed during the year an expenditure of ₹3.95 lakh towards balance weight & measurement, hydraulic jacks, insulation tester has been disallowed being minor assets. An expenditure of ₹271.26 lakh towards consultancy charges for preparation of DPR, technical specification, RLA study for R&M work has been disallowed as it has been the consistent approach of the Commission to allow such expenditure only after the R & M works based on RLA studies are incurred and benefits passed on to the consumers. An expenditure of ₹601.30 lakh, towards replacement of old assets viz. chlorine cylinder for chemical treatment of water, centrifugal process pump with motors, chemical dosing pump with motors, complete oil unit of APRDS with control system & panel and balancing of damaged LP rotor etc. has been allowed under Regulation 18(2)(iv), after deduction of gross value of old assets towards the successful and efficient operation of the

generating station. An expenditure of ₹20.08 lakh incurred towards crusher house building, DC fault locator, infrared thermo vision camera, electronic metal detector, has been allowed under Regulation 18(2)(iv) towards the successful and efficient operation of the generating station. An expenditure of ₹52.80 lakh claimed in respect of other assets has not been allowed to be capitalised since no details have been furnished. The petitioner by way of negative entry has adjusted an amount of ₹ 352.34 lakh during 2006-07 and the same is allowed. Accordingly, total expenditure for ₹269.04 lakh is allowed to be capitalised during 2006-07.

2007-08

60. Out of the expenditure for (-) ₹628.37 lakh claimed during this year an expenditure of ₹1.48 lakh for PH meter, hydraulic hand pump, portable pump etc., has been disallowed being minor assets. An expenditure of ₹8.56 lakh for 3rd oxygen analyser has been disallowed as two nos. of oxygen analyser have already been allowed to cater the need of the two units. An expenditure of ₹120.27 lakh incurred towards access road, oxygen analyser, welding machine, flue gas analyser, electronic digital display, rectification entry made for PO block has been allowed under Regulation 18(2)(iv) towards the successful and efficient operation of the generating station. An expenditure for ₹1206.60 lakh, towards replacement of old assets viz. CW pump with motor, hydraulic operated pump, water cooled refrigerated type air drier, conductivity type electronic drum level indicator, turbo-generator accessories etc., has been allowed under Regulation 18(2)(iv) towards the successful and efficient operation of the generating station, after deduction of gross value of old assets. An expenditure for ₹32.52 lakh towards the construction of Ash Bund is justified and has been allowed under Regulation 18(2)(v) of the 2004 Tariff Regulations. An expenditure of ₹22.79 lakh claimed on other assets has not been allowed being minor in nature. The petitioner by

way of negative entries has adjusted an amount of ₹2527.59 lakh during 2007-08 and the same is allowed. Accordingly, the total amount of (-) ₹1168.23 lakh is allowed to be capitalised during 2007-08.

2008-09

61. Out of an expenditure for ₹664.01 lakh claimed during the year, an expenditure of ₹440.67 lakh towards replacement of old assets viz. vertical mono block centrifugal pump, design manufacturing, supply, installation & commissioning of excitation system, replacement of old AEG make ABCBs with Areva make breakers, replacement of old trouble prone breaker at CHP, replacement of old AEG make ABCB with BHEL make breaker, accessories of BHEL breaker, gas filling device for BHEL make breaker, battery bank with installation & commissioning, lighting arrestor for 132 k, replacement of CT, squirrel cage non flange motor, plate type heat exchanger, lube oil cooler simplex, pneumatic cylinder drive with positioner, transmitter hand wheel etc., has been allowed under Regulation 18(2)(iv) towards the successful and efficient operation of the generating station, after deduction of gross value of old assets. An expenditure of ₹61.89 lakh incurred towards fully automatic controlled capacitance & tan delta test set, circuit breaker analyser with dynamic contact resistance meter, pump set with motor etc., has been allowed for successful & efficient operation of the generating station under Regulation 18(2)(iv). An expenditure of ₹18.38 lakh claimed on other assets has not been allowed due to non-submission of sufficient details. Accordingly, the total expenditure of ₹502.56 lakh has been allowed to be capitalised during 2008-09.

Meija TPS (Units I to III)

62. The petitioner has claimed expenditure of ₹398.47 lakh for 2006-07, ₹411.25 lakh for 2007-08 and ₹1869.07 lakh for 2008-09.

2006-07

63. Out of an expenditure for ₹398.47 lakh claimed during the year, an expenditure for ₹ 225.85 lakh towards balance payments on closing of contract, settlement of arbitration etc for Cost of land, PH building, Cable trenches, Effluent Water Treatment plant, Other buildings, Roads, Cooling towers etc., has been allowed under Regulation 18(2)(i) of the 2004 Tariff Regulations. An expenditure of ₹180.00 lakh towards development of green belt/plantation in and around Mejia TPS as per agreement dated 12.11.1999 entered into with the Divisional Forest Officer, Government of West Bengal, has been allowed under Regulation 18(2)(iv) for successful and efficient operation of the generating station. An amount of ₹1.94 lakh claimed on other assets during 2006-07 has not been considered for want of details. The petitioner by way of negative entries has adjusted an amount of ₹9.33 lakh and the same has been allowed. Accordingly, the total expenditure of ₹396.53 lakh has been allowed to be capitalised during 2006-07.

2007-08

64. The petitioner has claimed expenditure for ₹411.25 lakh during this year. Out of this, an expenditure of ₹61.41 lakh claimed on other assets during the year has not been considered for want of details. An expenditure of ₹ 439.89 lakh towards provision for balance payments/ final payments for power house buildings, sewage & sanitary system, plantation, Misc. power plant equipment, generation bus ducts, bridge & railway siding etc., has been allowed as it has been observed that these provisions had been reversed during 2008-09 under the head 'adjustments' as per petitioner's affidavit dated 16.3.2011. The petitioner by way of negative entry has adjusted an amount of ₹90.05 lakh and the same has been allowed. Accordingly, the total expenditure of ₹349.84 lakh has been allowed to be capitalised during 2007-08.

2008-09

65. The petitioner has claimed expenditure for ₹1869.07 lakh during the year. Out of this, expenditure of ₹13.02 lakh for temporary residential building has been disallowed being temporary assets. An expenditure of ₹423.67 lakh claimed for balance payments /deferred liabilities for works within the original scope for items viz. process fees paid to district land reform officer, cost of material for construction of other building, construction of public building, construction of residential building, construction of CISF complex, access road etc., has been allowed under Regulation 18(2)(i) of the 2004 Tariff Regulations. An expenditure of ₹1726.08 lakh towards construction of effluent treatment plant, construction of new captive railway system for carrying coal from Raniganj to MTPS, renovation of bridge, construction of settling of ponds for contaminated water etc., has been allowed for successful and efficient operation of the generating station under Regulation 18(2)(iv). An expenditure of ₹238.06 lakh claimed in respect of other assets has not been allowed being assets of a minor nature. The petitioner by way of negative entry has adjusted an amount of ₹531.77 lakh and the same has been considered. Accordingly, the total expenditure of ₹1617.99 lakh has been allowed to be capitalised during 2008-09.

(ii) Hydro-generating stations

66. Regulation 34 of the 2004 regulations provides for considering the additional capital expenditure for tariff purposes as under:

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission subject to prudence check.

(vi) Deferred liabilities,

(vii) Works deferred for execution,

(viii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 33,

- (ix) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and
- (x) On account of change in law.

Provided that original scope of works along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of generating station.

(2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:

- (i) Deferred liabilities relating to works/services within the original scope of work;
- (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court;
- (iii) On account of change in law; and
- (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.

(3) Any expenditure incurred on acquiring minor items/assets like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, T.V, washing machine, heat-convectors, mattresses, carpets, etc brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

Note

The list of items is illustrative and not exhaustive.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut-off date.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original capital cost, except such items as are listed in Clause (3) of this regulation.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 4

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 36 after writing off the original amount of the replaced assets from the original capital cost.”

Maithon

67. Maithon Hydrogenerating station with a total capacity of 63.2 MW (2 x 20 MW + 1 x 23.2 MW) was commissioned during December, 1958 with annual design energy of 137 MUs. The petitioner has claimed additional capital expenditure for the period 2006-09 as under:

(₹ in lakh)	
2006-07	215.38
2007-08	268.06
2008-09	349.46

2006-07

68. Out of the total expenditure for ₹215.38 lakh claimed during the year, an expenditure for ₹194.31 lakh towards the replacement of level reader, data logger PC and connection cable etc in switchyard control room as the old level recording system has outlived its useful life and for refurbishment of Unit-II of the generating station, is allowed under Regulation 34(2)(iv) of the 2004 Tariff Regulations. Similarly, the expenditure for ₹9.14 lakh for providing 750 kVA distribution transformers, 11 kV for strengthening of colony supply & replacement of 133 kV breaker of Unit-I which had outlived their useful life has also been allowed under Regulation 34(2)(iv). The petitioner has submitted the gross value of the replaced assets as ₹66.10 lakh, which has been considered. However, the claim for capitalization of ₹11.93 lakh on account of other assets like office furniture, computer, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹137.35 lakh has been allowed to be capitalized during 2006-07.

2007-08

69. Out of the expenditure of ₹268.06 lakh claimed during the year, expenditure for ₹0.24 lakh towards replacement of old meters in switchyard control panel and a refund of ₹1.25 lakh on account of refurbishment of Unit-II is allowed under Regulation 34(2)(iv). An expenditure for ₹4.02 lakh claimed on account of sub-station equipment like transfer of DT, lightening arresters have been allowed under Regulation 34(2)(iv). The petitioner has submitted the gross value of the replaced assets as ₹0.18 lakh, which has been considered. The claim for ₹264.08 lakh on account of book transfer of the assets of switchyard from T&D assets to hydro generating assets has not been allowed for tariff, being a book entry. The claim for capitalization of ₹0.97 lakh on account of other assets like office furniture, computer, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹2.82 lakh has been allowed to be capitalized during 2007-08.

2008-09

70. The petitioner has claimed additional capital expenditure of ₹349.46 lakh during the year. Out of this, expenditure for ₹283.98 lakh on account of plant and machinery and ₹35.51 lakh on account of sub-station equipments have been allowed under Regulation 34(2)(iv) considering that these equipment's have outlived their useful life. A claim for ₹28.20 lakh on account of refurbishment of 132 kV and 33 kV switchgear of the generating station, which has become necessary due to increased system load flow through grid, has been allowed under Regulation 34(2)(iv). The petitioner has submitted the gross value of the replaced assets as ₹109.76 lakh, which has been considered. The claim for capitalization of ₹1.77 lakh on account of other assets like office furniture, computer, A.C, invertor, power, library books etc., after the cut-off date, has not been

considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹237.94 lakh has been allowed to be capitalized during 2008-09.

Panchet

71. Panchet Hydro Power Station with a total capacity of 80 MW comprises of two units. Unit-I was commissioned during December, 1959 and Unit-II during March, 1991 with an annual design energy of 237 MUs. The petitioner has claimed additional capital expenditure for the period 2006-09 as under:

(₹ in lakh)	
2006-07	26.69
2007-08	24.57
2008-09	14.76

2006-07

72. The petitioner has claimed the total expenditure of ₹26.69 lakh during the year towards generator oil coolers for both the units and thrust bearing oil cooler & guide bearing oil cooler for Unit-I. The petitioner has submitted the gross value of the replaced assets as ₹6.80 lakh. In view of this, capitalization of the expenditure after deduction of the gross value of the assets is allowed under Regulation 34(2)(iv) of the 2004 Tariff Regulations. Accordingly, the total expenditure of ₹19.89 lakh is allowed to be capitalized during 2006-07.

2007-08

73. The claim of the petitioner for capitalization of ₹25.86 lakh towards plant and machinery has been allowed under Regulation 34(2)(iv). Also, the claim for negative adjustment of ₹4.47 lakh has been allowed. The claim for capitalization of ₹3.18 lakh on account of other assets like office furniture, computer, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. The petitioner has submitted the gross value of the replaced assets as

₹6.39 lakh, which has been considered. Accordingly, the total expenditure of ₹14.99 lakh is allowed to be capitalized during 2007-08.

2008-09

74. Out of the total expenditure of ₹14.76 lakh claimed for capitalization during the year, an expenditure of ₹14.52 lakh towards power house plant & machinery has been allowed under Regulation 34(2)(iv). The petitioner has submitted the gross value of the replaced assets as ₹2.13 lakh, which has been considered. The claim for capitalization of ₹0.24 lakh on account of minor assets like office furniture, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹12.39 lakh has been allowed to be capitalized during 2008-09.

Tilaiya

75. Tilaiya Hydro Power Station with a total capacity of 4 MW comprises of two units with 2 MW capacity each. Unit-I of the generating station was commissioned during February, 1953 and Unit-II during August, 1953. The additional capital expenditure claimed by the petitioner during 2006-09, is as under:

<i>(₹ in lakh)</i>	
2006-07	1.23
2007-08	10.53
2008-09	13.57

2006-07

76. The claim of the petitioner for capitalization of ₹1.23 lakh during this year on account of assets like office furniture, computer, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations.

