

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. Shri Ashok Basu, Chairman
2. Shri K.N. Sinha, Member
3. Shri Bhanu Bhushan, Member

**Review Petition No. 76/2004
in Petition No.99/2002**

In the matter of

Review of Commission's order dated 18.5.2004 in Petition No.99/2002 – Approval of tariff for Kawas GPS for the period from 1.4.1998 to 31.3.2001

And in the matter of

Madhya Pradesh State Electricity Board

...Petitioner

Vs

1. National Thermal Power Corporation Ltd., New Delhi
2. Gujarat Electricity Board, Vadodara
3. Maharashtra State Electricity Board, Mumbai
4. Chhattisgarh State Electricity Board, Raipur
5. Goa Electricity Board, Panaji, Goa
6. Electricity Department, Admn of Daman & Diu, Daman
7. Electricity Deptt, Admn of Dadra & Nagar Haveli, Silvassa**Respondents**

**Review Petition No. 86/2004
in Petition No. 99/2002**

In the matter of

Review of order dated 18th May 2004 passed by the Commission approving the tariff for Kawas Gas Power Station from 1.4.1998 to 31.3.2001

And in the matter of

National Thermal Power Corporation Ltd.

... **Petitioner**

Vs

1. Madhya Pradesh State Electricity Board, Jabalpur
2. Maharashtra State Electricity Board, Mumbai
3. Gujarat Electricity Board, Vadodara
4. Chhattisgarh State Electricity Board, Raipur
5. Electricity Deptt., Govt. of Goa, Panaji
6. Electricity Deptt., Admn of Daman & Diu, Daman
7. Electricity Deptt., Admn of Dadra & Nagar Haveli, Silvassa**Respondents**

The following were present:

1. Shri V.B.K. Jain, GM (Comml), NTPC
2. Shri R. Datt, GM (Comml), NTPC
3. Shri M.S. Chawla, AGM (Comml), NTPC
4. Smt. Ranjana Gupta, NTPC
5. Shri B. Arya, NTPC
6. Shri S.K. Johar, NTPC
7. Shri S.K. Sharma, Sr. Mgr (C), NTPC
8. Shri Sandeep Mehta, NTPC
9. Shri Alka Saigal, NTPC
10. Shri Ajay Sardana, NTPC
11. Shri D. Khandelwal, S.E. MPSEB
12. Shri Deepak K. Shrivastava, EE (Comml), MSEB
13. Shri Jayant Mehta, Advocate, GEB

**ORDER
(DATE OF HEARING 20.1.2005)**

National Thermal Power Corporation Limited, hereinafter referred to as “the petitioner” had filed Petition No.99/2002 for approval of tariff for the period 1.4.1998 to 31.3.2001 in respect of Kawas Gas Power Station (Kawas GPS) based on terms and conditions of tariff as contained in Ministry of Power notification dated 30.4.1994, valid up to 31.3.1998. The petition was disposed of by order dated 18.5.2004. The Commission approved the fixed charges as under:

(Rs. in lakh)

Sl No	Particulars	1.4.1998 to 31.10.1998	1.11.1998 to 31.3.1999	1999-2000	2000-2001
1	Interest on Loan	2503	2503	1389	341
2	Interest on Working Capital	1780	1888	1763	1680
3	Depreciation	10740	10740	11299	11001
4	Return on Equity	9120	12160	12304	12122
5	O&M Expenses including water Charges	3086	3086	3395	3734
	TOTAL	27229	30378	30150	28878

“

2. Madhya Pradesh State Electricity Board, hereinafter referred to as “the respondent”, in Review Petition No.76/2004 has sought review of O&M charges approved by the Commission. Similarly, the petitioner in Review Petition No. 86/2004 has sought review of certain other aspects of the order dated 18.5.2004. We discuss these two review petitions separately in the succeeding paragraphs.

Review Petition No. 76/2004:

3. In the main petition, the petitioner had sought approval of O&M charges of Rs.37.18 crore, 43.52 crore and 50.27 crore for the years 1998-99, 1999-2000 and 2000-01 respectively, based on actuals, as an element of fixed charges. The respondent had urged that actual O&M expenses for the year 1996-97, Rs.18.36 crore, as per the audited accounts submitted by the petitioner should be considered as the base for computation of O&M expenses for the years 1997-98 to 2001-01. According to the respondent, tariff for the years 1998-99 to 2000-01 was to be determined in advance, that is, before 1.4.1998 and accordingly for this purpose, O&M data for the year 1996-97 only could be considered.

