

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 176/2009**

**Coram**

Shri. S. Jayaraman, Member

Shri. V.S.Verma, Member

**DATE OF HEARING: 21.1.2010**

**DATE OF ORDER: 3.9.2010**

**In the matter of**

Approval of revised fixed charges after considering the impact of additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 in respect of Rangit Hydroelectric Project, (3 x 20 MW) for the period 1.4.2004 to 31.3.2009.

**And in the matter of**

NHPC Ltd, Faridabad

**...Petitioner**

Vs

1. West Bengal State Electricity Distribution Company Ltd, Kolkata
2. Damodar Valley Corporation, Kolkata
3. Jharkhand State Electricity Board, Ranchi
4. Bihar State Electricity Board, Patna
5. Department of Power, Govt. of Sikkim, Gangtok

**...Respondents**

**The following were present**

1. Shri Prashant Kaul, NHPC
2. Shri Surendra Meena, NHPC
3. Shri Ansuman Ray, NHPC
4. Shri A.C.Choudhury, NHPC
5. Shri V.N.Tripathi, NHPC

**ORDER**

This petition has been filed by the petitioner, NHPC Ltd, for revision of annual fixed charges after considering the impact of additional capital expenditure for the years 2006-07, 2007-08 and 2008-09, in respect of Rangit Hydroelectric Project, (3 x 20 MW) (hereinafter referred to as "the generating station") for the period from

1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations"). The petitioner has made the following specific prayers:

- "(i) Approve the revised annual fixed charges in respect of Rangit HE project after considering the impact of additional capitalization/de-capitalization as per details given in Annexure-I, for the tariff period 1.4.2004 to 31.3.2009.*
- (ii) allow the servicing of the capital expenditure from the year the same is incurred.*
- (iii) allow the reimbursement of filing fee of this petition by the respondents.*
- (iv) pass any other orders in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above".*

2. The generating station was declared under commercial operation on 15.2.2000. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission vide its order dated 9.5.2006 in Petition No.175/2004 and was revised by order dated 5.2.2007 in Review Petition No. 49/2006 (in Petition No.175/2004). Subsequently, the Commission by order dated 12.10.2009 in Petition No.40/2009 revised the annual fixed charges for the generating station after considering the impact on account of additional capitalization/de-capitalization during the years 2004-05 and 2005-06, based on the capital cost of ₹.49221.28 lakh as on 31.3.2006. The annual fixed charges approved by the Commission vide order dated 12.10.2009 is as under:

(Rs. in lakh)					
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	1155.06	1155.84	1156.06	917.54	917.54
Interest on Loan	622.74	202.53	73.99	0.00	0.00
Return on Equity	2616.05	2617.44	2617.83	2617.83	2617.83
Advance Against Depreciation	1892.58	0.00	393.36	0.00	0.00
Interest on Working Capital	194.25	158.76	168.30	161.23	166.72
O & M Expenses	839.19	872.76	907.67	943.98	981.73
<b>TOTAL</b>	<b>7319.87</b>	<b>5007.32</b>	<b>5317.21</b>	<b>4640.58</b>	<b>4683.82</b>

3. Reply to the petition has been filed by the fourth respondent, BSEB.

#### **ADDITIONAL CAPITALISATION**

4. 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.*

- (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 33,*
- (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 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-convector, 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."

5. The additional capital expenditure for the years 2006-07, 2007-08 and 2008-09 claimed by the petitioner, after reconciliation with the books of accounts, is as under:

		(₹. in lakh)		
		2006-07	2007-08	2008-09
1.	Additional capitalization as per Books of Accounts <b>(A)</b>	<b>(-) 11.99</b>	<b>35.27</b>	<b>122.12</b>
2	<b>Exclusions</b>			
(a)	<b>Additions</b>			
(i)	Minor assets (Regulation 34 (3))	10.07	17.08	40.78
(ii)	Assets not in use(obsolete / unserviceable assets)	29.58	0.00	1.02
(iii)	Capital spares as per AS-2	76.56	2.31	40.10
	<b>Sub-total 2 (a)</b>	<b>116.21</b>	<b>19.39</b>	<b>81.90</b>
(b)	<b>Deletions</b>			
(i)	Minor assets (Regulation 34 (3))	0.50	0.00	0.00
(ii)	Assets not in use(obsolete/ unserviceable assets)	17.83	0.00	5.27
(iii)	Assets in active use (out of assets declared surplus / not in use as on 1.4.2004)	0.00	0.00	1.83
(iv)	Assets (Gross value) transferred from natural head to obsolete assets(being obsolete in nature) excluding assets falling under assets (category -C)	0.00	0.00	1.66
(v)	Against capital spares as per AS-2	116.13	18.28	19.08
	<b>Sub-total 2 (b)</b>	<b>134.46</b>	<b>18.28</b>	<b>27.84</b>

