

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Review Petition No. 11/RP/2012

in

Petition No. 282/2009

Coram:

Dr. Pramod Deo, Chairperson

Shri S. Jayaraman, Member

Shri V. S. Verma, Member

Date of Hearing: 18.9.2012

Date of Order: 8.2.2013

IN THE MATTER OF

Review of order dated 13.4.2012 in Petition No.282/2009 regarding determination of generation tariff for Kahalgaon Super Thermal Power Station, Stage-II (3x500 MW) for the period from 1.4.2009 to 31.3.2014.

AND

IN THE MATTER OF

NTPC Ltd

...Petitioner

Vs

1. West Bengal State Electricity Distribution Company Ltd, Kolkata
2. Bihar State Electricity Board, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Ltd., Bhubaneswar
5. Power Department, Govt. of Sikkim, Gangtok
6. Madhya Pradesh Power Trading Ltd., Jabalpur
7. Maharashtra State Electricity Distribution Company Ltd., Mumbai
8. Gujarat Urja Vikas Nigam Limited, Baroda
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Power Development Department, Govt. of J&K, Srinagar
11. Power Department, Union Territory of Chandigarh, Chandigarh
12. Punjab State Electricity Board, Patiala
13. Himachal Pradesh State Electricity Board, Shimla
14. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
15. Ajmer Vidyut Vitaran Nigam Ltd, Ajmer
16. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
17. Chhattisgarh State Power Trading Company Ltd, Raipur
18. Haryana Power Purchase Centre, Haryana
19. BSES-Rajdhani Power Ltd, New Delhi
20. BSES-Yamuna Power Ltd, New Delhi
21. North Delhi Power Ltd, Delhi
22. Uttarakhand Power Corporation Ltd, Dehradun
23. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa
24. Electricity Department, Administration of Daman & Diu, Daman

....Respondents



Parties Present:

1. Shri A K Bishoi, NTPC
2. Shri Rohit Chhabra, NTPC
3. Shri C. K. Mondol, NTPC
4. Shri Ajay Dua, NTPC
5. Shri R. B. Sharma, Advocate, BRPL
6. Shri Manoj Dubey, Advocate, MPPMCL

ORDER

Petition No. 282/2009 was filed by the petitioner, NTPC, for approval of generation tariff in respect of Kahalgaon Super Thermal Power Station, Stage-II (hereinafter referred to as 'the generating station') for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations'). The Commission by its order dated 13.4.2012 approved the capital cost for the period 2009-14 as under:

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Opening capital cost	314673.82	472306.43	473712.43	512426.43	537276.43	563740.43
Projected Additional capital expenditure	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing Capital cost	314673.82	473712.43	512426.43	537276.43	563740.43	564740.43
Average Capital cost	314673.82	473009.43	493069.43	524851.43	550508.43	564240.43

2. The annual fixed charges approved by Commission *vide* its order dated 13.4.2012 is as under:

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Return on Equity	22166.57	33320.20	34733.29	36972.11	38779.47	39746.79
Interest on Loan	14011.99	20195.69	20508.67	21013.57	21398.35	21183.57
Depreciation	16178.37	24308.28	25339.18	26972.48	28291.01	28996.71
Interest on Working Capital	6232.52	9472.24	9590.08	9764.37	9886.67	9988.87
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of secondary fuel	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	73041.17	109809.55	113757.36	119464.20	124290.63	127127.07

3. Aggrieved by the said order, the petitioner has filed this review petition seeking review of the order dated 13.4.2012 on the following issues, namely:

(a) To consider depreciation rate of 'Software' as 33.33% for the purpose of calculating weighted average depreciation rate;

(b) To consider the rate of interest as indicated in respect of the loans mentioned in para-7 of petition and repayment in case of Bond XXIV from 9.9.2011 for calculating the weighted average rate of interest on actual loan in Form-13.

4. The matter was heard on 28.6.2012 on 'admission', and the Commission *vide* its interim order dated 9.8.2012 admitted the review petition on the issue raised in sub-clause (a) in paragraph 2 above. However, the issue raised in sub-clause (b) in paragraph 2 above, was directed to be carried out at the time of final disposal of this application.

5. Reply to the application has been filed by the respondent no. 6 (MPPMCL), respondent no.9, (UPPCL), respondent no. 17 (CSPDCL) and the respondent no. 19 (BRPL) and the petitioner has filed its rejoinder to the said replies.

