

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.149/2009**

**Coram:**      **1. Dr.Pramod Deo, Chairperson**  
                 **2. Shri S.Jayaraman, Member**  
                 **3. Shri V.S.Verma, Member**  
                 **4. Shri M.Deena Dayalan, Member**

**DATE OF ORDER: 17.1.2012**

**IN THE MATTER OF**

Revision of order dated 8.1.2010 in the light of the judgment of the Appellate Tribunal for Electricity dated 28.7.2011 in Appeal No.75/2010.

**AND**

**IN THE MATTER OF**

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 for Simhadri STPS, (1000 MW).

**AND**

**IN THE MATTER OF**

NTPC Ltd, New Delhi  
Vs

**.... Petitioner**

1. Transmission Corporation of Andhra Pradesh, Hyderabad
2. A.P. Eastern Power Distribution Company Ltd., Visakhapatnam
3. A.P. Southern Power Distribution Company Ltd., Tirupathi
4. A. P. Northern Power Distribution Company Ltd., Warangal
5. A.P Central Power Distribution Company Ltd., Hyderabad

**.....Respondents**

**ORDER**

The petitioner, NTPC had filed this application for approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 for Simhadri Thermal Power Station (1000 MW), (hereinafter referred to as “the generating station”) in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 regulations”). The



Commission by its order dated 8.1.2010, revised the tariff of the generating station based on the capital cost as under:

	( ` in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital Cost	345207.36	347677.09	348620.88	348958.73	348837.31
Additional capital expenditure allowed	2469.73	943.79	337.85	(-)121.42	2294.94
<b>Closing Capital cost</b>	<b>347677.09</b>	<b>348620.88</b>	<b>348958.73</b>	<b>348837.31</b>	<b>351132.25</b>
<b>Average Capital cost</b>	<b>346442.23</b>	<b>348148.99</b>	<b>348789.81</b>	<b>348898.02</b>	<b>349984.78</b>

2. The revised annual fixed charges approved by the Commission in order dated 8.1.2010 is as under:

	( ` in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	7483.74	7155.97	6800.51	6427.60	6073.67
Interest on Working Capital	2921.39	2948.94	2976.42	3009.28	3036.45
Depreciation	11534.85	11591.68	11613.01	11616.62	11652.80
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	14550.57	14622.26	14649.17	14653.72	14699.36
O & M Expenses	9360.00	9730.00	10120.00	10520.00	10950.00
<b>Total</b>	<b>45850.55</b>	<b>46048.85</b>	<b>46159.11</b>	<b>46227.22</b>	<b>46412.28</b>

### Background

3. The petitioner filed Petition No.149/2004 for determination of tariff of the generating station for the period 2004-09 and the Commission by its order dated 22.9.2006 determined the tariff of the generating station for the said period. Aggrieved by the said order, the petitioner filed Appeal No. 240/2006 before the Tribunal. Similar appeals [Appeal Nos.139 to 142 etc of 2006, 10, 11 and 23/2007 (NTPC-v-CERC & ors)] were also filed by the petitioner challenging the various orders of the Commission determining tariff for other generating stations of the petitioner during the period 2004-09. Appeal No.240/2006 was clubbed along with the said appeals and the Tribunal by its common judgment dated 13.6.2007 allowed the prayers of the petitioner and remanded the matters for re-determination of tariff by the Commission.

4. Against the judgment dated 13.6.2007, the Commission has filed Civil Appeals before the Hon'ble Supreme Court (C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) including Civil Appeal No. 5445/2007 pertaining to this generating station, 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.

