

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram :
1. Shri. Ashok Basu, Chairperson
2. Shri Bhanu Bhushan, Member
3. Shri A.H. Jung, Member

Review Petition No. 59/2006
in
Petition No. 153/2004

In the matter of

Review of order dated 9.5.2006 in Petition No. 153/2004, for approval of tariff in respect of Farakka STPS, for the period 1.4.2004 to 31.3.2009.

And in the matter of

NTPC Limited.

.....Petitioner

Vs

1. West Bengal State Electricity Board, Kolkata
2. Bihar State Electricity Board,, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Limited, Bhubaneshwar
5. Damodar Valley Corporation, Kolkata
6. Department of Power, Government of Sikkim, Gangtok
7. Tamil Nadu Electricity Board, Chennai
8. Electricity Department, Govt. of Pondicherry, Pondicherry
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Power Development Deptt. Govt of Jammu & Kashmir, Jammu
11. Chief Engineer & Secy, Engineering Deptt. Chandigarh Administration, Chandigarh
12. Madhya Pradesh Power Trading Corporation Ltd, Jabalpur
13. Gujarat Urja Vikas Nigam Ltd, Vadodra
14. Electricity Deptt., Administration of Daman & Diu, Daman
15. Electricity Deptt., Administration of Dadra & Nagar Haveli, Silvassa
16. Delhi Transco Ltd, New Delhi
17. Maharashtra State Electricity Distribution Company Ltd, Mumbai

---Respondents

The following were present

1. Shri. S.N.Goel, NTPC
2. Shri I. J. Kapoor, NTPC
3. Shri Guryog Singh, NTPC
4. Shri Vivake Kumar, NTPC
5. Shri V.K.Padha, NTPC

ORDER
(DATE OF HEARING : 7.9.2006)

This application has been made for review of order dated 9.5.2006, passed by the Commission in Petition No.153/2004, determining the tariff in respect of Farakka Super Thermal Power Station (hereinafter "the generating station), for the period 1.4.2004 to 31.3.2009.

2. The petitioner has contended that there are certain fundamental errors in the said order dated 9.5.2006 and accordingly has sought review. According to the petitioner, the order needs to be reviewed on account of the following errors present therein:

- (a) Not considering, First-In-First-Out (FIFO) method of loan repayment,
- (b) Impact of de-capitalisation of assets on cumulative repayment of loan,
- (c) De-capitalisation of liabilities-Impact adjustment for prior period,
- (d) Admissibility of depreciation up to 90% where depreciation not recovered due to non-achievement of target availability,
- (e) Reimbursement of publication expenditure, and
- (f) Life of the generating station.

First-In-First-Out (FIFO) method of repayment.

3. The petitioner has stated that it borrows money on the basis of consolidated corporate balance sheet which enables it to finalize loan on favourable terms. According to the petitioner, borrowing at the corporate level instead of at the specific project level enables it to reduce the cost of borrowing. In the absence of any specific stipulation to the contrary attached to a particular borrowing, the petitioner adopts FIFO for repayment of loans. This is particularly beneficial as the first drawls are generally at higher rate of interest and later drawls are at lower rate of interest in the current interest rate regime. The petitioner also has the flexibility of re-negotiating loans on reduced rate of interest for subsequent drawal with the same lender.

4. According to the petitioner, it has been adopting FIFO method to allocate interest liability to its generating stations. The Commission has, however, not considered FIFO method of repayment and has followed the average method of repayment of loan, irrespective of the terms and conditions of the loan agreements. According to the petitioner, adoption of FIFO method of loan repayment would be more beneficial to the respondent beneficiaries of the generating station. The petitioner has accordingly sought review.

5. We are not satisfied with the submission.

6. With regard to FIFO method, the petitioner had stated in the tariff petition No. 153/2004 that -

(a) As the loans are to be drawn over a period of years and at the time of first drawal, it is not known whether the next drawal will be at same interest rate or reduced interest rate.

(b) Repayment of some of the loans started even before the entire sanctioned loan was fully drawn.