6. During the hearing on 18.9.2012, the representative of the petitioner made his submissions on the above issues and prayed that the order dated 13.4.2012 be reviewed for the reasons mentioned in the application. The learned counsel for the respondent, BRPL has objected to the claim of the petitioner for review of the said order. Referring to the judgments of the Appellate Tribunal for Electricity in Review Petition No.1/2009 (in Appeal No. 64/2008), the learned counsel submitted that there are definitive limits to the exercise of the power of review under Order 47 Rule 1 of the CPC. He also submitted that as laid down by the Hon'ble Supreme court in the case of Parsion Devi and others V Sumitra Devi and others (1997) 8 SCC 715, a review is by no means an appeal in disguise whereby an erroneous decision is re-heard and corrected and prayed that the review petition be rejected. The representative of the respondent, MPPMCL has also objected to the claim of the petitioner for review of the said order.

7. Heard the parties and examined the documents on record. We now proceed to consider the issues raised by the petitioner, as discussed in subsequent paragraphs.

8. In accordance with Rule 1 Order 47 of the Code of Civil Procedure (CPC), a person aggrieved by an order may apply for a review under the following circumstances:

- (a) On discovery of new and important matter or evidence which after exercise of due diligence was not within his knowledge or could not be produced by him at a time when the order was made;
- (b) An error apparent on the face of the record;
- (c) For any other sufficient reason.

Consideration of depreciation rate of 'Software' for the purpose of calculating weighted average depreciation rate

9. The Commission in the order dated 13.4.2012 while computing the weighted average depreciation rate has considered the depreciation rate of 5.28% for Software. The petitioner in this petition has submitted that the Commission while calculating the weighted average rate of depreciation has inadvertently considered the rate of 5.28% for software instead of 33.33% as considered by the petitioner in Form -11 of the original petition. It has also pointed out that no specified depreciation rate has been prescribed for 'Software' and the depreciation rate corresponding to 'IT equipment' as specified by the Commission is 15% under Appendix -III of the 2009 Tariff Regulations. The petitioner has further submitted that since no specified depreciation rate for 'Software' has been specified, the depreciation rate of 33.33% has been considered based on books of accounts as per accounting policy of the petitioner and as allowed by the Commission during the period 2004-09. Accordingly, the petitioner has prayed that depreciation rate of 5.28% as considered by the Commission is an error apparent on the face of the order and the same may be reviewed by considering the rate of 33.33% as claimed in the original petition. The respondent BRPL has submitted that the depreciation rate considered by the Commission is in accordance with the Appendix-III of the 2009 Tariff Regulations. It has also submitted that 'Software' is not an asset and even if

the same is considered as an asset, the depreciation rate of 5.28% is only applicable. Similar submission has been made by the respondent, CSPDCL. The respondent, UPPCL has submitted that in case of apparent error if any, as claimed by the petitioner, then the Commission may consider the depreciation rate of 15% for IT equipments as per Appendix-III of the 2009 Tariff Regulations, instead of 5.28% .It has also stated that the depreciation rate of 33.33% as claimed by the petitioner is arbitrary and hence may be rejected. The respondent MPPMCL has submitted that the Tariff policy notified by the Ministry of Power, Govt. of India provides that the Commission may notify the rates of depreciation in respect of generation and transmission assets and accordingly, the depreciation rates notified by the Commission would be applicable for the purpose of tariff as well as accounting. It has also submitted that the prayer of the petitioner for consideration of the depreciation rate of 'Software' as 33.33% as per books of accounts is not tenable. It has also added that the failure of the petitioner to provide the breakup of the assets cannot be a ground for review of the order. In response to the above, the petitioner has submitted that 'Software' is used in IT equipment and the useful life of 'Software' is much less than the associated IT equipments. It has also submitted that the rate of 5.28% considered for 'Software' is an error and is not consistent with the depreciation rate considered for IT equipments and hence needs to be reviewed.

