CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Review Petition No. 22/2012
in
Petition No. 261/2009

Coram:
Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V. S. Verma, Member
Shri M. Deena Dayalan, Member

Date of Hearing: 18.12.2012
Date of Order: 22.4.2013

IN THE MATTER OF

Review of order dated 7.6.2012 in Petition No. 261/2009 regarding determination of generation tariff for Rihand Super Thermal Power Station Stage-I (1000 MW) for the period from 1.4.2009 to 31.3.2014.

AND

IN THE MATTER OF

NTPC Ltd **…Petitioner**

Vs

1. Uttar Pradesh Power Corporation Limited, Lucknow
2. Ajmer Vidyut Vitaran Nigam Ltd, Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Tata Power Delhi Distribution Ltd, Delhi
6. BSES-Rajdhani Power Ltd, New Delhi
7. BSES-Yamuna Power Ltd, Delhi
8. Punjab State Electricity Board, Patiala
9. Haryana Power Purchase Centre, Panchkula
10. Himachal Pradesh State Electricity Board, Shimla
11. Power Development Department, Government of J&K, Jammu
12. Engineering Department, Union Territory of Chandigarh, Chandigarh
13. Uttarakhand Power Corporation Ltd, Dehradun **….Respondents**

Parties Present:

1. Shri Ajay Dua, NTPC
2. Shri Shankar Saran, NTPC
3. Shri Navneet Goel, NTPC
4. Shri Vivek Kumar, NTPC
5. Shri S. K Sharma, NTPC
6. Shri R B Sharma, Advocate, BRPL
7. Shri Manish Garg, UPPCL

ORDER

Petition No.261/2009 was filed by the petitioner, NTPC for approval of generation tariff in respect of Rihand Super Thermal Power Station, Stage-I (1000 MW) (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 7.6.2012 approved the capital cost of the generating station as under:

(₹in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening capital cost	240456.49	240489.02	243082.40	243088.40	243688.40
Additional capital expenditure	32.52	2593.38	6.00	600.00	13600.00
Closing capital cost	240489.02	243082.40	243088.40	243688.40	257288.40
Average capital cost	**240472.76**	**241785.71**	**243085.40**	**243388.40**	**250488.40**

2. The annual fixed charges determined for the generating station for the period 2009-14 as under:

(₹in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Depreciation	4602.51	4788.13	4645.35	4709.52	5168.17
Interest on Loan	28.52	0.00	0.00	0.00	23.42
Return on Equity	28081.66	28174.15	28265.71	28287.05	28787.20
Interest on Working Capital	4617.76	4667.73	4723.00	4762.73	4832.73
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of Secondary fuel oil	1603.37	1603.37	1607.76	1603.37	1603.37
Compensation Allowance	350.00	500.00	650.00	650.00	650.00
Total	**52283.82**	**53473.37**	**54421.82**	**55372.67**	**57304.88**

3. Aggrieved by the said order, the petitioner has sought review on following issues:

(*i*) Disallowance of capital expenditure on account of CEA approved schemes and other schemes,

(ii) Disallowance of Capital expenditure for Phasing out of Halon fire fighting system with alternate Inert gas, and

(iii) Cumulative depreciation adjustment in respect of un-discharged liability as on 31.3.2009.

4. The petition was heard on 'admission' on 25.9.2012 and the Commission by its interim order dated 14.11.2012 admitted the review petition on the issues raised in clauses (ii) and (iii) of paragraph 3 above. The petitioner however did not press for the issue related to the disallowance of capital expenditure on account of CEA approved schemes and other schemes, as stated in clause (i) of paragraph 3 above.

5. Reply to the review petition has been filed by the respondent No.1, UPPCL and the respondent No.6, BRPL.

6. 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.