(c) In case the loan agreement is silent on the method of repayment, the petitioner adopts the FIFO or Average method in order to ensure minimal interest liability for the petitioner as well as the individual generating stations. The repayment and interest on loan is, thereafter allocated to the projects based on the method adopted.

7. Although loan is drawn by the petitioner at corporate level, determination of tariff is always for individual generating stations, considering project specific/allocated loans. Also, it is seen that interest rate applicable to various drawals of particular

loan contracted on FIFO repayment method is not the same and can increase or decrease depending on conditions prevalent at a point of time. Allocation of loan to a particular generating station is within the discretion of the petitioner. By allocating loans to projects and adopting FIFO method of repayment, the repayment schedule will turn uneven and will lead to irregular repayment amount in different years; the difference at times is substantial. Repayment of some of the loans started even before the entire sanctioned loan was fully drawn. Therefore, FIFO method advocated by the petitioner is beset with a number of difficulties.

8. While fixing tariff for a particular generating station, adoption of FIFO method of repayment may lead to higher AAD for the existing generating stations and higher IDC for the ongoing projects artificially in view of the discretion available with the petitioner for allocation of loans to individual generating stations. Therefore, FIFO method does not take into consideration the principle of uniformity and consistency. By adopting average method of loan repayment at interest rate applicable to the drawal, the repayment schedule worked out is even and regular thereby eliminating the chance of higher AAD/IDC in tariff calculations. FIFO method of repayment also leads to a situation where loan drawal and allocation is after expiry of moratorium period. Further, the petitioner's contention that rate of interest will fall subsequently is not borne by facts as seen from the data available on record. It is also seen that by adopting FIFO method of repayment, loan repayment during the tariff period will be unevenly spread, which will result into the payment of AAD in the tariff where the loan repayment is more than depreciation and benefit of full depreciation where the loan is less than the depreciation.

9. In order to obviate the above-noted anomalies, a conscious view has been taken for averaging of the repayment during the tariff period calculated as “normative loan balance as per regulation divided by loan tenure as per loan agreement “ and this method has been traditionally followed in all cases of tariff determination, including the cases pertaining to the periods prior to 1.4.2004. The same methodology considered for earlier periods has been accepted by the petitioner without demur.

10. It is also significant that the petitioner is not put to any loss in terms of interest payment if average payment method is used in place of FIFO method. Adoption of repayment on average basis is more reasonable.

11. In our considered view, the change of methodology suggested by the petitioner does not fall within the scope of review under Section 114 read with Order XLVII of the Code of Civil Procedure.

Impact of de-capitalisation of assets on cumulative re-payment of loan.

12. The petitioner's next grievance is that cumulative repayment of loan corresponding to the assets de-capitalised should also be adjusted to the extent of loan component of the de-capitalised assets to arrive at cumulative repayment, as on 1.4.2004, for the purpose of computation of tariff for the period 2004-05 to 2008-09. The petitioner's case is that in the course of operation of the generating stations (which have a life of 15 years or more) it de-capitalises assets from time to time. On such de-capitalisation, the value of the capital assets is reduced in the balance sheet of the concerned generating station for accounting purposes. However, the Commission in its order dated 9.5.2006 has reduced the capital base to the extent of such de-capitalisation which has adversely affected its entitlement to tariff on the

value of assets de-capitalised. The petitioner has stated that de-capitalisation of assets does not amount to taking back the capital employed in the assets except to the extent of the value recovered on sale of those assets, which generally is the scrap value. Further, according to the petitioner, de-capitalisation of assets does not reduce the loan capital and the obligation towards servicing of loan continues as scheduled. It has been urged that the revenue realized on the sale of the de-capitalised assets should be taken into account as a non-tariff income in the year in which such sale proceeds are realized. The petitioner has further submitted that if the de-capitalised assets are adjusted against the capital base, the cumulative depreciation recovered as well as the cumulative repayment of the loan proportionate to those assets de-capitalised should also be reduced. The Commission, in the order dated 9.5.2006 has made adjustment in cumulative depreciation on account of de-capitalisation without any adjustment of cumulative repayment of loan. The petitioner states that by such non-adjustment of cumulative repayment due to de-capitalisation, the petitioner will not be able to service the loan taken and employed for capital works, as the cumulative repayment has been allowed only to the extent of the reduced capital base.