2007-08

77. The claim of the petitioner for capitalization of ₹10.41 lakh during this year on account of assets like office furniture, computer, A.C, library books etc., after the cut-off date, has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. However, the miscellaneous adjustment of ₹0.12 lakh during the year has been allowed. Accordingly, a total expenditure of ₹0.12 lakh has been allowed to be capitalized during 2007-08.

2008-09

78. The petitioner has claimed additional capital expenditure of ₹13.57 lakh during the year. Out of this, an expenditure of ₹8.69 lakh for assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. However, the claim for capitalization of an expenditure of ₹4.89 lakh on account of extension of 11 kV bus for adding one number 750 kVA, 11 kV/400 V transformer to isolate the power house auxiliary supply, colony supply and other power supply is allowed in terms of Regulation 34(2)(iv). Accordingly, a total expenditure of ₹4.89 lakh has been allowed to be capitalized during 2008-09.

79. Based on the above discussions, the additional capital expenditure allowed for hydrogenating stations is summarized as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Maithon	137.35	2.82	237.94
Panchet	19.89	14.99	12.39
Tilaya	0.00	0.12	4.89
Total	157.24	17.93	255.22

Additional Capital Expenditure for Dam

(a) Maithon Dam

80. The petitioner has claimed additional capital expenditure for the period 2006-09 for Maithon Dam as under:

<i>(₹ in lakh)</i>	
2006-07	54.63
2007-08	59.82
2008-09	44.89

2006-07

81. Out of the total expenditure of ₹54.63 lakh claimed during the year, an expenditure of ₹33.10 lakh towards fire protection system for safety of new administrative building has been allowed under Regulation 34(2)(iv). However, an expenditure of ₹21.53 lakh for assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been allowed in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹33.10 lakh has been allowed to be capitalized during 2006-07.

2007-08

82. The total expenditure of ₹59.82 lakh claimed for assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been allowed in terms of Regulation 34(3) of the 2004 Tariff Regulations.

2008-09

83. Out of the total expenditure of ₹44.89 lakh claimed for capitalization during the year, an expenditure of ₹37.37 lakh for assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been allowed in terms of Regulation 34(3) of the 2004 Tariff Regulations. Expenditure of ₹4.32 lakh on account of security measures for colony and its surrounding and ₹3.20 lakh on account of computer room

at Middle Education school for providing computer education has been allowed in terms of Regulation 34(2)(iv). Accordingly, a total expenditure of ₹7.52 lakh has been allowed to be capitalized during 2008-09.

(b) Panchet Dam

84. The petitioner has claimed additional capital expenditure for the period 2006-09 for Panchet Dam as under:

(₹ in lakh)	
2006-07	0.77
2007-08	22.69
2008-09	39.20

2006-07

85. The total expenditure of ₹0.77 lakh claimed for assets like office furniture, computer, A.C, library books etc., after the cut-off date has not been allowed in terms of Regulation 34(3) of the 2004 Tariff Regulations.

2007-08

86. Out of the total expenditure of ₹22.69 lakh claimed during the year, an expenditure of ₹13.85 lakh claimed in respect of assets which include construction of cycle scoter stand, development of parade ground, electrical wiring, casing of new telephone exchange building, construction of boundary walls, construction of garage, diversion and improvement of colony drains and service lines, construction of new telephone exchange building, providing grill and collapsible gates etc., has been allowed in terms of Regulation 34(2)(iv). However, an expenditure of ₹8.84 lakh claimed for assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹13.85 lakh has been allowed to be capitalized during 2007-08.

2008-09

87. Out of the total expenditure of ₹39.20 lakh claimed during the year, an expenditure of ₹15.12 lakh towards up-gradation of Nehru Park, for providing healthy environment to the inhabitants, as a measure of Corporate Social Responsibility (CSR) has not been allowed, since the expenditure towards CSR is required to be borne by the petitioner and the beneficiaries cannot be burdened on this count. The claim for ₹13.80 lakh towards accommodation for CISF is allowed under Regulation 34(2)(iv), keeping in view the safety of the dam. An expenditure of ₹10.29 lakh claimed for other assets like office furniture, computer, A.C, library books etc., after the cut-off date, have not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹13.80 lakh has been allowed to be capitalized during 2008-09.

(c) Konar Dam

88. The petitioner has claimed additional capital expenditure for the period 2006-09 for Konar Dam as under:

(₹ in lakh)	
2006-07	8.06
2007-08	6.03
2008-09	5.87

2006-07

89. Out of the total expenditure of ₹8.06 lakh claimed during the year, an expenditure of ₹3.20 lakh towards installation of hand pumps for Konal dam to meet water scarcity in the adjacent area of the konar dam has not been allowed, since the activity appear to be towards Corporate Social Responsibility, which is required to be borne by the petitioner and the beneficiaries cannot be burdened on this count. The balance expenditure of ₹4.86 lakh claimed for other assets like office furniture, computer, A.C, library books etc., after the cut-off date has not been allowed in terms of Regulation 34(3) of the 2004 Tariff Regulations.

2007-08

90. The total expenditure of ₹6.03 lakh claimed for other assets like office furniture, computer, Air conditioner, library books etc., after the cut-off date has not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations.

2008-09

91. Out of the total expenditure of ₹5.87 lakh claimed during the year, an expenditure of ₹1.36 lakh towards extension work to meet scarcity of space has been allowed under Regulation 34(2)(iv). An expenditure of ₹4.51 lakh claimed for other assets like office furniture, computer, Air conditioner, library books etc., after the cut-off date, have not been considered in terms of Regulation 34(3) of the 2004 Tariff Regulations. Accordingly, a total expenditure of ₹1.36 lakh has been allowed to be capitalized during 2008-09.

92. Based on the above discussions, the additional capital expenditure for 2006-09 allowed in respect of Dams, is summarized as under:

	<i>(₹ in lakh)</i>		
	2006-07	2007-08	2008-09
Maithon	33.10	0.00	7.52
Panchet	0.00	13.85	13.80
Konar	0.00	0.00	1.36
Total	33.10	13.85	22.68

93. The petitioner in its petition has submitted that the power component of 34.56% has been considered towards additional capital expenditure in respect of dams. However, based on the audited figures provided by the petitioner the power component of dams works out to 34.56% in 2006-07, 32.80% in 2007-08 and 31.71% in 2008-09. Accordingly, the power component expenditure in respect of dams is worked out as stated overleaf:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Total additional expenditure allowed for dams	33.10	13.85	22.68
Power component (%)	34.56%	32.80%	31.71%
Power component expenditure	11.44	4.54	7.19

94. Based on the additional capital expenditure considered in dams, the percentage allocation to different hydro generating stations in the ratio of the capital cost as in balance sheet, as claimed by the petitioner during the respective years, is as under:

(in %)			
Percentage of allocation of additional capitalization			
	2006-07	2007-08	2008-09
Maithon	51.21	52.43	54.01
Panchet	47.28	45.99	44.33
Tilaiya	1.51	1.58	1.66
Total	100.00	100.00	100.00

95. Based on the apportionment of additional capitalization in the ratio of capital cost as per balance sheet submitted by the petitioner, the allocation of additional capital expenditure in respect of dams to the hydro generating stations of the petitioner is as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Maithon	5.86	2.38	3.88
Panchet	5.41	2.09	3.19
Tilaiya	0.17	0.07	0.12
Total	11.44	4.54	7.19

96. Accordingly, the additional capital expenditure considered for hydro generating stations of the petitioner, is as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Maithon			
Net additional expenditure allowed	137.35	2.82	237.94
Power Component of dam	5.86	2.38	3.88
Total	143.21	5.20	241.82
Panchet			
Net additional expenditure allowed	19.89	14.99	12.39
Power Component of dam	5.41	2.09	3.19
Total	25.30	17.08	15.57
Tilaiya			
Net additional expenditure allowed	0.00	0.12	4.89
Power Component of dam	0.17	0.07	0.12
Total	0.17	0.20	5.01

(iii) Transmission and distribution system

97. The claim of the petitioner for additional capital expenditure for the period 2006-09 under different heads is as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Transmission A to N stage	11902.74	(-) 24222.24	1239.53
Main Division	421.02	31196.03	460.15
CE Stores, Construction Establishment	5.24	181.48	25.59
Total	12329.00	7155.27	1725.27

98. The claims of the petitioner are examined as under:

Transmission A to N Stage of assets

2006-07

99. The petitioner has claimed additional capital expenditure of ₹11902.74 lakh for 2006-07. Out of this, an expenditure of ₹9993.66 lakh towards assets under transmission A to N stage is found justified and is allowed in terms of Regulation 52 (2)(iv) of the 2004 Tariff Regulation. However, expenditure for ₹ 681.89 lakh towards assets as detailed in submissions of the petitioner dated 11.4.2011 has been disallowed since the assets have not been commissioned. However, the petitioner is at liberty to claim capitalization of the expenditure as and when these assets are commissioned, and the same will be considered in accordance with law. An expenditure of ₹561.15 lakh in respect of assets under transmission A-N stage has been disallowed for want of proper justification. Similarly, expenditure for ₹647.75 lakh towards transmission A to N stage has been disallowed, as the details of the said work have not been furnished by the petitioner. An expenditure of ₹17.58 lakh in respect of assets under Transmission A to N stage has been disallowed as the expenditure is in the nature of O&M expenses. Also, expenditure of ₹0.71 lakh towards minor assets like computer etc has been disallowed as the expenditure on minor assets brought after the

cut-off date is not allowed to be capitalized in terms of Regulation 53(3) of the 2004 Tariff Regulations.

2007-08

100. The petitioner has claimed capitalization of a total expenditure of (-) ₹24222.24 lakh during this year. This involves an expenditure of ₹7826.83 lakh during this year under Transmission A to N Stage, (-) ₹31150.17 lakh towards transfer of assets to Transmission Main division and (-) ₹898.90 lakh on account of transfer of assets to Chandrapura TPS. The positive value of asset transferred to Transmission Main division is considered in the additional capitalisation claimed during 2007-08 in Main division. Similarly, the transfer of asset from Transmission A to N to Chandrapura TPS (CTPS) has been considered in the additional capitalisation claimed for CTPS during 2007-08. Out of the total expenditure for ₹7826.83 lakh claimed for capitalization under this head, an expenditure of ₹5175.89 lakh in respect of assets under Transmission A to N stage is found to be in order and is allowed to be capitalized under Regulation 52(2)(iv). An expenditure of ₹272.66 lakh in respect of assets under Transmission A to N stage is not allowed as the concerned asset had not been commissioned as per the information submitted by the petitioner *vide* its affidavit dated 11.4.2011. However, liberty is granted to the petitioner to claim the said amount after commissioning of the asset, and the same will be considered in accordance with law. Similarly, an expenditure of ₹53.23 lakh towards new line commissioned has not been allowed in this petition as the concerned line has been commissioned during 2009-10 in terms of the information submitted by the petitioner. The petitioner is at liberty to claim capitalization of this amount for the period 2009-14, which will be considered in accordance with law. Further, an expenditure of ₹7.87 lakh for Transmission A to N stage has been disallowed since proper justification for the said work along with details

etc. have not been provided by the petitioner. Also, an expenditure of ₹498.22 lakh towards Transmission A-N stage has been disallowed, since details of the work etc., corresponding to the expenditure claimed for the concerned assets has not been furnished by the petitioner. An expenditure of ₹14.69 lakh towards assets under Transmission A-N stage has not been allowed as the expenditure do not appear to be of capital in nature and is covered by the normative O&M expenses admissible to the petitioner. An expenditure of ₹1804.26 lakh towards re-conductoring of old transmission lines has been disallowed as the details of value de-capitalized for old conductor and hardware fittings etc., has not been furnished.

2008-09

101. The petitioner has claimed capitalization of an expenditure of ₹1239.53 lakh during the year. Out of this, an expenditure of ₹731.27 lakh for assets under Transmission A to N stage, as submitted by the petitioner vide affidavit dated 11.4.2011 has been allowed in terms of Regulation 52(2)(iv) of the 2004 Tariff Regulations. An expenditure of ₹ 260.97 lakh for Transmission A to N stage has not been allowed as the concerned asset had not been commissioned as per information submitted by the petitioner on 11.4.2011. However, petitioner is at liberty to claim the said amount after commissioning of the asset, which will be considered in accordance with law. Further, an expenditure of ₹ 0.18 lakh for Transmission A to N stage has been disallowed since proper justification for the work along with details etc. have not been furnished by the petitioner. Also, an expenditure of ₹268.25 lakh towards assets under Transmission A-N stage has been disallowed since details of the work corresponding to the expenditure claimed for the concerned assets, have not been furnished by the petitioner. An expenditure of ₹0.09 lakh has not been allowed as the expenditure is not capital in nature and is covered under the normative O&M expenses admissible to the petitioner.