5. The Hon'ble Supreme Court on 26.11.2007 granted interim order of stay of the operation of the order dated 13.6.2007 of the Tribunal. However, on 10.12.2007, the Hon'ble Supreme Court passed 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."*

6. During the pendency of the above Civil Appeals, the petitioner filed Petition No. 28/2007 for revision of tariff of the generating station after considering the impact of additional capital expenditure for the years 2004-05 and 2005-06 and the Commission by its order dated 18.6.2008 revised the tariff of the generating station. Subsequently, by order dated 24.12.2008, the Commission revised the calculation of interest on loan after rectifying the ministerial errors in order dated 18.6.2008. As there was no change in the interest on loan already approved, the annual fixed charges remained unaltered in the order dated 18.6.2008. Against this order, the petitioner filed Appeal

No.135/2008 before the Tribunal challenging the decision of the Commission to deduct 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’*”. Similar appeals (Appeal Nos.133/2008, 136/2008 and 148/2008) on the issue of deduction of un-discharged liabilities were also filed by the petitioner before the Tribunal against the orders of the Commission in respect of its other generating stations.

7. While so, in Appeal Nos.151 & 152/2007 filed by the petitioner before the Tribunal against the orders of the Commission revising the tariff of the generating stations (Rihand STPS and Ramagundam STPS) of the petitioner, after deduction of un-discharged liabilities, the Tribunal by judgment dated 10.12.2008 allowed the same 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.”*

8. In line with the above decision, the Tribunal by a common judgment dated 16.3.2009 disposed of Appeal No.135/2008 along with Appeal Nos.133/2008, 136/2008 and 148/2008 filed by the petitioner. Against the above said judgments of the Tribunal dated 10.12.2008 and 16.3.2009, the Commission has filed Civil Appeals before the Hon’ble Supreme Court in C.A Nos. 4112-4113/2009 and C.A Nos. 6286 to 6288/2009 and the same are pending.

9. Thereafter, Petition No.149/2009 was filed by the petitioner for approval of revised fixed charges for the generating station after considering the impact of additional capital



expenditure incurred during the period 2006-09. The petitioner also filed Interlocutory Application No. 35/2009 to the said petition and claimed revision of tariff of the generating station in terms of the judgment of the Tribunal dated 13.6.2007 by considering those issues covered by the interim order dated 10.12.2007 of the Hon'ble Supreme Court and the judgments of the Tribunal dated 10.12.2008 and 16.3.2009. The claims of the petitioner were disposed of by order dated 8.1.2010 as discussed in the subsequent paragraphs.

10. Keeping in view the spirit of the interim order of the Hon'ble Supreme Court dated 10.12.2007, the claim of the petitioner in I.A.35/2009 (in Petition No.149/2009) for implementation of the judgment of the Tribunal dated 13.6.2007 was deferred till the final disposal of the Civil Appeals by the Hon'ble Supreme Court. The relevant portion of the order containing the observations of the Commission in order dated 8.1.2010 in Petition No.149/2009 is extracted hereunder:

*"8. .... In our view, the undertaking given by the petitioner before the Hon'ble Supreme Court that "the five issues shall not be pressed for fresh determination" is binding on the petitioner and the petitioner is estopped in law from seeking fresh determination of these issues. Moreover, the petitioner seems to create a distinction between the main tariff petition and the petition for additional capitalization by stating that while the undertaking is confined to the remand order pertaining to the main petition, the additional capitalization can be considered as per the principles laid down by the Appellate Tribunal. Such an approach will lead to dichotomous situations wherein tariff for the main petition and petition for additional capitalization are determined on the basis of different principles. The tariff for the period 2004-09 is a complete package which needs to be determined on the same principle. From the point of view of regulatory uniformity and continuity and also in line with the spirit of the interim order of the Hon'ble Supreme Court, we are of the view that the implementation of the judgment of the Appellate Tribunal on the five issues should be deferred till the final disposal of the said Civil Appeals by the Hon'ble Supreme Court. Accordingly, tariff for additional capitalization is determined on the basis of the existing principles, subject to the final outcome of the Civil Appeals pending before the Supreme Court"*

11. On the issue of un-discharged liabilities, no stay of the operation of the judgment of the Tribunal dated 16.3.2009 in Appeal No.135/2008 was granted by the Hon'ble Supreme Court in the Civil Appeals (C.A Nos. 6286 to 6288/2009) filed by the Commission. Hence, the tariff of the generating station was revised by order dated

