CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram

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

Petition No 31/2001

In the matter of

Approval of tariff in respect of Kawas Gas Power Station for the period from 1.4.2001 to 31.3.2004.

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 Department, Govt of Goa, Panaji, Goa
6. Electricity Department, Admn. Of Daman & Diu, Daman
7. Electricity Department, Admn. of Dadra and Nagar Haveli, Silvassa..**Respondents**

The following were present

1. Shri Pranav Kapoor, NTPC
2. Shri V.B.K. Jain, NTPC
3. Shri I.J. Kapoor, NTPC
4. Shri Balaji Dubey, Dy. Mgr (Law), NTPC
5. Ms Alka Saigal, SM, NTPC
6. Shri S.K. Sharma, SM, NTPC
7. Shri Deepak K. Shrivastava, EE (Comml), MPSEB

ORDER
(DATE OF HEARING 9.12.2004)

This petition has been filed by the petitioner, NTPC, a generating company owned by the Central Government for approval of tariff in respect of Kawas Gas Power Station, (hereinafter referred to as "Kawas GPS ") for the period from 1.4.2001 to 31.3.2004. The tariff is to be regulated under the terms and conditions contained in the Commission's notification dated 26.3.2001, (hereinafter referred to as the "notification dated 26.3.2001").

2. Kawas GPS with a total capacity of 656.20 MW comprises of 4 gas turbines of 106 MW each and two steam turbines of 116.1 MW each. The date of commercial operation of the first gas turbine was 1.6.1992 and that of the second steam turbine and the station as a whole was 1.9.1993.

3. The tariff for the generating station was earlier notified by Ministry of Power vide its notification dated 30.4.1994, valid for a period up to 31.3.1998. The tariff notified was subsequently revised vide notifications dated 16.1.1997, 30.11.1998 and 14.5.1999. The additional capitalisation and FERV for the period up to 31.3.1998 was approved by the Commission in its order dated 19.4.2002 in Petition No 76/2000. The tariff for the period from 1.4.1998 to 31.3.2001 was approved by the Commission vide its order dated 18.5.2004 in Petition No 99/2002, wherein the Commission considered additional capitalisation up to 31.3.2001.

4. The details of the fixed charges claimed by the petitioner in the present petition are given hereunder:

(Rs. in lakh)

Particulars	2001-02	2002-03	2003-04
Interest on Loan	0	0	0
Interest on Working Capital	5787	5839	5892
Depreciation	8606	8615	8617
Advance against Depreciation	0	0	0
Return on Equity	12338	12351	12355
O & M Expenses	4072	4317	4576
Water Charges	331	331	331
TOTAL	**31134**	**31453**	**31771**

5. The details of Working Capital furnished by the petitioner and its claim for interest thereon are summarised hereunder:

(Rs. in lakh)

	2001-02	2002-03	2003-04
Fuel Cost	9828	9906	9989
Naptha Stock	8795	8795	8795
O & M expenses	339	360	381
Spares	1629	1727	1830
Receivables	25966	26196	26416
Total Working Capital	46558	46983	47411
Working Capital Margin (WCM)	2030	2030	2030
Total Working Capital allowed	44528	44953	45381
Rate of Interest	12.35%	12.35%	12.35%
Interest on allowed Working Capital	5499	5552	5604
Interest on WCM	125	125	125
Return on WCM	162	162	162
Total Interest on Working capital	**5787**	**5839**	**5892**

6. In addition, the petitioner has claimed Energy Charges @ 107.21 paise/kWh for natural gas and 323.17 paise/kWh for naptha (liquid) fuel for the period from 1.4.2001 to 31.3.2004.

7. The petitioner has also prayed for approval of other charges like Income Tax, incentive, Development Surcharge, late payment surcharge, other statutory taxes, levies, cess, filing fee, etc in terms of the notification.

<u>CAPITAL COST</u>

8. As per the notification dated 26.3.2001, the capital expenditure of the project shall be financed as per the approved financial package set out in the TEC of CEA or as approved by an appropriate independent agency, as the case may be. The notification dated 26.3.2001 further lays down that the actual capital expenditure

incurred on completion of the generating station shall be the criterion for fixation of tariff and where actual expenditure exceeds the approved project cost, the excess expenditure as approved by CEA or an appropriate independent agency shall be deemed to be the actual capital expenditure for the purpose of determining the tariff.

9. The Commission vide its order dated 18.5.2004 in Petition No.99/2002 has approved the tariff for the period 1.4.1998 to 31.3.2001 by considering a closing capital cost of Rs.151319.00 lakh, as on 31.3.2001. This has been adopted as the opening gross block as on 1.4.2001 for the purpose of tariff determination in the present petition. The petitioner has also included anticipated additional capital expenditure of Rs. 282.00 lakh, Rs. 43.00 lakh and Rs. 40.00 lakh for 2001-02, 2002-03 and 2003-04 respectively, based on the budgetary projections. The additional capitalisation claimed by the petitioner has not been considered for tariff determination since the claim of the petitioner is not based on actual expenditure as provided in the notification dated 26.3.2001. Accordingly, the capital cost of Rs.151319.00 lakh as on 1.4.2004 has been considered.

DEBT-EQUITY RATIO

10. As per the notification dated 26.3.2001, the interest on loan capital and return on equity are to be computed, as per the financial package approved by CEA or an appropriate independent agency, as the case may be. The petitioner has claimed tariff by considering debt and equity in the ratio of 50:50. It has been submitted by the respondents that debt and equity should be in the ratio of 80:20 or 70:30 as applicable to IPPs.

11. We have considered the rival submissions. Ministry of Power, while notifying tariff vide its notification dated 30.4.1994 had considered the normative debt-equity ratio of 50:50. The debt-equity ratio of 50:50 was adopted by the Commission in its order dated 18.5.2004 in Petition No. 99/2002 while approving tariff for the period from 1.4.1998 to 31.3.2001. Therefore, for the purpose of present petition, debt-equity ratio of 50:50 has been adopted in the working.

