

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Review Petition No. 2/2011  
in  
Petition No.189/2009**

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

**DATE OF HEARING: 24.3.2011**

**DATE OF ORDER: 15.6.2011**

**IN THE MATTER OF**

Review of order dated 21.1.2011 in Petition No.189/2009 relating to determination of revised fixed charges due to additional capital expenditure incurred during the period 2006-09 in respect of Singrauli STPS (2000 MW).

**AND IN THE MATTER OF**

NTPC Ltd, New Delhi  
Vs

**.... Petitioner**

1. Uttar Pradesh Power Corporation Ltd., Lucknow
2. Jaipur Vidyut Vitaran Nigam Ltd,Jaipur
3. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Delhi Transco Ltd, New Delhi
6. BSES Rajdhani Power Ltd, New Delhi
7. BSES Yamuna Power Ltd, New Delhi
8. North Delhi Power Ltd, New Delhi
9. Haryana Power Purchase Centre, 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 V.K.Padha,NTPC
2. Shri Ajay Dua, NTPC

**ORDER**

This application for review has been filed by NTPC, the petitioner herein, against the order of the Commission dated 21.1.2011 in Petition No.189/2009, relating to determination of revised fixed charges due to additional capital expenditure incurred



during the period 2006-09 in respect of Singrauli STPS (2000 MW) (hereinafter referred to as 'the generating station').

2. The petitioner has sought review of the order dated 21.1.2011 on the following issues:

(a) Disallowance of ₹425.83 lakh towards the installation of auto coal sampler before crusher;

(b) Deduction of liability discharged in 2005-06 of ₹3.16 lakh which was earlier not included in the additional capital expenditure allowed for 2005-06 in Petition No. 46/2007; and

(c) Interest on loan has been calculated considering the cumulative repayment upto 31.3.2004 as ₹46639 lakh without considering the repayment effect of the assets de-capitalized upto 31.3.2004 based on the ATE judgment dated 13.6.2007.

3. The petition was listed before us for admission. We heard the representative of the petitioner on the point raised in the application for review. After careful examination of the material on record and oral submissions made on behalf of the petitioner, we propose to dispose of the application at the admission stage for reasons recorded in succeeding paragraphs:

**Disallowance of ₹425.83 lakh towards the installation of auto coal sampler before crusher.**

4. The petitioner has submitted that an expenditure of ₹425.83 lakh has been claimed during 2008-09 under Regulation 18(2)(iv) of the 2004 Tariff Regulations, towards the installation of Auto Coal sampler before crusher as per R&M schemes approved by CEA under R&M phase-I vide letter dated 6.7.2000. The petitioner has also submitted that the Commission has been allowing expenditures under approved R&M schemes, since the same are approved by CEA after lot of deliberations and prudence check, with regard to their need from the technical point of view. The petitioner has further submitted that disallowance of the said one-time expenditure would result in non-servicing of capital expenditure incurred for efficient operation of



the generating station. According to the petitioner, there is an error apparent on the face of the record on this count in the order dated 21.1.2011, which is sought to be corrected.

5. The claim of the petitioner for ₹425.83 lakh towards capitalisation of the said asset was disallowed as the petitioner had not demonstrated in its petition (Petition No. 189/2009) as to how the installation of auto coal sampler before crusher could contribute to the efficient and successful operation of the generating station. Mere approval by CEA of the said asset as part of the R&M scheme could not be the sole basis for its capitalisation, particularly when the said asset is sought to be installed after 25 years of successful operation of the generating station. Moreover, perusal of the actual operational data pertaining to the period 2002-08 submitted by the petitioner during the finalisation of the 2009 Tariff Regulations (applicable for the period 2009-14), revealed that the Average Availability and the Plant Load Factor (PLF) of the generating station was about 90% during the period 2002-08 which proved beyond doubt that the generating station was operating efficiently and successfully, without the installation of the auto coal sampler. In consideration of the above, the claim of the petitioner was considered unjustified and was accordingly disallowed vide order dated 21.1.2011.