4. While approving O&M expenses by order dated 18.5.2004, the Commission had adopted the methodology earlier considered by the Central Government in Ministry of Power for fixation of tariff for old generating stations. The methodology followed by the Central Government was to consider 10% escalation over the actual O&M expenses for the year immediately preceding the first year of the tariff period to arrive at the allowable O&M expenses for the first year. O&M expenses for the subsequent years of tariff period are determined by considering 10% escalation every year over O&M expenses of the

previous year so determined. The Commission considered O&M expenses (including water charges) of Rs.2806 lakh for the year 1997-98 as the base. By applying the escalation factor of 10%, the Commission had allowed O&M expenses of Rs.3086 lakh, 3395 lakh and 3734 lakh for the years 1998-99, 1999-2000 and 2000-01 respectively.

5. In the present review petition, the respondent has re-iterated that the escalation factor of 10% per annum should be applied on O&M expenses for the year 1996-97 to arrive at O&M expenses payable for the tariff period, that is, 1998-99 to 2000-01. According to the respondent, consideration of O&M expenses for the year 1997-98 by the Commission as the base, constitutes an error apparent on the face of record and hence there is sufficient ground for review of the order dated 18.5.2004 so far as computation of O&M expenses is concerned.

6. The methodology adopted for approval of O&M expenses in the present case, has been followed consistently by the Commission in all cases involving approval of tariff for the period ending 31.3.2001, without any exception. The same procedure used to be followed by the Central Government before establishment of the Commission. The methodology considered has stood test of time. Therefore, we do not find any error in the order dated 18.5.2004 in this regard and do not find any merit in the contention of the respondent to consider O&M expenses for the year 1996-97 as the base for computation of O&M expenses for the tariff period starting on 1.4.1998. We are, therefore, of the opinion that review petition is not maintainable and is hereby dismissed with no order as to costs.

7. On perusal of the order dated 18.5.2004, we find that there is a discrepancy between the tables under paras 33 and 36 of the said order as regards O&M expenses. In order to bring these two paras at par, para 33 of the said order dated 18.5.2004 shall be substituted as under:

“In line with the methodology adopted by the Ministry of Power for various stations of NTPC, the actual O&M expenses including water charges for the year 1997-98 are to be taken from the audited balance sheet of Kawas TPS and escalation @ 10% p.a. is to be considered to work out the O&M expenses for the years 1998-99 to 2000-01. The O&M expenses for the years 1998-99 to 2000-01 as per above methodology work out as detailed below:

	(Rs.in lakh)			
	1997-98	1998-99	1999-2000	2000-01
O&M Expenses – Actuals as per B/S	2806	Escalation @ 10% per annum		
O&M expenses (including water charges)		3086	3395	3734

8. The above amendment does not in any manner affect O&M charges already approved by the Commission.

Review Petition No. 86/2004

9. The petitioner in this application sought review of the order dated 18.5.2004, on the following aspects, namely:

- (a) Non-inclusion of stock of Naphtha/NGL fuel in calculation of working capital;
- (b) Calculation of interest on loan based on actual or normative annual repayment, whichever is higher; and
- (c) Provision of heat rate of 3190 Kcal/kWh in place of 3150 Kcal/kWh

10. The application was heard on 7.10.2004 on admission. The Commission in its order dated 14.10.2004 admitted the application on the following two issues, namely:

- (a) Non-inclusion of Naphtha/NGL fuel in the calculation of working capital;
and
- (b) Provision of heat rate of 3190 Kcal/kWh in place of 3150 Kcal/kWh

11. So far as the alleged error in calculation of interest of loan is concerned, the Commission found that the same methodology was adopted in a number of other cases and, therefore, it had acquired finality and was immune from review.

12. We first consider the ground regarding correction of heat rate. The petitioner has pointed out that for open cycle operation of the generating station, the Commission has considered the heat rate of 3150 Kcal/kWh against the heat rate of 3190 Kcal/kWh prescribed in the notification dated 30.4.1994.