13. We have considered the contentions of the petitioner in this regard. There are generally two concepts associated with recovery of depreciation. According to one concept, depreciation is charged for replacement of the assets, the other one relates depreciation to repayment of loan. In the present case, certain assets were de-capitalised and certain other assets capitalised for the period ending 31.3.2004 on their face value. For the assets de-capitalised, the petitioner was allowed recovery of depreciation of 90% of the value of the assets de-capitalised, which has been allowed to be retained by the petitioner, in addition to the scrap value of the assets

de-capitalised. The entire value of the new assets replacing the old assets has been considered for the purpose of computation of tariff, without adjusting the depreciation recovered on the old replaced assets, discarding the first concept of recovery of depreciation. The petitioner is thus also entitled to recover interest on the entire loan amount considered for the new asset. By extending the second concept to the facts of this case, funds for repayment of loan were available to the extent of depreciation recovered and have to be utilised accordingly. In case the contention of the petitioner for adjustment of loan component of the de-capitalised asset is accepted, it will amount to servicing the loans already recovered through depreciation recovered.

14. In the above circumstances, de-capitalisation of assets should not have any impact on cumulative repayment of loan recovered. Therefore, in our considered opinion, no case for review on this count has been made out.

De-capitalisation of liabilities-Impact adjustment for prior period

15. The petitioner has submitted that it is maintaining accounts on accrual basis as per the requirement of the Companies Act, 1956 and as laid down in Accounting Standards issued by Institute of Chartered Accountant of India. The capital expenditure is entered in the books of accounts when the legal obligations to pay them arises, that is, all obligations of liabilities are to be recognized. Further, efforts are made to reduce the liabilities and/or otherwise to reduce the impact of the liabilities considering the interest of the beneficiaries. During implementation of a project, once actual liability is frozen, the liabilities in books of accounts on provisional basis are replaced with actual capital expenditure and this at times, results in reduced capital base. According to the petitioner, it has been decapitalising the liabilities to the extent it had been able to effect reduction.

16. The petitioner has claimed that during the period 2001-04 , it de-capitalised the liabilities to the extent of Rs. 2229 lakh in regard to the generating station. The reduction in the liability during the above financial years is on account of its conscious efforts, pursuant to the settlement with third parties claiming the amount.

17. According to the petitioner, while the benefit of reduction in the liabilities by way of de-capitalisation has accrued to the respondent beneficiaries, retrospective reduction in the fixed charges will adversely affect to the petitioner whose efforts have resulted in reduced liabilities.

18. While determining tariff, the Commission in its the order dated 9.5.2006 has directed mutual settlement of impact of de-capitalisation of liabilities pertaining to the past periods. According to the petitioner, retrospective implementation of the decision would lead to reopening of the tariff in respect of its generating stations since 1992. The petitioner has, therefore, submitted that the decision taken in regard to de-capitalised liability should be applied prospectively and not retrospectively and accordingly seeks review of this direction.

19. We are aware that accounts are maintained by the petitioner as per commercial accounting system by which revenue, costs, assets and liabilities are reflected in the accounts for the period in which they accrue. Under the system, all subsequent increases or decreases in capital expenditure are identified to relevant assets and the costs accounted for the earlier asset are charged accordingly.

20. The petitioner has de-capitalised the over-capitalised amounts under various heads after 5-6 years of capitalisation. During all these years the over-capitalised amount was earning tariff to which the petitioner was not entitled, as the expenditure

was not actually incurred. In the interest of justice and fair play, the excess amount recovered by the petitioner deserves to be adjusted. However, past period calculations towards impact on tariff have not been re-opened by the Commission but these have been ordered to be mutually settled between petitioner and the beneficiaries. The decision does not involve any illegality or irregularity, much less an error apparent on the face of record, calling for review thereof.