8.1.2010 in terms of the directions contained in the judgment dated 16.3.2009. The relevant portion of the order dated 11.1.2010 is extracted as under:

*16. The directions of the Appellate Tribunal pertain to additional capitalization for the tariff period 2004-09 which has come to an end on 31.3.2009 and the exercise for implementation of the directions have been undertaken after the expiry of the said tariff period. Accordingly, tariff of the generating station is revised after considering the additional capital expenditure, capitalization of un-discharged liabilities and IDC after truing up of the expenditure as on 31.3.2009. While truing up, the liabilities discharged, liabilities reversed on account of de-capitalization of assets during the tariff period have been accounted for”*

12. Against the order of the Commission dated 8.1.2010, the petitioner filed appeal No.75/2010 before the Tribunal on the following issues:

- (a) Exclusion of part of the capital expenditure validly incurred but pending actual disbursement/payment from the capital cost for the purposes of tariff;*
- (b) Equating depreciation with normative loan repayment;*
- (c) Disallowance of cost of maintenance spares;*
- (d) Impact of de-capitalisation of assets on cumulative repayment of loan;*
- (e) De-capitalisation of capital spares and minor items and excluding them from capital base even when capitalization of substituted components is not allowed;*
- (f) Applying principle of cut-off date on erroneous interpretation of Regulation 14 and 18 (2) of Tariff Regulations, 2004.*

13. By its judgment dated 28.7.2011, the Tribunal has allowed the prayer of the petitioner on the issues at (a) to (d) above, in line with its earlier decision contained in judgments dated 13.6.2007 and 16.3.2009 as stated *supra*. The prayer at (e) above was however rejected by the Tribunal in line with its decision contained in its judgment dated 4.2.2011 in Appeal No. 92/2010 (NTPC-v- CERC & ors). As regards the prayer at (f) above, the same was remanded to the Commission to consider the question of relaxation of cut-off date for additional capital expenditure of the generating station in exercise of its “power to relax’. The relevant portion of the judgment dated 28.7.2011 is extracted as under:

*”10. A similar issue was raised by the Appellant before this Tribunal in Appeal No. 66 of 2008 which was decided by the Judgement dated 18.8.2010 (2010 ELR (APTEL) 1096) rejecting this*



claim. However, some observations have been made in favour of the Appellant. The relevant observations are as follows:

“41. In the instant case, the Appellant has four units of the generating station. In case of generating station, the date of commercial operation in terms Regulations 2001 means the date of commercial operation of the last unit. Thus, what is called scheduled commercial date is the date ideally fixed for putting the concerned unit under commercial operation. Such an ideal date, the date targeted, may turn out to be a reality, may not be so. The units may be put under commercial operation ahead of scheduled date of commercial operation, or after that date. The date of scheduled commercial operation is the date ideally taken to be one by which the unit is expected to be commissioned. There may be a failure to adhere to that date, there may a success also, and success may come before that date also. Therefore, in terms of the regulations the date of commercial operation must be to all intents and purposes the actual date of commercial operation.

42. We are unable to accept the submission of Mr. Ramachandran that the scheduled commercial date should be the basis for determining the cut off date. As already observed, the provision of the regulations admits of no confusion and ambiguity. Where the plain meaning of the regulation is clear, no contrary reasoning is admissible.....

11. Even though, this point has been held as against the Appellant, this Tribunal has directed the Commission to consider for the relaxation of Regulations. The observation is as follows:

“44. The Appellant has submitted that the order for certain works for a sum of Rs.76 crores could not be placed by 31.03.2007 due to detailed review of initial spares. After detailed exercise enquiry for some of the spares was issued in July and September, 2006 against which offers were received from BHEL in September and November, 2006. The order could be placed after negotiation and bringing down the cost only after 3.1.3.2007. Also some orders relating to Civil Works were placed after 31.3.2007. It has been argued by the Learned Counsel for the Appellant that the present case is a just and proper case for exercising the Power to Relax.

