CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram

1. **Shri Ashok Basu, Chairperson**
2. **Shri K.N.Sinha, Member**
3. **Shri Bhanu Bhushan, Member**
4. **Shri A.H. Jung, Member**

Petition No 160/2004

In the matter of

Approval of tariff in respect of Anta Gas Power Station, for the period from 1.4.2004 to 31.3.2009.

And in the matter of

National Thermal Power Corporation Ltd. **……Petitioner**

Vs

1. Uttar Pradesh Power Corporation Limited, Lucknow
2. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
3. Ajmer Vidyut Vitran Nigam Ltd., Ajmer
4. Jodhpur Vidyut Vitran Nigam Ltd., Jodhpur
5. Delhi Transco Limited, New Delhi
6. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
7. Punjab State Electricity Board, Patiala
8. Himachal Pradesh State Electricity Board, Shimla
9. Power Development Deptt., Govt. of Jammu & Kashmir, Jammu
10. Power Department, Union Territory of Chandigarh, Chandigarh
11. Uttaranchal Power Corporation Limited, Dehradun …. **Respondents**

The following were present

1. Shri V.B.K. Jain, NTPC
2. Shri I.J. Kapoor, NTPC
3. Shri S.D. Jha, NTPC
4. Shri Manoj Saxena, NTPC
5. Shri Shankar Saran, NTPC
6. Shri D.G. Salpekar, NTPC
7. Shri Balaji Dubey, NTPC
8. Shri S.K. Johar, NTPC
9. Shri Guryog Singh, NTPC
10. Shri Satya Prakash, NTPC
11. Shri Ajay Garg, NTPC
12. Shri G.K Dua, NTPC

13. Ms Alka Saigal, NTPC
14. Shri Ajay Dua, NTPC
15. Shri T.K. Srivastava, UPPCL
16. Shri B.K. Paliwal, DTL
17. Shri V.K. Malhotra, DTL

ORDER
(DATE OF HEARING : 16.2.2006)

This petition has been filed by the petitioner, a generating company owned or controlled by the Central Government for approval of tariff in respect of Anta Power Station, (hereinafter referred to as "the generating station") for the period from 1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations")

2. The generating station with a total capacity of 419.33 MW comprises of 3 gas turbine units of 88.71 MW each and one steam turbine of 153.20 MW. The first gas turbine of the generating station was declared under commercial operation on 1.4.1989 and the steam turbine on 1.8.1990. Thus, the date of commercial operation of the generating station is 1.8.1990.

3. The tariff for the generating station for the period ending 31.3.2004 was approved by the Commission vide its order dated 30.4.2004 in Petition No 45/2001 based on capital cost of Rs. 45167 lakh as on 31.3.2001 and included FERV up to that date. In the petition, the petitioner had claimed additional capitalisation on works for the years 2001-02, 2002-03 and 2003-4 based on budgetary projections. This additional capitalisation claimed by the petitioner was not considered in the order dated 30.4.2004 for tariff determination. Subsequently, vide order dated 13.4.2005 in Petition No 174/2004, the Commission approved the additional capital expenditure of

Rs. 102.546 lakh against the petitioner's claim of additional capitalisation of Rs.2234.766 lakh for the period 1.4.2001 to 31.3.2004 (excluding FERV) and arrived at the capital base of Rs. 45269.40 lakh as on 31.3.2004, for the purpose determination of tariff as on 1.4.2004. The Commission further ordered that the cost of servicing of investment on the additional expenditure would be reimbursed to the petitioner during tariff for 2004-09. The details of the capital expenditure approved are given hereunder:

	(Rs. in lakh)
2001-2002	28.736
2002-2003	44.127
2003-2004	29.683
Total	**102.546**

4. Consequent to approval of the additional capital expenditure by order dated 13.4.2005, the petitioner filed the amended petition to claim tariff for the period 2004-05 to 2008-09. This order is in the context of the amended petition subsequently filed.

