## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 183/2009

#### Coram

Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V.S.Verma, Member

## DATE OF HEARING: 15.3.2011

## DATE OF ORDER: 20.4.2011

## In the matter of

Determination of impact of additional capital expenditure incurred during 2008-09 for Rihand STPS, Stage-II (1000 MW).

And in the matter of

NTPC Ltd, New Delhi

.....Petitioner

- Vs
- (1) Uttar Pradesh Power Corporation Ltd, Lucknow
- (2) Jaipur Vidyut Vitaran Ltd, Jaipur
- (3) Ajmer Vidyut Vitaran Ltd, Ajmer
- (4) Jodhpur Vidyut Vitaran Ltd, Jodhpur
- (5) Delhi Transco Ltd, New Delhi
- (6) North Delhi Power Ltd, Delhi
- (7) BSES-Rajdhani Power Ltd, New Delhi
- (8) BSES Yamuna Power Ltd, Delhi
- (9) Haryana Power Purchase Ltd, Panchkula
- (10) Punjab State Electricity Board, Patiala
- (11) Himachal Pradesh State Electricity Board, Shimla
- (12) Power Development Department, Govt. of J&K, Srinagar
- (13) Power Department, Union Territory of Chandigarh, Chandigarh
- (14) Uttarakhand Power Corporation Ltd, Dehradun .....Respondents

## The following were present:

- 1. Shri Ajay Dua, NTPC
- 2. Ms. Alka Saigal, NTPC
- 3. Shri Sameer Aggarwal, NTPC
- 4. Shri Manish Garg, UPPCL

#### ORDER

The petitioner has made this application for approval of the revised fixed charges after considering the impact of additional capital expenditure incurred during the period 2008-09 for Rihand STPS, Stage-II (1000 MW), (hereinafter referred to as "the generating station") 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) Revision of capital base for tariff based on Judgment of Hon'ble ATE dated 10.12.2008 in Appeal No. 151/2007 as brought out at para 5.1, 5.2 & 5.5 above.
- (ii) Additional capital expenditure incurred during 2008-09.
- (iii) Approve recovery of filling fee of this petition from respondents.
- *(iv)* Allow recovery of Income Tax from the beneficiaries as per the CERC Regulations for the period 2004-09.
- (v) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.

2. The generating station has a total capacity of 1000 MW with two units of 500 MW each. The date of commercial operation of the generating station is 1.4.2006. The tariff of the generating station for the period 15.8.2005 to 31.3.2009 was determined by the Commission vide its order dated 15.10.2007 in Petition No. 106/2006 based on the capital cost of ₹136682.29 lakh as on date of commercial operation of Unit-I i.e. 15.8.2005 and ₹264673.76 lakh as on date of commercial operation of Unit-II (or the generating station) i.e.1.4.2006. Subsequently, the Commission vide its order dated 30.12.2009 in Petition No.97/2008 revised the tariff of the generating station, after taking in to account the additional capital expenditure incurred during the period from 15.8.2005 to 31.3.2008. The capital cost on various dates, as approved by the Commission, is as under:

				( <b>₹</b> in lakh)
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
Opening Capital Cost	137461.05	265664.80	276866.84	282554.17
Additional cap expenditure	ital 16250.14	11202.03	5687.33	-
<b>Closing Capital Cost</b>	153711.19	276866.84	282554.17	282554.17

3. The annual fixed charges approved by the Commission by order dated 30.12.2009 is as under:

				( <b>₹</b> in lakh)
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
Interest on Loan	7484	13240	12524	11473
Interest on Working Capital	1538	2996	3064	3086
Depreciation	5273	9798	10103	10205
Advance Against Depreciation	3131	4733	6914	7607
Return on Equity	6115	11393	11748	11867
O & M Expenses	4865	10120	10520	10950
TOTAL	28406	52279	54874	55189

4. The petitioner has claimed the annual fixed charges taking into account the principles laid down in the tariff orders of the Commission and the judgment dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23 of 2007 and judgments dated 10.12.2008 and 16.3.2009 in Appeal Nos. 151 & 152/2007 and Appeal Nos.133,135 etc of 2008 of the Appellate Tribunal passed against the various tariff orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner.