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:

Disallowance of Capital expenditure for Phasing out of Halon fire fighting system with alternate Inert gas

8. The petitioner in the original petition had claimed ₹435.97 lakh during 2009-10, ₹2496.72 lakh during 2010-11, ₹164.20 lakh during 2011-12, ₹4436.55 lakh during 2012-13 and ₹2298.15 lakh during 2013-14 for various Renovation & Modernization (R&M) schemes, under Regulation 9(2)(ii) of the 2009 Tariff Regulations. This also included the claim for an expenditure of ₹192.38 lakh during 2010-11 towards the Phasing out of Halon fire fighting system with alternate Inert gas. The Commission by its order dated 7.6.2012 after considering the submissions of the parties disposed of the prayer of the petitioner for capitalization of expenditure towards various R&M schemes as under:

> "22. The submissions of the parties have been considered. The additional capital expenditure claimed for capital assets for different Renovation & Modernization schemes approved by CEA as indicated in Serial nos.1 to 32 in the table under para 19 above cannot be considered under the provisions of Regulation 9(2) (ii) of the 2009 Tariff Regulations, since the generating station has not completed useful life of 25 years. In terms of provisions of Regulation 10 of the 2009 Tariff Regulations, the expenditure on Renovation and Modernization for the purpose of extension of life of the generating station beyond the useful life would be applicable only after completion of useful life of 25 years. Moreover, the petitioner is entitled for compensation allowance in terms of Regulation 19(e) of the 2009 Tariff Regulations to meet expenses on new assets of capital nature including in the nature of minor assets after completion of 10 years of useful life up to 25 years. In view of this, the capitalization of expenditure for Renovation & Modernization schemes as indicated in serial nos.1 to 32 of the table under paragraph 19 above, along with its de-capitalization is not allowed."

9. The petitioner in the instant petition has submitted that the said asset is required for statutory compliance under National Fire Protection Association Standard on Clean Agent Fire Extinguishing system (NFPA-2001). It has also submitted that similar work has already been allowed by the Commission in its tariff order dated 20.4.2012 in Petition No. 239/2009 (Anta GPS), order dated 23.5.2012 in Petition No. 270/2009 (Auraiya GPS) and order dated 14.6.2012 in Petition No. 224/2012 (Dadri GPS) for the period 2009-14. Accordingly, the petitioner has prayed that the capital expenditure for replacement of halon system may be allowed.

10. The respondent, UPPCL in its reply has pointed out that the petitioner has not established that there is error on the face of the record and has submitted that the claim of the petitioner may be rejected. During the hearing, the representative of the respondent also submitted that the petitioner has not provided the de-capitalization amount in respect of the expenditure of ₹192.38 lakh claimed on account of phasing out of Halon firefighting system with alternate inert gas during 2010-11 and prayed that the claim cannot be considered in this petition.

11. The learned counsel for the respondent, BRPL has submitted that the claim for additional capitalization on phasing out of Halon system fire fighting system can be considered only when there is change in law under Regulation 9(2) of the 2009 Tariff Regulations. He also submitted that the claim of the petitioner does not fall under the 'definition' clause provided under Regulation 3(9) of the 2009 Tariff Regulations. The learned counsel further submitted that the petitioner has not enclosed any notification/order or any document to show that it is entitled for the said expenditure under this head. The learned counsel added that the expenditure on similar works allowed by the Commission in the petitions relating to gas based generating stations does not automatically entitle the petitioner to seek capitalization of expenditure in respect of its thermal power generating stations since there are distinguishing features with different facts and circumstances in respect of both gas and thermal based generating stations, and the same are not comparable. He further submitted that the review petition filed by the petitioner is in the nature of an appeal in disguise, and the error in judgment cannot be cured by way of a review petition. He also relied upon the judgment of the Appellate Tribunal for Electricity in Review Petition No. 7/2009 (in Appeal No. 85/2007) in support of

the contention that the request of the petitioner to consider the whole issue afresh by making submissions which were presented before the Commission in the original petition cannot be permissible in law.

12. We have examined the matter and considered the documents available on record. The petitioner in justification of its claim for an expenditure of ₹192.38 lakh for 2010-11 in respect of phasing out of Halon system fire fighting system under Regulation 9(2)(ii) had in its original petition dated 9.11.2009 and amended petition dated 16.3.2011submitted as under:

> "Halon fire protection system is provided for CCR & CER HALON system of permanent fire fighting system uses substances which are Ozone depleting in nature. As per the Environment (Protection) Act 1986, the Central Government laid down rules for Ozone Depleting Substances (Regulation and Control) Rules, 2000. As per this, no person or enterprise shall engage in any activity that uses ozone depleting substances unless he is registered with the authority. As per the Montreal Protocol on substances that deplete the Ozone layer, plants using Ozone depleting substances must phase out these systems and adopt systems which use substances that do not deplete the Ozone layer. Hence it is proposed to replace Halon gas fire protection system with alternate inert gas."