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

(Rs. in lakh)

Particulars	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**
Depreciation	827	827	827	827	827
Interest on Loan	0	0	0	0	0
Return on Equity	3266	3266	3266	3266	3266
Advance against Depreciation	0	0	0	0	0
Interest on Working Capital	1760	1771	1781	1797	1805
O & M Expenses	3933	4090	4254	4424	4601
TOTAL	**9787**	**9954**	**10128**	**10314**	**10499**

6. The details of interest on working capital furnished by the petitioner and its claim for interest thereon are summarised hereunder:

(Rs. in lakh)

	2004-05	**2005-06**	**2006-07**	**2007-08**	**2008-09**
Spares	978	1037	1099	1165	1235
O & M expenses	328	341	354	369	383
Recievables	8164	8192	8221	8270	8283
Total Working Capital	17174	17274	17379	17529	17606
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	**1760**	**1771**	**1781**	**1797**	**1805**

7. In addition, the petitioner has claimed the energy charges as under subject to adjustment for fuel price:

Description	Unit	**Combined Cycle**	**Open Cycle**
Rate of Energy Charge ex-bus per kWh sent (GAS)	Paise/ /kWh	**92.54**	**131.53**
Rate of Energy Charge ex-bus per kWh sent (NAPTHA)	Paise/ /kWh	**373.65**	**531.07**

8. The reply to the petition before amendment was filed by UPPCL and PSEB**.** The other respondents have not filed any reply. The petitioner has published notices in accordance with the procedure specified by the Commission. However, no objections or suggestions have been received in response to these notices.

9. Before we consider the details of tariff, a general issue regarding treatment of depreciation when it exceeds repayment of loan in a year raised by the beneficiaries in certain other petitions filed by the petitioner is being considered since this is one of the first orders for the period 1.4.2004 to 31.3.2009 in a petition filed by the petitioner and this will set precedent for decision in other cases.

10. Before we attempt detailed analysis of the matter, the relevant provisions of the 2004 regulations need to be taken note of. These regulations, *inter alia*, provide as under:

(a) In case any moratorium period is availed of by the generating company or the transmission licensee, depreciation provided for in the tariff during the years of moratorium is treated as repayment during those years and interest on loan capital is calculated accordingly.

(b) Depreciation is calculated annually, based on straight line method over the useful life of the asset and at the rates prescribed in the regulations.

The residual life of the asset is considered as 10% and depreciation is allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost is excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset includes additional capitalization on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.

(c) On repayment of entire loan the remaining depreciable value is to be spread over to the balance useful life of the asset.

(d) In addition to allowable depreciation, the generating company or the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 21 (i) subject to a ceiling of $1/10^{th}$ of loan amount as per regulation 20 minus depreciation as per schedule

Advance Against Depreciation is permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year and Advance Against Depreciation in a year is restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

11. From the above, it is to be seen that the 2004 regulations do not contain any express provision as regards the adjustment of depreciation against repayment of loan when it exceeds the amount of repayment in a year. Some of the State utilities in other petitions have in their replies argued that notwithstanding absence of any specific provision for adjustment of excess depreciation against the repayment of loan, the combined reading of the above-noted provisions of the 2004 regulations, leads to an inference that the excess depreciation has to be taken as repayment of loan.

12. In the first instance, we take notice of the historical background. Prior to 1992, the tariff in respect central power sector utilities was determined through the Power Purchase Agreements signed by such utilities with the State beneficiaries, as single part tariff. The Central Government constituted a Committee under the Chairmanship of Shri K.P. Rao, the then Member CEA to formulate principles and normative parameters for working out tariff for sale of power from NTPC and NHPC generating stations. The Committee in its report, *inter alia,* recommended two-part tariff and merit order operation of the power plant. The Committee recommended that the loans would be progressively reduced to the extent these have been repaid as per repayment schedule and once the loans are totally repaid and reduced to zero, the tariff would not include any interest element and the equity element would remain constant up to that stage. It was further provided in the report that after the loans were reduced to zero, equity component would progressively be reduced to the extent of further depreciation and return on equity would be determined on the basis of the equity component as reduced from year to year. The Central Government vide Department of Power letter dated 5.7.1991 conveyed that the Committee's report should be adopted without any modification with effect from 1.4.1991. Incidentally, till that time there was no specific provision in law under which the Central Government could lay down norms for determination of tariff though as owner of the petitioner and NHPC, it could issue suitable guidelines to these utilities.