An adjustment of (-) ₹21.23 lakh has not been allowed as details of de-capitalization value of re-conductoring of old transmission line has not been furnished by the petitioner. Accordingly, a total expenditure of ₹731.27 lakh has been allowed to be capitalised for 2008-09.

Transmission Main Division

2006-07

102. The petitioner has claimed capitalization of total expenditure of ₹421.02 lakh during the year. Out of this, an expenditure of ₹98.58 lakh in respect of assets under transmission main division has been allowed under Regulation 53(2)(iv) of the 2004 Tariff Regulations. An expenditure of ₹220.41 lakh for assets under transmission main division have been disallowed since proper justification for the work along with relevant details has not been furnished by the petitioner. An expenditure of ₹5.51 lakh towards assets under transmission main division has been disallowed since the details of work corresponding to the expenditure claimed for the concerned assets have not been provided by the petitioner. An expenditure of ₹33.01 lakh for assets under transmission main division has not been allowed as the expenditure is not capital in nature and is covered under the normative O&M expenses admissible to the petitioner. An expenditure of ₹63.51 lakh for assets under transmission main division has been disallowed as the expenditure on minor assets brought after the cut-off date is not to be capitalized in terms of Regulation 53(3) of the 2004 Tariff Regulations.

2007-08

103. The petitioner has claimed a total expenditure of ₹31196.04 lakh during the year. Out of this, an expenditure of ₹30972.24 lakh for assets under transmission main division has been allowed under Regulation 53(2)(iv). An expenditure of ₹223.80 lakh has not been allowed to be capitalized under this head for the following reasons.

(a) Expenditure of ₹94.98 lakh for assets has been disallowed since proper justification for the work along with relevant details has not been furnished by the petitioner.

(b) Expenditure of ₹15.67 lakh for assets has been disallowed since the details of work corresponding to the expenditure claimed for the concerned assets have not been submitted by the petitioner.

(c) Expenditure of ₹20.60 lakh on assets which are not capital in nature and is covered under the normative O&M expenses admissible to the petitioner has not been allowed.

(d) Expenditure for ₹92.55 lakh towards assets has been disallowed as the expenditure on minor assets brought after the cut-off date is not to be capitalized in terms of Regulation 53(3) of the 2004 Tariff Regulations.

2008-09

104. The petitioner has claimed capitalization of a total expenditure of ₹460.15 lakh during the year. Out of this, an expenditure of ₹130.54 lakh for assets under transmission main division has been allowed under Regulation 53(2)(iv) since the same is found reasonable. Expenditure of ₹213.72 lakh for assets under this head has been disallowed for want of details and proper justification for the work. An expenditure of ₹22.37 lakh for assets under transmission main division has been disallowed since the relevant details of the work corresponding to the expenditure claimed for the concerned assets have not been furnished by the petitioner. An expenditure of ₹44.80 lakh for assets under transmission main division has not been allowed as the expenditure is not capital in nature and is covered under the normative O&M expenses admissible to the petitioner. Also, an expenditure for ₹48.70 lakh towards assets under transmission main division has been disallowed as the expenditure on minor assets brought after the cut-off date is not to be capitalized in terms of Regulation 53(3) of the 2004 Tariff Regulations.

CE Stores and Construction Establishment

2006-07

105. The petitioner has claimed a total expenditure of ₹5.24 lakh under this head, in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. As the claim of the petitioner is in respect of minor assets like Office furniture, computer, Air conditioner, library books etc., the expenditure has been disallowed as the expenditure on minor assets brought after the cut-off date is not to be capitalized in terms of Regulation 53 (3) of the 2004 Tariff Regulations.

2007-08

106. The petitioner has claimed a total expenditure of ₹181.48 lakh under this head in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. Expenditure of ₹8.47 lakh for assets like GOLA 220 kV S/S is disallowed as the expenditure is towards land for sub-station which had not been commissioned, as per information submitted by the petitioner. Expenditure for ₹37.06 lakh towards building has not been allowed as relevant details along with proper justification for the said work has not been furnished by the petitioner. An expenditure of ₹135.95 lakh for minor assets like Office furniture, computer, Air conditioner, library books etc., has been disallowed as the expenditure on minor assets brought after the cut-off date is not to be capitalized in terms of Regulation 53 (3) of the 2004 Tariff Regulations.

2008-09

107. The petitioner has claimed a total expenditure of ₹25.59 lakh under this head, in terms of Regulation 53(2)(iv) of the 2004 Tariff Regulations. As the claim of the petitioner is in respect of minor assets like Office furniture, computer, Air conditioner, library books etc., the expenditure has been disallowed as the expenditure on minor

assets brought after the cut-off date is not to be capitalized in terms of Regulation 53 (3) of the 2004 Tariff Regulations.

108. In view of the above, the additional capital expenditure for 2006-09 is allowed is as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Transmission A-N stage	9993.65	(-) 26873.18	731.27
Main Division	98.58	30972.24	130.54
CE Stores	0.00	0.00	0.00
Total	10092.23	4099.06	861.81
Gross block of de-capitalization	21.16	32.05	42.51
Net Additional capital expenditure allowed	10071.07	4067.01	819.30

Capital Cost of Common Assets

109. In terms of the observations of the Tribunal in its judgment dated 23.11.2007 in Appeal Nos. 271, 272, 273, 275 of 2006 & Appeal No.8 of 2007, the return on equity, interest on loan and depreciation of the common assets has been calculated and the amount so calculated has been apportioned to each of the productive generating stations/transmission system of the petitioner, in proportion to the capital cost allocated as on 31.3.2004 to Direction office, Other office, Central office and Subsidiary activities.

110. The petitioner in this petition has claimed additional capital expenditure for the period 2004-05 to 2008-09 for Common assets under different activities as stated hereunder:

Direction office

	1.4.2004	Additional Capital Expenditure (actuals)		Additional Capital Expenditure (actuals)		
		2004-05	2005-06	2006-07	2007-08	2008-09
As allowed by order dated 6.8.2009	457	0.00	0.00	0.00	0.00	0.00
Additional expenditure claimed		244.99	31.91	19.10	0.28	49.55
Total	457	244.99	31.91	19.10	0.28	49.55

Central office

(₹ in lakh)

	1.4.2004	Additional Capital Expenditure (Actuals)		Additional Capital Expenditure (Actuals)		
		2004-05	2005-06	2006-07	2007-08	2008-09
As allowed by order dated 6.8.2009	3477	0.00	0.00	0.00	0.00	0.00
Additional expenditure claimed		29.74	72.62	-	-	-
Total	3477	29.74	72.62	234.40	113.03	80.91

Other office

(₹ in lakh)

	1.4.2004	Additional Capital Expenditure (Actuals)		Additional Capital Expenditure (Actuals)		
		2004-05	2005-06	2006-07	2007-08	2008-09
As allowed by order dated 6.8.2009	486	0.00	0.00	0.00	0.00	0.00
Additional expenditure claimed		4.88	22.30	(-) 12.38	32.58	9.99
TOTAL	486	4.88	22.30	(-) 12.38	32.58	9.99

Subsidiary activities

(₹ in lakh)

	1.4.2004	Additional Capital Expenditure (Actuals)		Additional Capital Expenditure (Actuals)		
		2004-05	2005-06	2006-07	2007-08	2008-09
As allowed by order dated 6.8.2009	3469	0.00	0.00	0.00	0.00	0.00
Additional expenditure claimed		141.82	169.44	132.82	(-) 163.78	1245.15
TOTAL	3469	141.82	169.44	132.82	(-) 163.78	1245.15

111. The petitioner has not furnished the nature of assets and proper justification in respect of its claim for additional capital expenditure for the period 2006-09. Hence, in the absence of asset-wise details and justification, the additional capital expenditure for Direction Office, Central office, other office and subsidiary activities have not been allowed.

112. Based on the above discussions, the additional capital expenditure on net basis allowed for the period 2004-09, for thermal and hydro generating stations and for transmissions systems of the petitioner is as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Bokaro TPS	2.88	7.05	3009.62	1.60	100.08
Chandrapura TPS	1069.84	0.00	239.58	447.85	1227.28
Durgapur TPS	0.00	0.00	269.04	(-) 1168.23	502.56
Mejia TPS (Units 1 to III)	0.00	0.00	396.53	349.84	1617.99
Maithon HPS	0.00	0.00	143.21	5.20	241.82
Panchet HPS	0.00	0.00	25.30	17.08	15.57
Tilaiya HPS	0.00	0.00	0.17	0.20	5.01
Transmission & Distribution system	2637.63	9352.65	10071.07	4067.01	819.30

113. Based on the capital cost as on 1.4.2004 and the additional capitalization allowed during the years 2004-09 as above, the capital cost considered for tariff from 1.4.2006 is as under:

		(₹ in lakh)		
		2006-07	2007-08	2008-09
Bokaro TPS	Opening Capital cost	55443.53	58453.15	58454.75
	Closing Capital cost	58453.15	58454.75	58554.83
	Average Capital cost	56948.34	58453.95	58504.79
Chandrapura TPS	Opening Capital cost	24999.34	25238.92	25686.77
	Closing Capital cost	25238.92	25686.77	26914.05
	Average Capital cost	25119.13	25462.84	26300.41
Durgapur TPS	Opening Capital cost	19898.11	20167.15	18998.92
	Closing Capital cost	20167.15	18998.92	19501.48
	Average Capital cost	20032.63	19583.04	19250.20
Mejia TPS-Units I to III	Opening Capital cost	158348.76	158745.29	159095.13
	Closing Capital cost	158745.29	159095.13	160713.11
	Average Capital cost	158547.03	158920.21	159904.12
Maithon HPS	Opening Capital cost	5490.82	5634.03	5639.23
	Closing Capital cost	5634.03	5639.23	5881.05
	Average Capital cost	5562.43	5636.63	5760.14
Panchet HPS	Opening Capital cost	4958.83	4984.13	5001.22
	Closing Capital cost	4984.13	5001.22	5016.79
	Average Capital cost	4971.48	4992.68	5009.01
Tilaiya HPS	Opening Capital cost	258.42	258.60	258.79
	Closing Capital cost	258.60	258.79	263.80
	Average Capital cost	258.51	258.69	261.29
Transmission & Distribution System	Opening Capital cost	73584.35	83655.41	87722.43
	Closing Capital cost	83655.41	87722.43	88541.73
	Average Capital cost	78619.88	85688.92	88132.08

Debt-Equity Ratio

114. The 2004 Tariff Regulations, as amended on 8.6.2006, provides that:

"(1) In case of the existing generating stations or transmission projects debt-equity ratio considered by the Commission for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 1.4.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing generating stations or transmission projects where additional capitalization has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 18, equity in the additional capitalization to be considered shall be,-

- (a) 30% of the additional capital expenditure admitted by the Commission; or
- (b) equity approved by the competent authority in the financial package, for additional capitalization; or
- (c) actual equity employed,

whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company or the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

115. In line with the second proviso to the said regulations, equity is restricted to 30% and the notional equity works out as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Bokaro TPS	902.89	0.48	30.02
Chandrapura TPS	71.87	134.36	368.18
Durgapur TPS	80.71	(-) 350.47	150.77
Mejia TPS-Units I to III	118.96	104.95	485.40
Maithon HPS	42.96	1.56	72.55
Panchet HPS	7.59	5.13	4.67
Tilaiya HPS	0.05	0.06	1.50
Transmission & Distribution System	3021.32	1220.10	245.79

Return on Equity

116. Return on equity has been worked out as stated hereunder:

	(₹ in lakh)		
Bokaro TPS	2006-07	2007-08	2008-09
Equity-Opening	27668.57	28571.46	28571.93
Addition of Equity due to additional capital expenditure	902.89	0.48	30.02
Equity Closing	28571.46	28571.93	28601.96
Average Equity	28120.01	28571.70	28586.95
Return on Equity @ 14%	3936.80	4000.04	4002.17
Chandrapura TPS			
Equity-Opening	12231.31	12303.19	12437.54
Addition of Equity due to Additional capital expenditure	71.87	134.36	368.18