	<b>Net Addition under Exclusions (2(a)-2(b))</b>	(-) 18.25	1.12	54.06
<b>3</b>	<b>Net Additional Capitalization as per Books of Accounts (Total 1+Total 2)</b>	<b>(-) 30.24</b>	<b>36.38</b>	<b>176.19</b>

6. The difference in the amount of additional capital expenditure as per books of accounts and the claim as above is on account of exclusion of certain positive and negative entries in the books of accounts.

### **Exclusions**

7. In the first instance, we consider the exclusions under different heads in the claim.

(a) **Minor assets:** In terms of clause (3) of Regulation 34, the petitioner has excluded the amounts of ₹.10.07 lakh, ₹.17.08 lakh and ₹.40.78 lakh for the years 2006-07, 2007-08 and 2008-09 respectively for procurement of minor assets like furniture & fixtures, computer, printers and fixed assets of minor value. The exclusions claimed is in order and hence allowed.

(b) **Assets not in use:** The petitioner has excluded amounts of ₹.29.58 lakh and ₹.1.02 lakh for the years 2006-07 and 2008-09 respectively towards old/unserviceable items like chain pulley, room air-conditioner, dish antenna, construction of P&M awaiting disposal, which are not in use as on 31.3.2007 and 31.3.3009 respectively. The same is in order and hence exclusion is allowed.

(c) **Capital spares as per AS-2:** Since capitalization of spares over and above initial spares procured after the cut-off date are not allowed for the purpose of tariff, the petitioner has excluded amounts of ₹.76.56 lakh, ₹.2.31 lakh and ₹.40.10 lakh for the years 2006-07, 2007-08 and 2008-09 respectively. The exclusions under this head is in order and hence allowed

(d) **Deletion of minor assets:** The petitioner by way of de-capitalization has excluded an amount of ₹.0.50 lakh for the year 2006-07 in respect of minor like furniture & fixtures in the books of accounts. We are of the view that the assets which are no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, de-capitalization under this head is not allowed for the purpose of tariff.

(e) **Deletion against assets 'not in use' declared obsolete/unserviceable assets (WDV):** The petitioner has excluded amounts of ₹.17.83 lakh and ₹.5.27 lakh in respect of assets like construction of P&M awaiting disposal during the years 2006-07 and 2008-09 under this head. The same is in order and hence allowed.

(f) **Deletion of assets in active use (out of assets of gross value declared surplus/ not in use as on 1.4.2004):** The petitioner has excluded an amount of ₹.1.83 lakh during the year 2008-09 under this head. The Commission vide its order dated 9.5.2006 in Petition No.121/2005 while considering the additional capitalization in respect of the generating station had reduced the gross value of "Assets not in use" as on 31.3.2004 amounting to ₹.201.92 lakh. In view of this, the exclusion is allowed for the purpose of tariff.

(g) **Exclusion of Assets transferred from natural head to obsolete assets:** The petitioner has excluded an amount of ₹.1.66 lakh in respect of assets like telephone, telex machine, TV, projector, audio-visual equipment and air-conditioners, for the year 2008-09, under this head. The exclusion is in order and hence allowed.

(h) **Deletion against capital spares as per AS-2:** The petitioner has excluded amounts of ₹.116.13 lakh, ₹.18.28 lakh and ₹.19.08 lakh by way of de-capitalization during the years 2006-07, 2007-08 and 2008-09 respectively on consumption of capital spares. The Commission vide order dated 9.5.2006 in Petition No.121/2005 while considering the additional capitalization in respect of the generating station had disallowed the capitalization of spares (as per AS-2) appearing in the books of accounts amounting to ₹.352.02 lakh (₹.281.78 lakh in 2002-03 and ₹.70.24 lakh in 2003-04). As per policy of the petitioner, these spares continued in the gross block of the station and reduced as and when consumed. Therefore, the petitioner had separately indicated the consumption of these spares in the exclusion list in order to avoid double deduction. In view of this, the exclusion of capital spares is allowed.