TARGET AVAILABILITY

12. In accordance with the notification dated 26.3.2001, the petitioner is entitled to recovery of full capacity charges at target availability of 80%.

13. The petitioner has prayed for relaxation in target availability. According to the petitioner, the target availability of 80% should be considered on the basis of availability of machines which means that the difference between 80% availability and the declared capacity based on actual availability of fuel be treated as deemed availability for recovery of full capacity charges, subject to machine availability being 80% till the adequate gas supply is made available. The petitioner has stated that full fixed charges were payable in the previous tariff period at 62.79% PLF, which included the deemed generation also.

14. The Commission in its order dated 1.11.2002 in Petition No.86/2002, relaxed the target availability for Kawas GPS and Gandhar GPS from 1.7.2002 to 31.3.2004 after deliberating the issue at great length. It was held that recovery of full capacity charges in respect of Kawas GPS and Gandhar GPS should be allowed on their together achieving 80% machine availability and 65% PLF, subject to dispatch

instructions by WRLDC. The petitioner is liable to demonstrate the machine availability when asked to do so by WRLDC/WREB.

15. The petitioner has submitted that even prior to 1.7.2002 the position was similar to what was considered in Petition No 86/2002. MPSEB submitted that the plea of less availability of gas as a ground for reduced target availability was not accepted by the Commission in its order dated 4.1.2000 in Petition No.2/1999 and further order dated 21.12.2000 specifying the terms and conditions of tariff also provides for fuel supply risk to be borne by the generator.

16. All these aspects have been considered in the order dated 1.11.2002 ibid. We do not consider any justification to take a view different from that taken in the order dated 1.11.2002. Accordingly, machine availability of 80 % coupled with PLF of 65% have been considered for recovery of full fixed charges and computation of fuel element in the working capital for the period from 1.4.2001 to 31.3.2004.

RETURN ON EQUITY

17. As per the notification dated 26.3.2001, return on equity shall be computed on the paid up and subscribed capital and shall be 16% of such capital. The petitioner has claimed return on equity @ 16% on normative equity. The respondents have, however, submitted that return on equity should be payable at 12% and should be allowed on actual equity employed since the cost of servicing equity is higher in comparison to cost involved in servicing debt. In case of generating stations, return on equity was charged in tariff @ 12% per annum till 31.10.1998. However, it was increased to 16% with effect from 1.11.1998. The respondents have contended that

there was no justification to increase return on equity from 12% to 16%. As the things stand, the terms and conditions prescribed by the Commission legislate that return on equity should be allowed @ 16%. Accordingly, we do not find any justification in support of the issue raised. In our computation of tariff, return on equity @ 16% per annum has been allowed. We have already indicated our reasons for allowing normative equity of 50% in the present case.

18. The respondents have submitted that the tariff for the generating stations belonging to the petitioner was notified by Ministry of Power based on KP Rao Committee Report wherein it was recommended that once the loan is reduced to zero, the equity component will be reduced progressively to the extent of further depreciation recovered. It is, therefore, contended that the equity needs to be reduced to the extent of depreciation charged after the loan was repaid. We have considered this submission. The tariff notification issued by Ministry of Power on 30.4.1994 does not provide reduction of equity after the loan is fully repaid. In any case, the tariff is to be fixed in keeping with the provisions of the notification dated 26.3.2001, which also does not provide for the reduction of equity. Therefore, the contention raised on behalf of the respondents has been found to be without force.

19. Accordingly, return on equity has been worked out on the average normative equity. The charges payable by the respondents on account of return on equity as under:

(Rs in lakh)

Particulars	**2001-02**	**2002-03**	**2003-04**
Opening Balance	75659	75659	75659
Increase/ Decrease due to FERV	0	0	0
Increase/ Decrease due to Additional Capitalisation	0	0	0
Closing Balance	75659	75659	75659
Average	75659	75659	75659
Rate of Return on Equity	16.00%	16.00%	16.00%
Return on Equity	**12105**	**12105**	**12105**

INTEREST ON LOAN

20. As per the notification dated 26.3.2001, the interest on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment, as per the financial package approved by CEA or an appropriate independent agency, as the case may be. As the entire loan is already repaid, the petitioner has not claimed interest on loan. Therefore, interest on loan has not been considered in the present petition.

DEPRECIATION

21. The notification dated 26.3.2001 prescribes that the value base for the purpose of depreciation shall be historical cost of the asset and the depreciation shall be calculated annually as per straight line method at the rates of depreciation prescribed in the Schedule thereto.

22. Depreciation for the tariff period has been calculated by taking the individual assets and their depreciation rates as per the notification dated 26.3.2001. The weighted average rate of depreciation works out to 5.11% against the weighted average rate of 5.58% claimed in the petition.

23. The notification dated 26.3.2001 further provides that where loan has been fully repaid, depreciation is to allowed by considering the balance useful life of the generating station. Since the loan has been fully paid in the year 2000-01 and net loan opening as on 1.4.2001 is nil, the depreciation component of tariff for the tariff period 2001-02 to 2003-04 has been worked out by spreading the remaining depreciable value over the balance useful life of the assets/ station which has been calculated as 11.39 years as on 1.4.2001.

24. While allowing tariff, depreciation recovered in tariff up to 31.3.2001, as per the Commission's order dated 18.5.2004 in Petition No.99/2002 has been taken into account.

25. The detailed calculations in support of depreciation allowed are given hereunder:

(Rs. In lakh)

	Upto 2000-01	**2001-02**	**2002-03**	**2003-04**
Depreciation				
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	52132	47114
Depreciation recovered in tariff		5017	5017	5017

ADVANCE AGAINST DEPRECIATION

26. As per the notification dated 26.3.2001, Advance Against Depreciation shall be permitted wherever originally scheduled loan repayment exceeds the depreciation allowable and shall be computed as follows:

AAD= Originally scheduled loan repayment amount subject to a ceiling of 1/12th of original loan amount minus depreciation as per schedule.