Equity Closing	12303.19	12437.54	12805.73
Average Equity	12267.25	12370.36	12621.63
Return on Equity @ 14%	1717.41	1731.85	1767.03
Durgapur TPS			
Equity-Opening	9706.40	9787.11	9436.64
Addition of Equity due to additional capital expenditure	80.71	-350.47	150.77
Equity Closing	9787.11	9436.64	9587.41
Average Equity	9746.76	9611.88	9512.03
Return on Equity	1364.55	1345.66	1331.68
Mejia TPS-Units I to III			
Equity-Opening	47504.63	47623.59	47728.54
Addition of Equity due to additional capital expenditure	118.96	104.95	485.40
Equity Closing	47623.59	47728.54	48213.93
Average Equity	47564.11	47676.06	47971.24
Return on Equity @ 14%	6658.98	6674.65	6715.97
Maithon HPS			
Equity-Opening	2699.98	2742.94	2744.50
Addition of Equity due to additional capital expenditure	42.96	1.56	72.55
Equity Closing	2742.94	2744.50	2817.04
Average Equity	2721.46	2743.72	2780.77
Return on Equity @ 14%	381.00	384.12	389.31
Panchet HPS			
Equity-Opening	2465.86	2473.45	2478.57
Addition of Equity due to additional capital expenditure	7.59	5.13	4.67
Equity Closing	2473.45	2478.57	2483.24
Average Equity	2469.65	2476.01	2480.91
Return on Equity @ 14%	345.75	346.64	347.33
Tilaiya HPS			
Equity-Opening	128.22	128.27	128.33
Addition of Equity due to additional capital expenditure	0.05	0.06	1.50
Equity Closing	128.27	128.33	129.83
Average Equity	128.24	128.30	129.08
Return on Equity @ 14%	17.95	17.96	18.07
Transmission & Distribution System			
Equity-Opening	26664.12	29685.44	30905.55
Addition of Equity due to additional capital expenditure	3021.32	1220.10	245.79
Equity Closing	29685.44	30905.55	31151.34
Average Equity	28174.78	30295.50	31028.44
Return on Equity @ 14%	3944.47	4241.37	4343.98

Interest on Loan

117. Interest on Loan has been computed with weighted average rate of interest of actual loan applicable for the generating units/transmission systems. Depreciation calculated for the year is treated as repayment of loan during that year. However while allowing the additional capital expenditure for 2006-09 the actual rate of interest has been applied. Interest on loan has been computed as stated overleaf:

(₹ in lakh)

Bokaro TPS	2006-07	2007-08	2008-09
Gross loan opening	27774.96	29881.69	29882.81
Cumulative repayment of loan upto previous year	27774.96	29881.69	29882.81
Net loan opening	0.00	0.00	0.00
Addition of loan due to additional capital expenditure	2106.74	1.12	70.06
Repayment of loan during the year	2106.74	1.12	62.09
Net loan closing	0.00	0.00	7.96
Average loan	0.00	0.00	3.98
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	0.00	0.00	0.36
Chandrapura TPS			
Gross loan opening	12768.03	12935.73	13249.23
Cumulative Repayment of loan upto previous year	12768.03	12935.73	13249.23
Net loan opening	0.00	0.00	0.00
Addition of loan due to additional capital expenditure	167.70	313.50	859.09
Repayment of loan during the year	167.70	313.50	832.83
Net loan closing	0.00	0.00	26.26
Average loan	0.00	0.00	13.13
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	0.00	0.00	1.17
Durgapur TPS			
Gross loan opening	10191.71	10380.04	9562.28
Cumulative Repayment of loan upto previous year	10191.71	10380.04	9562.28
Net loan opening	0.00	0.00	0.00
Addition of loan due to additional capital expenditure	188.33	(-) 817.76	351.79
Repayment of loan during the year	188.33	(-) 817.76	103.31
Net loan closing	0.00	0.00	248.48
Average loan	0.00	0.00	124.24
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	0.00	0.00	11.08
Mejia TPS-Units I to III			
Gross loan opening	110844.13	111121.70	111366.59
Cumulative repayment of loan upto previous year	73232.06	82998.88	92788.69
Net Loan opening	37612.07	28122.82	18577.90
Addition of loan due to additional capital expenditure	277.57	244.89	1132.59
Repayment of loan during the year	9766.82	9789.81	9850.42
Net loan closing	28122.82	18577.90	9860.07
Average loan	32867.45	23350.36	14218.98
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	3237.69	2206.71	1268.33
Maithon HPS			
Gross Loan opening	2790.85	2891.09	2894.73
Cumulative Repayment of loan upto previous year	1328.32	1622.33	1920.25
Net Loan opening	1462.53	1268.77	974.48
Addition of loan due to additional capital expenditure	100.24	3.64	169.27
Repayment of loan during the year	294.00	297.92	304.45
Net loan closing	1268.77	974.48	839.30
Average loan	1365.65	1121.62	906.89
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	134.53	106.00	80.89
Panchet HPS			
Gross loan opening	2492.98	2510.69	2522.65

Cumulative Repayment of loan upto previous year	2492.98	2510.69	2522.65
Net loan opening	0.00	0.00	0.00
Addition of loan due to additional capital expenditure	17.71	11.96	10.90
Repayment of loan during the year	17.71	11.96	10.90
Net loan closing	0.00	0.00	0.00
Average loan	0.00	0.00	0.00
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	0.00	0.00	0.00
Tilaiya HPS			
Gross loan opening	130.21	130.33	130.46
Cumulative Repayment of loan upto previous year	130.21	130.33	130.46
Net loan opening	0.00	0.00	0.00
Addition of loan due to additional capital expenditure	0.12	0.14	3.50
Repayment of loan during the year	0.12	0.14	3.50
Net loan closing	0.00	0.00	0.00
Average loan	0.00	0.00	0.00
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	0.00	0.00	0.00
Transmission & Distribution System			
Gross loan opening	46920.22	53969.97	56816.88
Cumulative repayment of loan upto previous year	38677.76	44818.63	51511.65
Net loan opening	8242.47	9151.34	5305.23
Addition of loan due to additional capital expenditure	7049.75	2846.91	573.51
Repayment of loan during the year	6140.87	6693.02	5878.74
Net Loan closing	9151.34	5305.23	0.00
Average loan	8696.90	7228.29	2652.62
Weighted Average Rate of Interest on loan	9.85%	9.45%	8.92%
Interest on loan	856.71	683.10	236.61

Depreciation

118. Weighted average rate of depreciation has been calculated in case of each of the generating stations and transmission systems, all offices and subsidiary activities of the petitioner, based on the value of each assets as on 31.3.2004 and the rate of depreciation applicable for the asset used by the petitioner based on depreciation rates approved by the Comptroller and Auditor General (C&AG). The depreciable value of 90% has been calculated after excluding the amount for land and land rights.

119. Cumulative depreciation recovered as on 31.3.2006 has been considered as per Commission's order dated 6.8.2006 wherever no additional capital expenditure is allowed or involved for the years 2004-05 and 2005-06. In cases where capital cost as on 1.4.2006

has been revised due to admitted additional capital expenditure for the years 2004-05 and 2005-06, the cumulative depreciation recovered have been revised and considered.

120. The annual depreciation has been calculated based on the weighted average rate of depreciation on gross block after accounting for the additional capital expenditure allowed (including adjustment in the cumulative depreciation on assets de-capitalized) to the extent of cumulative depreciation of 90% of the cost of the assets. The necessary calculations are as under:

	(₹ in lakh)		
Bokaro TPS	2006-07	2007-08	2008-09
Opening Capital cost	55443.53	58453.15	58454.75
Closing Capital cost	58453.15	58454.75	58554.83
Average Capital cost	56948.34	58453.95	58504.79
90% Depreciable value excluding land & land rights cost	51190.37	52545.42	52591.17
Balance Depreciable value	4183.86	1668.69	62.09
Depreciation to be recovered	3870.21	1668.69	62.09
Cumulative Depreciation	50876.73	52545.42	52591.17
Cumulative Depreciation reduction due to de-capitalization	0.00	16.34	1.20
Cumulative Depreciation after adjustment due to de-capitalization	50876.73	52529.08	52589.98
Chandrapura TPS			
Opening Capital cost	24999.34	25238.92	25686.77
Closing Capital cost	25238.92	25686.77	26914.05
Average Capital cost	25119.13	25462.84	26300.41
90% Depreciable value excluding land & land rights cost	22586.22	22895.56	23649.37
Balance Depreciable value	3441.37	1844.18	832.83
Depreciation to be recovered	1972.97	1844.18	832.83
Cumulative Depreciation	21117.81	22895.56	23649.37
Cumulative Depreciation reduction due to de-capitalization	66.44	79.02	19.44
Cumulative Depreciation after adjustment due to de-capitalization	21051.38	22816.54	23629.93
Durgapur TPS			
Opening Capital cost	19898.11	20167.15	18998.92
Closing Capital cost	20167.15	18998.92	19501.48
Average Capital cost	20032.63	19583.04	19250.20
90% Depreciable value excluding land & land rights cost	17966.23	17561.60	17262.05
Balance Depreciable Value	288.95	0.00	103.31
Depreciation to be recovered	288.95	0.00	103.31
Cumulative Depreciation	17966.23	17561.60	17262.05
Cumulative Depreciation reduction due to de-capitalization	404.64	402.86	128.78
Cumulative Depreciation after adjustment due to de-capitalization	17561.60	17158.74	17133.27
Mejia TPS-Units I to III			
Opening Capital cost	158348.76	158745.29	159095.13
Closing Capital cost	158745.29	159095.13	160713.11
Average Capital cost	158547.03	158920.21	159904.12
90% Depreciable value excluding land & land rights cost	141193.92	141529.78	142415.30
Balance Depreciable value	67961.85	58530.90	49626.61

Depreciation to be recovered	9766.82	9789.81	9850.42
Cumulative Depreciation	82998.88	92788.69	102639.11
Cumulative Depreciation reduction due to de-capitalization	0.00	0.00	0.00
Cumulative Depreciation after adjustment due to de-capitalization	82998.88	92788.69	102639.11
Maithon HPS			
Opening Capital cost	5490.82	5634.03	5639.23
Closing Capital cost	5634.03	5639.23	5881.05
Average Capital cost	5562.43	5636.63	5760.14
90% Depreciable value excluding land & land rights cost	4943.05	5009.83	5120.99
Balance Depreciable value	3320.42	3152.69	2966.09
Depreciation to be recovered	294.00	297.92	304.45
Cumulative Depreciation	1916.63	2155.07	2459.35
Cumulative Depreciation reduction due to de-capitalization	59.49	0.17	98.78
Cumulative Depreciation after adjustment due to de-capitalization	1857.14	2154.90	2360.57
Panchet HPS			
Opening Capital cost	4958.83	4984.13	5001.22
Closing Capital cost	4984.13	5001.22	5016.79
Average Capital cost	4971.48	4992.68	5009.01
90% Depreciable value excluding land & land rights cost	4419.50	4438.57	4453.26
Balance Depreciable value	279.64	25.20	20.45
Depreciation to be recovered	279.64	25.20	20.45
Cumulative Depreciation	4419.50	4438.57	4453.26
Cumulative Depreciation reduction due to de-capitalization	6.12	5.75	1.92
Cumulative Depreciation after adjustment due to de-capitalization	4413.37	4432.82	4451.35
Tilaiya HPS			
Opening Capital cost	258.42	258.60	258.79
Closing Capital cost	258.60	258.79	263.80
Average Capital cost	258.51	258.69	261.29
90% Depreciable value excluding land & land rights cost	196.87	197.04	199.38
Balance Depreciable value	46.43	40.34	36.43
Depreciation to be recovered	6.25	6.25	6.32
Cumulative Depreciation	156.69	162.95	169.26
Cumulative Depreciation reduction due to de-capitalization	0.00	0.00	0.00
Cumulative Depreciation after adjustment due to de-capitalization	156.69	162.95	169.26
Transmission & Distribution System			
Opening Capital cost	73584.35	83655.41	87722.43
Closing Capital cost	83655.41	87722.43	88541.73
Average Capital cost	78619.88	85688.92	88132.08
90% Depreciable value excluding land & land rights cost	70618.56	76980.70	79179.54
Balance Depreciable value	32328.84	32569.16	28103.82
Depreciation to be recovered	6140.87	6693.02	6883.85
Cumulative Depreciation	44430.59	51104.56	57959.57
Cumulative Depreciation reduction due to de-capitalization	19.05	28.84	38.26
Cumulative Depreciation after adjustment due to de-capitalization	44411.54	51075.72	57921.31

O&M Expenses for 2006-09

121. The petitioner has claimed O&M expenses at actuals for its generating stations and transmission systems for the period 2006-09 in addition to the O&M expenses allowed by the Commission in order dated 6.8.2009 as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Mejia TPS (I to III)			
O&M expenses as per order dated 6.8.2009	7018	7298	7590
Ash Evacuation		512	360
Mega Insurance		330	229
Amortisation		556	755
Additional O&M Expenses for old unit	4550	390	0
Additional O&M Expenses for subsidiary activity			
O&M Expenses (actual)	11568	9086	8934
Bokaro TPS			
O&M expenses as per order dated 6.8.2009	11566	12028	12509
Ash Evacuation	1291	1555	1576
Mega Insurance		248	172
Amortisation		305	595
Additional O&M Expenses for old unit	3809	4005	5378
Additional O&M Expenses for subsidiary activity	140	406	633
O&M Expenses (actual)	16806	18547	20863
Chandrapura TPS			
O&M expenses as per order dated 6.8.2009	11817	12290	12781
Ash Evacuation	93	661	280
Mega Insurance	0	153	106
Amortisation	0	434	882
Additional O&M Expenses for old unit	373	801	1139
Additional O&M Expenses for subsidiary activity	4	182	381
O&M Expenses (actual)	12287	14521	15569
Durgapur TPS			
O&M expenses as per order dated 6.8.2009	9872	10267	10678
Ash Evacuation	507	53	371
Mega Insurance	0	138	96
Amortisation	0	1381	2233
Additional O&M Expenses for old unit	1631	(-) 953	1502
Additional O&M Expenses for subsidiary activity	114	322	459
O&M Expenses (actuals)	12124	11208	15339
Hydro generating stations			
Maithon Hydel			
O&M expenses as per order dated 6.8.2009	1088	1131	1176
Amortisation	0	169	239
Additional O&M for old units	17	19	0
Additional O&M for subsidiary activity	0.69	3.82	101