8. The Commission by letter dated 17.11.2009 directed the petitioner to furnish certain additional information and the petitioner by its affidavit dated 11.1.2010 has submitted the additional information. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner is as under:

		(₹.in lakh)		
<b>Capitalization</b>		<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>1</b>	<b>Additional Capitalization</b>			
(a)	<b>Addition</b>			
(i)	Additional works/services which have become necessary for efficient and successful operation of station. (Regulation 34 (2) (iv))	40.35	35.27	117.67
(ii)	Expenditure on replacement of old assets (Regulation 34, Note 2)	17.15	0.00	9.22
(iii)	Assets in active use (out of assets declared surplus / not in use as on 1.4.2004)	0.00	0.00	5.97
	<b>Sub-total 1 (a)</b>	<b>57.50</b>	<b>35.27</b>	<b>132.86</b>
(b)	<b>Deletions/Deductions</b>			
(i)	Deletion of assets with replacement/without replacement.	9.91	0.00	7.18

(ii)	Assets (Gross value) transferred from natural head to obsolete assets (being obsolete in nature) excluding assets falling under Minor assets (category-c)	59.58	0.00	3.55
	<b>Sub-total 1 (b)</b>	<b>69.49</b>	<b>0.00</b>	<b>10.74</b>
<b>2</b>	<b>Net Additional Capitalization (1(a)-1(b))</b>	<b>(-) 11.99</b>	<b>35.27</b>	<b>122.12</b>

9. After examining the asset-wise details and justification for additional capitalization/ de-capitalization claimed by the petitioner, under various categories and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.

**Additional works/services which have become necessary for efficient and successful operation of station- (Regulation 34(2) (iv))**

10. The petitioner has claimed expenditure of ₹.40.35 lakh, ₹.35.27 lakh and ₹.117.67 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this category in respect of assets like pumps, street lighting, DG Sets, roads, boats, plant and machinery, computer and computer software, laboratory testing and meter testing equipments, ambulance and other assets. The claim for the years 2006-07, 2007-08 and 2008-09 is examined as under:

**2006-07**

11. The expenditure of ₹.2.44 lakh in respect of assets which include photocopy machine, max pullar etc. are in the nature of minor assets and hence not allowed to be capitalized. Also, the claim for ₹.1.84 lakh for assets which include power supply system- cabling of surge shaft gate from switchyard is in the nature of replacement and the gross value of the old asset has also not been furnished. In view of this, capitalization of the amount not in terms of Note 2 under clause (2) of Regulation 34.



**2007-08**

12. An expenditure of ₹. 0.13 lakh for assets which include Mody submersible pump is in the nature of replacement, and hence not allowed to be capitalized in terms of Note 2 under clause (2) of Regulation 34.

**2008-09**

13. The expenditure of ₹. 8 lakh for assets which include plant and machinery-incoming panel for VCB is in the nature of replacement and the gross value of the old asset has also not been furnished. In view of this, capitalization of the amount not in terms of Note 2 under clause (2) of Regulation 34. Also, an expenditure of ₹. 1.89 lakh for assets which include indoor motorized camera is not allowed to be capitalized as the said asset cannot be considered to contribute to the efficient and successful operation of the generating station.

14. Based on prudence check as above, only amounts of ₹.36.06 lakh, ₹.35.14 lakh and ₹.107.77 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, is allowed to be capitalized under this category.

**Expenditure on replacement of old assets (Regulation 34 Note 2)**

15. The petitioner has claimed expenditure of ₹.17.15 lakh and ₹.9.23 lakh during 2006-07 and 2008-09 respectively, under this category, in respect of assets which include pumps, telephone, car and photocopy machines. The claim for the years 2006-07 and 2008-09 is examined as under:

**2006-07**

16. An expenditure of ₹. 1.12.lakh for assets which include photocopy machine is in the nature of minor assets and hence not allowed to be capitalized.

**2007-08**

17. An expenditure of ₹. 0.13 lakh in respect of the purchase of Mody submersible pump, disallowed at para 12 above, in terms of sub-clause clause (iv) of clause (2) of Regulation 34, being a replacement asset, is allowed to be capitalized under this category.