13. With effect from 15.10.1991 section 43A was introduced in the Electricity (Supply) Act, 1948, which enabled the Central Government and CEA to prescribe financial and operational norms respectively for determination of tariff. The newly added section 43A (2) also empowered the Central and State Governments to

determine the terms, conditions and tariff for sale of electricity in respect of the generating companies wholly or partly owned by these Governments. Despite the fact that the Central Government had decided to adopt the report without any modification, the particular recommendation regarding reduction of equity was not given effect to either in the general notification dated 30.3.1992 issued under section 43A (2) of the Electricity (Supply) Act, 1948 or the project-specific notifications in respect of NTPC and NHPC generating stations. On the question of interest on loan it was provided in the notifications that interest on loan capital would be computed on the outstanding loans, including the schedule of repayment, as per the financial package approved by CEA. It was further provided that return on equity would be computed on the paid up and subscribed capital. Under the notifications, depreciation was recoverable in tariff based on the rates of depreciation notified by the Central Government from time to time.

14. The terms and conditions prescribed by the Central Government were continued up to 31.3.2001. With effect from 1.4.2001, the terms and conditions for determination of tariff as contained in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2001 (the 2001 regulations) became applicable. The 2001 regulations provided that interest on loan capital would be computed on the outstanding loans, taking into account the schedule of repayment as per the financial package approved by CEA or an Appropriate Agency. It was provided that return on equity would be computed on the paid up and subscribed capital. It would thus be seen that as regards interest on loan and return on equity, the provisions of the notifications earlier issued by the Central Government were generally retained. However, certain changes were made as regards recovery of

depreciation. In the 2001 regulations it was provided that the value base for the purpose of depreciation would be the historical cost of the asset and would be calculated annually as per straight line method at the specified rates. It was further provided that total depreciation during the life of the project would not exceed 90% of the approved original cost and on repayment of loan, the remaining depreciable value would be spread over the balance useful life. A new concept of Advance Against Depreciation was made applicable to thermal power generating stations. According to this, Advance Against Depreciation was permitted in addition to allowable depreciation where originally scheduled loan repayment exceeded the depreciation allowable. Therefore, under the 2001 regulations for the first time, some linkage was established between depreciation and the repayment of loan. The Commission in its order dated 20.12.2000 gave the following reasons for allowing Advance Against Depreciation:

> "It is worthwhile to bring about uniformity in the method of charging depreciation across the entire electricity sector covering the thermal and hydro generation as well as transmission. This could be achieved either by providing further accelerated deprecation for hydro and transmission projects or by providing advance against depreciation for repayment of loans in the case of thermal and transmission projects as well. Along with extending advance against depreciation, it is appropriate that the depreciation rates would then have to be linked to the fair life of the various assets. Thus, depreciation rates which were prevailing before 1992 could broadly become the relevant rates subject of course to any revision in estimation of useful life of the asset which was done in 1992 and 1994. This would smoothen out the tariff, reduce tariff shocks due to excessive front loading of tariff, bring uniformity of depreciation rates across various utilities etc. As far as the utilities are concerned, their debt service obligations are to be fully met subject to application of test of prudence with regard to the duration of loan which has been recognised as 12 years in the case of existing hydro stations. The utilities would also do well to manage their finance by resorting to refinancing etc by which they can create opportunities for optimising their financing cost and reduce interest burden, which shall accrue to them exclusively.
>
> We do recognise that the above may result in some reduction in the cash flow to utilities which are presently using accelerated depreciation. <u>However, no utility shall suffer on account of lack of funds for repayment of loans as the concept of advance against depreciation is a flexible measure.</u> It should be

ensured that once the loans are repaid the depreciation rates are readjusted to spread the balance depreciable value over the balance life of the assets."

15. The terms and conditions as contained in the 2001 regulations were valid up to 31.3.2004. Therefore, the Commission undertook an exercise for formulation of terms and conditions for determination of tariff applicable from 1.4.2004. In the first instance, the Commission had invited views of the stakeholders and other interested persons on the 2001 regulations. In response, a suggestion was made that the loan repayment should match the depreciation because in some cases loan repayment could start later due to moratorium period. It was also suggested that the provision for Advance Against Depreciation should be omitted or it should be provided only when the cumulative depreciation allowable is less than the original scheduled loan repayment on cumulative basis. The State utilities had also raised the issue of reduction of equity corresponding to recovery of depreciation after the loan is fully repaid, as recommended by the K.P. Rao Committee. These aspects were deliberated in the Discussion Paper on terms and conditions of tariff circulated by the Commission in June 2003. On further consideration of the responses received on the Discussion Paper, the Commission formulated draft regulations on the terms and conditions of tariff applicable from 1.4.2004, elaborately dealing with the genesis for the provisions made therein. The draft regulations provided that interest on loan capital would be computed duly taking into account the schedule of repayment and actual interest rate. It was provided that in case of the existing projects, the normative loan outstanding would be considered as the opening loan and the repayment would be worked out on normative basis. On the question of return on equity, the suggestion made by the State utilities for its reduction corresponding to depreciation recovered was not incorporated in the draft regulations. As regards depreciation and