O&M (actual)	1106	1323	1516
Tilaya Hydel			
O&M expenses as per order dated 6.8.2009	314	326	340
Amortisation	0	0	0
Additional O&M for old units	34	152	68
Additional O&M for subsidiary activity	1.03	2.71	34
O&M (actual)	349	481	442
Panchet			
O&M expenses as per order dated 6.8.2009	718	746	776
Amortisation	0	0	0
Additional O&M for old units	365	232	133
Additional O&M for subsidiary activity	3.58	7.18	77
O&M (actual)	1087	985	985
Transmission & Distribution			
O&M expenses as per order dated 6.8.2009	4278.00	4449.00	4627.00
Additional O&M expenses	1199.00	1431.00	2186.00
O&M Expenses (actual)	5477.00	5880.00	6813.00

122. The learned counsel for respondent No.4, JSEB during the hearing on 12.1.2012 submitted that the claim for relaxation of provisions of the 2004 Tariff Regulations for consideration of O&M expenses, if allowed, would have no sanctity to the norms specified by the Commission. He also submitted that the petitioner has not submitted proper justification of its claim for O&M expenses at actuals, in respect of thermal generating stations and hence the same may not be allowed. The objector, M/s BSAL has submitted that the claim towards O&M expenses at actuals is barred by *res judicata* as the same has already been decided by the Tribunal. The claim of the petitioner for higher O&M expenses is contrary to the provisions of the 2004 Tariff Regulations.

123. The matter has been examined. In the proceedings before the Commission in Petition No. 66/2005, pursuant to the directions of the Tribunal in its judgment dated 23.11.2007, the petitioner filed interlocutory Application (I.A.No.19/2009) claiming amongst others, additional capital expenditure incurred on employee cost on account of pay revision, pension and gratuity contribution based on the recommendations of the sixth pay commission, additional O&M expenses incurred on old units and on account of compliance towards environmental laws. Objections to the above said claims of the

petitioner were also filed by the respondent, JSEB and the objector, BSAL. However, the Commission by its order dated 6.8.2009 disposed of the said I.A as under:

"14. The claim of the petitioner for additional capital expenditure for the period 2006-09 is outside the scope of the judgment of the Appellate Tribunal in which directions have been issued to consider the order dated 3.10.2006 *denovo* to the extent indicated in the judgment. Accordingly, we have decided to confine our consideration of the issues earlier decided in our order dated 3.10.2006 in the light of the observations of the Appellate Tribunal. The petitioner is allowed liberty to approach the Commission through an appropriate application, for consideration of any additional issues which would be considered in accordance with law. With the said observation, the interlocutory application is disposed of."

124. Since the reliefs claimed by the petitioner in this petition is based on the liberty granted by the Commission in its order dated 6.8.2009 as stated above, the contentions of the respondent, JSEB and the objector are not acceptable. Accordingly, by this order we propose to consider the claims of the petitioner for consideration of O&M expenses at actual.

125. The reasons furnished by the petitioner for higher O & M expenses during 2006-09 are as under:

- (a) High Men/MW ratio in old vintage units.
- (b) High Repair & Maintenance cost.
- (c) Deployment of employees after retirement of units at BTPS (A) to other running units.
- (d) Expenditure incurred every year on pond ash evacuation.
- (e) Expenditure on strengthening of securities in disturbance areas.
- (f) Investment on social integration / subsidiary activities within the command area.

Additional O&M Expenses for Thermal generating stations

126. In respect of additional O&M expenses claimed towards Ash evacuation, the petitioner was directed vide order dated 30.9.2011 to furnish additional information on affidavit, on the following:

- (a) Details of Ash Handling Systems of Bokaro TPS, Durgapur TPS, Chandrapura TPS and Mejia TPS (Units I to III).
- (b) Justification for the necessity of ash evacuation from ash pond with reference to the present system of ash handling system available to the above generating stations.

127. The petitioner *vide* its affidavit dated 14.10.20011 has submitted that presently, there is only wet slurry ash disposal system in Chandrapura and Durgapur generating stations, whereas in the case of Bokaro generating station, dry fly ash system has been partly commissioned, in addition to the wet slurry ash disposal, and in respect of Mejia, Unit I to III, in addition to wet slurry ash disposal, dry fly ash system has been commissioned during 2009. The petitioner has also submitted that considering the absence of dry fly ash system and the capacity of ash pond, if the existing ash ponds are not evacuated on regular basis, the ash slurry would overflow to the low lying areas/river, causing river bed pollution. Therefore, in order to comply with the pollution control norms of the statutory authority, ash evacuation is required during 2006-09.

128. The objector, BSAL has submitted that the claim for relaxation of operational norms cannot be permitted since the reasons submitted by the petitioner are all controllable in nature. It has also submitted that the Commission by providing relaxed norms had already provided cushion in target operating norms considering the age of the old units. Moreover, outages due to boiler leakages can be prevented by proper planning and management and failure to undertake timely overhauling is the sole responsibility of the petitioner and any loss incurred due to non-performance cannot be passed on to the consumers.

129. The submissions have been considered. The claim of the petitioner for additional O&M expenses for 2006-09 by relaxation of the provisions of the 2004 Tariff

Regulations has been considered on the following two aspects, namely (a) Ash evacuation for compliance with pollution control norms and (b) Repair & Maintenance of old units, in the light of the fact that most of the units are very old and are in operation after the expiry of useful life without undertaking any Renovation & Modernization of these vintage units. The expenditure towards Ash evacuation pertains to the evacuation of ash from the already filled up ash ponds, in case of old generating station like Bokaro, Chandarpura and Durgapur. In case Mejia TPS (Unit Nos. I to III), the Ash evacuation is necessary for compliance with the statutory provisions of Environment Protection Act and the directions of the Pollution Control Board. Moreover, the notifications of the Ministry of Environment & Forests, Government of India regarding 100% fly ash utilization/evacuation would govern all the thermal generating stations of the petitioner. In view of the above and keeping in view that the expenditure pertaining to Ash utilization and Ash evacuation in abandoned mines do not form part of the normative O&M norms specified by the Commission under the 2004 Tariff Regulations, the additional O&M expenses claimed on this count has been considered and allowed.

130. The higher expenses incurred on Repair and Maintenance in respect of Chandrapura TPS and Durgapur TPS generating stations of the petitioner is on account of the fact that these generating stations were commissioned during the years 1979 and 1982 and have already completed their useful lives. Also, the thermal generating units of BTPS 'B' commissioned during early 1990 are about to complete their useful life. Moreover, there has been no significant capital investment during the past in respect of the age old generating units of Chandrapura TPS, Durgapur TPS and Bokaro TPS 'B' and the Plant Load Factor (PLF) of these age old and vintage generating stations are lower and is in the range of 24% to 55% (approx) during 2005-06. It is noticed that major capital investment was envisaged under the Partnership In Excellence (PIE)

programme vide order of the Ministry of Power, Government of India dated 8.4.2005 during the period 2004-09 and after refurbishments/replacement of components of the different units of the above said generating stations, the PLF and the performance parameters had noticeably improved. Hence, in the absence of any R&M for these vintage units, O&M practices under PIE programme is considered necessary for sustenance of generation in line with the norms specified under the 2004 Tariff Regulations. In consideration of the above and since the additional expenditure related to Repair & Maintenance do not form part of the normative O&M expenses specified by the Commission, the claim of the petitioner for additional expenses on this count is allowed.

131. Mejia TPS (Unit-I to III) generating station of the petitioner is comparatively a new generating station and therefore we do not find the need for any modification/ replacement work in order to overcome obsolescence etc. In view of this, the additional O&M expenses claimed towards Repair & Maintenance in respect of Mejia TPS (Units I to III) has not been allowed. It is expected that the refurbishment / replacement of components based on the additional Repair & Maintenance expenses allowed would result in efficient operation of these generating stations as per benchmark norms set by the Commission for the generating stations of the petitioner for the period 2006-09. Accordingly, the prayer of the petitioner for relaxation of O&M expense norms as prayed for in the petition is disposed of in terms of the above.

132. One more issue for consideration is the revision of O&M expenses on account of pay revision as per recommendations of the Sixth pay Commission as prayed for by the petitioner. The petitioner has submitted that additional expenditure for the period 2006-09 on account of pay revision of its employees pursuant to the implementation of the

recommendations of the sixth pay commission may be allowed and the consequent impact on the pension and gratuity contribution as a result of pay revision may be considered by the Commission. The arrear salary, on account of revision in pay in respect of the employees (officers & staff) in the different projects of the petitioner is as given under:

Sl No.	Project/Station	Ledger Balance		(₹ in lakh) Total
		601/09- Pay revision arrears- Officers	601/09- Pay revision arrears -Staff	
1	DTPS	65794177	169836065	235630242
2	CTPS	87317794	177694219	265012013
3	MTPS	142468298	108364643	250832941
4	BTPS	58597791	165757660	224355451
5	Panchet	5778972	30370484	36149456
6	Maithon	103487297	296990563	400477860
7	Konar	2656022	13281561	15937583
8	Hazaribagh	14569349	60485154	75054503
9	TSC	16091920	35912370	52004290
10	Koderma	1939755	10081747	12021502
11	Bermo Mines	3367988	857538	4225526
12	Kolkata	408093969	120204664	528298633
	Total	910163332	1189836668	2100000000

133. The petitioner *vide* its affidavit dated 13.12.2011 has submitted that as per the accounts audited by the Comptroller & Auditor General (C&AG) of India, all head office expenses including pay revision, has been apportioned amongst various heads namely, power, irrigation and flood control. The petitioner has also submitted that as per mercantile system of accounting, the total liability accrued during 2008-09 on account of pay revision has been booked in the year 2008-09. It has further submitted that as per directions of the Government of India, 40% of the arrears on account of revision of pay are payable during 2008-09 and the balance 60% during 2009-10. Accordingly, in line with the accounts audited by C&AG, the petitioner has submitted the individual station-wise claim in Form-18 and Appendix-II of the petition. It has also been submitted that the claim in respect of Mejia TPS (Units IV to VI) has not been included by the

petitioner and the impact of pay revision for the years 2006-07 and 2007-08 has been withdrawn and has been shown as past years adjustments. The respondent, JSEB has submitted that the Tribunal in its judgment dated 23.11.2007 has upheld the order of the Commission dated 3.10.2006 and had not remanded the matter to the Commission. It has also submitted that the issue has been settled as the Commission had not granted any liberty to approach on this issue. The learned counsel for M/s BSAL during the hearing on 17.11.2011 submitted that while determining the employee cost for the projects of the petitioner, the same should be linked to the efficiency/performance level of the employee as per decision of the Tribunal in its judgment dated 26.5.2006 in Siel-v-PSERC (2007 ELR APTEL 931). He also submitted that the expenditure towards salary, wages in respect of Unit Nos IV to VI of Mejia TPS may not be considered in this petition. The objector, M/s SAIL-BSL in its objections dated 15.11.2011 while pointing out that the petitioner is seeking to review the tariff order after the judgment of the Tribunal, has submitted that the genuine claims of the petitioner on this count, if any, is only a subject matter of truing-up.