5. We now proceed to examine the prayer of the petitioner for determination of tariff based on the principles laid down in the judgments of the Appellate Tribunal dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23 of 2007 and judgments dated 10.12.2008 and 16.3.2009 in Appeal Nos. 151 & 152/2007 and Appeal Nos. 133,135 etc of 2008 of the Appellate Tribunal in subsequent paragraphs.

6. The petitioner filed Appeal Nos.139 to142 etc of 2006 before the Appellate Tribunal challenging the various orders of the Commission determining tariff for its generating stations during the period 2004-09. The Appellate Tribunal by its judgment dated 13.6.2007 allowed the said appeals and remanded the matters for redetermination by the Commission. Against the said judgment the Commission has filed 20 appeals before the Hon'ble Supreme Court (in C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) on issues such as:

(a) Consequences of refinancing of loan;

(b) Treating of depreciation as deemed repayment of loan;

(c) Cost of maintenance spares related to additional capitalization;

(d) Depreciation availability up to 90% in the event of disincentive; and

(e) Impact of de-capitalization of assets on cumulative repayment of loan

7. The Hon'ble Supreme Court on 26.11.2007 granted an interim order of stay

of the operation of the order dated 13.6.2007 of the Appellate Tribunal. However,

on 10.12.2007, the Hon'ble Supreme Court passed an interim order as under:

"Learned Solicitor General appearing on behalf of the National Thermal Power Corporation stated that pursuant to the remand order, following five issues shall not be pressed for fresh determination:

(a) Consequences of refinancing of loan;

(b) Treating of depreciation as deemed repayment of loan;

(c) Cost of maintenance spares related to additional capitalization;

(d) Depreciation availability up to 90% in the event of disincentive; and

(e) Impact of de-capitalization of assets on cumulative repayment of loan

The Commission may, however, proceed to determine other issues.

It is clarified that this order shall apply to other cases also.

*In view of this, the interim order passed by the Court on 26th November, 2007, is vacated. The interlocutory applications are, accordingly, disposed of.*"

8. The petitioner in its application has submitted that it has been advised that the statement of the Solicitor General of India (SGI) before the Hon'ble Supreme Court resulting in the interim order dated 10.12.2007 does not restrict it from claiming additional capitalization based on the principles laid down by the Appellate Tribunal in its judgment dated 13.6.2007 and that the effect of the statement of SGI was that it would not seek fresh determination pursuant to the remand order. The petitioner has also submitted that the Hon'ble Supreme Court has not stayed further proceedings before the Commission for determination of additional capitalization and even if it was construed as stay, the decision of the court (Appellate Tribunal) does not become *non est*.

9. The Hon'ble Supreme Court in its interim order dated 26.11.2007 had granted stay on the operation of the judgment dated 13.6.2007 of the Appellate Tribunal. In view of the undertaking given by the Solicitor General of India on behalf of the petitioner that "the five issues shall not be pressed for fresh determination", the Hon'ble Supreme Court vacated the interim order dated 26.11.2007 and directed that "the Commission may proceed to determine the other issues". It was clarified that "this order shall apply to other cases also". It is the contention of the petitioner that the undertaking before the Hon'ble Supreme Court does not restrict it from claiming additional capitalization based on the principle laid down by the Appellate Tribunal.

10. One more prayer of the petitioner in the application is for revision of capital cost of the generating station considering the un-discharged liabilities, in terms of the judgments dated 10.12.2008 and 16.3.2009 in Appeal Nos. 151 & 152/2007 and Appeal Nos. 133,135 etc of 2008.