27. As the entire loan has already been repaid, the petitioner is not entitled to Advance Against Depreciation. Accordingly, the petitioner has not made any claim under this head.

O&M EXPENSES

28. As per the notification dated 26.3.2001, operation and maintenance (O&M) expenses including insurance for the stations belonging to the petitioner, in operation for 5 years or more in the base year of 1999-2000, are derived on the basis of actual O & M expenses, excluding abnormal O & M expenses, if any, for the years 1995-1996 to 1999-2000 duly certified by the statutory auditors. The average of actual O & M expenses for the years 1995-1996 to 1999-2000 is considered as O & M expenses for the year 1997-1998 which is escalated twice at the rate of 10% per annum to arrive at O & M expenses for the base year 1999-2000. Thereafter, the base O & M expenses for the year 1999-2000 are further escalated at the rate of 6% per annum to arrive at permissible O & M expenses for the relevant year. The notification dated 26.3.2001 further provides that if the escalation factor computed from the observed data lies in the range of 4.8% to 7.2%, this variation shall be absorbed by the petitioner. In case of deviation beyond this limit, adjustment shall be made by applying actual escalation factor arrived on the basis of weighted price index of CPI for industrial workers (CPI_IW) and index of selected component of WPI(WPIOM) for which the petitioner shall approach the Commission with an appropriate petition. The

notification dated 26.3.2001 thus implies that the variations between ±20% over the previous year's expenses are to be absorbed by the petitioner.

29. The petitioner has claimed O & M expenses as under, stated to be based on the actual expenses for the years 1996-1997 to 2000-2001:

(Rs. in lakh)

Year	**2001-02**	**2002-03**	**2003-04**
O&M claimed including water charges	4401	4651	4911

30. The actual O&M expenses for the years 1995-1996 to 1999-2000 are furnished in the petition, the details of which are as follows:

(Rs. in lakh)

Year	1995-96	1996-97	1997-98	1998-99	1999-00
O&M	1686	1837	2861	3718	4352
Water Charges	63	54	532	441	563
Total O&M without Water charges	1623	1783	2329	3277	3789

31. The petitioner has further prayed for allowing recovery of additional expenses likely to be incurred due to consumption of major spares after warranty period, as additional O&M charges over and above what is claimed in the petition for the period 1.4.2001 to 31.3.2004.

32. The issue of supply of free warranty spares during the warranty period was deliberated during the hearing. The petitioner submitted that the details of O&M expenses furnished did not include cost of spares, which were replaced free of cost by the manufacturer during the warranty period of 10 years. The petitioner had to incur expenditure on procurement of such spares after the expiry of warranty period of 10 years and, therefore, an additional provision for O&M expenses on account of

procurement of spares was required to be made. The Commission had directed the petitioner to file details of the notional cost of the spares supplied by the manufacturer free of cost along with the equipment/machinery as also the firmed up future requirements of spares.

33. The petitioner furnished following details of notional spares supplied free of cost under the guarantee agreement with the manufacturer for 1995-96 to 2000-01

Capital Cost as on 1.4.2001 (Rs. in lakh)	Cost of warranty spares (Rs. in lakh)							% of Spares in Capital Cost
	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	Total	
151319	-	6814	1055	3151	9438	6394	26852	17.89%

34. The details of initial spares supplied free of cost under the guarantee agreement in respect of other stations of the petitioner are as follows:-

Name of the Plant (COD of GT-I) Capacity MW	Capital Cost as on 1.4.2001 (Rs. in lakh)	Cost of warranty spares (Rs. in lakh)							% of Spares in Capital Cost
		95-96	96-97	97-98	98-99	99-00	00-01	Total	
Anta GPS (4/89) 419.33 MW	45167	4730	161	29	-	-	-	4920	10.89%
Auraiya GPS (3/89) 663.6 MW	72091	2034	1246	656	1236	979	-	6151	8.53%
Dadri GPS (5/92) 829.78 MW	86632	1625	2877	1078	20	2360	6558	14518	16.76%
Gandhar GPS (3/95) 657.39 MW	242505	-	-	200.45	-	186.6	-	387	0.16%

35. The above values of spares are based on notional values of spares quoted by the OEM in the supply contract. The consumption of spares in case of Kawas GPS is Rs. 26852 lakh, which are about 17.89% of the total capital base (1.4.2001). There is

no uniformity of consumption of spares in Kawas, Gandhar, Anta, Auraiya, and Dadri GPS. The capital cost of Kawas GPS is high as compared to other gas-based generating stations, except Gandhar GPS. It is difficult to hold that the project cost quoted by the bidders would not be including a substantial cost of warranty spares to be supplied free of cost over 10 years period. It has been stated by the petitioner during the hearing that the warranty period for supply of free spares would be expired after 50000 EOH of operation. The petitioner and respondents were not in a position to quantify the amount built in to the project capital cost on account of these warrantee spares. The petitioner is getting return on equity and depreciation on built in cost of these spares. In view of this, it would not be appropriate for us to allow additional O&M for the consumption of such spares. A similar view has been taken by the Commission on this issue in other gas-based generating stations belonging to the petitioner.

36. The petitioner's claim on account of O&M expenses under different heads has been examined in terms of the notification dated 26.3.2001 as discussed in the succeeding paragraphs.