134. The submissions of the parties have been examined. As stated, the petitioner was granted liberty by order dated 6.8.2009 in Petition No. 66/2005 to claim additional expenditure due to pay revision etc by way of a separate application and this order has been upheld by the Tribunal by its judgment dated 10.5.2010 in Appeal No.146/2009. Since the expenditure incurred on employee cost on account pay revision etc has been claimed by the petitioner based on the liberty granted in order dated 6.8.2009, we are inclined to consider the same. We now consider the submission of the objector, BSAL that the employee cost shall be linked to the efficiency/performance level of the employees as laid down by the Tribunal in its judgment dated 26.5.2006 in Siel-v-PSERC (2007 ELR APTEL 931). The facts in the present case stand on a different

footing. In *Siel's* case, PSEB was extending benefits such as increase in salaries, DA etc., to the employees to maintain parity with the employees of the State Government. The Tribunal after considering the facts of the said case had held that the Board was not legally bound to give such benefits and there had been no improvement in the performance of the employees of the Board. Accordingly, the Tribunal directed that in case the employees of the Board do not increase their efficiency, the employee cost allowed by the Commission would remain capped till the performance of the Board employees improve. In the present case, the employees of the petitioner are being treated at par with the central government employees and are being granted the pay and allowances of the central government employees since its inception. After implementation of the Sixth pay commission recommendations for the central government employees, the petitioner has implemented the pay and allowances recommended by the sixth pay commission to its employees. It is however noted that employee cost form part of the normative O&M expenses specified under the 2004 Tariff Regulations. The petitioner is accordingly required to manage the pay and allowances of its employees from the normative O&M expenses admissible to it. The Commission while deciding the norms applicable for the period 1.4.2004 to 31.3.2009 had considered the O&M expenses for the years 1995-96 to 1999-2000, normalized the O&M expenses and thereafter escalated them at a specified percentage. The relevant portion of the order dated 29.3.2004 in Petition No. 67 of 2003 is extracted as under:

"103. For determining the operation and maintenance cost norms for coal based generating stations in this category, the following methodology was used at the time of preparing draft regulations:

- 1. Actual operation and maintenance expenses as given by NTPC for its stations for the period 1995-96 to 1999-2000 was normalized;*
- 2. After normalization, simple average of the series was obtained which represents the average normalized expenditure during the mid year, 1997-98.*

3. Escalation factor of 10% for the years 1998-99 and 1999-2000 and 6% for the year 2000-01 was used to arrive at the base year (2000-01) O&M Expenses.

4. The base year O&M Expenses, thus arrived were escalated @ of 4% for determining, year-wise, norms for the five year period 2004-09".

135. In case of DVC, the O&M expense norms for 2004-09 were based on actual for the years 1998-99 to 2002-03 normalized the O&M expenses and thereafter escalated them at a specified percentage. Thus, revision of pay with effect from 1.1.2006 was never taken into account while fixing the norms for the period 2004-09. Had the pay revision or wage revision taken place at the time the norms were decided, the Commission would certainly have taken into account its impact while fixing the norms. In other words, the legitimate expenditures incurred are not being serviced as the same have not been factored in the norms specified by the Commission for the period 2004-09. Pay and allowances are mandatory expenditures and are a necessary input to determine the cost of electricity. The said expenditure could not be factored at the time of determination of the norms since the pay revision came into force w.e.f. 1.1.2006 in respect of the employees of the petitioner. We are of the view that if the impact of pay revision or wage revision is denied, it would result in under recovery of cost of electricity by the generating company. Therefore, the petitioner has made out a case for consideration of the impact of pay revision etc for the period 2006-09. In view of this, the contention of the objector is not acceptable. It is pertinent to mention that NTPC, one of the central sector generating company, based on the liberty granted by the Commission, had filed several petitions (Petition No 35/MP/2011 and other connected matters) before the Commission praying for a direction for recovery of additional O&M cost due to increase in employee cost on account of wage revision of its employees from 1.1.2007 and pay revision of the employees of the Central Industrial Security Force deployed at NTPC stations and the staff of Kendriya Vidyalaya employed at

NTPC stations from 1.1.2006 in respect of its generating stations, as an additional expense from the respondents as one-time payment in proportion to their capacity charge in the respective years under Regulation 12 and 13 of the 2004 Tariff Regulations. The Commission disposed of the said petitions allowing the prayer of the petitioner, NTPC by its order dated 12.10.2012. The relevant portion of the order is extracted as under:

"11.....In our view, norms of tariff have been specified in the terms and conditions of tariff after extensive stakeholder's consultation and keeping in view the provisions of the Act, National Electricity Policy and Tariff Policy and its sanctity should be maintained. Normally a party should not be allowed any charge in deviation of the norms. However, when a particular expenditure has not been factored while deciding the norms, in that case the claim for such expenditure cannot be said to result in reopening of norms. The claim has to be considered in addition to the norms after due prudence check as regards its reasonability. Otherwise this will result in under-recovery of the cost of expenditure of the generating company. In our view, the principle that tariff is a package based on the norms and cannot be reopened on account of additional actual expenses is not applicable in this case since, the impact of wage revision and pay revision was never factored in the norms and hence was never part of the package. Therefore, the impact of wage and pay revision need to be considered over and above the norms specified in the 2004 Tariff Regulations

12.....The respondents have relied on the judgment of the Hon'ble Supreme Court in Uttar Pradesh Power Corporation Limited vs. National Thermal Power Corporation Limited and Others [(2009) 6 SCC 235]. In that case, Hon'ble Supreme Court has held that NTPC had not approached the Commission for revision of tariff on account of the implementation of the wage revision even though it was aware of the implementation of the pay revision on the date of filing the application. However, the present case is distinguishable from the other case in the sense that the petitioner had approached the Commission during the 2004-09 period to consider the impact of the pay and wage revision. The Commission had also directed that the claim would be dealt with in accordance with law at the appropriate point of time. In other words, all the parties including respondents are aware that the Commission is seized with the issue and appropriate order will follow in due course of time. In our view, a legitimate expenditure cannot be denied to the petitioner on the ground that it will burden the new consumers with the past dues.

13.....We are aware that the beneficiaries are facing financial difficulties to manage their affairs on account of non-revision of retail tariff by the State Commissions in many cases and huge T&D losses. However, financial difficulties cannot be a ground for not paying for the cost of power which is supplied to the consumers of the beneficiaries. The expenditure on the salary and wages of the generating company is a part of the cost of electricity and needs to be serviced in tariff. The Commission has already factored the impact of pay and wage revision during the tariff block 2009-14 by allowing 50% of the impact to be borne by the beneficiaries. By parity of reasoning, we are of the view that the petitioner should be suitably compensated for the pay and wage revision during the period 1.1.2007 to 31.3.2009

14. In view of the above discussion, the objections of the respondents cannot be sustained. However, the Commission has the mandate to balance the interest of the consumers and recovery of the cost of electricity in a reasonable manner. Therefore, the Commission is required to find out an equitable solution to the problem so that the generating company is not deprived of its legitimate dues while ensuring that it does not result in a tariff shock to the beneficiaries.

XXXXXXXX

17.....It is noted that the Commission had allowed only normative increase of 50% of the employee cost for all PSUs during the 2009-14 period. We are of the view that it would be just and reasonable if the same principle is adopted to consider the increase in salary and wages of CPSUs including the petitioner. Accordingly, we direct that for the period 1.1.2007 to 31.3.2009, the actual increase in employee cost on account of wage revision is allowed which shall be limited to 50% of the salary and wages (Basic + DA) of the employees of the petitioner company as on 31.12.2006. In so far as increase in the salary of the CISF personnel posted at NTPC stations and the employees of Kendriya Vidyalaya are concerned, the increase in salary shall be on actual basis and shall be a pass through to the beneficiaries."

18. In exercise of our power to remove difficulty under Regulation 12 of the 2004 Tariff Regulations, we allow the above increase in the employee cost of NTPC as additional O&M charges. However, the arrears shall be paid by the beneficiaries in twelve equal monthly installments during the year 2013-14 in addition to the O&M charges as per the 2009 Tariff Regulations. Keeping in view of the distance of time we order that as a special case, no interest shall be charged on the arrear which will benefit the consumers. In our view, this arrangement will protect the interest of both the petitioner and the beneficiaries."

136. Similar prayers for revision of O&M expenses for the period 2004-09 due to pay revision were also made before the Commission by some of the other central sector generating stations/transmission licensee namely, NLC, NHPC and PGCIL by filing separate applications. The Commission, in line with the decision contained in order dated 12.10.2012 in Petition No. 35/MP/2011 etc and on prudence check, allowed the revision of O&M expenses in relaxation of the provisions of the 2004 Tariff Regulations. In line with the decision of the Commission in order dated 12.10.2012 as above, the prayer of the petitioner to consider the actual increase in employee cost on account of salary & wages has been considered and has been limited to 50% of the salary and wages (Basic+DA) of the employees of the petitioner as on 1.1.2006. It is to be noted that in case of NTPC, the arrears on account of the said pay revision was ordered to be

paid by the beneficiaries in twelve monthly installments during 2013-14 keeping in view that no tariff petitions of NTPC for the period 2004-09 were pending as on the date of the said order. However, in the instant case, since additional capital expenditure in respect of the generating stations and inter-state transmission system of the petitioner for 2006-09 are being determined in this petition, we direct that the impact of arrear payments (on account of employee cost) based on the pay revision as allowed above, is payable by the beneficiaries, in addition to the normative O&M expenses allowed in this order as per the 2004 Tariff Regulations. However, keeping in view of the distance of time, we order that interest shall not be charged on the said arrear amount, which will benefit the consumers.

137. The claim of the petitioner for additional O&M on Amortization and Mega Insurance are discussed in the subsequent paragraphs.

Amortization

138. The petitioner has claimed amortization of spares of capital nature as additional O&M (station-wise) during the years 2006-07 and 2008-09. The total amortization amount claimed in respect of the generating stations and transmission systems of the petitioner are as under:

	<i>(₹ in lakh)</i>		
	2006-07	2007-08	2008-09
Amortisation	0	2845	4704

139. The petitioner has submitted that certain spares of a capital nature were amortized during the years 2007-08 and 2008-09 and allocated to each year as per the decision taken by the petitioner company and duly approved by the Comptroller and Auditor General. Accordingly, the petitioner has claimed the above said amounts as additional O&M expenses under this head.

140. It is observed from the submission of the petitioner that during the period 2006-09, the old units of the generating stations namely, Units 1, II and III of CTPS, Unit-III of DTPS, Units I to III of Bokaro-B and Maithon Hydro Power Project had undergone comprehensive improvement performance with major refurbishment/component replacement under the Partnership In Excellence (PIE) programme to improve the Plant Load Factor of the generating stations above 60% in a shorter time frame. The PIE programme envisaged a short-term (six months), medium term (one-year) and a long term (three years) action plan in order to derive maximum benefits by adopting the best O&M practices. It was also emphasized by the Government of India that with improved O&M practices through PIE programme and by providing adequate funds for purchase of spares etc., the PLF of the generating stations could be improved by 20% to 30%. It was also decided by the Government of India that the funds for R&M programme would be provided only if the power generating stations show improvement through better O&M practices in a shorter time frame. After the transition period of 2004-06 granted by the Commission, the petitioner had proposed for improved operational norms for its thermal generating stations for the period 2006-09 through R&M, which were set as operational norms by the Commission for specific generating stations. In order to achieve higher PLF and operational norms through improved efficiency and by minimizing down time, the petitioner amortized some capital spares for the units of the above mentioned generating stations during the years 2007-08 and 2008-09 as the petitioner could not take up comprehensive R&M. The cost of these spares was in the nature of expenditure prior to the use of the asset. As the economic service life of the asset had expired, the cost of these spares was amortized as an operational expense of the generating station. As amortization of spares does not form part of the normative O&M expense admissible to the thermal generating stations under the 2004 Tariff

Regulations, we are of the view that the expenses on amortization should be allowed as additional O&M expenses for thermal generating stations, except for Mejia TPS (Units 1 to 3) generating station in relaxation of the provisions of Regulation 21(iv) of the 2004 Tariff Regulations. In case of Mejia TPS, the actual performance during the period 2006-09 was better than the norms specified, except during 2008-09 when the actual PLF was marginally lower, which could be attributable to reasons other than for technology obsolescence and/or any deficiencies in the units of the said generating station.