11. The Commission in some of the petitions filed by the petitioner (Rihand and Ramagundam generating stations) revised the tariff for the period 2004-09 based on additional capital expenditure incurred, after deducting un-discharged liabilities, on the ground that "the expenditure for the liability incurred for which payment was not made would not come under the category 'actual expenditure

*incurred*". Against the orders, appeals were filed by the petitioner before the Appellate Tribunal (Appeal No 151&152/2007) and the Appellate Tribunal by its judgment dated 10.12.2008 held as under:

"25. Accordingly, we allow both the appeals in part. We direct that the appellant be allowed to recover capital cost incurred including the portion of such cost which has been retained or has not yet been paid for. We also direct that in case the Commission attributes any loan taken at the corporate level to a particular project under construction and considers any repayment out of it before the date of commercial operation the sum deployed for such repayment would earn interest as pass through in tariff.

26. The Commission is directed to give effect to the directions given herein in the truing up exercise and consequent subsequent tariff orders."

12. Similar appeals (Appeal Nos.133, 135,136 and 148/2008) were filed by the petitioner before the Appellate Tribunal against the orders of the Commission in respect of other generating stations by the petitioner on the question of deduction of un-discharged liabilities, IDC etc. The Appellate Tribunal, following its judgment dated 10.12.2008 *ibid*, allowed the claim of the petitioner and directed the Commission to give effect to the directions contained in the said judgments.

13. Against the judgments of the Appellate Tribunal dated 10.12.2008 and 16.3.2009 as above, the Commission has filed Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286 to 6289/2009 before the Hon'ble Supreme Court. These Civil Appeals are pending and there is no stay of the operation of the judgments of the Appellate Tribunal.

14. The distinction between the main tariff petition and the petition for additional capitalization could not be made since tariff for 2004-09 was a composite package which needs to be determined on the same principle. Also, the Appellate Tribunal in its judgment dated 4.2.2011 in Appeal No. 92/2010 (NTPC-v- CERC & ors) has observed that pendency of civil appeals against the judgment of the

Appellate Tribunal dated 13.6.2007 before the Hon'ble Supreme Court is not a ground to ignore the orders of the Appellate Tribunal. The Commission is in the process of filing Civil Appeal against this judgment. In line with the observations of the Appellate Tribunal in Appeal No. 92/2010 and keeping in view that tariff for 2004-09 is a composite package to be determined on the same principle, the tariff in respect of the generating station is revised by this order subject to the final outcome of the Civil Appeals pending before the Supreme Court.

15. The petitioner has claimed revised fixed charges based on additional expenditure as under:

	( <b>₹ i</b> n lakh)
Particulars	2008-09
Additional capital expenditure	3702.62

16. Reply to the petition has been filed by the respondent No.1, UPPCL.

## Additional Capitalization for 2008-09

17. Regulation 18 of the 2004 regulations provides for considering the additional

capital expenditure for tariff as under:

"18. (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 that original scope of work 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 the generating station.

(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 cutoff 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 1

Any expenditure admitted on account of committed liabilities within 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 20.

#### 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."

#### 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 20.

#### Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original capital cost."

18. The additional capital expenditure claimed as per books of accounts is as

under:

	( <b>₹</b> in lakh)
Particulars	2008-09
Closing Gross Block	538409.78
Less: Opening Gross Block of the year	527442.93
Additional capital expenditure as per books	10966.85
Less: Additional capital expenditure pertaining	
to Stage-I	1168.49
Additional capital expenditure for generating	
station (as per books) (A)	9798.35
Less: Exclusions (B)	6095.73
Net Additional capital expenditure claimed	3702.62

19. The summary of exclusions from the books of account is as under:

	(₹in lakh)
Heads	2008-09
De-capitalized Wagons	(-) 40.09
De-capitalization of spares	(-) 1.99
FERV	6137.82
Total	6095.73