6. The petitioner through the present petition seeks to re-agitate the issue on merit, which is not permissible in the proceedings for review. In the circumstances, in our view there is no error apparent on the face of record and consequently, the petitioner's prayer for review of order dated 21.1.2011 on this ground is rejected.

**Deduction of liability discharged in 2005-06 of ₹3.16 lakh**

7. The petitioner has submitted that the Commission has deducted the liability discharged amounting to ₹3.16 lakh during 2005-06 in order dated 21.1.2011 which



was also not included in the additional capital expenditure allowed for the period 2005-06 in order dated 20.11.2008 in Petition No. 46/2007.

8. On scrutiny, it is noticed that the Commission in paragraph 33 of the order dated 20.11.2008 in Petition No.46/2007, had considered the discharge of un-discharged liabilities amounting to ₹3.16 lakh while allowing the additional capital expenditure for 2005-06, but had inadvertently overlooked the same while calculating tariff. The Commission, while revising the additional capital expenditure for 2004-06 based on the judgment of the Appellate Tribunal dated 21.8.2009 (in Appeal No.74/2009) in Petition No. 189/2009, had inadvertently deducted the said amount of ₹3.16 lakh for 2005-06, as under:

*“18.Considering the above adjustments, the revised additional capital expenditure for the period 2004-06 is as stated under.*

<b>Particulars</b>	<b>(₹ in lakh)</b>		
	<b>2004-05</b>	<b>2005-06</b>	<b>Total</b>
Additional Capital Expenditure allowed earlier in Petition No.46/2007 dated 20.11.2008 (A)	2649.60	1464.36	4113.96
Un-discharged liabilities disallowed earlier (B )	8.20	2.35	10.55
Liabilities discharged during the year considered earlier (C)	0.00	3.16	3.16
<b>Additional Capital Expenditure allowed (A+B-C)</b>	<b>2657.80</b>	<b>1463.55</b>	<b>4121.35</b>

9. The omission to consider the discharge of liabilities by the Commission is an error apparent on the face of the record and is sought to be rectified by this order. We allow review of order on this ground. Accordingly, the revised additional capital expenditure after considering the discharge of liability of ₹3.16 lakh for 2005-06, shall stand modified to ₹1466.71 lakh.

**Non-consideration of repayment of loan on assets de-capitalized upto 31.3.2004 on the cumulative repayment upto 31.3.2004 while computing interest on loan.**

10. The petitioner has submitted that the Commission in its order dated 21.1.2011, while working out the interest on loan had considered the cumulative repayment of

loan (on normative basis) amounting to ₹46639.00 lakh as on 1.4.2004 as in order dated 9.5.2006, but has not considered the repayment of loan on assets de-capitalised as on 31.3.2004 based on the judgment dated 13.6.2007 of the Appellate Tribunal in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23 of 2007.

11. Interest on loan as computed by the Commission in para 54 of the order dated 21.1.2011 by considering the cumulative repayment of loan is as under:

(₹ 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>
Gross Opening Loan	57019.10	58879.56	59904.04	60549.45	65967.30
Cumulative Repayment of loan upto previous year	46639.00	49403.56	52061.98	53885.97	54775.62
Net Loan Opening	10380.10	9476.00	7842.06	6663.48	11191.68
Addition of loan due to Additional Capital Expenditure approved	1860.46	1024.48	645.41	5417.85	726.12
Repayment of loan (normal)	2849.97	2781.79	1903.90	1058.01	1785.86
Less: Adjustment for de-cap during the period	85.41	123.37	79.91	168.35	60.09
Repayment of loan during the year (net)	2764.56	2658.42	1823.99	889.65	1725.78
Net Loan Closing	9476.00	7842.06	6663.48	11191.67	10192.02
Average Loan	9928.05	8659.03	7252.77	8927.58	10691.85
Weighted Average Rate of Interest on Loan	8.5127%	7.6825%	7.5018%	6.6521%	5.7824%
<b>Interest on Loan</b>	<b>845.14</b>	<b>665.23</b>	<b>544.09</b>	<b>593.87</b>	<b>618.25</b>

12. It is noticed that the Commission while computing interest on loan had not adjusted the cumulative repayment of loan amounting to ₹761.06 lakh on assets de-capitalised (amounting to ₹1522.13 lakh) for the period up to 31.3.2004, inadvertently due to certain arithmetical/linkage errors in the calculations.