13. The Commission in its order dated 7.6.2012 had rejected the capitalization of the expenditure for various R&M schemes (which includes the phasing out of halon system) on the ground that the generating station was not eligible for R&M scheme prior to the completion of useful life of 25 years as per Regulation 10 of the 2009 Tariff Regulations and that the petitioner was entitled to compensation allowance in terms of Regulation 19(e) of the 2009 Tariff Regulations to meet the expenses on new assets of capital nature including minor assets after completion of 10 years of useful life upto 25 years. This according to the petitioner is an inadvertent error since the asset is required for statutory compliance under the National Fire Protection Association Standard on Clean Agent Fire Extinguishing system (NFPA-2001) and would be admissible under Regulation

9(2)(ii) of the 2009 Tariff Regulations. i.e Change in law. The respondent, BRPL has submitted that the claim of the petitioner does not fall under the scope of the definition of change in law, in terms of Regulation 3(9) of the 2009 Tariff Regulations. In response to a specific query by the Commission during the hearing as to how the claim falls under Regulation 9(2)(ii), the petitioner has clarified that in accordance with the provisions of the Ozone Depleting Substances (Regulation and Control) Rules, 2000 (the Rules), the generating companies are allowed to continue with the existing fire fighting system for a period of 10 years after which the production and servicing of the same was stopped. Hence the replacement of halon gas protection system with alternate inert gas was undertaken during 2010-11 for which the expenditure has been claimed in the petition.

14. We have considered the submissions of the parties. On perusal of Schedule IV of the said Rules (Regulation on consumption of ozone depleting substances on end use basis) it is noticed that the phase out time and for switching over to non ozone depleting substance technology in respect of fire extinguishers and fire extinguishing systems is 10 years. The petitioner has claimed the expenditure on this count during the year 2010-11 after completion of 10 years i.e 1.1.2010. In the circumstances, since the expenditure incurred is towards statutory compliance with the provisions of the Rules as aforesaid, we are of the view that the expenditure falls within the ambit of Change in law under Regulation 9(2)(ii) of the 2009 Tariff Regulations. These aspects have been overlooked by the Commission at the time of passing of the order dated 7.6.2012 and hence it is an error apparent on the face of the order.

15. Another contention of the respondent, BRPL is that the expenditure allowed by the Commission on similar works/asset in respect of gas based generating stations of the

petitioner shall not be made applicable to the thermal generating stations in view of the distinguishable facts and circumstances. In our view, both, gas based generating stations and thermal generating stations require fire protection system as per the prevailing requirement and are in conformity with the applicable laws and rules. Since the Rules require switch over to non ozone depleting substance technology, it has to be complied with in case of all generating stations irrespective of the nature of the fuel used. It is noticed that the Commission had also allowed expenditure for the said work in its orders dated 12.10.2012 and 12.9.2012 in respect of the thermal generating stations of the petitioner namely, Korba STPS (I and II) in Petition No. 264/2009 and Vindhyachal STPS (Petition No. 227/2009) respectively for the period 2009-14. However, this requirement in respect of this generating station has been inadvertently overlooked while passing the order dated 7.6.2012. In our view, the error needs to be rectified in review. Accordingly, the additional capital expenditure of ₹192.38 lakh for 2010-11 is allowed to be capitalized along with the de-capitalized amount under Regulation 9(2)(ii) of the 2009 Tariff Regulations. The respondent, UPPCL during the hearing, while objecting to the capitalization of the said asset has submitted that the de-capitalization amount has not been provided by the petitioner. In response, the petitioner has clarified that an amount of ₹55.23 lakh has been de-capitalized for the said asset. In view of this, capitalization of a net expenditure of ₹137.15 lakh (₹192.38-55.23 lakh) is allowed for 2010-11 under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