## Exclusions

20. In the first instance, we consider the exclusions as under:

(a) **De-capitalized Wagons:** The petitioner has de-capitalized an amount of ₹40.09 lakh towards unserviceable wagons. However, the petitioner has prayed that negative entries arising on account of de-capitalization may be ignored for the purpose of tariff. The justification submitted by the petitioner for claim for exclusion is as under:

"These damaged wagons have been de-capitalized for accounting purposes& the replacement of the same will be purchased shortly. Since the H'ble Commission may not allow capitalization of new wagons purchased, this de-capitalization may be excluded for the tariff purposes"

The petitioner's claim for retaining the de-capitalized amount in the gross block for the purpose of tariff is not acceptable, as these un-serviceable wagons form part of capital cost and do not render any useful service to the beneficiaries. In view of this, the exclusion of negative entries has not been allowed.

(b) **De-capitalization of spares:** The petitioner has de-capitalized an amount of  $\mathbf{\xi}$ 1.99 lakh towards capital spares. However, the petitioner has prayed that negative entries arising on account of de-capitalization may be ignored for the purpose of tariff. The justification submitted by the petitioner for claim for exclusion is as under:

"The unserviceable spares have been de-capitalized for accounting purposes the replacement of the same will be purchased shortly. H'ble Commission may allow exclusion of the same"

The petitioner's claim for retaining the de-capitalized amount in the gross block for the purpose of tariff is not acceptable, as these 'un-serviceable capital spares' do not render any useful services to the beneficiaries. Moreover, it is also not clear from the submissions of the petitioner if these assets do not from part of capital cost considered for the purpose of tariff. In view of this, the exclusion of negative entries has not been allowed.

(c) **FERV:** The exclusion of an amount of ₹6137.82 lakh on account of FERV is allowed. The petitioner is entitled to recover the FERV amount directly from the beneficiaries in accordance with the 2004 regulations.

21. The category-wise break-up of the additional capital expenditure claimed by petitioner is as under:

	(₹ in lakh)
Nature of capitalization	2008-09
Deferred Liabilities relating to works within original scope of work [18(2)(i)]	3702.62

22. The date of commercial operation of the generating station is 1.4.2006. In terms of the definition under Clause (ix) of Regulation 14 of the 2004 regulations, the cut-off date of the generating station is 31.3.2008. As such, the additional capital expenditure after the cut-off-date is admissible under Regulation 18(2) of the 2004 regulations. The petitioner has claimed additional capital expenditure under the Regulation18 (2)(i) i.e Deferred liabilities relating to works/services within the original scope of work.

23. The claim for additional capital expenditure for ₹3702.62 lakh by the petitioner can be categorized under the following heads:

- (a) Deferred liabilities of ₹140.94 lakh for works executed and admitted by the Commission before the cut-off-date i. e 31.3.2008.
- (b) Assets/works amounting to ₹1843.30 lakh for which the orders were placed before the cut-off date, but executed after the cut-off-date.
- (c) Assets/works amounting to ₹424.88 lakh for which the orders were placed after the cut-off date.
- (d) FERV amounting to ₹1258.52 lakh
- (e) IDC amounting to ₹34.66 lakh

24. The respondent No.1, UPPCL during the hearing on 15.3.2011 has mainly objected to the additional capital expenditure claims of the petitioner and has submitted that the petitioner has not provided sufficient justification for non-payment of huge amounts for the assets/works undertaken in respect of the generating station. The respondent also submitted that the inclusion of undischarged liabilities should only be considered after the disposal of the Civil Appeals pending before the Hon'ble Supreme Court.