13. Thus, the omission to consider the cumulative repayment of loan amounting to ₹761.06 lakh as on 31.3.2004 by the Commission for the computation of interest on loan in terms of the judgment of the Tribunal dated 13.6.2007, as stated above, is an inadvertent mistake which constitutes an error apparent on the face of the record and the same needs to be rectified.

14. In view of the foregoing, the issues raised by the petitioner in para 2 (b) and (c) fall within the scope of review under Order 47, Rule 1 of the Civil Procedure Code and review of the order dated 21.1.2011 on these counts is allowed.

15. We now proceed to revise the tariff of the generating station after rectification of the errors in the order dated 21.1.2011 as mentioned below:

### **CAPITAL COST**

16. The capital cost for the period 2004-09 arrived at in para 47 of the order dated 21.1.2011 shall stand revised as under:

	<i>(₹ in lakh)</i>				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Opening Capital cost considered in order dated 21.1.2011	114038.20	116696.00	118162.70	119084.72	126824.50
Additional capital expenditure allowed now	2657.80	1466.71	922.02	7739.78	1037.32
<b>Closing Capital cost</b>	<b>116696.00</b>	<b>118162.70</b>	<b>119084.72</b>	<b>126824.50</b>	<b>127861.82</b>
<b>Average Capital cost</b>	<b>115367.10</b>	<b>117429.35</b>	<b>118623.71</b>	<b>122954.61</b>	<b>127343.16</b>

17. Consequently, the additional notional equity in the table under para 51 of the order dated 21.1.2011 has been revised as under:

	<i>(₹ in lakh)</i>				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Additional Notional Equity	797.34	440.01	276.60	2321.93	311.20

### **Return on Equity**

18. The Return on equity allowed under para 52 of the order dated 21.1.2011 has been revised as stated under:

	<i>(₹ in lakh)</i>				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Equity – Opening considered now</b>	57019.10	57816.44	58256.45	58533.05	60854.99
Addition of Equity due to Additional, capital expenditure admitted in the petition	797.34	440.01	276.60	2321.93	311.20
Equity-Closing	57816.44	58256.45	58533.05	60854.99	61166.18
Average equity	57417.77	58036.44	58394.75	59694.02	61010.59
<b>Return on Equity @ 14%</b>	<b>8038.49</b>	<b>8125.10</b>	<b>8175.27</b>	<b>8357.16</b>	<b>8541.48</b>

### **Interest on loan**



19. Interest on loan as worked out in para 53 of the order dated 21.1.2011 is revised as under:

(a) Gross opening loan on normative basis on 1.4.2004 as considered in order dated 21.1.2011 is ₹57019.10 lakh.

(b) Cumulative repayment of loan on normative basis amounting to ₹46639.00 lakh on 1.4.2004 was considered in order dated 9.5.2006. However, on account of cumulative repayment adjustment amounting to ₹761.06 lakh corresponding to assets de-capitalized (amounting to ₹1522.13 lakh) for the period up to 1.4.2004, the cumulative repayment as on 1.4.2004 is revised to ₹45877.94 lakh, which has been considered for the purpose of tariff calculation.

(c) Thus, the revised Net opening normative loan as on 1.4.2004 is ₹11141.16 lakh.

(d) There is addition of notional loan to the tune of ₹1860.46 lakh, ₹1026.69 lakh, ₹645.41 lakh, ₹5417.85 lakh and ₹726.12 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively on account of the admitted additional capital expenditure.

(e) Weighted average rate of interest as considered in order dated 21.1.2011 is considered for calculation of interest on loan.

(f) Normative repayment =  $\frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$

(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 respective periods.