Advance Against Depreciation, the provisions made in the 2001 regulations were generally retained in the draft regulations.

16. The suggestions and objections received on the draft regulations were considered by the Commission in its order dated 29.3.2004. In response to the draft regulations, the State utilities had pleaded that in the past, central power sector utilities contracted loans with a moratorium period extending beyond the date of commercial operation and in all such cases the interest on loan was passed on to the beneficiaries without considering any repayment during the moratorium period. This issue was considered threadbare and the Commission decided that in case any moratorium period is availed of by the central power sector utilities, the repayment during such period should be reckoned as depreciation provided in tariff during that year and the interest on loan would be calculated accordingly. The relevant extract from the order is placed below:-

> "We have also applied our mind to the issue of moratorium period after the commercial operation date. The effect of moratorium period is to increase the liability on account of interest on loan. In case the loan is repaid from the date of commercial operation, the interest liability would be going down on a year to year basis. We are, therefore, of the view that the moratorium period only benefits the central power sector utilities at the cost of the beneficiaries. We are keen to correct this situation and accordingly we have decided that in case any moratorium period is availed of by the central power sector utilities, the depreciation shall be reckoned as repayment during such moratorium period and the interest on loan shall be calculated accordingly. This arrangement is equitable to both i.e. the central power sector utilities and the beneficiaries inasmuch as the central power sector utilities would have sufficient cash flows during the moratorium period of loans, while the beneficiaries would get the benefit of reduction in the interest."

17. The above decision of the Commission has been notified in the 2004 regulations, as given at para 10(a) above. In this manner, the 2004 regulations

moved towards further strengthening the bond between depreciation and loan repayment and this has brought material change in the position on the nexus between the two.

18. It would, however, be seen that when the terms and conditions for determination of tariff applicable from 1.4.2004 were being formulated, the issue was raised on behalf of the State beneficiaries to co-relate depreciation with repayment of loan so that depreciation recovered should be treated as repayment in case of loans with moratorium period. The issue of adjusting excess depreciation against repayment of loan generally was not raised or considered or decided.

19. The argument for adjusting excess amount of depreciation against repayment of loan is that the 2004 regulations provide for considering depreciation against repayment of loan where there is a moratorium period. The 2004 regulations also provide for Advance Against Depreciation where depreciation is less than the amount of repayment, (subject to $1/10^{th}$ of the gross loan) to provide for cash flow to facilitate repayment. It has been urged that though the 2004 regulations are silent on the question of adjustment of depreciation, when depreciation exceeds repayment amount, provision has to be read into these regulations by implication, that being a situation in between the two positions expressly covered. It is also urged that unless the provision is so implied, the central power sector utilities, by not repaying the loans or contracting loans with longer tenor, be able to recover depreciation at accelerated rates, since so long as loan is outstanding, and is not fully paid, depreciation is recoverable in tariff based on the depreciation rates specified by the Commission and after entire repayment of loan, the amount of depreciation each year gets considerably

reduced, because in such case, balance recoverable depreciation is spread over the balance useful life of the asset, in accordance with para 10(c) above.

20. There is a well known principle of statutory interpretation called "*exressio unius est exclusio alterius*" which means that express enactment shuts the door to further implication. This has been interpreted to mean that where an expressly prescribed one or more particular modes of dealing with property are provided, such expression always excludes any other mode, except as specifically authorised. It has, however, been held that for application of the principle it is not enough that the express and the tacit are incongruous; it must be clear that they cannot be reasonably be intended to co-exist. The courts have observed that the rule has to be applied with great caution for it is neither conclusive nor of universal application. The Hon'ble Supreme Court in Asstt Collector of Central Excise Vs National Tobacco Co. [(1972) 2 SCC 560] observed that the rule, is often a valuable servant, but a dangerous master and further held that the rule is subservient to the basic principle that courts must endeavour to ascertain the legislative intent and purpose, and then adopt a rule of construction which effectuates rather than the one that may defeat them. Maxwell on Interpretation of Statutes (12th Edition – Page 296) has stated that "the maxim ought not be applied when its application, having regard to the subject-matter to which it is to be applied, leads to inconsistency and injustice".