25. We now proceed to examine the claim of the petitioner for additional capitalization for 2008-09. Regulation 18(1) of the 2004 regulations provide for capitalisation of deferred liabilities and for works deferred for execution prior to the cut-off date of the generating station. Since the claim of the petitioner for additional capitalization relate to liabilities deferred after the cut-off date and works deferred for execution, it would be necessary to consider the said claims under Regulation 18(1) (i) and (ii) of the 2004 regulations. We observe that some of the liabilities incurred is in respect of works which have already been admitted by the Commission during the previous years. In addition, some of the works for which orders were placed prior to the cut-off date could be executed by the petitioner only after the cut-off date and in some of the cases the works could be commenced only

after the cut-off date. It is observed that these works are necessary for the generating station. The Commission in its 2009 Tariff Regulations applicable for the period from 1.4.2009 has provided more time for new generating stations which have been commissioned after 1.4.2009 to complete all works and it would not be reasonable to disallow the same to the generating stations which have been commissioned during the previous period. Moreover, the Appellate Tribunal by its judgment dated 18.8.2010 in Appeal No 66/2008 (pertaining to Talcher STPS-II) while remanding the matter to the Commission to consider the question of relaxation of cut-off date, has observed that the Commission could consider the relaxation of the cut-off date of the generating station as it was a fit case for the reasons stated therein. The facts and circumstances in this generating station being similar to the case of Talcher STPS-II have also convinced us to the need for relaxation of the cut-off date for capitalization. We therefore feel that it is a fit case for relaxation of the cut-off date and accordingly relax the cut-off period of the generating station for a period of one year i.e upto 31.3.2009, in exercise of our power to relax the provisions of the regulations in terms of Regulation 13 of the 2004 regulations. In view of this, we allow the additional capital expenditure claims of the petitioner after prudence check, in terms of Regulation 18(1) (i) and 18 (1)(ii) as under:

	(₹ in lakh)
Particulars	2008-09
Additional capital expenditure allowed under Regulation 18(1)(i) i.e. deferred liabilities considering the relaxed cut-off- date as 31.3.2009.	140.94
Additional capital expenditure Allowed under Regulation 18(1)(ii) i.e. works deferred for execution, considering the relaxed cut-off-date as 31.3.2009.	1843.30
Additional capital expenditure Allowed under Regulation 18(1)(ii) i.e. works deferred for execution after considering the relaxed cut-off date as 31.3.2009	424.88
Additional capital expenditure allowed prior to adjustment of FERV,IDC and exclusions	2409.12

26. Based on the above, the additional capital expenditure allowed for 2008-09 is as under:

	( <b>₹ i</b> n lakh)
Nature of capitalization	2008-09
Deferred Liabilities relating to works within original scope of work. [18(1)(i)]	140.94
Works deferred for execution[18(1)(ii)]	2268.18
Total before adjustments of exclusions (A)	2409.12
Exclusions not allowed (B)	(-)42.08
Additional capital expenditure (before claim of FERV and IDC) (C=A+B)	2367.04

27. Since, FERV and IDC claimed by the petitioner is in respect of assets/works already admitted by the Commission, the same has been allowed under Regulation 18(1)(i) of the 2004 regulations. Accordingly, the additional capital expenditure, after adjustment of FERV and IDC is as under:

	(₹in lakh)
Nature of capitalization	2008-09
Additional capital expenditure allowed (before claim of FERV and IDC)	2367.04
Add: FERV in respect of works already admitted (under 18(1)(i))	1258.82
Add: IDC in respect of works already admitted ( under 18(1)(i))	34.66
Additional capital expenditure allowed	3660.54

# **Capital cost**

28. As stated above, the Commission vide order dated 30.12.2009 in Petition No. 97/2008 had admitted the capital cost of ₹137461.05 lakh as on date of commercial operation of Unit-I i.e. 15.8.2005 and ₹265664.80 lakh as on date of commercial operation of Unit-II (date of commercial operation of generating station) i.e. 1.4.2006.