20. The interest on loan computed in para 54 is revised as under:

(₹ In lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Gross Opening loan considered now</b>	57019.10	58879.56	59906.25	60551.66	65969.51
Cumulative Repayment of loan upto previous year	45877.94	48851.46	51671.95	53591.17	54527.98
Net Loan Opening	11141.16	10028.10	8234.30	6960.49	11441.53
Addition of loan due to admitted additional capital expenditure	1860.46	1026.69	645.41	5417.85	726.12
Repayment of loan (Normative)	3058.93	2943.87	1999.12	1105.16	1825.73
Less: Adjustment for de-cap during the period	85.41	123.37	79.91	168.35	60.09
Repayment of loan during the year (net)	2973.52	2820.50	1919.22	936.81	1765.65

Net Loan Closing	10028.10	8234.30	6960.49	11441.53	10402.00
Average Loan	10584.63	9131.20	7597.40	9201.01	10921.77
Weighted Average Rate of Interest on Loan	8.5127%	7.6825%	7.5018%	6.6521%	5.7824%
<b>Interest on Loan</b>	<b>901.04</b>	<b>701.51</b>	<b>569.94</b>	<b>612.06</b>	<b>631.54</b>

### Depreciation

21. Depreciation has been re-calculated applying weighted average rate of depreciation of 3.77% as considered in original order dated 20.11.2008 in Petition No. 46/2007. The depreciation worked out in para 58 of order dated 21.1.2011 is revised as under:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	114038.20	116696.00	118162.70	119084.72	126824.50
Closing capital cost	116696.00	118162.70	119084.72	126824.50	127861.82
Average capital cost	115367.10	117429.35	118623.71	122954.61	127343.16
Depreciable value @ 90%	102841.14	104697.16	105768.67	109666.48	113616.17
Balance depreciable value	10410.81	8027.21	4830.24	4358.67	4166.15
Balance useful life	7.28	6.28	5.28	4.28	3.28
<b>Depreciation</b>	<b>4349.34</b>	<b>4427.09</b>	<b>4472.11</b>	<b>4358.67</b>	<b>4166.15</b>

### Interest on Working capital

22. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 21.1.2011 have been kept unchanged. 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	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock- 1.1/2 months	11474.83	11474.83	11474.83	11506.27	11474.83
Oil stock -2 months	644.48	644.48	644.48	646.25	644.48
O & M expenses	1646.67	1712.50	1780.83	1851.67	1926.67
Maintenance Spares	2754.19	2933.32	3118.10	3382.30	3593.29
Receivables	22112.37	22244.62	22381.89	22595.61	22710.08
<b>Total Working Capital</b>	<b>38632.54</b>	<b>39009.75</b>	<b>39400.13</b>	<b>39982.10</b>	<b>40349.35</b>
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
<b>Total Interest on Working capital</b>	<b>3959.84</b>	<b>3998.50</b>	<b>4038.51</b>	<b>4098.16</b>	<b>4135.81</b>



23. The annual fixed charges determined for the period from 1.4.2004 to 31.3.2009 in order dated 21.1.2011 shall stand revised as under:

<i>(₹ in lakh)</i>					
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on loan	901.04	701.51	569.94	612.06	631.54
Interest on Working Capital	3959.84	3998.50	4038.51	4098.16	4135.81
Depreciation	4349.34	4427.09	4472.11	4358.67	4166.15
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	8038.49	8125.10	8175.27	8357.16	8541.48
O & M Expenses	19760.00	20550.00	21370.00	22220.00	23120.00
<b>Total</b>	<b>37008.70</b>	<b>37802.19</b>	<b>38625.83</b>	<b>39646.06</b>	<b>40594.98</b>

24. Except the above, all other terms and conditions in order dated 21.1.2011 shall remain unchanged.

25. The petitioner shall claim the difference between the fixed charges approved by order dated 21.1.2011 and those approved now in three monthly installments.

26. Review Petition No. 2/2011 in Petition No. 189/2009 stands disposed of at the admission stage, in terms of the above.

**Sd/-**  
**[M.DEENA DAYALAN]**  
**MEMBER**

**Sd/-**  
**[V.S.VERMA]**  
**MEMBER**

**Sd/-**  
**[DR.PRAMOD DEO]**  
**CHAIRPERSON**