21. The strict application of the principle will lead to the conclusion that when depreciation recovered exceeds the amount of repayment, the excess amount cannot be considered as repayment since the express provisions in the 2004 regulations are made for other purposes, and not for this purpose.

22. But, such an interpretation will appear to be inconsistent with the other provisions of the 2004 regulations and will do injustice to the State beneficiaries. The 2004 regulations provide that whenever the repayment amount exceeds the depreciation recovered, excess amount is to be allowed as Advance Against Depreciation. The converse of it should also be taken as true, which would mean that where depreciation exceeds the actual repayment, the excess amount is taken as repayment of loan; otherwise the State beneficiaries will be put to hardship and will be subjected to injustice. It is also to be noted that under the 2004 regulations when there is no actual repayment, (as during the moratorium period) the depreciation recovered is adjusted against loan repayment. Non-adjustment of depreciation against repayment of loan where depreciation is more will lead to illogical results. For example, where amount of repayment is only nominal, depreciation is not adjusted against repayment of loan, but when repayment is 'nil', depreciation is considered as repayment of loan. This interpretation may afford opportunity to the central power sector utilities for maneuvering their affairs in such a manner that they contract loans in such a manner that the loan repayments, howsoever small in amount, always remain outstanding. This cannot be the intention of the 2004 regulations which were based on equitable considerations, as extracted at para 16 above. Thus, rigid observance of the maxim *"expressio unius est exclusio alterius"* in this case would lead to a wholly irrational situation, make other provisions of the 2004 regulations inconsistent and absurd, and result in injustice. Therefore, strict interpretation of the 2004 regulations based on the rule should not be permitted. It was an omission not to consider the matter in the context of the issue presently before us. The conclusion, therefore, is that when depreciation recovered in a year is more than the amount of repayment during that year, the entire amount of depreciation is to be considered as

repayment of loan for tariff computation. This interpretation will coexist with the specific provisions of the 2004 regulations, adverted to at para 10 above, and will be in consonance with the intent and object the provision of these regulations which lays down that in case of moratorium, deprecation will be considered as repayment of loan.

23. Similar approach has been adopted by the Commission, while approving tariff in respect of the transmission assets of PGCIL, and in the interest of consistency and continuity of approach same methodology needs to be followed in case of the petitioner also.

CAPITAL COST

24. As per the second proviso to Regulation 17 of the 2004 regulations in case of the generating stations existing up to 31.3.2004, the capital cost admitted by the Commission for determination of tariff prior to 1.4.2004 shall form the basis for determination of tariff.

25. The petitioner has considered the capital expenditure of Rs. 46661 lakh after accounting for additional capitalization of Rs. 103 lakh on works already approved and Rs. 1392 lakh on account of FERV of for the period 1.4.2001 to 31.3.2004 over the capital expenditure of Rs. 45167 lakh admitted by the Commission in the order dated 30.4.2004 ibid. The details of FERV claimed by the petitioner are as follows:

(Rs. In lakh)

Year	2001-02	2002-03	2003-04	Total
Actual foreign loan	17945	17276	0	**35221**
FERV	(-)317	1709	0	**1392**

26. The petitioner, vide affidavit filed on 24.11.2005 has confirmed that all the assets included in the balance sheet for 2003-04 of the generating station were in use as on 1.4.2004. The petitioner has further submitted that the assets that will be out of use in the tariff period 2004-09 will be decapitalised and the details of such assets not in use/amounts decapitalized shall be furnished to the Commission along with the claims of capitalisation to be filed separately.

27. The Commission vide its order dated 13.4.2005 in Petition No.174/2004 has decided that the opening capital cost (excluding FERV) for the purpose of tariff for the period 2004-09 as on 1.4.2004 shall be Rs.45269.40 lakh. This has been adopted for the purpose of tariff determination in the present petition. Now we consider the question of additional capitalisation on account of FERV.