29. Taking into account the admitted capital cost of the generating station as on the date of commercial operation of the respective units, the additional capital expenditure for the years 2005-06, 2006-07, 2007-08 and 2008-09 along with undischarged liabilities, the capital cost for the period 2005-09 is worked out as under:

				(₹in lakh)
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
Capital cost as on date of commercial operation of respective units (as considered in order dated 30.12.2009 in Petition No. 97/2008)	137461.05	265664.80	-	-
Add: Un-discharged liabilities disallowed earlier vide 15.10.2007 in Petition No. 106/2006	13231.90	13573.73	-	-
Opening capital cost	150692.95	279238.53	284488.76	288654.06
Additional capital expenditure (after considering un- discharged liabilities)	11151.90	5250.23	4165.30	3660.54
Closing Capital cost	161844.86	284488.76	288654.06	292314.59
Average Capital cost	156268.90	281863.65	286571.41	290484.32

## Debt-Equity ratio

30. Regulation 20 of the 2004 Regulations provides as under:

"(1) In case of the existing project, 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 31.03.2004 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 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 is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

31. On account of the treatment of un-discharged liabilities as a part of the capital cost of the generating station, the gross opening loan (normative) as on 15.8.2005 (date of commercial operation of Unit-I) and 1.4.2006 (date of commercial operation of generating station) has been revised to ₹105485.07 lakh and ₹195466.97 lakh, (from ₹96222.74 lakh and ₹185965.36 lakh) respectively.

32. The petitioner has submitted that the total capital expenditure has been financed partly from debt and partly out from internal resources. However, after applying prudence check, the debt-equity ratio of 70:30 has been considered for the admitted additional capital expenditure, in terms of sub-clause (a) of clause (1) of Regulation 20 of 2004 regulations. Accordingly, the additional notional equity and notional loan of the generating station on account of admitted additional capitalization works out as under:

					(₹in lakh)
Particulars		<b>2005-06</b> ( 15.8.2005 to	2006-07	2007-08	2008-09
		31.3.2006)			
Additional Equity	Notional	3345.57	1575.07	1249.59	1098.16
Additional Not	ional Loan	7806.33	3675.16	2915.71	2562.38

## **Return on Equity**

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

			(₹ i	in lakh)
Particulars	2005-06	2006-07	2007-08	2008-09
	(15.8.2005			
	to			
	31.3.2006)			
Equity – Opening	45207.89	83771.56	85346.63	86596.22
Addition of Equity due to Additional				
capital expenditure	3345.57	1575.07	1249.59	1098.16
Equity-Closing	48553.46	85346.63	86596.22	87694.38
Average equity	46880.67	84559.09	85971.42	87145.30
Return on Equity @ 14%	6563.29	11838.27	12036.00	12200.34

#### Interest on loan

34. Adjustment of repayment corresponding to de-capitalization of assets: The Appellate Tribunal by its judgment dated 13.6.2007 has decided as under:

"When asset is not in use it is only logical that the capital base for the purpose of tariff is also proportionately reduced. It follows therefore that the appellant will not earn any depreciation, return on equity and O&M charges. However, despite the decapitalization, the appellant is required to pay interest on loan. Whereas 10% salvage value of the de-capitalized asset should be non-tariff revenue, the interest on loan has to be borne by the beneficiaries. If the salvage value is more than 10%, amount realized above 10% should be counted as additional revenue. If salvage value is less than 10%, it will be counted as loss in the revenue.

Therefore, in this view of the matter, the cumulative repayment of the loan proportionate to those assets de-capitalized required to be reduced. The CERC shall act accordingly".

35. In the instant petition, the petitioner has not claimed any such adjustment as no de-capitalization has been considered by the petitioner. However, since the petitioner's claim for exclusion of de-capitalization of certain assets is not admissible, (based on judgment as stated above) the repayment adjustment has been done applying the formula as shown below:

	Gross value of de-capitalised asset
	х
Repayment to be adjusted =	Debt proportion corresponding to normative debt-equity ratio for the respective period

36. In terms of the above decision of the Appellate Tribunal, the cumulative repayment adjustment has been worked out proportionate to assets de-capitalized such that the net opening loan prior to de-capitalisation and after de-capitalisation do not change.