Employee Cost

37. The petitioner has indicated following amounts under this head for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	**1996-1997**	**1997-1998**	**1998-1999**	**1999-2000**
357.06	413.15	531.44	630.70	881.80

38. There has been increase of 29% in the year 1997-1998 over the expenses for the previous year and 40% in the year 1999-2000 over those for 1998-1999. The

petitioner has clarified that the increase is on account of pay revision of employees, which was due from 1.4.1997. The petitioner has also claimed incentive and ex gratia paid to the employees under the employee cost. The petitioner has clarified that incentive and *ex gratia* payments are under the productivity linked bonus scheme. The respondents have contested that incentive and ex gratia should not be included in the employee cost and should be payable from the incentive earned by the petitioner and should not be charged from beneficiaries in O&M cost. The Commission's policy in this regard is to allow only the obligatory minimum bonus payable under the Payment of Bonus Act. As such, the following amount of incentive and *ex gratia* has not been considered for arriving at the normalised O&M expenses for the purpose of tariff and the balance of expenses given under this head have been considered for normalisation:

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
23.84	22.08	24.79	64.79	64.42

<u>Repair & Maintenance</u>

39. The petitioner has indicated following amounts under this head for 1995-96 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
383.47	513.31	670.49	1164.75	1009.42

40. There has been increase of 34% in 1996-1997, 31% in 1997-1998 and 74% in 1999-2000. The petitioner has clarified vide its affidavits dated 31.12.2002 and 20.5.2004 that the repair & maintenance charges for the years 1995-96 and 1996-97 are low because of operation of the plant at low PLF of less than 40% because of non-availability of gas and hence are not the representative expenses. The increase in

1996-97 by 34% is on account of hot gas path inspection of GT4 and replacement of torque converter of GT1. The higher repair & maintenance expenses in subsequent years are due to operation of the plant at higher PLF of 72% to 83% due to creation of liquid fuel firing facility in 1997-98. Further, in 1997-98, repair & maintenance of NGL tank area and make upwater-pump house was also taken up due to commissioning of liquid fuel firing system and commissioning of Variav pump house. The increase in 1998-99 has been explained to be on account of major overhauling of steam turbine of module 2 and major inspection (‘C’ inspection) of GT-2. The petitioner has further clarified that repair & maintenance expenses do not include the cost of spares, which are in the nature of warrantee spares or of spares capitalized in the project cost.

41. Therefore, the following amounts of Repair & Maintenance cost for the years 1997-1998 to 1999 -2000 have been considered to arrive at normalized O&M on 3 years average basis.

(Rs. in lakh)

Years	1997-1998	1998-1999	1999-2000
R&M cost	670.49	1164.75	1009.42

Stores

42. The petitioner has indicated following amounts under this head for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
19.23	29.61	26.21	35.99	36.75

43. There has been increase of 54% in 1996-1997 and 37% in 1998-1999 over the respective previous year’ expenses. The petitioner has clarified that the stores consumed in 1996-97 have increased due to chemical consumption in water system

due to bad quality of water and in addition in 1998-99 due to increase in price of chemicals during the year. On consideration of these facts, amounts as indicated by the petitioner have been considered to arrive at normalised O&M charges.

Power Charges

44. The petitioner has indicated the following amounts under this head for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
29.34	29.84	25.61	82.26	124.20

45. There has been increase of 221% in 1998-99 and 51% in 1999-00 over the respective previous year. The petitioner has clarified that Variav pump house had come up in 1997-98 (situated at 16 KM away from the generating station) and increase is on account of purchase of power for Variav pump house in the two years and it shall be continuing in future also. This explains higher power charges in 1998-99 but variation in 1999-2000 over 1998-99 is not adequately explained. As such, power charges for the year 1999-2000 has been restricted to 20% increase at Rs 99.43 lakhs from the previous year. Therefore, the following power charges have been considered for normalized O&M expenses.

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
29.34	29.84	25.61	82.26	99.43

46. The respondents have questioned the admissibility of power charges claimed by the petitioner. The respondents have contended that the claim results in double payment by them as they are paying separately for auxiliary consumption on

normative basis. On the issue the petitioner has explained during the hearings that these power charges pertain to colony power consumption taken directly from the power stations and do not include any construction power. However, the charges booked under O&M are only the energy charges and fixed charges are not claimed. It has been further clarified that the payment received from the employees for the power consumed in residential quarters is credited to the revenue account and only net power charges for colony power consumption is charged to O&M. As such, there is no double payment by the respondent-beneficiaries. It is contended by the petitioner that in case the power had been procured from the state utility, then also power charges for the colony infrastructure would have been booked under O&M. We are satisfied with the explanation furnished by the petitioner.

Water Charges

47. The petitioner has indicated the following amounts under this head for the years 1995-1996 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
63.17	53.59	531.64	440.98	562.90

48. There has been increase of 892% and 28% in the years 1997-1998 and 1999-2000 over the respective previous year. The petitioner has clarified that the increase in 1997-98 is due to increase in the water charges by Gujarat Govt., The rate of water charges was increased from Rs. 0.85 to Rs. 6.50 per cubic meter. Increase in 1999-2000 is stated to be due to increased water consumption, The side stream plant had started trial operation in 1998-99 with 5 COC which was revised to 2 COC in 1999-2000 due to certain operating problems. This resulted in increase in consumption over previous year. The water charges for the year 1995-96 and 1996-97 cannot be taken

as representative consumption for specifying future water charges on account of low rate of water charges compares with 1997-98. Accordingly, the following amounts have been considered for arriving at normalized O&M charges on 3-year average basis:

(Rs. in lakh)

1997-98	1998-99	1999-2000
531.64	440.98	562.90

Communication expenses

49. The petitioner has indicated the following amounts under this head for 1995-1996 to 1999-2000

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
14.44	18.33	23.00	25.07	16.66

50. There has been an increase of 27% in 1996-97 and 25% in 1997-98 from previous year. The petitioner has clarified that the increase was attributable to increase in telephone charges arising from installation of new connections for improving communication facilities, increase in number of employees entitled to residential telephones and repair of SATCOM line. In view of this, the amount indicated by the petitioner has been considered to arrive at normalized O&M expenses.

Travelling Expenses

51. The petitioner has indicated the following amounts under this head for 1995-1996 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
38.41	41.45	46.41	62.91	73.19

52. There has been an increase of 36% in 1998-1999 over the previous year's expenses. The petitioner has clarified that this increase is due to because of transfer and redeployment of employees and conveyance allowance. On consideration of the explanation, the amounts as indicated by the petitioner have been considered to arrive at normalized O&M charges.