FERV/Extra Rupee Liability during the years 2001-04

28. Regulation 1.13 (a) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 provided as under:

(a) Extra rupee liability towards interest payment and loan repayment actually incurred, in the relevant year shall be admissible; provided it directly arises out of foreign exchange rate variation and is not attributable to Utility or its suppliers or contractors. Every utility shall follow the method as per the Accounting Standard-11 (Eleven) as issued by the Institute of Chartered Accountants of India to calculate the impact of exchange rate variation on loan repayment

(b) Any foreign exchange rate variation to the extent of the dividend paid out on the permissible equity contributed in foreign currency, subject to the

ceiling of permissible return shall be admissible. This as and when paid, may be spread over the twelve-month period in arrears

29. Regulation 1.7 of the 2001 regulations further provided that recovery of foreign exchange rate variation would be done directly by the utilities from the beneficiaries without filing a petition before the Commission. In case of any objections by the beneficiaries to the amounts claimed on these counts, they may file an appropriate petition before the Commission.

30. The petitioner's claim for capitalization of Rs.1392 lakh on account of FERV is based on the actual loan. The petitioner has submitted that its entitlement to FERV is to be admitted in view of clause 1.13 (a) of the 2001 regulations because it has "actually" incurred extra rupee liability towards interest payment and loan repayment in foreign currency.

31. We have very carefully considered the petitioner's claim. For determination of tariff of the generating station normative debt-equity ratio of 50:50 is being considered since 1992, irrespective of debt and equity actually employed. It appears that in this case actual loan was more than the normative loan, and actual equity less than the normative equity. The actual as well as normative loan has been repaid through tariff in 2003-04, but the amount of actual loan, which includes foreign currency loan is more than the normative loan as per the books of accounts of the petitioner. The petitioner has accordingly sought capitalization of an amount of Rs.1392 lakh on account of FERV based on actual loan. We do not find enough justification for the petitioner's claim. Capitalisation of FERV should be admissible on the outstanding normative loan, which is the basis for computation of tariff. Once the normative loan is

repaid partly or wholly by its claim through tariff, the respondents' liability to repay interest on loan (including foreign currency loan) gets reduced or extinguished. The petitioner is being allowed return on notional equity of 50% for more than one decade, which far exceeds return on actual equity. This accelerated amount of return on equity will be admissible to the petitioner through out the life of the generating station. This more than compensates the petitioner for the loss, if any, on account of FERV. If the matter is viewed from that angle, heartburn should be less. Accordingly, the petitioner is entitled to capitalization of FERV amount up to the year 2002-03, on the notional loan only. FERV allowed on notional loan is as under:

(Rs. In lakh)

Year	2001-02	2002-03	2003-04	Total
Normative foreign loan	10035	8469	0	**18504**
FERV	(-)179.129	847.077	0	**667.951**

32. Based on the above, after adjustment of FERV of Rs667.95 lakh, the gross block as on 1.4.2004 comes to Rs.46661.40 lakh as claimed as per details given hereunder:

(Rs. in lakh)

Capital cost admitted as on 31.3.2001.	45167.32
Additional Capitalization as approved for the years 2001-2004	102.556
FERV admitted for the tariff period 2001-2004	667.951
Opening Capital cost as on 1.4.2004 for the tariff period 2004-2009	**45937.66**

DEBT-EQUITY RATIO

33 Clause (1) of Regulation 20 of the 2004 regulations *inter alia* provides that iIn case of the existing generating stations, debt–equity ratio considered by the

Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff.

34. The Commission, vide its order dated 30.4.2004 in Petition No 45/2001 while approving tariff for the period from 1.4.2001 to 31.3.2004 had considered the normative debt-equity ratio of 50:50. Therefore, for the purpose of present petition, debt-equity ratio of 50:50 has been adopted in the working. Additional capitalisation on account of Works and FERV has been apportioned between debt and equity in the ratio of 50:50. Accordingly, for the purpose of tariff, an amount of Rs. 22969 lakh has been considered as equity as on 1.4.2004.

TARGET AVAILABILITY

35. The petitioner has considered Target Availability of 80%, based on the provisions of the 2004 regulations. Accordingly, Target Availability of 80 % has been considered for recovery of full fixed charges and computation of fuel element in the working capital for the period from 1.4.2004 to 31.3.2009.

