

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

- 1. Shri Bhanu Bhushan, Member**
- 2. Shri R. Krishnamoorthy, Member**

**Petition No.31/2001**

**In the matter of**

Approval of tariff in respect of Kawas GPS (656.2 MW) for the period 1.4.2001 to 31.3.2004.

**And in the matter of**

NTPC Ltd, New Delhi

Vs

**.... Petitioner**

1. Madhya Pradesh State Electricity Board, Jabalpur
2. Maharashtra State Electricity Board, Mumbai
3. Gujarat Electricity Board, Vadodara
4. Chattisgarh State Electricity Board, Raipur
5. Electricity Department, Govt of Goa, Panaji, Goa
6. Electricity Department, Administration of Daman & Diu, Daman
7. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa

**....Respondents**

**ORDER**

The petitioner, NTPC Limited, had filed this petition for approval of tariff in respect of Kawas GPS (656.2 MW) (hereinafter referred to as “the generating station”) for the period 1.4.2001 to 31.3.2004. On completion of pleadings and after hearing the parties, final tariff in respect of the generating station was awarded vide the Commission’s order dated 7.4.2005. The summary of the annual fixed charges awarded is given hereunder:

(Rs in lakh)

Particulars	2001-02	2002-03	2003-04
Interest on Loan	0	0	0
Interest on Working Capital	3542	3554	3576
Depreciation	5017	5017	5017
Advance against Depreciation	0	0	0
Return on Equity	12105	12105	12105
O & M Expenses	4132	4380	4643
<b>TOTAL</b>	<b>24797</b>	<b>25057</b>	<b>25341</b>

2. Details of the computation of interest on working capital awarded in the above order are as under:

(Rs in lakh)

	2001-02	2002-03	2003-04
Fuel Cost	8130	8130	8152
Naptha stock	905	905	905
O & M expenses	344	365	387
Spares	670	710	753
Receivables	20393	20436	20528
Total Working Capital	30442	30547	30725
Working Capital Margin (WCM)	2030	2030	2030
Total Working Capital allowed	28412	28517	28695
Rate of Interest	11.50%	11.50%	11.50%
Interest on allowed Working capital	3267	3279	3300
Interest on WCM	112	112	113
Return on WCM	162	162	162
<b>Total Interest on Working capital</b>	<b>3542</b>	<b>3554</b>	<b>3576</b>

3. Subsequently, the Appellate Tribunal for Electricity (hereinafter referred to as "the Appellate Tribunal") vide its order dated 14.11.2006 in Appeal No. 96/2005 relating to fixation of tariff for the generating station for the period 1997-2001, directed, interalia, that interest on loan capital should be determined based on normative debt repayment formula.

4. As the above direction of the Appellate Tribunal relates to the general methodology adopted by the Commission, irrespective of the generating station,

for the tariff period, it was decided to apply the same to all cases of tariff determination.

5. The Commission by its order dated 2.11.2007 in Petition No. 99/2002 revised the annual fixed charges of the generating station for period 1997-2001, by applying normative debt repayment methodology. By this order, the tariff of the generating station for the period 1.4.2001 to 31.3.2004 is being revised, by applying normative debt repayment methodology.

6. As the direction of the Appellate Tribunal requires revision of only the debt repayment methodology, other factors relating to tariff determination viz. capital cost, FERV, debt-equity ratio, additional capitalization, cumulative depreciation recovered, actual loan statement, etc., have been kept as admitted by the Commission in the original tariff order dated 7.4.2005. Further, the cumulative repayment as arrived at in order dated 2.11.2007 has been considered. Thus, the revised calculations of interest on loan based on the above direction of the Appellate Tribunal is as under:

(Rs in lakh)

<b>Particulars</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>
Gross loan-Opening	75659	75659	75659
Cumulative repayments of Loans up to previous year	60333	63894	67455
Net loan-Opening	15327	11766	8204
Increase/ Decrease due to FERV	0	0	0
Increase/ Decrease due to Additional Capitalisation	0	0	0
Total	15327	11766	8204
Repayments of Loans during the year	3561	3561	4320
Net loan-Closing	11766	8204	3885
Average Net Loan	13546	9985	6045
Rate of Interest on Loan	11.02%	11.05%	11.15%
<b>Interest on loan</b>	<b>1493</b>	<b>1104</b>	<b>674</b>

7. On account of the change in the repayment methodology for the tariff period 1997-2001, there is normative loan, outstanding as on 1.4.2001. Hence weighted average rate of depreciation of 5.11% has been considered for computation of depreciation, instead of spreading the remaining depreciable value over the balance life of the generating station considered in the order dated 7.4.2005. (As per order dated 7.4.2005, there was no outstanding loan during 2001-04). The necessary calculation in support of depreciation now chargeable is as follows:

(Rs in lakh)

Particulars	Up to 2000-01	2001-02	2002-03	2003-04
Rate of depreciation		5.11%	5.11%	5.11%
Depreciable value	136187			
Balance useful life of plant in years		11.39	10.39	9.39
Remaining depreciable value		57149	49413	41677
<b>Depreciation</b>		<b>7736</b>	<b>7736</b>	<b>7736</b>

8. Revision of interest on loan and depreciation has resulted in the revision of interest on working capital as interest on loan and depreciation are components of “receivables” included in the working capital. Accordingly, interest on working capital has been recalculated as under:

(Rs in lakh)

	2001-02	2002-03	2003-04
Fuel Cost	8130	8130	8152
Naptha stock	905	905	905
O & M expenses	344	365	387
Spares	670	710	753
Receivables	21109	21086	21105
Total Working Capital	31158	31196	31302
Working Capital Margin (WCM)	2030	2030	2030
Total Working Capital allowed	29128	29166	29272
Rate of Interest	11.50%	11.50%	11.50%
Interest on Working capital	3350	3354	3366
Interest on WCM	112	112	113
Return on WCM	162	162	162
<b>Total Interest on Working capital</b>	<b>3624</b>	<b>3629</b>	<b>3642</b>

9. Annual fixed charges revised on the basis of the above in respect of the generating station for the period from 1.4.2001 to 31.3.2004 are summarised as under:

(Rs in lakh)

<b>Particulars</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>
Interest on Loan	1493	1104	674
Interest on Working Capital	3624	3629	3642
Depreciation	7736	7736	7736
Advance against Depreciation	0	0	0
Return on Equity	12105	12105	12105
O & M Expenses	4132	4380	4643
<b>TOTAL</b>	<b>29091</b>	<b>28954</b>	<b>28801</b>

10. The petitioner shall recover the additional amount within six months immediately following the date of this order.

**Sd/-**  
**(R. KRISHNAMOORTHY)**  
**MEMBER**

**Sd/-**  
**(BHANU BHUSHAN)**  
**MEMBER**

**New Delhi dated 23<sup>rd</sup> January, 2008**