Insurance

53. The petitioner has indicated the following amounts under this head for 1995-96 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
119.02	128.94	188.28	220.29	158.25

54. There has been increase of 46% in 1997-98 than the previous year. The petitioner has clarified that the insurance amount in 1997-98 has increased due to increase in sum insured due to increase in exchange rate (French Franc and Belgium Franc), inclusion of liquid fuel system & fuel tanks and Variav water pump house. Hence, the premium charged by insurance companies has increased. Increase in 1998-99 was on account of increase in insurance premium due to taking of machinery break down policy (MBD Policy). The reduction in 1999-2000 due to availability of maximum discount by opting higher discount and disallowance clause under the revised discount structure of insurance companies. The reasons given by the petitioner have been found to be satisfactory. As such, the amounts indicated by the petitioner have been considered to arrive at normalized O&M Charges.

Rent

55. The petitioner has indicated following amounts under this head for 1995-96 to 1999-2000:-

(Rs. in lakh)

1995-96	1996-97	1997-98	1998-99	1999-2000
0.00	0.00	0.00	0.00	4.10

56. There has been no rent payment from 1995-96 to 1998-99.As clarified by the petitioner there was no rent for pump house land in the previous years. Since such rent would be continuing in future also, the amounts as indicated by the petitioner have been considered to arrive at normalized O&M charges separately.

Security Expenses

57. The petitioner has indicated the following amounts under the head "security expenses" for 1995-1996 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
96.13	123.94	111.45	162.70	151.07

58. There has been increase of 29% in the year 1996-97, 46% in the year 1998-99 over the respective previous year. The petitioner has submitted that the increase is on account of revision of salaries of CISF personnel deployed for security of the station consequent to implementation of recommendation of V Central Pay Commission. As such, the amounts claimed by the petitioner have been considered for the purpose of normalisation of O&M charges.

Professional Expenses

59. The petitioner has submitted the following details of the amounts under the head "professional expenses" for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
0.58	2.59	3.76	5.78	5.88

60. There has been increase of 347%, 45% and 54 % for the years 1996-97, 1997-98 and 1998-99 respectively over the expenses foe the respective the previous year. The petitioner has clarified that the professional expenses in 1996-97,1997-98 and 1998-99 have increased due to increase in expenditure on Environment audit and ambient air monitoring at plant. Since the amounts involved are small, the amounts indicated by the petitioner have been considered to arrive at normalized O&M charges.

Printing & Stationery

61. The petitioner has indicated the following amounts under this head for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
10.35	15.37	5.77	9.17	10.17

62. There has been an increase of 49% and 59% in the years 1996-97 and 1998-99 respectively over the respective previous year's expenses. The petitioner has clarified that increased in consumption and hike in cost of stationary in the year 1996-97 and increase in consumption of computer stationery for the year 1998-99. On consideration of the facts on record by the petitioner, the amounts indicated in the petition have been considered to arrive at normalized O&M charges.

Other Expenses

63. The petitioner has indicated the following amounts under this head for 1995-1996 to 1999-2000:-

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
217.14	162.22	118.73	194.15	178.21

64. There has been an increase of 64% in the year 1998-99 over the expenses for the previous year. The petitioner has clarified that certain additional expenses incurred in publicity and increased expenditure in five open tender for spares and works, in developing alternative sources in gas plant spares procurement etc. and also increased in advertisement rates. The explanation is considered to be reasonable. As such, the amounts as indicated by the petitioner have been considered to arrive at normalized O&M charges.

Corporate Office Expenses

65. The petitioner has made the following allocation of corporate office expenses to the station for 1995-1996 to 1999-2000: -

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
337.57	304.28	578.48	682.83	1139.10

66. As clarified by the petitioner, the expenses common to Operational and Construction activities are allocated to Profit and Loss Account and Incidental Expenditure during Construction in proportion of sales to annual capital outlay. The corporate office expense details furnished by the petitioner are those charged to revenue only. These corporate office and other common expenses chargeable to revenue are allocated to the projects on the basis of sales.

67. There has been increase of 90%, and 67% in corporate expenses in the year 1997-1998 and 1999-2000 in corporate office expenses respectively over the previous year. It has been clarified by the petitioner that the increases are on account of the increases due to wage revision and increase in travelling expenses of the corporate office employees. As discussed above, in the case of project employee costs, the increases on account of wage revision have been allowed for calculation of the normalised O&M expenses after deducting incentive and ex gratia. Similarly, in case of corporate office expenses also, the incentive and ex gratia have not been considered in direct employee expenses.

68. Schedule 13 of the Company balance sheets for different years reveals Rs. 55 lakh, Rs.0.40 lakh, Rs. 85 lakh and Rs. 2800 lakh as donations for the years 1996-1997 to 1999-2000 respectively, the donations were made for the benefit of society or for some social cause for which the petitioner deserves appreciation, donations cannot be directly attributed to the business of power generation, the activity in which the petitioner is engaged. Accordingly, these donations cannot be passed on to the beneficiaries. Therefore, the donation amounts have not been considered in the corporate office expenses.

69. After excluding the proportionate amount for incentive, ex gratia, and donations, the following amounts in corporate office expenses in respective year have been considered towards the normalised O&M expenses for the station:

(Rs. in lakh)

1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
325.30	288.70	562.84	641.49	932.43

Expenses under remaining heads

70. Under all other heads, increases are within the permissible limit of 20%. Therefore, amounts indicated by the petitioner have been considered to arrive at the normalised O&M charges. O&M computation done in accordance with the methodology prescribed in the notification dated 26.3.2001.