Mega Insurance

141. The petitioner has claimed expenses on Mega Insurance as additional O&M expenses as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Mega Insurance	0	869	603

142. The petitioner in page-240 of this petition under the heading 'Summary statement of additional O&M' has referred to page-9 of the Interlocutory Application (I.A.No. 19/2009) in Petition No. 66/2005 in justification of its claim for Mega Insurance. Similarly, in page 5 at para 12 of the petition, the petitioner has submitted that some of the formats filed with I.A.No.19/2009 has been revised consequent to changes in actual capital expenditure and actual O&M expenses based on audited accounts now available. In view of this, the submissions of the petitioner in I.A.No.19/2009 which form part of the submissions in this petition has been considered along with the submissions made in this petition. It is noticed that the petitioner in I.A.No.19/2009, in justification of its claim for Mega Insurance had submitted that it had to take comprehensive insurance for its generating stations for a significant amount for the first time during the period 2007-08 keeping in view the substantial increase in the risk profile of Power plants on

account of various issues involving financial (including lenders covenants), natural calamities, law and order and various other strategic safeguard measures. The petitioner has submitted that since no comprehensive insurance was taken during the period from 1998-99 to 2002-03, the amount of insurance may be considered with the base years adopted by the Commission for determination of normative O&M expenses for the period 2006-09. This according to the petitioner would protect the consumers from any tariff shock in the event of any substantial loss arising out of damage or destruction of the power plants. Considering the location of the generating stations of the petitioner and the security of the generating station against any acts of sabotage/terrorism and keeping in view that the normalized O&M expenses allowed to the generating stations of the petitioner for 2006-09 do not include expenses on insurance on this count, we are inclined to grant the expenses incurred towards mega insurance, as additional O&M expenses, in relaxation of the provisions of the 2004 Tariff Regulations. Accordingly, the additional O&M expenses towards Amortization and Mega Insurance in respect of Thermal generating stations is allowed as under:

		2006-07	2007-08	2008-09
1	Bokaro TPS	<i>(₹ in lakh)</i>		
	Ash Evacuation	1291.00	1555.00	1576.00
	Additional O&M expenses for Old units	3809.00	4005.00	5378.00
	Amortization	0.00	305.00	595.00
	Mega Insurance	0.00	248.00	172.00
	Total Additional O&M expenses allowed	5100.00	6113.00	7721.00
2	Chandrapura TPS			
	Ash Evacuation	93.00	661.00	280.00
	Additional O&M expenses for Old units	373.00	801.00	1139.00
	Amortization	0.00	434.00	882.00
	Mega Insurance	0.00	153.00	106.00
	Total Additional O&M expenses allowed	466.00	2049.00	2407.00
3	Durgapur TPS			
	Ash Evacuation	507.00	53.00	371.00
	Additional O&M expenses for Old units	1631.00	(-) 953.00	1502.00
	Amortization	0.00	1381.00	2233.00
	Mega Insurance	0.00	138.00	96.00
	Total Additional O&M expenses allowed	2138.00	619.00	4202.00
4	Mejia TPS (1 to 3)			
	Ash Evacuation	0.00	512.00	360.00
	Additional O&M expenses for Old units	0.00	0.00	0.00

	Amortization	0.00	0.00	0.00
	Mega Insurance	0.00	330.00	229.00
	Total Additional O&M expenses allowed	0.00	842.00	589.00

Additional O&M expenses for Hydro generating stations

143. The petitioner has claimed additional O&M expenses in respect of Hydro generating stations as indicated in the table under para 121 of this order. The petitioner has submitted that it may be compensated for amortization of spares, the additional O&M expenses for old units and additional O&M for subsidiary activity. In our view, such small expenses claimed under amortization of spares and additional O&M due to old units gets covered under the head 'Consumption of Spares' and 'Repairs and Maintenance'. The expenses under these heads which are already on the higher side due to old age of these units have already been taken into consideration while specifying the O&M expense norms under the 2004 Tariff Regulations, based on past data. As such, the submissions of the petitioner for allowing small variations between the actual and normative O&M expenses, is not acceptable. Only the wide variation as observed in respect of Thermal generating units of the petitioner have been considered and allowed in this order to the extent admissible. In view of the above, we reject the petitioner's prayer towards amortization and additional O&M expenses for old hydro generating units of the petitioner. As regards the expenses claimed under the head 'additional O&M for subsidiary activity' the same has been dealt with in para 149 of this order. With regard to the increase in O&M expenses on account of pay revision, the same has been allowed in paragraphs 134 to 136 of this order.

Additional O&M expenses for inter-state transmission system

144. In our order dated 6.8.2009, the normative O&M expenses for the Transmission & Distribution assets of the petitioner for the period 2004-09 were specified on the basis of information submitted by the petitioner, as detailed under:

Norms for O&M expenses per bay and per Ckt-km of Inter-state transmission system of 132 kV and above

	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (₹ in lakh per ckt.-km.)	0.131	0.136	0.141	0.147	0.153
O&M expenses (₹ in lakh per bay)	13.45	13.99	14.55	15.13	15.73

Norms for O&M expenses per bay and per Ckt-km. of Inter-state transmission system below 132 kV

	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (₹ in lakh per ckt.-km)	0.077	0.080	0.084	0.087	0.090
O&M expenses (₹ in lakh per bay)	2.46	2.56	2.66	2.77	2.88

145. The petitioner has claimed additional O&M expenses for the years 2006-07, 2007-08 and 2008-09 for additional expenses as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
O&M expenses allowed in order dated 6.8.2009	4278	4449	4627
Additional O&M expenses claimed	1199	1431	2186
Total O&M expenses (at actual)	5477	5880	6813

146. Since no justification for additional O&M expenses was submitted by the petitioner in its petition, the Commission by its letter dated 9/11.3.2011 directed the petitioner to clarify the basis and the details for calculation of O&M expenses along with the justification for the claim of additional O&M expenses for the years 2006-07, 2007-08 and 2008-09 respectively. The petitioner in its reply filed on 11.4.2011 has submitted that the actual O&M expenses claimed are in accordance with the directions of the Commission as contained in order dated 6.8.2009. However, the petitioner has submitted only the figures in respect of its claim for additional O&M expenses without furnishing any justification for the said claim. In view of this, the claim for additional O&M expenses has therefore not been allowed. Hence, only the normative O&M

expenses as allowed in order dated 6.8.2009 has been considered and the claim for additional O&M expenses stands rejected.

147. In our order dated 6.8.2009, the details of O&M expenses claimed and allowed in respect of for transmission system below 132 kV in the table under paragraph 65 is as under:

<i>(₹ in lakh)</i>			
Transmission system below 132 kV	2006-07	2007-08	2008-09
O&M claimed	685	712	740
O&M allowed	639	665	691

148. It has come to notice that in the table under paragraph 78 of the order dated 6.8.2009 pertaining to annual fixed charges approved for the period 2006-09, the details of the O&M expenses of ₹639.00 lakh for 2006-07, ₹665.00 lakh for 2007-08 and ₹691.00 lakh for 2008-09 allowed under paragraph 65 of order dated 6.8.2009, had not been considered. This is an inadvertent error and the same is rectified by this order. Accordingly, the amount of ₹639.00 lakh for 2006-07, ₹665.00 lakh for 2007-08 and ₹691.00 lakh for 2008-09 allowed as above has been considered under O&M expenses for transmission system below 132 kV for the period 2006-09 in this order.

Additional O&M expenditure on subsidiary activities

149. O&M expenses on subsidiary activities except for soil conservation were not allowed in our order dated 3.10.2006. The same was also not allowed in our order dated 6.8.2009 in terms of the judgment of the Tribunal dated 23.11.2007. Accordingly, additional O&M expenditure on subsidiary activities has not been considered in this order.

Contribution to Pension and Gratuity Fund

150. As regards Pension and Gratuity (P&G) Contribution, the Commission in its order had decided as under:

"73. Accordingly, in compliance with the directions contained in the judgment of the Appellate Tribunal, it has been decided to stagger the balance 40% of the pension fund over a period of five years during the tariff period 2009-14, without any revision in the pension fund allocated in tariff for the period 2006-09. Based on the above, calculations have been made and the amount to be recovered in five installments during the tariff period 2009-14 is ₹61379.60 lakh, with an annual installment of ₹12275.92 lakh..."

151. In the appeal filed by the petitioner (Appeal No.146/2009), the Tribunal by its judgment dated 10.5.2010 had agreed with the findings of the Commission and observed that the same was in consonance with the directions given by the Tribunal in its judgment dated 23.11.2007.

152. As regards adjustment of Pension and Gratuity Contribution, the petitioner in this petition has specifically prayed for as under:

"Direct the adjustment of contribution to pension and gratuity fund in the tariff already charged by the petitioner during the period 1.4.2006 to 31.3.2009 to the extent applicable and defer such contribution to be allowed during the period 2009-14 only to the extent not covered by the tariff levied by the Petitioner as per the tariff prevalent since September, 2000."

153. The petitioner has furnished the following actuarial liabilities as on 31.3.2009 for Pension and Gratuity Fund contribution.

STATEMENT OF PENSION & GRATUITY CONTRIBUTION CLAIM		
PENSION LIABILITIES AS ON 31. 3.2009		
Actuarial liabilities as on 31.3.2009		(₹ in crore)
Pension		
Existing Employees		1222.46
Existing Pensioners		1770.35
Gratuity		
Existing Employees		148.13
Leave		
Existing Employees		90.06
Total		3231.00
Pension & Gratuity liability excluding leave		3140.94
Annual liability for 2008-09		60.00
Total liability		3200.94
SUMMARY OF CLAIM FOR THE PERIOD 2006-09		
1	Total liability after Pay revision as on 31.3.2009 (as per actuarial valuation as on 1.4.2006)	3200.94
2	Liability admitted by Central Commission (60%)	920.70
3	Liability staggered during 2009-14 (40%)	613.80

4	Total liability admitted (2+3)	1534.50	
5	Liability accrued on account of Pay revision (1-4)	1666.44	
6	Liability claim (60%) during the period 2006-09 (Item 5*60%)	999.86	
7	Liability claim (60%) for the each year (Item 6/3)	333.29	

154. In support of its prayer for adjustment of P&G liability, the petitioner has submitted as under:

"The petitioner further submits that the Hon'ble Commission has directed that 40% of the pension and gratuity contribution without taking into account the revision in pay, allowances etc. would be considered in the tariff period 1.4.2009 to 31.3.2014 in equated five annual installments on the ground that it would avoid tariff shock to the consumers. The relevant part of the decision of the Hon'ble Commission in this regard are as under:

Accordingly, in compliance with the directions contained in the judgment Of the Appellate Tribunal, it has been decided to stagger the balance of 40% of the pension fund over a period of five years during the tariff period 2009-14, without any revision in the pension fund allocated in tariff for the period 2006-09. Based on the above, calculations have been made and amount to be recovered in five installments during the tariff period 2009-14 is ₹61379.60 lakh, with an annual installments of ₹12275.92 lakh.

Deferment of additional capitalization, additional amount paid on account of the implementation of the recommendation of the Sixth Pay Commission, contribution to Pension and Gratuity Fund with consequential effect of pay revision will result in substantial adjustment in the amount already collected as tariff in the first instance. If such adjustments are not considered in the tariff already collected there will be serious effect on the cash flow of DVC leading to severe tariff shock to DVC. Thereafter, if at a later stage when the same amount is allowed with interest and payable by the consumer the same will lead to tariff shock to consumers.

The petitioner submits that the petitioner had realized the tariff during the period 1.4.2006 to 31.3.2009 as per the tariff rate prevalent since September, 2000 with appropriate adjustment for fuel price and related cost. As mentioned above, the Hon'ble Supreme Court had stayed the refund of the tariff collected by the petitioner pursuant to the decision dated 6.8.2009 passed by the Hon'ble Commission and 10.5.2010 passed by the Hon'ble Appellate Tribunal. In the circumstances mentioned above, the tariff elements that may be decided by the Hon'ble Commission pursuant to this petition can be adjusted in the tariff collected by the petitioner from the consumers/customers and in addition thereto the substantial part of pension and gratuity contribution including consequent to the pay revision can also be adjusted in the tariff already collected by the petitioner, without the need to increase the tariff related to the said period. This would not cause any tariff shock to the consumers/customers.

In the circumstances mentioned above, the petitioner submits that this Hon'ble Commission may be pleased to decide on the elements of tariff mentioned in para 1 hereinabove as well as on the aspects of tariff elements to adjust the pension and gratuity contribution, even pending the decision in the Second Appeal before the Hon'ble Supreme Court. Such determination will be consistent with the order dated 6.8.2009 passed by the Hon'ble Commission and the order dated 10.5.2010 passed by the Hon'ble Tribunal.

The petitioner submits that the details of the capitalization/additional capitalization, pay revision, pension and gratuity contribution and consequence thereof were all contained as a part of the Interlocutory Application 19 of 2009 filed before the Hon'ble Commission. A copy of the application filed is attached hereto as Annexure A. The Petitioner has since revised some of the format filed with IA 19 of 2009 consequent to changes in actual capital expenditure and actual O & M expenses based on the audited accounts, which is now

available. The revised formats are attached hereto as Annexure B. The petitioner is also filing herewith the audited balance sheet for the period 2007-08 and 2008-09, and the same are marked as Annexure C and D. The petitioner is filing herewith the justification and details for additional capitalization incurred during the period 2004-05 and 2005-06 in respect of some of the generating stations, which the Hon'ble Commission did not consider in the order dated 6.8.2009 for want of such details/justification. Such details/justifications are marked as Annexure E. The petitioner is filing herewith the details and justification for the actual O&M expenses incurred in the various generating stations and the transmission system for relaxation of the norms, the same is attached hereto as Annexure F."

155. The respondent No.4, JSEB has submitted that the issue related to pension and gratuity has already been settled by the Tribunal and no liberty has also been granted by the Commission. The objectors, M/s BSAL and M/s SAIL-BSL have submitted that the prayer of the petitioner for adjustment of balance 40% contribution to pension and gratuity fund is barred by the principles of *resjudicata* in as much as the issue has been finally disposed of by the Tribunal by its judgment dated 10.5.2010. The petitioner has clarified that it has not claimed 40% of the pension and gratuity liability in 2006-09 as alleged by the objector, but has only prayed for adjustment. It has also submitted that the question of applicability of the principles of *res judicata* /constructive *res judicata* does not apply.