10. The submissions have been considered. It is noticed that Appendix-III to the 2009 Tariff Regulations which provides the depreciation schedule for assets, does not include 'Software' as a standalone asset or as part of the 'IT equipment' for which 15% has been specified as the depreciation rate. However, the claim of the petitioner that the depreciation rate of 33.33% should be considered based on books of accounts and also as per earlier tariff orders of the Commission for the period 2004-09 is not acceptable since determination of tariff of the generating station for the period 2009-14 is governed by the provisions of the 2009 Tariff Regulations. The submission of the respondent, BRPL that 'software' cannot be

termed as an 'asset' is not acceptable, since, according to us 'software' is an intangible asset and cannot be used in isolation of IT equipments. With this background and keeping in view that IT equipments include 'Software', the Commission by a conscious decision had allowed the depreciation rate of 15% for 'software' in its various orders determining the tariff for other generating stations of the petitioner for the period 2009-14. This was inadvertently overlooked by the Commission at the time of determination of tariff of this generating station for 2009-14. The non-consideration of the earlier orders of the Commission allowing the depreciation rate of 15% for 'software', in respect of other generating stations of the petitioner for the period 2009-14, to the instant case, is according to us, an error apparent on the face of the order. Thus the review of order on this count is allowed. Accordingly, in terms of our earlier orders for the period 2009-14 determining tariff for other generating stations of the petitioner and for the purpose of uniformity, we allow the depreciation rate of 15% for 'Software' in respect of this generating station for 2009-14.

Calculation of Weighted Average Rate of Interest on actual loan

11. The petitioner has submitted that the Commission in its order while calculating the weighted average rate of interest had inadvertently not considered repayment in case of Bond-XXIV and has considered higher rate of interest in respect of some of the actual loans [(SBP Syndicate (T-I, D-4), SBI-III (T-I, D-2, 6,8)] from that submitted by the petitioner. The submissions have been examined. It is noticed that certain inadvertent linkage errors had occurred in the calculation of IDC, thereby consequentially affecting to some extent the rates considered in the computation of Weighted Average Rate of Interest on actual loans. Accordingly, review is allowed and the inadvertent error is rectified by this order.

12. The issues raised by the petitioner in this review petition is disposed of in terms of the above findings. Based on this, we proceed to revise the annual fixed charges of the generating station in the subsequent paragraphs.

13. Based on the above discussions, the annual fixed charges for the generating station for 2009-14 are revised as under:

Capital Cost

14. The Commission in its order dated 13.4.2012 has considered the capital cost of ₹314673.82 lakh as on 1.4.2009 and ₹472306.43 lakh (after removal of the differential IDC and on account of FIFO-Average adjustments, totaling ₹1428.33 lakh) as on 20.3.2010. After rectification of the linkage error in the weighted average rate of interest calculation prior to the declaration of commercial operation, the computation of IDC stands revised. As a result of this, the amount to be deducted on account of FIFO-Average adjustment is revised to ₹1597.99 lakh. Accordingly, the capital cost as on 20.3.2010 (COD of generating station) is revised to ₹472136.77 lakh.

15. Accordingly, the capital cost approved *vide* order dated 13.4.2012 for the purpose of tariff is revised as under:

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Opening capital cost	314673.82	472136.77	473542.77	512256.77	537106.77	563570.77
Add: Projected Additional Capital Expenditure	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing capital cost	314673.82	473542.77	512256.77	537106.77	563570.77	564570.77
Average capital cost	314673.82	472839.77	492899.77	524681.77	550338.77	564070.77

Debt- Equity Ratio

16. Debt-equity ratio as considered in order dated 13.4.2012 remain unchanged.

Return on Equity

17. On account of change in the capital cost as above the Return on Equity is revised as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Normative Equity - Opening	94402.15	141641.03	142062.83	153677.03	161132.03	169071.23
Add: Addition to equity on account of Projected Additional Capital Expenditure	0.00	421.80	11614.20	7455.00	7939.20	300.00
Normative Equity - Closing	94402.15	142062.83	153677.03	161132.03	169071.23	169371.23
Average Equity	94402.15	141851.93	147869.93	157404.53	165101.63	169221.23
Return on Equity @ 23.481%	22166.57	33308.25	34721.34	36960.16	38767.51	39734.84

18. Interest on loan has been worked out as under:

(a) The gross normative loan amounting to ₹220271.67 lakh as on 1.4.2009, considered in order dated 13.4.2012 has been considered for the purpose of revision of tariff. Further, the gross normative loan corresponding to 70% of the admissible capital cost approved above, works out to ₹330495.74 lakh as on 20.3.2010.