45. We have examined the details of the items where the orders were placed after the cut off date submitted by the Appellant. These are essentially the initial spares required for the power plant. In view of the explanation offered by the Appellant, we are convinced that it is a fit case for consideration of the Commission to exercise its power to relax under the Tariff Regulations, 2004. Accordingly, we remand this matter to the Commission to consider the request of the Appellant to extend the cut off date appropriately in exercise of its power to relax”.

12. The reading of the above observations would indicate that although the Tribunal rejected the submissions of the Appellant that the scheduled commercial date should be the basis for determining the cut-off date, this Tribunal directed the Central Commission to consider the exercise of the power to relax and give relief to the Appellant on the issue of spares, taking note of the facts and circumstances. Similarly, the Central Commission may consider the facts of this case also and decide whether the facts of this case would apply to the above judgement. If a similar explanation is offered by the Appellant before the Commission, then the Commission may consider for the exercise of its power to relax the relevant tariff regulations.

13. Accordingly, we remand this matter to the Commission on this issue to consider the request of the Appellant to consider the cut-off date appropriately in exercise of its power to relax."



14. Thus, in terms of the above directions of the Tribunal, it needs to be considered by the Commission if the facts of the present case would apply to the facts contained in judgment dated 18.8.2010 in Appeal No. 66/2008 and to consider relaxation of cut-off date, if similar explanation is offered by the petitioner before the Commission.

15. The petition was heard by the Commission on 17.11.2011 on the issue of relaxation of cut-off date for additional capitalization of the generating station, and it has been submitted by the petitioner that the Commission may relax the cut-off date for the generating station taking into consideration the observations of the Tribunal in its judgment dated 18.8.2010 in Appeal No. 66/2008 (NTPC-v-CERC & ors). None appeared on behalf of the respondents.

16. We have examined the documents available on record in the above matters and the same is discussed in the succeeding paragraphs.

17. It is noticed that in the case of Talcher TPS (*pertaining to Appeal No.66/2008*), the petitioner on its prayer for relaxation of cut-off date upto 31.3.2008, had submitted that the project was declared under commercial operation on 1.8.2005 (*about 10 months prior to the scheduled date of commercial operation*) and if the same was declared during May 2006, it would have enabled the petitioner to complete the residual works upto 31.3.2008. It had also submitted that though commercial operation of the generating station was advanced by pre-poning the activities, some of the capital works/assets which are essentially required for the generating station was taken up in due course of time. The Commission by its order dated 31.1.2008 in Petition No. 179/2004 had rejected the prayer of the petitioner for relaxation of cut-off date from 31.3.2007 to 31.3.2008 on the ground that Regulation 18 of the 2004 regulations provide for additional capitalization of balance works under approved scope of works. However, the



Tribunal, taking into consideration the circumstantial facts for the delay in placement of orders had considered it fit case for relaxation of cut-off date for additional capitalization. Accordingly, the Commission by its order dated 29.12.2011 has allowed the relaxation of cut-off date of the generating station upto 31.3.2008 for additional capitalization. However, the facts in the present case (*Simhadri TPS*) stand on a different footing. In the present case, the petitioner while seeking revision of tariff due to additional capital expenditure incurred during 2004-06 in Petition No. 28/2007 had prayed for relaxation of cut-off date on the ground that the concept of cut-off date was introduced for the first time through the 2004 regulations and that despite the efforts made, it was not possible to complete all works within the original scope. It had also submitted that the generating station was commissioned on 1.3.2003 against the scheduled date of commissioning during June 2003, resulting in substantial benefits to the beneficiaries. Considering the fact that the petitioner was not left with any time to complete the balance works before the cut-off date and since the delay was not attributable to the petitioner, the cut-off date of the generating station was relaxed upto 31.3.2006 and additional capitalization was allowed. Having already relaxed the cut-off date of the generating station upto 31.3.2006, the Commission by its order dated 18.6.2008 in Petition No. 28/2007 had disallowed an expenditure of `46.70 lakh towards tools and plants while considering the additional capitalization for 2006-09 for this generating station, on the ground that orders have been placed after the relaxed cut-off date of 31.3.2006. In our view, the facts of the present case are different from the case in Talcher-STPS (*in Appeal No. 66/2008*).