13. The Commission in its order dated 18.5.2004 had allowed energy charges for combined cycle operation corresponding to heat rate of 2125 Kcal/kWh with NOx control. The corresponding heat rate for open cycle operation is 3190 Kcal/kWh. However, while providing for MOPA adjustment, the Commission inadvertently mentioned open cycle heat rate of 3150 Kcal/kWh without NOx control instead of 3190 Kcal/kWh with NOx control. The error pointed out by the petitioner is purely of ministerial nature. Therefore, for the words "3150 Kcal/kWh (without NOx)", the words "3190 Kcal/kWh (with NOx)" shall be substituted for MOPA adjustment given in para 40 (ii) of the order dated 18.5.2004.

14. The only issue left to be considered is regarding non-inclusion of naphtha/NGL fuel in calculation of working capital. Naphtha is one of the constituent of fuel cost, an element of working capital. From the audited accounts for the year 1997-98 pertaining to Kawas GPS, it was noticed that naphtha stock and fuel oil stock were shown separately. Naphtha stock as on 31.3.1998 was shown as 'nil'. As such, the value of naphtha stock as on 31.3.1998 for the purpose of computation of working capital for the year 1998-99 was taken as 'zero' based on audited accounts for the year 1997-98.

15. The petitioner has submitted that it had been maintaining naphtha stock for the year 1997-98 and had given details in this regard vide affidavit dated 23.7.2003 in the main petition (No. 99/2002) under the orders of the Commission. According to the petitioner, non-consideration of naphtha stock as contained in the said affidavit dated 23.7.2003 is an error apparent on the face of record. It has been clarified that in the audited accounts pertaining to Kawas GPS for the year 1997-98, fuel oil stock of Rs.2.49 crore has been indicated. This amount includes Rs.1.71 crore as the cost of naphtha/NGL stock and Rs.77.18 lakh worth of HSD fuel stock. Therefore, the petitioner has contended that naphtha/NGL stock of Rs.1.71 crore and HSD fuel oil stock of Rs.77.18 lakh (total 2.49 crore) are to be taken into consideration while computing working capital.

16. On consideration of the material available on record, we are satisfied that there is an inadvertent omission on the part of the Commission while considering fuel stock as an element on working capital. Naphtha/NGL/HSD stock of a value of Rs.2.49 crore ought to have been taken into consideration by the Commission as a part of fuel cost while

computing working capital. Accordingly, in order to rectify the inadvertent mistake, the working capital and consequently the interest thereon need to be recalculated. The necessary revised computation in support of the working capital and interest on working capital are given hereunder:

(Rs. in lakh)				
	1.4.1998 to 31.10.1998	1.11.1998 to 31.3.1999	1999-2000	2000-2001
Fuel Cost (Gas)	2886	2886	2886	2886
Liquid fuel stock	249	249	249	249
O & M expenses	257	257	283	311
Spares	464	464	464	464
Receivables	10315	10840	10802	10590
Total Working Capital	14171	14696	14684	14500
Working Capital Margin (WCM)	2030	2030	2030	2030
Total Working Capital allowed	12141	12666	12654	12470
Rate of Interest	13.00%	13.00%	12.00%	11.50%
Interest on allowed Working Capital	1578	1647	1518	1434
Interest on WCM	112	112	113	113
Return on WCM	122	162	162	162
Total Interest on Working capital	1812	1921	1793	1709

17. The revised annual fixed charges for the period 1.4.1998 to 31.3.2001 allowed are summed up as below:

(Rs. in lakh)					
Sl No	Particulars	1.4.1998 to 31.10.1998	1.11.1998 to 31.3.1999	1999-2000	2000-2001
1	Interest on Loan	2503	2503	1389	341
2	Interest on Working Capital	1812	1921	1793	1709
3	Depreciation	10740	10740	11299	11001
4	Return on Equity	9120	12160	12304	12122
5	O&M Expenses including water Charges	3086	3086	3395	3734
	TOTAL	27261	30410	30180	28907

18. The tables given under para 16 and 17 above shall be substituted for the tables given under paras 35 and 36 of the order dated 18.5.2004.

19. With the above, both the review petitions stand disposed of.

Sd/-
(BHANU BHUSHAN)
MEMBER

Sd/-
(K.N. SINHA)
MEMBER

Sd/-
(ASHOK BASU)
CHAIRMAN

New Delhi dated the 28th March 2005