(b) Cumulative repayment amounting to ₹6721.41 lakh as on 1.4.2009, as considered in order dated 13.4.2012 has been considered for the purpose of revision of tariff. Further, on account of change in capital cost as on COD of the generating station, the cumulative repayment as on 20.3.2010 works out to ₹22385.02 lakh.

(c) Accordingly, the net normative opening loan as on 1.4.2009 and 20.3.2010 works out to ₹213550.26 lakh and ₹308110.72 lakh, respectively.

(d) Addition to normative loan on account of projected additional capital expenditure approved above has been considered.

(e) Depreciation allowed has been considered as repayment of normative loan during the respective years of the tariff period 2009-14. Further, proportionate adjustment has been made to the repayments of loan corresponding to the discharges of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. However, as the petitioner has not furnished the break-up of combined discharges/projected discharges i.e. whether pertaining to liability existing as on 1.4.2009 (requiring adjustment to be made) or liability added after 1.4.2009 (for which no adjustment is to be made since additions allowed on or after 1.4.2009 are on cash basis), no adjustment has been made for the present and adjustments, if any, would be made at the time of truing up, based on detailed break-up to be furnished by the petitioner.

(f) The rate of interest on loan as existing as on 1.4.2009 and 20.3.2010 (on annual rest basis as furnished in the IDC calculations) has been considered to calculate the Weighted Average Rate of Interest (WAROI) for the period from 1.4.2009 to 19.3.2010 and from 20.3.2010 to 31.3.2014, respectively. Further, in line with the various orders of the Commission and confirmed by the judgments of the Appellate Tribunal, actual repayment of loan has been calculated by applying the Average method instead of FIFO method (as considered by the petitioner). Further, the actual

loan portfolio drawn up to COD of the generating station (as submitted by petitioner) has been considered.

(g) The petitioner has considered surveillance fee of 0.03% in addition to rate of interest attached to Bond XIX, Bond XXI, Bond XXIII, Bond XXVIII and Bond XXIV (from 1.4.2011 to 31.3.2014) to arrive at the WAROI. Accordingly, Interest rates for the aforementioned Bonds considered in the actual loan portfolio have been arrived at after considering the surveillance fee of 0.03%.

(h) Average net loan is calculated as average of opening and closing.

19. The interest on normative loan computation is as under:

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Gross Opening Loan	220271.67	330495.74	331479.94	358579.74	375974.74	394499.54
Cumulative Repayment of Loan	6721.41	22385.02	23184.48	48561.92	75544.95	103847.45
Net Loan Opening	213550.26	308110.72	308295.46	310017.82	300429.79	290652.09
Addition of loan due to projected Additional Capital Expenditure	0.00	984.20	27099.80	17395.00	18524.80	700.00
Repayment of Normative loan	15663.61	799.46	25348.56	26983.03	28302.50	29008.70
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	0.00	0.00	28.88	0.00	0.00	0.00
Net Repayment	15663.61	799.46	25377.44	26983.03	28302.50	29008.70
Net Loan Closing	197886.65	308295.46	310017.82	300429.79	290652.09	262343.39
Average Loan	205718.46	308203.09	309156.64	305223.81	295540.94	276497.74
Weighted Average Rate of Interest on Loan	6.7792%	6.5012%	6.5879%	6.8443%	7.2079%	7.6390%
Interest on Loan	13946.01	20036.87	20366.91	20890.42	21302.35	21121.55

Depreciation

20. Commission vide its order dated 13.4.2012 has considered the weighted average rate of depreciation of 5.1413% for the period from 1.4.2009 to 19.3.2010 and 5.1391% from 20.3.2010 onwards to 2013-14, considering the depreciation rate of 5.28% for 'Software' as against petitioner's claim of 33.33%. However, on account of the depreciation rate of 15% considered for "Software" by this order, the weighted average rate of depreciation is revised to 5.1469% for the period from 1.4.2009 to 19.3.2010 and 5.1427% from 20.3.2010 onwards

to 2013-14. This has been considered for the purpose of calculation of depreciation. The cumulative depreciation as on 31.3.2009 as per order dated 29.11.2011 in Petition No.125/2009 works out to ₹7080.43 lakh. Further, proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the cumulative depreciation as on 1.4.2009 is revised to ₹6721.41 lakh. Further, proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. However, since the petitioner has not furnished the break-up of the combined discharges/projected discharges i.e. whether they pertaining to liability existing as on 1.4.2009 (requiring adjustment to be made) or liabilities added after 1.4.2009 (for which no adjustment is to be made), no adjustment is being made for the present and the adjustment, if any, will be made at the time of truing up based on detailed break-up to be furnished by the petitioner.