21. The petitioner maintains accounts on accrual basis and claims tariff on the same principles. Almost all tariffs up to 31.3.2004 were based on the capital cost calculated on accrual basis. In other words, some liabilities included in the capital cost, did not materialise and were de-capitalised later on. While reducing the capital cost from the gross block, the cumulative depreciation already recovered against the de-capitalised liabilities has also been adjusted to the extent of assets de-capitalized created out of the liabilities. In this way, the interest of the petitioner has been duly protected.

22. We consider it appropriate to point out that in a large number of cases, the benefit of increased tariff has been extended to the petitioner from retrospective dates. Therefore, it is not proper that the question of retrospective adjustment should be raised in a situation where excess tariff was recovered previously.

Admissibility of depreciation up to 90% where depreciation not recovered due to non-achievement of target availability.

23. Another issue raised by the petitioner in this application for review is that it is entitled to carry forward depreciation not recovered in a year due performance below target availability level. The tariff regulations provide for recovery of full fixed cost, including depreciation, at target performance level and pro rata recovery when

performance is below the target availability level. The contention of the petitioner is that depreciation being allowed up to 90% of the total value of the assets as expense on account of the usage of the assets and even after recovering this 90%, the asset may continue to be used would mean that so long the assets are available to the utility for use, depreciation not taken in any particular year, either fully or partly, can be taken in the subsequent years, so long as 90% cap level is not exhausted.

24. The petitioner has submitted that the Part VI (b) of the Sixth Schedule to the Electricity (Supply) Act, 1948 provides for accumulation of depreciation and that the Fifth Schedule to the Electricity (Supply) Act, 1948 dealing with the charges for the generating companies also incorporate the above principle relating to accumulation of depreciation referred to in the Sixth Schedule. The petitioner therefore claims that the proportionate depreciation not allowed in a year where the performance of the generating station was not up to the target availability specified for full fixed cost recovery, the effect would not be that the unadjusted depreciation in the concerned year will get exhausted and not recoverable at all, but should be allowed to be recovered by accumulation in the subsequent years. The reason given by the petitioner is that the consequence of non-performance or under-performance shall be limited to compensating the respondent beneficiaries not allowing depreciation to be recovered in the concerned year to the extent of non-performance and there is no reason whatsoever as to why the generating company should not be allowed to recover the unadjusted depreciation in the later year when the assets are used to perform and deliver electricity to the respondent beneficiaries.

25. This issue was raised by the petitioner in petition No 147/2004 and the commission in its order dated 9.5.2006 had decided as follows:

“The generating station could not achieve the target availability norms of 80% during the years 1999-2000 and 2001-02. Accordingly, the petitioner could not recover depreciation to the tune of Rs.137 lakh and 1384 lakh during these years. The petitioner has pleaded that the depreciation not recovered in tariff during these years should be reduced from the cumulative depreciation, otherwise the generating station would not be able to recover its capital cost. We have considered the submission made by the petitioner. The law provides for disincentive for not meeting the target availability norms by proportionate reduction in fixed charges, which includes depreciation. In case the petitioner’s prayer is accepted it will amount to undoing the effect of the generating station not achieving the normative target availability during the previous tariff period and thereby incurring disincentive. In our considered view, this is not permissible. Therefore, for the purpose of computation of tariff in the present petition, depreciation recoverable in accordance with the order dated 5.3.2004 read with order dated 18.5.2004 has been considered since the tariff in these orders was computed based on normative target availability of 80%.”

26. Based on the above decision the issue of adjustment of depreciation not recovered in the previous years was not agreed to in order dated 9.5.2006 in petition No. 147/2004. Once the Commission has taken a considered and reasoned decision in the matter, it cannot be allowed to be reopened by way of review. Even otherwise we are of the considered view that depreciation as part of fixed charges recoverable in a year is disallowed by virtue of non-fulfillment of a condition of eligibility cannot be passed on to subsequent year as it would amount to deferment of recovery and not a disincentive envisaged in the tariff regulations.