**2008-09**

18. The expenditure of ₹. 9.23 lakh for assets like car and photocopy machines is allowed to be capitalized under this category.

19. Based on prudence check as above, amounts of ₹.16.03 lakh, ₹.0.13 lakh and ₹.9.23 lakh during 2006-07, 2007-08 and 2008-09 respectively, is allowed to be capitalized.

**Assets in active use, declared surplus/ not in use as on 1.4.2004:**

20. The Commission vide order dated 9.5.2006 in Petition No.121/2005 disallowed an amount of ₹.201.92 lakh in respect of assets which were not in use as on 31.3.2004. The petitioner has now purchased some of the assets like loaders etc, amounting to ₹. 5.97 lakh, and has taken them to active use. In view of this, capitalization of the amount is allowed.

21. In addition to the capitalization under above categories, the petitioner has de-capitalized amounts of ₹.69.49 lakh and ₹.10.74 lakh during 2006-07 and 2008-09 respectively and the details are as under:

(a) **Deletion of assets with/without replacement during the year:** The petitioner has claimed ₹.9.91 lakh and ₹.7.18 lakh for the years 2006-07 and 2008-09 respectively, under this head. The deletion of the assets with / without replacement during the years is in order and hence the amounts are allowed.

(b) **Deletion of Assets transferred from natural head to obsolete assets:** The petitioner has claimed ₹.59.58 lakh and ₹.3.55 lakh for the years 2006-07 and 2008-09 respectively, under this head. The deletion of assets transferred from natural head to obsolete assets during the year is in order and hence the amounts are allowed.

**Replaced Minor assets**

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

**Additional capital expenditure allowed (without excluding un-discharged liabilities)**

23. Based on the above discussions, the additional capital expenditure allowed (without excluding un-discharged liabilities) for the years 2006-07, 2007-08 and 2008-09 is as under:

		(₹ in lakh)		
		2006-07	2007-08	2008-09
<b>1</b>	<b>Additional Capitalization</b>			
(a)	<b>Addition</b>			
	Additional works/services which have become necessary for efficient and	36.06	35.14	107.77

	successful operation of station. (Regulation 34 (2) (iv))			
	Expenditure on replacement of old assets (Regulation 34, Note 2)	16.03	0.13	9.23
	Assets in active use (out of assets declared surplus / not in use as on 1.4.2004)	0.00	0.00	5.97
	<b>Sub-total 1 (a)</b>	<b>52.09</b>	<b>35.27</b>	<b>122.96</b>
(b)	<b>Deletions/Deductions</b>			
(i)	Deletion of assets with replacement/without replacement.	9.91	0.00	7.18
(ii)	Assets (Gross value) transferred from natural head to obsolete assets (being obsolete in nature) excluding assets falling under Minor assets (category-c)	59.58	0.00	3.55
	<b>Sub-total 1 (b)</b>	<b>69.49</b>	<b>0.00</b>	<b>10.74</b>
<b>Total 1</b>	<b>Net additional capitalization (1(a)-1(b))</b>	<b>(-) 17.39</b>	<b>35.27</b>	<b>112.23</b>
<b>2</b>	<b>Exclusion</b>			
	<b>Addition</b>			
(i)	Category C (Regulation 34 (3))	10.07	17.08	40.78
(ii)	Assets not in use (Obsolete / Unserviceable Assets)	29.58	0.00	1.02
(iii)	Capital Spares as per AS-2	76.56	2.31	40.10
	<b>Sub-total 2 (a)</b>	<b>116.21</b>	<b>19.39</b>	<b>81.90</b>
	<b>Deletion</b>			
(i)	Minor assets (Regulation 34 (3))	0.00	0.00	0.00
(ii)	Assets not in use (obsolete/ unserviceable assets)	17.83	0.00	5.27
(iii)	Assets in active use (out of assets declared surplus / not in use as on 1.4.2004)	0.00	0.00	1.83
(iv)	Assets (Gross value) transferred from natural head to obsolete assets (being obsolete in nature) excluding assets falling under assets (category -C)	0.00	0.00	1.66
(v)	Against capital spares as per AS-2	116.13	18.28	19.08
	<b>Sub-Total 2 (b)</b>	<b>133.96</b>	<b>18.28</b>	<b>27.84</b>
<b>Total 2</b>	<b>Net addition under Exclusion (2(a)-2(b))</b>	<b>(-) 17.75</b>	<b>1.12</b>	<b>54.06</b>
<b>3</b>	Exclusions not allowed	<b>(-) 0.50</b>	<b>0.00</b>	<b>0.00</b>
<b>4</b>	<b>Additional capital expenditure allowed (1 + 3)</b>	<b>(-) 17.89</b>	<b>35.27</b>	<b>112.23</b>