37. Interest on loan has been worked out as mentioned below:

(a) As stated above, the gross opening loan on normative basis as on 15.8.2005 (date of commercial operation of Unit-I) and 1.4.2006 (date of commercial operation of generating station) has been revised to ₹105485.07 lakh and ₹195466.97 lakh, respectively.

- (b) Cumulative repayment of loan on normative basis amounting to Rs. Nil and ₹5272.92 lakh was considered vide order dated 30.12.2009 as on 15.8.2005 (date of commercial operation of Unit-I) and 1.4.2006 (date of commercial operation of generating station) respectively. However, on account of ignoring depreciation for the purpose of calculating normative repayment, the cumulative repayment as on 1.4.2006 (date of commercial operation of generating station) has been revised to ₹5780.49 lakh.
- (c) Thus, the revised net-opening normative loan as on 15.8.2005 and 1.4.2006 works out to ₹105485.07 lakh and ₹189686.48 lakh, respectively.
- (d) As stated above, there is addition of notional loan to the tune of ₹7806.33 lakh, ₹3675.16 lakh, ₹2915.71 lakh and ₹2562.38 lakh for the years 2005-06 (15.8.2005 to 31.3.2006), 2006-07, 2007-08 and 2008-09, respectively on account of additional capital expenditure approved above.
- (e) Weighted average rate of interest as considered in order dated 30.12.2009 after accounting for drawl during 2008-09 has been considered for calculating interest on loan.
- (f) Normative repayment = Actual Repayment x Normative Loan

#### Actual Loan

(g) Cumulative repayment during 2005-09, has been adjusted on account of de-capitalized assets, if any, in proportion to debt-equity ratio adopted for allowing additional capital expenditure during the respective years.

	(₹ in lakh)			
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
Gross Opening Loan	105485.07	195466.97	199142.13	202057.84
Cumulative Repayment of Loan upto previous year	0.00	5780.49	21034.88	38453.41
Net Loan Opening	105485.07	189686.48	178107.26	163604.43
Addition of loan due to Additional capital expenditure approved above	7806.33	3675.16	2915.71	2562.38
Repayment of loan during the year (normative)	5780.49	15254.39	17418.53	18104.53
Less: Repayment adjustment corresponding to de-cap of assets	0.00	0.00	0.00	29.46
Net repayment of loan during the year	5780.49	15254.39	17418.53	18075.07
Net Loan Closing	107510.91	178107.26	163604.43	148091.74
Average Loan	106497.99	183896.87	170855.84	155848.09
Weighted Average Rate of Interest on Loan	7.5382%	7.4653%	7.4780%	7.6054%
Interest on Loan	8028.08	13728.46	12776.55	11852.85

38. Interest on loan has been computed as under:

#### Depreciation

39. On account of change in capital cost as on date of commercial operation of both the Units, the depreciation as worked out in order dated 30.12.2009, would also undergo revision.

40. The weighted average rate of depreciation of 3.6219% for the period from 15.8.2005 to 31.3.2006 and 3.6118% for the period from 1.4.2006 to 31.3.2009, as considered in orders dated 15.10.2007 and 30.12.2009 has been considered to calculate depreciation. Further, depreciation has been adjusted for decapitalization of assets, if any, considered for the purpose of tariff.

				(₹in lakh)
	2005-06	2006-07	2007-08	2008-09
	(15.8.2005 to			
	31.3.2006)			
Opening capital cost	150692.95	279238.53	284488.76	288654.06
Closing capital cost	161844.86	284488.76	288654.06	292314.59
Average capital cost	156268.90	281863.65	286571.41	290484.32
Depreciable value @ 90%	140642.01	253677.28	257914.27	261435.89
Balance depreciable value	140642.01	247896.79	236879.39	222982.48
Depreciation (annualized)	5659.87	10180.49	10350.53	10491.85
Depreciation (pro-rata)	3550.99	10180.49	10350.53	10491.85
Cumulative depreciation /	5780.49	21034.88	38453.41	56546.69
AAD (before adjustment for				
de-cap)				
Depreciation adjustment	0.00	0.00	0.00	18.22
on account of de-cap of				
assets				