18. In the case of Talcher STPS, the petitioner had submitted that the implementation of the project was taken up much before the notification of the 2004 regulations and some of the capital works like MGR siding, PTS quarters plant civil

works, land payments, TG air compressors etc which are essentially required for the smooth and safe operation in the long run was taken up in due course of time. In the present case, the submissions of the petitioner as regards the delay in placement of orders were considered and the Commission by its order dated 18.6.2008 (in Petition No. 28/2007) had allowed the relaxation of cut-off date upto 31.3.2006. In respect of additional capitalization for 2006-09, in the present petition, the petitioner had not submitted any justification for the delay in placing the purchase orders, but has instead remarked that "that orders for these equipments were placed in 2003-04 but supply delayed by the supplier". Taking into account these submissions, the item-wise date of placement of orders was considered by the Commission, and on prudence check, the claim of the petitioner was rejected, as orders were placed after the relaxed cut-off date of 31.3.2006. The submissions of the petitioner are different in both cases and we find no merit in the present case for relaxation of cut-off date for the generating station. Accordingly, the prayer of the petitioner for relaxation of cut-off date for the generating station again is rejected, taking into consideration the facts and the explanation submitted by the petitioner.

19. In compliance with the decision of the Tribunal in Appeal No.75/2010 and considering the fact that the tariff for 2004-09 is a composite package, the tariff of the generating station for 2004-09 is revised through this order after considering the issues raised by the petitioner, subject to the final outcome of the Civil Appeals pending before the Hon'ble Supreme Court.

#### **Un-discharged liabilities**

20. The additional capital expenditure approved vide order dated 8.1.2010 is revised after including the un-discharged liabilities disallowed earlier and removal of the un-



discharged liabilities already discharged. The revised additional capital expenditure for the period 2004-09 is as under:

	(' in lakh)				
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Additional capital expenditure admitted in order dated 8.1.2010	2469.73	943.79	337.85	(-) 121.42	2294.93
Add: Un-discharged liabilities deducted earlier	304.80	289.48	54.91	11.08	96.05
Less: Discharge of liabilities allowed earlier	0.00	26.04	0.00	186.22	25.05
<b>Additional capital expenditure admitted now</b>	<b>2774.53</b>	<b>1207.23</b>	<b>392.76</b>	<b>(-) 296.56</b>	<b>2365.93</b>

### Adjustment of FERV

21. The Commission vide its order dated 22.09.2006 in Petition No. 149/2004 had allowed normative FERV for the period 2001-04 in the capital base of the generating station as on 1.4.2004. As such, no further revision on this count is required.

### Capital Cost

22. The opening capital cost of `345207.36 lakh as on 1.4.2004 as approved in order dated 8.1.2010 remains unaltered. However, the capital cost for the respective years of the period 2004-09 gets revised due to revision in the admitted additional capital expenditure as stated above. Thus, the capital cost as approved vide order dated 8.1.2010 is revised as stated under:

	(' in lakh)				
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Opening Capital cost (considered now)</b>	345207.36	347981.89	349189.12	349581.88	349285.32
Additional capital expenditure approved	2774.53	1207.23	392.76	(-) 296.56	2365.93
<b>Closing Capital cost</b>	<b>347981.89</b>	<b>349189.12</b>	<b>349581.88</b>	<b>349285.32</b>	<b>351651.25</b>
<b>Average Capital cost</b>	<b>346594.63</b>	<b>348585.51</b>	<b>349385.50</b>	<b>349433.60</b>	<b>350468.29</b>

### Debt-Equity ratio

23. For the purpose of allowing additional capital expenditure for the period 2004-09, the debt-equity ratio would remain the same as considered in order dated 8.1.2010.