### Capital cost

24. As already noted, the Commission had admitted capital cost of ₹.49221.28 lakh as on 31.3.2006, for revision of tariff for the period 2004-09.

25. Taking into account the capital cost of the generating station as on 1.4.2006 and the additional capital expenditure approved as per para 23 above, the capital cost for the period 2006-09 is worked out as under:

	(₹. in lakh)		
	2006-07	2007-08	2008-09
Opening Capital cost as on 1 <sup>st</sup> April of the financial year	49221.28	49203.39	49238.65
Additional capital expenditure for the financial year	(-) 17.89	35.27	112.23
Capital cost as on 31 <sup>st</sup> March of the financial year	<b>49203.39</b>	<b>49238.65</b>	<b>49350.88</b>

### Debt-Equity Ratio

26. Regulation 36 of the 2004 Regulations provides as under:

*“(1) In case of the existing generating stations, 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 where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 34, equity in the additional capitalization to be considered shall be,-*

*30% of the additional capital expenditure admitted by the Commission, or equity approved by the competent authority in the financial package, for additional capitalization, or 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 is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.*

*(2) In case of the generating stations for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:*

*Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff:*

*Provided further that the Commission may in appropriate cases consider equity higher than 30% for determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public”.*

(3) In case of the generating stations for which investment approval is accorded on or after 1.4.2004, debt and equity in the ratio of 70:30 shall be considered for determination of tariff:

Provided that where equity actually employed is more than 30%, equity in excess of 30% shall be treated as notional loan;

Provided further that where deployment of equity is less than 30%, the actual debt and equity shall be considered for determination of tariff.

(4) The debt and equity amount arrived at in accordance with above clause (1), (2) or (3), as the case may be, shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation."

27. The petitioner has claimed debt-equity ratio of 70:30 for the purpose of additional capitalization. Debt-equity ratio of 70:30 has been considered for additional capitalization in terms of sub-clause (a) of clause (1) of Regulation 36 of the 2004 regulations. Accordingly, additional notional equity for the generating station on account of capitalization approved, works out as under:

(₹. in lakh)			
	2006-07	2007-08	2008-09
Additional Notional Equity	(-) 5.37	10.58	33.67

### Return on Equity

28. Return on equity is allowed @ 14% on the average normative equity, as under:

(₹ in lakh)			
Return on Equity	2006-07	2007-08	2008-09
Opening Equity	18698.82	18693.45	18704.03
Addition due to additional capital expenditure	(-) 5.37	10.58	33.67
Closing Equity	18693.45	18704.03	18737.70
Average Equity	18696.13	18698.74	18720.86
Return on Equity	<b>2617.46</b>	<b>2617.82</b>	<b>2620.92</b>

### Interest on Loan

29. As no fresh loans have been added to the actual loans, the weighted average rate of interest, as worked out in order dated 12.10.2009 in Petition No. 40/2009, has been considered.

30. Interest on loan has been computed as under:

(₹ in lakh)			
Interest on Loan	2006-07	2007-08	2008-09
Gross Normative Loan	30522.46	30509.94	30534.62
Cumulative repayment upto previous year	28973.04	30522.46	30547.15
Net loan-opening	1549.43	0.00	0.00
Repayment during the year	1549.43	24.69	78.56
Addition due to additional capitalization	(-)12.52	24.69	78.56
Net loan-closing	0.00	0.00	0.00
Average loan	774.71	0.00	0.00
Weighted Average Rate of Interest on loan	9.5500%	9.5500%	9.5500%
<b>Interest on loan</b>	<b>73.99</b>	<b>0.00</b>	<b>0.00</b>

### Depreciation

31. For calculating depreciation, the cumulative depreciation of ₹.13312.50 lakh recovered upto 31.3.2006 and the weighted average rate of depreciation of 2.37% as per order dated 12.10.2009 in Petition No. 40/2009 has been considered.