41. The necessary computation for depreciation is as under:

## **Advance Against Depreciation**

42. On account of revision as above, Advance Against Depreciation allowed vide

order dated 30.12.2009 is also revised and the necessary calculations are as under:

				(₹in lakh)
	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	10548.51	19546.70	19914.21	20205.78
Repayment of the Loan during the yea				
(normative)	5780.49	15254.39	17418.53	18104.53
Minimum of the above	5780.49	15254.39	17418.53	18104.53

Depreciation during the year	3550.99	10180.49	10350.53	10491.85
(A) Difference	2229.50	5073.90	7068.01	7612.67
Cumulative Repayment of the Loan	5780.49	21034.88	38453.41	56528.48
Cumulative Depreciation / AAD	3550.99	15960.98	31385.40	48927.04
(B) Difference	2229.50	5073.90	7068.01	7601.43
Advance Against Depreciation [Minimum of (A) and (B)]	2229.50	5073.90	7068.01	7601.43
Advance Against Depreciation (annualised)	3553.57	5073.90	7068.01	7601.43

#### O&M expenses

43. O&M Expenses as considered in order dated 30.12.2009 has been kept unchanged for revision of tariff.

## **Interest on Working capital**

44. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 30.12.2009 have been kept unchanged except allowing the maintenance spares on additional capital expenditure. Also, the admitted additional capital expenditure after the date of commercial operation has been considered while computing the maintenance spares for calculating the interest on working capital. 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)		
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09
Coal Stock – 1.5 months	3276.80	6875.27	6894.11	6875.27
Oil Stock- 2 months	425.65	499.36	500.73	499.36
O & M expenses	405.42	843.33	876.67	912.50
Maintenance Spares	1599.45	2825.59	3035.20	3252.67
Receivables	9838.60	18664.08	19002.50	19038.18
Total Working Capital	15545.91	29707.64	30309.21	30577.98
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on Working capital	1593.46	3045.03	3106.69	3134.24

45. The revised annual fixed charges for the period from 15.8.2005 to 31.3.2009 are summarized as under:

			(₹. in lakh)		
Particulars	2005-06 (15.8.2005 to 31.3.2006)	2006-07	2007-08	2008-09	
Interest on loan	8028.08	13728.46	12776.55	11852.85	
Interest on Working Capital	1593.46	3045.03	3106.69	3134.24	
Depreciation	5659.87	10180.49	10350.53	10491.85	
Advance Against Depreciation	3553.57	5073.90	7068.01	7601.43	
Return on Equity	6563.29	11838.27	12036.00	12200.34	
O & M Expenses	4865.00	10120.00	10520.00	10950.00	
Total	30263.27	53986.15	55857.78	56230.72	

46. The target availability of 80% considered by the Commission in the order dated 30.12.2009 remains unchanged. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 30.12.2009 have been retained for the purpose of calculation of the revised fixed charges.

## Others

47. In addition to the charges approved above, the petitioner is entitled to recover other charges like incentive, claim for reimbursement of income-tax, other taxes, cess levied by statutory authority, in accordance with the 2004 regulations, as applicable.

48. The petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No.129/2005 wherein it was directed that filing fee during the period 2004-09 would not be reimbursed, as the same has been factored in the normalized O&M expenses under the 2004 regulations.

49. The annual fixed charges determined in this order are subject to the outcome of Civil Appeals as stated above, pending before the Hon'ble Supreme Court

50. The petitioner shall claim the difference in respect of the tariff determined by order dated 30.12.2009 and the tariff determined by this order, from the beneficiaries in three equal monthly installments.

51. Petition No.183/2009 stands disposed of in terms of the above.

Sd/-[V.S.VERMA] MEMBER Sd/-[S.JAYARAMAN] MEMBER Sd/-[Dr. PRAMOD DEO] CHAIRPERSON