Reimbursement of publication expenditure

27. In the said order dated 9.5.2006 the petitioner was allowed reimbursement of expenditure incurred on publication of notices in the newspapers from the respondents in one installment in the ratio applicable for sharing of fixed charge subject to the petitioner filing an affidavit before the Commission as the details of expenditure had not been submitted. The petitioner has submitted that it had by affidavit dated 10.3.2006 given the details of expenditure amounting to Rs 6,78,127/- on publication of notices in the newspapers. As the affidavit required for

reimbursement was already on record it is clarified that the petitioner is entitled to reimbursement of expenditure incurred on publication of notices in terms of the order dated 9.5.2006 itself.

Life of the generating station

28. The petitioner has submitted that the balance useful life of the generating station as on 1.4.2005 should be 12.58 years instead of 13.08 years as computed by the Commission. According to the petitioner the total useful life of the generating station is 25 years and after deducting weighted average life used of 12.42 years, the balance useful life as on 1.4.2005 is 12.58 years.

29. It is seen that the petitioner has considered useful life of the generating station as 25 years whereas the Commission has computed weighted average useful life of 25.85 years by considering the gross value and the useful life of each asset. The Commission has been consistently adopting the weighted average method for calculating the useful life of the station for the purpose of spreading depreciation after the loans have been fully repaid. The method adopted in the case of other generating stations of the petitioner while determining the tariff for the period 2001-04 has been accepted by the petitioner.

30. However, it has been noticed that there is an error in calculation of the balance useful life of the generating station as the respective dates of commercial operation of the different units of the generating station shown in the tariff petition in mm/dd/yyyy format, without any indication thereof, have been considered as dd/mm/yyyy. This is a ministerial error and needs to be corrected in the interest of justice, in the light of clarification now furnished. Accordingly, the balance useful life of the generating station based on correct dates of commercial operation of the

units works out to 13.43 years. Consequently, depreciation recoverable during 2005-06 to 2008-09, receivables component of working capital, interest on working capital and the annual fixed charges require modification in keeping with the revised balance useful life of 13.43 years. We have not considered it necessary to issue notice to the respondents since correction of the balance useful life, based on the averments made in the petition will be resulting in reduction in tariff approved by order dated 9.5.2006. The relevant paragraphs 34, 46(e), 48 and 49 of the order dated 9.5.2006 are therefore, amended to read as follows:

“ 34. Accordingly, for the period 1.4.2004 to 31.3.2005 the depreciation works out to 11385 lakh by applying rate of depreciation of 3.73%. The entire normative loan is repaid in 2004-05. Therefore, from 2005-06 and onwards remaining depreciation recoverable has been spread over to the balance useful life of the generating station. As such, for the period 1.4.2005 to 31.3.2009 the depreciation works out to Rs.7563 lakh each year as shown below:

(Rs.in lakh)

Details of Depreciation	2004-05	2005-06	2006-07	2007-08	2008-09
Rate of Depreciation	3.73%				
Depreciable Value	274125	274125	274125	274125	274125
Remaining Depreciable Value	112959	101574	94011	86448	78884
Depreciation	11385	7563	7563	7563	7563

46(a)

(e) **Receivables:** The receivables have been worked out on the basis of two months of fixed and variable charges. The supporting calculations in respect of receivables are tabulated hereunder:

Computation of receivables component of Working Capital

(Rs.in lakh)

Variable Charges	2004-05	2005-06	2006-07	2007-08	2008-09
Coal (Rs/kwh)	0.9565	0.9565	0.9565	0.9565	0.9565
Oil (Rs/kwh)	0.0292	0.0292	0.0292	0.0292	0.0292
Rs./kwh	0.9857	0.9857	0.9857	0.9857	0.9857
Variable Charges per year	102165	102165	102165	102165	102165
Receivables					
Variable Charges -2 months	17028	17028	17028	17074	17028
Fixed Charges - 2 months	8845	8280	8395	8516	8642
Receivables (Rs in lakh)	25873	25308	25423	25591	25670