21. Depreciation has been calculated as under:

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.03.2010	20.3.2010 to 31.3.2010				
Opening capital cost	314673.82	472136.77	473542.77	512256.77	537106.77	563570.77
Add: Projected Additional Capital Expenditure	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing capital cost	314673.82	473542.77	512256.77	537106.77	563570.77	564570.77
Average capital cost	314673.82	472839.77	492899.77	524681.77	550338.77	564070.77
Rate of depreciation	5.1469%	5.1427%	5.1427%	5.1427%	5.1427%	5.1427%
Depreciable value @ 90%	283206.44	425555.80	443609.80	472213.60	495304.90	507663.70
Balance depreciable value	276485.03	403170.78	420425.32	423651.68	419759.95	403816.25
Depreciation	15663.61	799.46	25348.56	26983.03	28302.50	29008.70
Depreciation (annualized)	16196.08	24316.93	25348.56	26983.03	28302.50	29008.70
Cumulative depreciation at the end of the period	22385.02	23184.48	48533.04	75544.95	103847.45	132856.15
Add: Cumulative depreciation adjustment on account of discharges out of un-discharged liabilities	0.00	0.00	28.88	0.00	0.00	0.00

deducted as on 1.4.2009						
Cumulative depreciation (at the end of the period)	22385.02	23184.48	48561.92	75544.95	103847.45	132856.15

22. Target Availability of 85% as considered in order dated 13.4.2012 remain unchanged.

O & M Expenses

23. O&M expenses as considered in order dated 13.4.2012 remain unchanged.

Interest on Working Capital

24. **Receivables:** On account of change in various components as above, receivable component of the working capital have been worked out on the basis of two months of fixed and variable charges. For this purpose, the operational parameters and weighted average price of fuel as considered in order dated 13.4.2012 has been retained. Accordingly, interest on working capital has been calculated by applying SBI PLR of 12.25% as considered in order dated 13.4.2012. The necessary details in support of calculation of interest on working capital are as under:

	2009-10		2010-11	2011-12	(₹ in lakh)	
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010			2012-13	2013-14
Cost of coal for 1.1/2 months	14905.26	22744.92	22744.92	22807.23	22744.92	22744.92
Cost of secondary fuel oil for 2 months	241.95	610.52	610.52	612.19	610.52	610.52
Maintenance spares	2600.00	3770.00	3984.60	4213.70	4454.40	4709.60
Receivables	32038.99	48600.56	49261.56	50299.15	51025.25	51503.86
O&M Expenses	1083.33	1570.83	1660.25	1755.71	1856.00	1962.33
Total working capital	50869.54	77296.84	78261.85	79687.99	80691.09	81531.23
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	6231.52	9468.86	9587.08	9761.78	9884.66	9987.58

25. The annual fixed charges for the period 2009-14 approved by order dated 13.4.2012 is revised as under:

	2009-10		2010-11	2011-12	(₹ in lakh)	
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010			2012-13	2013-14
Return on Equity	22166.57	33308.25	34721.34	36960.16	38767.51	39734.84
Interest on Loan	13946.01	20036.87	20366.91	20890.42	21302.35	21121.55
Depreciation	16196.08	24316.93	25348.56	26983.03	28302.50	29008.70
Interest on Working Capital	6231.52	9468.86	9587.08	9761.78	9884.66	9987.58
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of secondary fuel oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	72991.90	109644.04	113610.02	119337.05	124192.16	127063.80

Note: 1) All figures are on annualized basis.

2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.

26. The difference between the annual fixed charges determined by this order and those determined by order dated 13.4.2012 shall be adjusted by the parties in six equal monthly installments, in terms of the proviso to Regulation 5(3) of the 2009 Tariff Regulations.

27. Except the above, all other terms contained in the order dated 13.4.2012 remains unchanged.

28. Review Petition No. 11/2012 is disposed of as above.

Sd/-
[V. S. Verma]
Member

Sd/-
[S. Jayaraman]
Member

Sd/-
[Dr. Pramod Deo]
Chairperson