71. A comparative tabular statement of the year-wise O&M expenses claimed by the petitioner and those allowed by us is extracted hereunder:

		1995-96		1996-97		1997-98		1998-99		1999-2000		1995-96 to 1999-2000			
		Claimed	Allowed	Claimed	Allowed	Claimed	Allowed	Claimed	Allowed	Claimed	Allowed	Average as per NTPC	Based on	Average as per CERC	**Normalised expenses for the base year 2000-01**
1	Employee cost	357.06	**333.22**	413.15	**391.07**	531.44	**506.65**	630.70	**565.91**	881.80	**817.38**	562.83	5 year average	522.85	**670.60**
2	Repair and Maintenance	383.47	**-**	513.31	**-**	670.49	**670.49**	1164.75	**1164.75**	1009.42	**1009.42**	948.22	3 year average	948.22	**1105.62**
3	Stores consumed	19.23	**19.23**	29.61	**29.61**	26.21	**26.21**	35.99	**35.99**	36.75	**36.75**	29.56	5 year average	29.56	**37.91**
4	Power charges	29.34	**29.34**	29.84	**29.84**	25.61	**25.61**	82.26	**82.26**	124.20	**99.43**	58.25	5 year average	53.30	**68.36**
5	Water Charges	63.17	**-**	53.59	**-**	531.64	**531.64**	440.98	**440.98**	562.90	**562.90**	511.84	3 year average	511.84	**596.81**
6	Communication expenses	14.44	**14.44**	18.33	**18.33**	23.00	**23.00**	25.07	**25.07**	16.66	**16.66**	19.50	5 year average	19.50	**25.01**
7	Travelling expenses	38.41	**38.41**	41.45	**41.45**	46.41	**46.41**	62.91	**62.91**	73.19	**73.19**	52.47	5 year average	52.47	**67.30**
8	Insurance	119.02	**119.02**	128.94	**128.94**	188.28	**188.28**	220.29	**220.29**	158.25	**158.25**	162.96	5 year average	162.96	**209.01**
9	Rent	0.00	**0.00**	0.00	**0.00**	0.00	**0.00**	0.00	**0.00**	4.10	**4.10**	4.10	5 year average	4.10	**5.26**
10	Security expenses	96.13	**96.13**	123.94	**123.94**	111.45	**111.45**	162.70	**162.70**	151.07	**151.07**	129.06	5year average	129.06	**165.53**
11	Professional expenses	0.58	**0.58**	2.59	**2.59**	3.76	**3.76**	5.78	**5.78**	5.88	**5.88**	3.72	5 year average	3.72	**4.77**
12	Printing & Stationary	10.35	**10.35**	15.37	**15.37**	5.77	**5.77**	9.17	**9.17**	10.17	**10.17**	10.17	5 year average	10.17	**13.04**
13	Other Expenses	217.14	**217.14**	162.22	**162.22**	118.73	**118.73**	194.15	**194.15**	178.21	**178.21**	174.09	5 year average	174.09	**223.29**
14	Corporate office expenses	337.57	**325.30**	304.28	**288.70**	578.48	**562.84**	682.83	**641.49**	1139.10	**932.43**	608.45	5 year average	550.15	**705.63**
15	Total O&M including water charges	1685.91	**1203.16**	1836.62	**1232.06**	2861.27	**2820.84**	3717.58	**3611.45**	4351.70	**4055.84**	3275.21		3171.97	**3898.13**

72. O &M expenses allowed in tariff are summarised below:

(Rs. in lakh)

		With 6% escalation		
	2000-01	**2001-02**	**2002-03**	**2003-04**
Base O&M – Average of (1995-1996 to 1999-2000)	3898.13			
O&M Charges including water charges		**4132.02**	**4379.94**	**4642.74**

73. The petitioner has claimed water charges separately. As the O&M charges allowed include water charges, these have not been approved separately.

INTEREST ON WORKING CAPITAL

74. Working capital has been calculated considering the following elements:

(a) **Fuel Cost**: As per the notification dated 26.3.2001, fuel cost for one month corresponding to normative Target Availability is to be included in the working capital. In this case target availability has been linked to machine availability and PLF. Accordingly, the fuel cost is worked out for one month on the basis of 65% PLF corresponding to generation of 25% on gas and 75% on liquid fuel. The fuel component in working capital worked out as summarized below:

	2001-02	**2002-03**	**2003-04**
Weighted Avg. GCV of Gas (KCal/SCM)	9943.33	9943.33	9943.33
Specific gas Consumption (SCM/kwh)	0.2137	0.2137	0.2137
Annual Requirement of gas (1000 SCM)	199628	199628	200175
Price of Gas (Rs./1000 SCM)	4866.20	4866.20	4866.20
Cost of Gas (Rs. in lakh)	9714	9714	9741
Cost of Gas - 1 month (Rs. in lakh)	**809.52**	**809.52**	**811.74**
Fuel Cost- Gas & liquid fuel (Naptha/HSD etc) - 1 month (Rs. in lakh)	**8130.02**	**8130.02**	**8152.29**

(b) **Liquid fuel:** Liquid fuel stock has been considered in the working capital by taking lower of the two values, namely stock as per the balance sheet for the year 2000-01 or the actual stock as on 31.3.2001 as calculated below:

	2001-02	**2002-03**	**2003-04**
Weighted Avg. GCV of Naptha (kCal/Lit.)	11310.00	11310.00	11310.00
Specific Naptha Consumption (Lits/kwh)	0.19	0.19	0.19
Annual Requirement of Naptha (KL)	526516	526516	527958
Price of Naptha (Rs./KL)	16684.39	16684.39	16684.39
Liquid fuel (Naptha/HSD etc) cost -1 month (Rs in lakh)	**7320.49**	**7320.49**	**7340.55**
Liquid fuel Stock (Actual) (Rs in lakh)	**1134.54**	**1134.54**	**1134.54**
Liquid fuel Stock as per audited accounts of 2000-01 (Rs in lakh)	**905**	**905**	**905**

(c) **O&M Expenses:** As per the notification dated 26.3.2001, operation and maintenance expenses (cash) for one month are permissible as a part of the working capital. Accordingly, O&M expenses for working capital has been worked out for 1 month of O&M expenses approved above are considered in tariff of the respective year.