## Return on Equity

24. Based on the above, the return on equity approved vide order dated 8.1.2010 is revised as under:

	(` in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Equity –Opening considered now	103562.21	104394.57	104756.74	104874.57	104785.60
Addition of Equity due to admitted additional capital expenditure	832.36	362.17	117.83	(-) 88.97	709.78
Equity-Closing	104394.57	104756.74	104874.57	104785.60	105495.38
Average equity	103978.39	104575.65	104815.65	104830.08	105140.49
<b>Return on Equity @ 14%</b>	<b>14556.97</b>	<b>14640.59</b>	<b>14674.19</b>	<b>14676.21</b>	<b>14719.67</b>

## Interest on loan

25. Adjustment of repayment corresponding to de-capitalization of assets: In Petition No.149/2004, the petitioner has sought adjustment in cumulative repayment on account of de-capitalization of assets in such a manner that the net loan opening prior to de-cap does not undergo a change. The 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 de-capitalization, 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”.*

26. In the instant petition, the petitioner has claimed such adjustment applying the formula as under:

$$\begin{aligned} & \text{Cumulative repayment at the beginning} \\ & \quad \times \\ & \quad \text{Gross value of de-capitalised asset} \\ & \quad \times \\ & \quad \text{Debt proportion corresponding to normative debt-} \\ & \quad \text{equity ratio for the respective period} \\ \text{Repayment to be adjusted} = & \text{-----} \end{aligned}$$

Gross debt at the beginning of the year of de-capitalisation

27. In terms of the above decision of the 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.

28. Interest on loan has been re-worked out as mentioned below:

- (a) Gross opening loan on normative basis as on 1.4.2004 as considered in order dated 8.1.2010 was `241645.15 lakh.
- (b) Cumulative repayment of normative loan as on 1.4.2004 as considered in order dated 8.1.2010 was `nil'.
- (c) Accordingly, the net opening normative loan as on 1.4.2004 is revised to `241645.15 lakh.
- (d) The addition of notional loan on account of additional capital expenditure approved for the period 2004-09 will be revised to `1942.17 lakh, `845.06 lakh, `274.93 lakh, (-) `207.59 lakh and `1656.15 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively.
- (e) Weighted average rate of interest as considered in order dated 24.12.2008 in Petition No. 28/2007 and 8.1.2010 in Petition No. 149/2009 has been considered.
- (f) Normative repayment = 
$$\frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$

Regulation-21(1)(i)(f) of the 2004 Regulations, provides as under:

*"In case any moratorium period is availed by the generating company, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly"*

Since, actual repayment is 'nil' for the period 2004-05 and 2005-06 on account of moratorium, the depreciation for the period 2004-05 and 2005-06 has been considered as repayment for the respective periods, in terms of the above said regulation.

- (g) Cumulative repayment during 2004-09, has been adjusted on account of de-capitalized assets in proportion to debt-equity ratio adopted for allowing additional capital expenditure during the respective years.



29. Interest on loan has been re-computed as under:

	(` in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan – considered now	241645.15	243587.32	244432.39	244707.32	244499.73
Cumulative Repayment of Loan upto previous year	0.00	11539.92	23146.13	24885.14	28020.13
Net Loan Opening	241645.15	232047.40	221286.25	219822.18	216479.59
Addition of loan due to approved additional capital expenditure	1942.17	845.06	274.93	-207.59	1656.15
Repayment of loan (Normative)	11539.92	11606.21	1739.35	3483.08	3485.34
Less: Adjustment for de-capitalisation during the period	0.00	0.00	0.35	348.08	255.03
Repayment of loan during the year (net)	11539.92	11606.21	1739.00	3135.00	3230.31
Net Loan Closing	232047.40	221286.25	219822.18	216479.59	214905.43
Average Loan	236846.28	226666.83	220554.22	218150.89	215692.51
Weighted Average Rate of Interest on Loan	3.1611%	3.1611%	3.1598%	3.1557%	3.1501%
<b>Interest on Loan</b>	<b>7487.03</b>	<b>7165.24</b>	<b>6969.07</b>	<b>6884.24</b>	<b>6794.60</b>