Cumulative depreciation adjustment in respect of un-discharged liability as on 31.3.2009

16. The petitioner has submitted that out of the total un-discharged liability of ₹2660.76 lakh as on 31.3.2009, ₹2580.67 lakh is towards land cost. It has also submitted that since

depreciation for freehold land is 'zero', the same should not be considered for cumulative depreciation adjustment. Accordingly, the petitioner has prayed that the calculation error in respect of cumulative depreciation adjustment may be modified accordingly. The respondents, BRPL and UPPCL have objected to the said prayer on the ground that the petitioner had not submitted any details and the information provided was sketchy. However, the Commission in its record of the proceedings of the hearing on 18.12.2012 directed the petitioner to submit detailed calculations in regard to its prayer for modification of the calculations for cumulative depreciation adjustment, with copy to the respondents. In compliance with the said directions, the petitioner vide its affidavit dated 9.1.2013 has submitted the detailed calculations in support of its prayer. On scrutiny, it is noticed that an inadvertent error had crept in our order dated 7.6.2012 in the adjustment of un-discharged liabilities of freehold land in depreciation and the same is to be rectified. In view of this, the prayer of the petitioner is allowed and review on this count is allowed.

17. Based on the above discussions, the additional capital expenditure allowed in para 30 of the order dated 7.6.2012 is revised as under:

(₹ in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Additional capital expenditure	3.36	137.15	6.00	600.00	13600.00
Liabilities discharged	29.16	2593.38	0.00	0.00	0.00
Additional capital expenditure allowed	**32.52**	**2730.53**	**6.00**	**600.00**	**13600.00**

18. Accordingly, the capital cost considered for the purpose of tariff for 2010-14 in paragraph 31 of the order dated 7.6.2012 is revised as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost	240456.49	240489.02	243219.55	**243225.55**	243825.55
Additional capital expenditure	32.52	2730.53	6.00	600.00	13600.00
Closing capital cost	**240489.02**	**243219.55**	**243225.55**	**243825.55**	**257425.55**
Average capital cost	**240472.76**	**241854.28**	**243225.55**	**243525.55**	**250625.55**

19. Return on Equity as allowed in paragraph 36 of the order dated 7.6.2012 is revised as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	119588.26	119598.01	120417.17	120418.97	120598.97
Addition of Equity due to Additional capital expenditure	9.76	819.16	1.80	180.00	4080.00
Normative Equity-Closing	119598.01	120417.17	120418.97	120598.97	124678.97
Average Normative Equity	119593.13	120007.59	120418.07	120508.97	122638.97
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for the year 2008-09	33.990%	33.990%	33.990%	33.990%	33.990%
Rate of Return on Equity (Pre Tax)	23.481%	23.481%	23.481%	23.481%	23.481%
Return on Equity (Pre Tax)-Annualised	**28081.66**	**28178.98**	**28275.37**	**28296.71**	**28796.86**

20. The interest on loan computed in paragraph 39 of the order dated 7.6.2012 is revised as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	120868.24	120891.01	122802.38	122806.58	123226.58
Cumulative repayment of loan upto previous year	118071.58	120891.01	122802.38	122806.58	123226.58
Net Loan Opening	2796.66	0.00	0.00	0.00	0.00
Addition due to Additional capitalisation	22.77	1911.37	4.20	420.00	9520.00
Repayment of loan during the year	2824.50	2401.18	4.20	420.00	5211.65
Less: Repayment adjustment on account of de-capitalization	0.00	38.66	0.00	0.00	0.00
Add: Repayment adjustment on account of discharges / reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	(-) 5.07	(-) 451.15	0.00	0.00	0.00
Net Repayment	2819.43	1911.37	4.20	420.00	5211.65
Net Loan Closing	0.00	0.00	0.00	0.00	4308.35

Average Loan	1398.33	0.00	0.00	0.00	2154.18
Weighted Average Rate of Interest on Loan	2.0396%	1.2029%	1.1109%	1.0978%	1.0762%
Interest on Loan	**28.52**	**0.00**	**0.00**	**0.00**	**23.18**