(d) **Spares:** As per the notification dated 26.3.2001, maintenance spares at actuals subject to a maximum of 1% of the capital cost but not exceeding 1 year's requirements less value of $1/5^{th}$ of initial spares already capitalised for first 5 years are required to be considered in the working capital. Accordingly, actual spares consumption/one year requirement has been worked out in the similar manner as prescribed for O&M expenses in the notification dated 26.3.2001, that is, the average of actual spares consumption for the years 1995-1996 to 1999-2000 has been considered as spares consumption for the year 1997-98, which has been escalated twice at the rate of 10% per annum to arrive at spares consumption for the base year 1999-2000, and the base spares consumption for the year 1999-2000 has been further escalated at the rate of 6% per annum to arrive at permissible spares consumption for the relevant year. The amount has been restricted to spares arrived at by applying the escalation formula. As the plant is more than 5 years old, deduction of 1/5th of initial spares is not applicable. The calculations in support of spares allowed in working capital are as under:

(Rs. in lakh)

Spares						**Average**	**Base**	**Base**	**Tariff Period**		
	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	1995-1996 to 1999-2000	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Actual Consumption as per Audited Balance Sheet	245	304	464	707	742						
Calculation of Base Spares	245	304	464	707	742	493	596	632	670	710	753
1% of Average Capital Cost									1513	1513	1513
Minimum of the above allowed as spares									670	710	753

(e) **Receivables:** As per the notification dated 26.3.2001, receivables will be equivalent to two months average billing for sale of electricity calculated on normative Plant Load Factor/Target Availability. The receivables have been worked out on the basis of two months of fixed and variable charges corresponding to PLF of 65%. The variable charges of 2 months have been worked out considering 25% generation on gas and 75% on liquid fuel. The supporting calculations in respect of receivables are tabulated hereunder:

Computation of receivables component of Working Capital

Variable Charges	**2001-2002**	**2002-2003**	**2003-2004**
Gas (Rs/kWh)	1.0721	1.0721	1.0721
Liquid Fuel (Naptha/HSD etc)	3.2317	3.2317	3.2317
Variable Charges per year - Rs. in lakh	**97560.21**	**97560.21**	**97827.49**
Receivables			
Variable Charges -2 months- Rs. in lakh	16260.03	16260.03	16304.58
Fixed Charges - 2 months- Rs. in lakh	4133	4176	4224
Total- Rs. in lakh	**20393**	**20436**	**20528**

(f) Working Capital Margin: The notification dated 26.3.2001 is silent on Working Capital Margin. The Commission had considered the Working Capital Margin while awarding tariff for the period 1.4.1998 to 31.3.2001 vide order dated 18.5.2004 in Petition No.99/2002. Accordingly, Working Capital Margin of Rs 2030.00 lakh has been considered in the working. 50% of the Working Capital Margin has been considered as equity and the remaining 50% as loan. Return on equity and interest on loan have been allowed on the respective portion. The interest on loan portion of the Working Capital Margin has been allowed on the basis of weighted average rate of interest.

75. Since the notification dated 26.3.2001 does not provide for escalation in fuel prices, the same has not been considered in the computation of fuel elements in working capital. Therefore, the liquid fuel stock has been adopted based on stock for one month at normative Target Availability level.

76. The average SBI PLR of 11.50% has been considered as the rate of interest on working capital during the tariff period 2001-02 to 2003-04, in line with the Commission's earlier decision though the petitioner has claimed interest @ 12.35%.

77. The necessary details in support of calculation of Interest on Working Capital are appended below:

Calculation of Interest on Working Capital

(Rs. in lakh)

	2001-2002	2002-2003	2003-2004
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
Total Interest on Working capital	**3542**	**3554**	**3576**

ANNUAL FIXED CHARGES

78. The annual fixed charges for the period 1.4.2001 to 31.3.2004 allowed in this order are summed up as below:

(Rs. in lakh)

Particulars	2001-2002	2002-2003	2003-2004
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
TOTAL	**24797**	**25057**	**25341**

ENERGY/VARIABLE CHARGES

79. The notification dated 26.3.2001 in para 2.3 (a) lays down that the operational norms, except those relating to "Target Availability" and “Plant Load Factor" as contained in the existing tariff notifications for individual power stations issued by the Central Government under proviso to Section 43A (2) of the Electricity (Supply) Act, 1948 (for short, "the Supply Act") in respect of the existing stations belonging to the petitioner shall continue to apply for those stations. Similarly, para 2.3(b) of the notification dated 26.3.2001 saves application of operational norms for the existing and new stations for which no tariff notification had been issued by the Central Government, but Power Purchase Agreements/Bulk Power Supply Agreements were existing on the date of the notification dated 26.3.2001. Para 2.4 of the notification dated 26.3.2001 further lays down in detail the norms of operation, including Target Availability" and "Plant Load Factor". The explanation below para 2.4 further prescribes that for the purpose of calculating tariff, the operating parameters, namely, Station Head Rate, Secondary Fuel Oil Consumption and Auxiliary Consumption shall be determined on the basis of actuals or norms, whichever is lower.

80. Based on the explanation, it has been argued on behalf of Respondent No.1 that the operational parameters for Kawas GPS for the purpose of fixation of energy charges should be lower of the actuals or norms. According to Respondent No.1, the explanation governs para 2.3 as also para 2.4 of the notification dated 26.3.2001.

81. We have considered the submission made on behalf of Respondent No.1. The provisions of para 2.3 and para 2.4 are mutually exclusive. Para 2.3 will apply to the thermal stations belonging to the petitioner where, the Central Government , in

exercise of powers under proviso under Section 43 A (2) of the Supply Act had prescribed the terms and conditions of tariff or Power Purchase Agreements/Bulk Power Supply Agreements were signed. Para 2.4 applies in cases where terms and conditions of tariff in respect of generating stations belonging to Central Government were not notified by the Central Government or the agreements were not entered into by the generator and the beneficiaries. The explanation qualifies the norms prescribed under para 2.4. The tariff for Kawas GPS was notified by Ministry of Power vide notification dated 30.4.1994, issued under proviso to Section 43 A (2) of the Supply Act. Therefore, in view of the para 2.3 (a) of the notification dated 26.3.2001, the terms and conditions as contained in Ministry of Power notification dated 30.4.1994 shall govern the operational parameters, applicable to Kawas GPS.