### Depreciation

30. Cumulative depreciation/Advance against Depreciation of `16469.18 lakh upto 31.3.2004 as considered in order dated 8.1.2010 has been retained. Depreciation has been re-calculated applying the weighted average rate of depreciation of 3.3295% as mentioned in order dated 8.1.2010. The necessary calculations are as under.

	(` in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	345207.36	347981.89	349189.12	349581.88	349285.32
Closing capital cost	347981.89	349189.12	349581.88	349285.32	351651.25
Average capital cost	346594.63	348585.51	349385.50	349433.60	350468.29
Depreciable value @ 90%	304948.44	306740.23	307460.23	307503.52	308434.74
Cumulative depreciation at the beginning of the year	16469.18	28009.10	39615.31	51248.13	62802.38
Balance depreciable value (at the beginning)	288479.26	278731.13	267844.92	256255.39	245632.35
<b>Depreciation</b>	<b>11539.92</b>	<b>11606.21</b>	<b>11632.85</b>	<b>11634.45</b>	<b>11668.90</b>
Cumulative depreciation adjustment on account of de-capitalization	0.00	0.00	0.03	80.19	74.91

### Advance Against Depreciation



31. Advance Against Depreciation allowed vide order dated 8.1.2010 remain unchanged.

#### **O&M expenses**

32. O&M Expenses approved vide order dated 8.1.2010 remain unchanged.

#### **Interest on Working capital**

33. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 8.1.2010 have been kept unchanged. The additional capital expenditure allowed after the date of commercial operation has been considered while arriving at the maintenance spares for the purpose of calculating 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, maintenance spares. The necessary details in support of calculation of interest on working capital are as under:

(' in lakh)

	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Coal stock- 1.1/2 months	8027.17	8027.17	8027.17	8049.16	8027.17
Oil stock -2 months	305.06	305.06	305.06	305.90	305.06
O & M expenses	780.00	810.83	843.33	876.67	912.50
Maintenance Spares	3673.78	3905.44	4143.33	4388.85	4675.93
Receivables	15980.98	16019.14	16066.92	16149.44	16202.36
<b>Total Working Capital</b>	<b>28766.99</b>	<b>29067.64</b>	<b>29385.82</b>	<b>29770.02</b>	<b>30123.02</b>
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
<b>Total Interest on Working capital</b>	<b>2948.62</b>	<b>2979.43</b>	<b>3012.05</b>	<b>3051.43</b>	<b>3087.61</b>

34. The revised annual fixed charges for the period from 1.4.2004 to 31.3.2009 are summarized as under:

(' in lakh)

	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on loan	7487.03	7165.24	6969.07	6884.24	6794.60
Interest on Working Capital	2948.62	2979.43	3012.05	3051.43	3087.61
Depreciation	11539.92	11606.21	11632.85	11634.45	11668.90
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	14556.97	14640.59	14674.19	14676.21	14719.67
O & M Expenses	9360.00	9730.00	10120.00	10520.00	10950.00
<b>Total</b>	<b>45892.54</b>	<b>46121.47</b>	<b>46408.16</b>	<b>46766.33</b>	<b>47220.78</b>



35. The target availability of 80% considered by the Commission in the order dated 8.1.2010 remains unchanged. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 8.1.2010 have been retained for the purpose of calculation of the revised fixed charges.

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

37. The petitioner shall claim the difference in respect of the tariff determined by order dated 8.1.2010 and the tariff determined by this order, from the beneficiaries in three equal monthly installments.

**Sd/-**  
**(M.DEENA DAYALAN)**  
**MEMBER**

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

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

**Sd/-**  
**(DR.PRAMOD DEO)**  
**CHAIRPERSON**