Depreciation

21. The value of freehold land included in gross block on accrual basis is ₹ 5669.37 lakh (inclusive of liabilities of freehold land amounting to ₹2580.67 lakh) as on 1.4.2009. Subsequently, full amount of liabilities related to freehold land (₹2580.67 lakh) has been discharge in the year 2010-11. On account of above changes, computation of depreciation in the table under paragraph 41 of the order dated 7.6.2012 is revised as under:

(₹in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening capital cost	240456.49	240489.02	243219.55	243225.55	243825.55
Closing capital cost	240489.02	243219.55	243225.55	243825.55	257425.55
Average capital cost	240472.76	241854.28	243225.55	243525.55	250625.55
Value of Freehold land (on accrual basis)	5669.37	5669.37	5669.37	5669.37	5669.37
Liabilities in above	2580.67	0.00	0.00	0.00	0.00
Value of Freehold land (on cash basis)	3088.70	5669.37	5669.37	5669.37	5669.37
Depreciable value @ 90%	213645.65	213727.72	213797.86	214070.56	220460.56
Remaining useful life at the beginning of the year	7.25	6.25	5.25	4.25	3.25
Balance depreciable value	33782.37	29182.70	24616.36	20200.23	21837.23
Depreciation (annualized)	**4659.64**	**4669.23**	**4688.83**	**4753.00**	**5211.65**
Cumulative depreciation at the end	184522.92	189214.25	193870.33	198623.32	203834.97
Less: Cumulative depreciation reduction due to de-capitalization	0.00	42.38	0.00	0.00	0.00
Less: Cumulative depreciation adjustment on account of discharges / reversal of liabilities out of liabilities deducted as on 1.4.2009	(-) 22.10	(-) 9.63	0.00	0.00	0.00
Net Cumulative depreciation (at the end of the period)	184545.02	189181.50	193870.33	198623.32	203834.97

Interest on working capital

22. Consequent upon the above, the receivable component of the working capital is revised as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges -2 months	14303.68	14303.68	14342.87	14303.68	14303.68
Fixed Charges - 2 months	8723.69	8892.82	9079.34	9237.82	9559.81
Total	**23027.37**	**23196.50**	**23422.21**	**23541.50**	**23863.50**

23. Interest on working capital is worked out as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Coal Stock – 1.1/2 months	10727.76	10727.76	10757.15	10727.76	10727.76
Oil Stock – 2 months	267.23	267.23	267.96	267.23	267.23
O&M expenses – 1 month	1083.33	1145.00	1210.83	1280.00	1353.33
Maintenance Spares	2600.00	2748.00	2906.00	3072.00	3248.00
Receivables – 2 months	23027.37	23196.50	23422.21	23541.50	23863.50
Total working capital	**37705.69**	**38084.49**	**38564.16**	**38888.49**	**39459.82**
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	**4618.95**	**4665.35**	**4724.11**	**4763.84**	**4833.83**

24. Based on the above, the annual fixed charges for the period 2009-14 is revised as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4659.64	4669.23	4688.83	4753.00	5211.65
Interest on Loan	28.52	0.00	0.00	0.00	23.18
Return on Equity	28081.66	28178.98	28275.37	28296.71	28796.86
Interest on Working Capital	4618.95	4665.35	4724.11	4763.84	4833.83
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of secondary fuel Oil	1603.37	1603.37	1607.76	1603.37	1603.37
Compensation Allowance	350.00	500.00	650.00	650.00	650.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	**52342.14**	**53356.93**	**54476.07**	**55426.91**	**57358.88**

Note :*(a) All figures are on annualized basis.(b) 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 figures in columns.*

25. The difference between the annual fixed charges determined by this order and those determined by order dated 7.6.2012 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.

26. Except the above, all other terms contained in the order dated 7.6.2012 remains unchanged.

27. Review Petition No. 22/2012 is disposed of in terms of the above.

Sd/-	***Sd/-***	***Sd/-***	***Sd/-***
[M.Deena Dayalan]	**[V. S. Verma]**	**[S. Jayaraman]**	**[Dr. Pramod Deo]**
Member	**Member**	**Member**	**Chairperson**