82. It was next contended on behalf of Respondent No.1 that Ministry of Power notification dated 30.4.1994 was valid up to 31.3.1998 and, therefore, cannot be applied. We do not find any force in this contention of Respondent No.1. Ministry of Power notification dated 30.4.1994 was continued up to 31.3.2001. Para 6 of Ministry of Power notification dated 30.4.1994 provided that in case a new tariff for the period beyond dated 31.3.1998 was not finalised before that date, the beneficiaries would continue to pay to the petitioner for the power supplied from Kawas GPS beyond that date on ad hoc basis in the manner detailed in the notification. The Commission had allowed the applicability of the notification dated 30.4.1994 up to 31.3.2001. Thus, the operational norms, except those relating to target availability and PLF in respect of Kawas GPS as contained in Ministry of Power notification dated 30.4.1994 would be applicable for computation of tariff. The notification dated 30.4.1994 does not contain any provisions for computing energy

charges by considering the operational parameters based on norms or actuals, whichever is lower.

83. Therefore, the operational parameters as laid down in the notification dated 30.4.1994, except those relating to target availability and PLF have been considered for the purpose of determination of tariff in the present petition.

84. The petitioner has claimed the energy charges based on the operational norms, except those relating to PLF and target availability applicable to gas-based generating stations in terms of the notification dated 26.3.2001 for the tariff period 2001-2004 based on Ministry of Power notification dated 30.4.1994 as amended from time to time.

85. The respondents have pointed out that the petitioner is raising energy charges on a composite basis, despite the fact that capacity is to be declared separately for gas and liquid fuel under ABT. It is further stated that they are not buying the power from the liquid fuel but are made to pay for the power on liquid fuel in the composite billing for the time being. This is not fair even though the bills are provisional and subject to correction. Since the capacity is to be declared separately for gas and liquid fuel under ABT, the base energy charges have been computed for natural gas and liquid fuel separately.

86. The fuel price and GCV furnished by the petitioner for the month of January, February, March 2001 in the petition have been considered for the Base Energy Charge computation. The Base Energy Charge(BEC) computed based on the data furnished by the petitioner is summarised below:

Computation of Base Energy Charge

Description	Unit	65 % PLF
Capacity	MW	656.20
Normative 65% PLF (Relaxed)	Hours/Kw/year	5694.00
Gross Station Heat Rate (with Nox) Combined Cycle Operation	KCal/kWh	2125.00
Aux. Energy consumption for Combined Cycle Operation	%	3.00
Weighted Average GCV of liquid fuel (Naptha/HSD etc)	KCal/l	11310.00
Weighted Average GCV of Gas	Kcal/SCM	9943.33
Price of Gas	Rs/ 1000SCM	4866.20
Price of liquid fuel (Naptha/HSD etc)	Rs/KL	16684.39
Rate of Energy Charge ex-bus per kWh Sent (With NOx Control) Combined Cycle Operation with Gas	Paise/kWh	107.21
Rate of Energy Charge ex-bus per kWh Sent (With NOx Control) Combined Cycle Operation with liquid fuel (Naptha/HSD etc)	Paise/kWh	323.17

87. The Base Energy Charge has been calculated on base value of GCV, base price of fuel and normative operating parameters as indicated in the above table and are subject to fuel price adjustment. The notification dated 26.3.2001 provides for fuel price adjustment for variation in fuel price and GCV of fuels. Accordingly, the base energy charges approved shall be subject to adjustment. The formula applicable for fuel price and GCV variation (Gas and liquid fuel) adjustment shall be as given below:

$$\mathbf{FPA} = \frac{10 \times (SHR_n) \times (P_m/K_m) - (P_s/K_s)}{(100 - AC_n)}$$

Where,

FPA = Fuel price Adjustment for a month in Paise/kWh Sent out

SHR_n = Normative Gross Station Heat Rate expressed in kCal/kWh

AC_n = Normative Auxiliary Consumption in percentage

P_m = Weighted average price of Gas or Liquid fuel as per PSL for the month in Rs. / 1000 SCM of Rs./ KL or Rs./MT

K_m = Weighted average gross calorific value of Gas or Liquid fuel for the month in Kcal/ SCM or kCal/ Litre or kCal/ Kg

P_s = Base price of Gas or Liquid fuel as taken for determination of base energy charge in tariff order in Rs. / 1000 SCM of Rs./ KL or Rs./MT

K_s = Base value of gross calorific value of Gas or Liquid fuel as taken determination of base energy charge in tariff order in Kcal/ SCM or kCal/ Litre or kCal/ Kg

88. FPA shall further be subjected to adjustment for monthly operating pattern adjustment (MOPA) for percentage open cycle operation as certified by respective REB and corresponding to Gross Station Heat Rate of 3150 kCal/kWh (without Nox) and 3190 kCal/kWh (with Nox) and auxiliary energy consumption of 1%.

89. In addition to the charges approved above, the petitioner is entitled to recover other charges also like claim for reimbursement of Income-tax, other taxes, cess levied by a statutory authority, Development Surcharge and other charges in accordance with the notification dated 26.3.2001, as applicable. This is subject to the orders, if any, of the superior courts. The petitioner shall also be entitled to recover the filing fee of Rs. 10 lakh paid in the present petition from the respondents in ten equal monthly installments of Rs. one lakh each, payable by the respondents in proportion of the fixed charges. This is subject to confirmation that the amount has not been included in O &M expenses.

90. This order disposes of Petition No 31/2001.

Sd/-	Sd/-	Sd/-
(BHANU BHUSHAN)	**(K.N. SINHA)**	**(ASHOK BASU)**
MEMBER	**MEMBER**	**CHAIRMAN**

New Delhi dated the 7th April 2005