48. The necessary details in support of calculation of interest on working capital are appended below:

Calculation of Interest on Working Capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Fuel Cost	0	0	0	0	0
Coal Stock- 1.1/2 months	12392	12392	12392	12426	12392
Oil stock -2 months	504	504	504	506	504
O & M expenses	1300	1352	1406	1462	1521
Spares	4230	4484	4753	5038	5340
Receivables	25873	25308	25423	25591	25670
Total Working Capital	44299	44040	44478	45022	45427
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	4541	4514	4559	4615	4656

ANNUAL FIXED CHARGES

49. A statement showing summary of the capital cost and other related matters is annexed to this order. The annual fixed charges for the period 1.4.2004 to 31.3.2009 allowed in this order are summed up as below :

(Rs. in lakh)

	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1	Interest on Loan	165	0	0	0	0
2	Interest on Working Capital	4541	4514	4559	4615	4656
3	Depreciation	11385	7563	7563	7563	7563
4	Advance against Depreciation	0	0	0	0	0
5	Return on Equity	21381	21381	21381	21381	21381
6	O & M Expenses	15600	16222	16870	17540	18252
	TOTAL	53071	49680	50373	51305	52058

”

31. Review Petition No.59/2006 is disposed of at the admission stage with the modification of order dated 9.5.2006 only to the extent mentioned in para 30 above on account of corrected balance useful life of the station, the remaining issues being not maintainable.

Sd/-

Sd/-

(A.H.JUNG)
MEMBER

(BHANU BHUSHAN)
MEMBER

(ASHOK BASU)
CHAIRPERSON

New Delhi dated the 27th October 2006.

Summary Sheet				
COMPANY			NTPC Ltd.	
POWER STATION			FARAKKA (1600MW)	
PETITION NO.			153/2004	
IA NO.			55/2005	
Tariff Setting Period			2004-09	
(Rs.in lakh)				
1	Capital Cost of the Project as on 31.3.2001			301732
2	Additional Capitalisation(works)			1825
	2001-02		652	
	2002-03		1332	
	2003-04		-159	
	Total		1825	
3	Additional Capitalisation(FERV)			1881
	2001-02		-196	
	2002-03		1482	
	2003-04		595	
	Total		1881	
4	Total Capital Cost as on 1.4.2004(1+2+3)			305438
5	Means of Finance¹ :			
	Debt		50.00%	152719
	Equity		50.00%	152719
	Total		100.00%	305438
6	Normative Loan as on 1.4.2004			7740

		Normative Loan outstanding as on 31.3.2004			5887	
		Normative Loan due to ACE+FERV in 2001-04			1853	
		Total Normative Loan as on 1.4.2004			7740	
7	Cumulative Repayment upto 31.3.2009 :					152719
		Repaid upto 31.3.2004			144979	
		From 1.4.2001 to 31.3.2004 (ACE & FERV)			0	
		From 1.4.2004 to 31.3.2009			7740	
		Total			152719	
8	Balance Normative Loan to be repaid beyond 31.3.2009 :					0
9	Depreciation recovered upto 31.3.2009 :					202804
			Dep	AAD	Total	
		Recovered upto 31.3.2004	159839	1648	161486	
		From 1.4.2001 to 31.3.2004 (ACE & FERV)	74	0	74	
		From 1.4.2004 to 31.3.2009	41638	0	41638	
		Adj.of Cum.Dep.due to decapitalisation	-394	0	-394	
		Total			202804	
10	Balance Depreciation to be recovered beyond 31.3.2009 :					71321
		Capital cost for the purpose of Depreciation			301732	
		ACE + FERV			3706	
		Capital cost as 1.4.2004			305438	
		Less: Land Cost			1514	
					303924	
		90% of Capital Cost as above			273531	
		Amortisation of Lease land in 25 years			593	
		90% dep. Value incl. lease amortization			274125	
		Cum. Depreciation to be recovered upto 31.3.2009			202804	
		Balance Depreciation to be recovered beyond 31.3.2009			71321	