156. The Commission in its order dated 3.10.2006 in Petition No. 66/2005 had allowed the sum of ₹153449 lakh towards pension and gratuity fund. However, based on the directions of the Tribunal in its judgment dated 23.11.2007, the Commission by its order dated 6.8.2009 in Petition No. 66/2005 (*as quoted above*) had directed the recovery of 60% of the aforesaid amount from the consumers over a period of three years beginning from the year 2006-07 to 2008-09 and the balance 40% of the said fund amounting to ₹613796 lakh was deferred for recovery by the petitioner in equal installments during the period 2009-14. The petitioner in its petition has prayed that the deferred amount of ₹613796 lakh to be considered as part of tariff for the period 2006-09 to avoid any setback in cash flow resulting on account of refund of excess/shortage, amount collected from the respondents /consumers.

157. We have examined the submissions of the parties. The Commission in its order dated 3.10.2006 in Petition No. 66/2005 had allowed ₹1534.49 crore as pension and gratuity fund out of which 60% was to be recovered from the beneficiaries during the period 2006-09 and the remaining 40% to be funded by the petitioner from its own resources. However, the Tribunal in its judgment 23.11.2007 had directed that the remaining 40% of the amount should also be borne by the beneficiaries though its impact may be staggered by the Commission keeping in view the tariff shock for consumers. Accordingly, the Commission in its order dated 6.8.2009, while implementing the directions of the Tribunal directed the recovery of ₹613796 lakh during 2009-14 in equal installments. This decision of the Commission was also examined by the Tribunal in Appeal No.146/2009 (DVC-v-CERC & ors) filed by the petitioner and the Tribunal by its judgment dated 10.5.2010 had upheld the said order of the Commission. Accordingly, in line with the judgment of the Tribunal, the prayer of the petitioner for adjustment of 40% of the pension and gratuity fund to be recovered from additional capitalization for the period 2006-09 is not accepted and the same is recoverable during 2009-14. Similarly, the impact of P&G contribution on account of revision of employee cost due to pay revision during the period 2006-09 (1.1.2006 to 31.3.2009) is recoverable by the petitioner to the extent of 60% during 2006-09 and the balance 40% is recoverable during the period 2009-14 along with the P&G liability to be recovered during the period 2009-14, in line with the decision of the Tribunal. The Tribunal in its judgment dated 23.11.2007 had disallowed the carrying cost on the P&G fund for recovery during the period 2009-14 and accordingly, the beneficiaries who have been spared of the carrying cost would not also be entitled for any interest on the refund of the amount, if any, by the petitioner on this count. Adjustments, if any, shall be considered at the time of determination of final tariff for the period 2009-14.

Sinking Fund

158. The amount considered in order dated 6.8.2009 under this head has been retained for the purpose of tariff.

Interest on Working capital

159. For the purpose of calculation of working capital, the operating parameters including the price of fuel components considered in the original order dated 6.8.2009 has been kept unaltered. The “receivables” component of the working capital has been revised for the reason of revision of return on equity, interest on loan etc. The necessary details in support of calculation of interest on working capital are as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
BOKARO TPS			
Coal Stock- 2 months	4332.20	4586.73	4923.81
Oil stock -2 months	360.09	335.29	280.59
O & M expenses	1388.83	1511.75	1685.83
Spares	619.98	657.17	696.60
Receivables	9040.04	9168.07	9546.19
Total Working Capital	15741.13	16259.01	17133.03
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	1613.47	1666.55	1756.14
Chandrapura TPS			
Coal Stock- 2 months	1993.54	1999.00	2174.77
Oil stock -2 months	183.04	183.54	199.67
O & M expenses	1023.58	1194.92	1265.67
Spares	265.82	281.77	298.67
Receivables	4983.14	5321.80	5500.53
Total Working Capital	8449.11	8981.02	9439.31
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	866.03	920.55	967.53
Durgapur TPS			
Coal Stock- 2 months	2760.59	2919.87	3088.34
Oil stock -2 months	300.61	216.22	200.56
O & M expenses	1000.83	907.17	1240.00
Spares	209.94	222.54	235.89
Receivables	5505.48	5338.79	6197.17
Total Working Capital	9777.45	9604.59	10961.96
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	1002.19	984.47	1123.60
Mejia TPS-Units I to III			
Coal Stock- 2 months	5734.39	5748.48	5630.08
Oil stock -2 months	563.07	413.64	330.01
O & M expenses	584.83	678.33	681.58
Spares	1770.41	1876.63	1989.23
Receivables	11081.50	10966.91	10624.66
Total Working Capital	19734.21	19683.99	19255.55

Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	2022.76	2017.61	1973.69
Maithon HPS			
O & M expenses	90.67	94.25	98.00
Spares	59.14	62.69	66.45
Receivables	324.36	328.13	333.62
Total Working Capital	474.16	485.07	498.07
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	48.60	49.72	51.05
Panchet HPS			
O & M expenses	59.83	62.17	64.67
Spares	54.96	58.25	61.75
Receivables	229.78	191.64	196.14
Total Working Capital	344.57	312.06	322.55
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	35.32	31.99	33.06
Tilaiya HPS			
O & M expenses	26.17	27.17	28.33
Spares	2.85	3.02	3.20
Receivables	57.85	59.91	62.33
Total Working Capital	86.87	90.09	93.87
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	8.90	9.23	9.62
Transmission & Distribution System			
O & M expenses	409.75	426.17	443.17
Spares	634.17	672.21	712.55
Receivables	2707.26	2856.14	2865.77
Total Working Capital	3751.17	3954.52	4021.49
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working capital	384.50	405.34	412.20

160. Based on the above, the annual fixed charges for the period from 1.4.2006 to 31.3.2009 in respect of generating stations (thermal and hydro) and the transmission systems of the petitioner is summarized as under:

	(₹ in lakh)		
Annual Fixed Charges	2006-07	2007-08	2008-09
Thermal stations			
Bokaro TPS			
Depreciation	3870.21	1668.69	62.09
Interest on Loan	0.00	0.00	0.36
Return on Equity	3936.80	4000.04	4002.17
Interest on Working Capital	1613.47	1666.55	1756.14
O & M Expenses	16666.00	18141.00	20230.00
Sub Total	26086.48	25476.28	26050.76
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	183.07	173.61	166.36
Grand Total	26269.55	25649.89	26217.12
Chandrapura TPS			
Depreciation	1972.97	1844.18	832.83
Interest on Loan	0.00	0.00	1.17
Return on Equity	1717.41	1731.85	1767.03
Interest on Working Capital	866.03	920.55	967.53

O & M Expenses	12283.00	14339.00	15188.00
Sub-Total	16839.42	18835.59	18756.56
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	78.49	74.44	71.33
Grand Total	16917.91	18910.02	18827.89
Durgapur TPS			
Depreciation	288.95	0.00	103.31
Interest on Loan	0.00	0.00	11.08
Return on Equity	1364.55	1345.66	1331.68
Interest on Working Capital	1002.19	984.47	1123.60
O & M Expenses	12010.00	10886.00	14880.00
Sub-Total	14665.69	13216.13	17449.68
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	61.99	58.79	56.33
Grand Total	14727.68	13274.92	17506.01
Mejia TPS (Units I to III)			
Depreciation	9766.82	9789.81	9850.42
Interest on Loan	3237.69	2206.71	1268.33
Return on Equity	6658.98	6674.65	6715.97
Interest on Working Capital	2022.76	2017.61	1973.69
O & M Expenses	7018.00	8140.00	8179.00
Sub-Total	28704.24	28828.77	27987.42
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	522.78	495.76	475.05
Grand Total	29227.02	29324.54	28462.47
Hydro generating stations			
Maithon			
Depreciation	294.00	297.92	304.45
Interest on Loan	134.53	106.00	80.89
Return on Equity	381.00	384.12	389.31
Interest on Working Capital	48.60	49.72	51.05
O & M Expenses	1088.00	1131.00	1176.00
Sub -Total	1946.14	1968.76	2001.71
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	13.06	12.38	11.87
Grand Total	1959.19	1981.15	2013.57
Panchet HPS			
Depreciation	279.64	25.20	20.45
Interest on Loan	0.00	0.00	0.00
Return on Equity	345.75	346.64	347.33
Interest on Working Capital	35.32	31.99	33.06
O & M Expenses	718.00	746.00	776.00
Sub-Total	1378.71	1149.82	1176.84
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	13.49	12.80	12.26
Grand Total	1392.20	1162.62	1189.10
Tilaiya HPS			
Depreciation	6.25	6.25	6.32
Interest on Loan	0.00	0.00	0.00
Return on Equity	17.95	17.96	18.07
Interest on Working Capital	8.90	9.23	9.62
O & M Expenses	314.00	326.00	340.00

Sub-Total	347.11	359.45	374.01
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	0.42	0.40	0.38
Grand Total	347.53	359.85	374.39
Transmission & Distribution			
Depreciation	6140.87	6693.02	6883.85
Interest on Loan	856.71	683.10	236.61
Return on Equity	3944.47	4241.37	4343.98
Interest on Working Capital	384.50	405.34	412.20
O & M Expenses including transmission	4917.00	5114.00	5318.00
Sub-Total	16243.54	17136.83	17194.65
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	187.26	177.58	170.17
Grand Total	16430.81	17314.42	17364.81
Total Annual Fixed Charges			
Depreciation	22619.71	20325.08	18063.72
Interest on Loan	4228.93	2995.81	1598.45
Return on Equity	18366.92	18742.29	18915.55
Interest on Working Capital	5981.76	6085.46	6326.90
O & M Expenses including sub transmission	55014.00	58823.00	66087.00
Sub-Total	106211.32	106971.64	110991.62
Additional Charges on account of ROE, IOL, Depreciation of Direction/Central/other offices and subsidiary activities	1060.57	1005.76	963.74
Pension and Gratuity Contribution as per order dated 6.8.2009	30689.80	30689.80	30689.80
Provision towards Sinking Fund	4043.39	3071.51	2755.00
Grand Total	142005.09	141738.71	145400.16

Operational norms

161. The operational norms and parameters, the energy charges and the fuel component of the thermal generating stations as considered in order dated 3.10.2006 has been considered.

Fuel Price Adjustment

162. The base rate of energy charge shall be subject to fuel price adjustment in accordance with the following formula:

$$\text{FPA} = \text{A} + \text{B}$$

Where,

FPA – Fuel Price Adjustment for a month in Paise/kWh sent out

A – Fuel Price Adjustment for secondary fuel oil in Paise/kWh sent out

B – Fuel Price Adjustment for coal in Paise/kWh sent out

And,

$$A = \frac{10 \times (SFC_n)}{(100 - AC_n)} \left\{ (P_{om}) - (P_{os}) \right\}$$

$$B = \frac{10}{(100 - AC_n)} \left\{ (SHR_n) \left\{ (P_{cm}/K_{cm}) - (P_{cs}/K_{cs}) \right\} - (SFC_n) \left\{ (k_{om} \times P_{cm}/K_{cm}) - (k_{os} \times P_{cs}/K_{cs}) \right\} \right\}$$

Where

SFC_n – Normative Specific Fuel Oil consumption in l/kWh

SHR_n – Normative Gross Station Heat Rate in kCal/kWh

AC_n – Normative Auxiliary Consumption in percentage

P_{om} – Weighted Average price of fuel oil on as consumed basis during the month in Rs./KL.

K_{om} – Weighted average GCV of fuel oils fired at boiler front for the month in Kcal/Litre

P_{os} – Base value of price of fuel oils as taken for determination of base energy charge in tariff order in Rs. / KL.

K_{os} – Base value of gross calorific value of fuel oils as taken for determination of base energy charge in tariff order in Kcal/Litre

P_{cm} – Weighted average price of coal procured and burnt during the month at the power station in Rs. / MT.

K_{cm} – Weighted average gross calorific value of coal fired at boiler front for the month in Kcal/Kg

P_{cs} – Base value of price of coal as taken for determination of base energy charge in tariff order in Rs. /MT

K_{cs} – Base value of gross calorific value of coal as taken for determination of base energy charge in tariff order in kCal/Kg.

163. The petitioner is directed to apply the said formula and accordingly pass on the impact in tariff.

164. It is noticed that in Civil Appeal No.4881/2010 filed by DVC, the Hon'ble Supreme Court in its interim order dated 9.7.2010 has granted stay on refund of tariff by DVC. In view of the directions of the Hon'ble Supreme Court, we do not intend to issue any direction as regards refund of the excess/shortage arising out of the difference in the fixed charges approved vide order dated 6.8.2009 and those approved now. However, the same shall be adjusted by the parties against the final tariff to be determined by the Commission for the period 2009-14.

165. The annual fixed charges determined by this order is subject to the final outcome of the Civil Appeals pending before the Hon'ble Supreme Court.

166. Petition No. 272/2010 is disposed of in terms of the above.

Sd/-
[M. Deena Dayalan]
Member

Sd/-
[S. Jayaraman]
Member

Sd/-
[Dr. Pramod Deo]
Chairperson