32. The Commission has approved de-capitalization of assets worth ₹.69.99 lakh and ₹.10.74 lakh during the years 2006-07 and 2008-09 respectively. Assets amounting to ₹.4.90 lakh during the year 2007-08 have been transferred from other generating station at gross block. The amount of cumulative depreciation allowed in tariff against the de-capitalized assets has been calculated on pro-rata basis and the same has been adjusted from the cumulative depreciation of the year. As loans in respect of the generating station have been fully repaid in the year 2007-

08, the balance depreciation to be recovered has been spread over the balance useful life of the generating station.

33. Accordingly, depreciation of the generating station has been worked out as under:

(₹ in lakh)			
<b>Depreciation</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Gross Block as on 31.3.2006	49221.28	49203.39	49238.65
Additional capital expenditure	(-)17.89	35.27	112.23
Closing gross block	49203.39	49238.65	49350.88
Average gross block	49212.33	49221.02	49294.77
Rate of Depreciation	2.37%	2.37%	2.37%
Depreciable Value @90%	43673.70	43681.52	43747.89
Balance Useful life of the asset	32.4	31.4	30.41
Remaining Depreciable Value	30361.20	28840.70	27987.30
<b>Depreciation</b>	<b>1155.85</b>	<b>918.20</b>	<b>920.33</b>

#### **Advance Against Depreciation**

34. Advance Against Depreciation as considered in order dated 12.10.2009 has been re-calculated after considering the additional capital expenditure. The Advance Against Depreciation is worked out as under:

(₹ in lakh)			
<b>Advance against Depreciation</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
1/10th of Gross Loan(s)	3052.25	3050.99	3053.46
Repayment of the Loan	1549.43	24.69	78.56
Minimum of the above	1549.43	24.69	78.56
Depreciation during the year	1155.85	918.20	920.33
(A) Difference	393.58	(-) 893.51	(-)841.77
Cumulative Repayment of Loan	30522.46	30547.15	30625.71
Cumulative Depreciation/ Advance against Depreciation	14468.35	15759.02	16680.92
(B) Difference	16054.11	14788.13	13944.79
<b>Advance against Depreciation</b>	<b>393.58</b>	<b>0.00</b>	<b>0.00</b>

#### **O&M Expenses**

35. O&M expenses as allowed in the order dated 12.10.2009 in Petition No.40/2009 have been considered.



### Interest on Working Capital

36. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 12.10.2009 in Petition No.40/2009 have been kept unchanged. The "receivables" component of the working capital in the order dated 12.10.2009 has been revised for the reason of revision of return on equity, interest on loan, etc.

37. The SBI PLR of 10.25% as on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period as considered in order dated 12.10.2009. The necessary details in support of calculation of interest on working capital are as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Maintenance Spares	680.06	720.87	764.12
O & M expenses	75.64	78.67	81.81
Receivables	886.14	773.54	781.63
Total	1641.84	1573.07	1627.57
Interest	<b>168.29</b>	<b>161.24</b>	<b>166.83</b>

### ANNUAL FIXED CHARGES

38. The revised annual fixed charges for the period from 1.4.2006 to 31.3.2009 are summarized as under:

	(₹ in lakh)		
Annual Fixed Charges	2006-07	2007-08	2008-09
Depreciation	1155.85	918.20	920.33
Interest on Loan	73.99	0.00	0.00
Return on Equity	2617.46	2617.82	2620.92
Advance against Depreciation	393.58	0.00	0.00
Interest on Working Capital	168.29	161.24	166.83
O & M Expenses	907.67	943.98	981.73
Total	<b>5316.83</b>	<b>4641.25</b>	<b>4689.81</b>

39. The reimbursement of the filing fee is not allowed in view of the Commission's general order dated 11.9.2008 in Petition No.129/2005.

40. The petitioner shall claim the difference between the fixed charges approved vide order dated 12.10.2009 and those approved now, from the beneficiaries in three equal monthly installments.

41. Petition No.176/2009 stands disposed of in terms of the above.

**Sd/-  
(V.S.VERMA)  
MEMBER**

**Sd/-  
(S. JAYARAMAN)  
MEMBER**