RETURN ON EQUITY

36. As per clause (iii) of Regulation 21 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 20 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

37. The petitioner has claimed return on equity of Rs. 23331 lakh after accounting for equity on account of additional capitalization on works and FERV for the period

1.4.2001 to 31.3.2004. Equity on accepted capital cost is Rs.22969 lakh. Accordingly, the claim has been restricted to accepted equity. The return on equity has been worked out on the average normative equity. The charges payable by the respondents on account of return on equity shall be Rs 3216 lakh each year.

INTEREST ON LOAN

38. Clause (i) of regulation 21 of the 2004 regulations *inter alia* provides that,-

(a) Interest on loan capital shall be computed loan-wise on the loans arrived at in the manner indicated in regulation 20.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan as per regulation 20 minus cumulative repayment as admitted by the Commission for the period up to 31.3.2004. The repayment for the period 2004-09 shall be worked out accordingly on normative basis.

(c) The generating company shall make every effort to swap the loan as long as it results in net benefit to the long-term transmission customers. The costs associated with such swapping shall be borne by the long-term transmission customers.

(d) The changes to the loan terms and conditions shall be reflected from the date of such swapping and benefits passed on to the beneficiaries.

(e) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

39. In the instant case, the normative loan was fully paid during 2003-04. However, notional loan has arisen during the current tariff period because of additional

capitalization approved by the Commission for the period 2001-04 and capitalization on account of FERV. For the reasons already recorded, repayment in such case is to be equal to the amount of depreciation. As the normative loan amount is less than depreciation during 2004-05, entire normative loan gets repaid in that year itself. The weighted average rate of interest considered for calculating the interest on loan is that of Bonds XIV which is actually outstanding in the books of accounts of the petitioner. These Bonds replaced the high interest bearing GOI loans considered in earlier tariff period. For the reasons recorded in the Commission's order dated 5.5.2006 in Petition No 162/2004, interest on loan has been allowed by considering the interest of the Bonds, though the petitioner has claimed interest with reference to GOI loans. Financial charges incurred towards contracting of loans by the petitioner have been allowed and taken into consideration for calculation for interest on loan. The computations of interest on notional loan by applying weighted average interest rate are appended hereinbelow:

COMPUTATION OF INTEREST ON LOAN

(Rs. in lakh)

	2004-05	**2005-06**	**2006-07**	**2007-08**	**2009-04**
Gross loan-Opening	22969	22969	22969	22969	22969
Cumulative repayments of Loans up to previous year	22584	22969	22969	22969	22969
Net loan-Opening	385	0	0	0	0
Repayments of Loans during the year	385	0	0	0	0
Net loan-Closing	0	0	0	0	0
Average Net Loan	193	0	0	0	0
Rate of Interest on Loan	8.0800%	8.0800%	8.0800%	8.0800%	0.0000%
Interest on loan	16	0	0	0	0

DEPRECIATION

40. Sub-clause (a) of clause (ii) of Regulation 21 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

(i) The value base for the purpose of depreciation shall be the historical cost of the asset.

(ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government /Commission.

(iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

41. In present petition the petitioner has claimed decapitalisation of Rs. 351.24 lakh for the period up to 31.3.2004 and has claimed depreciation after accounting for depreciation of Rs. 248.73 lakh recovered against the assets decapitalised. However, we have considered decapitalisation of assets amounting to Rs. 251.68 lakh.

Therefore, adjustment of depreciation already recovered has been proportionately reduced and it works out to Rs. 158.69 lakh.

42. The cost of land in the present case is Rs. 113 lakh. The gross depreciable value of the asset, excluding land cost, as per (ii) above, is 0.9 X(Rs. 45938 lakh-Rs. 113 lakh) = Rs. 41242 lakh. Cumulative depreciation and AAD recovered in tariff up to 31.3.2004 is Rs. 36320 lakh, which amount takes into account depreciation of Rs. 83.22 lakh on FERV for the period 1.4.2001 to 31.3.2004 and the impact of assets decapitalized. Remaining depreciable value as on 1.4.2004 is thus Rs.4933 lakh.

43. The petitioner has calculated the weighted average depreciation rate (excluding cost of land) of 4.91% based on asset-wise depreciation corresponding to a gross block of Rs. 51244 lakh. This has not been considered since the entire normative loan is already repaid. Therefore, depreciation has been spread over to the balance useful life of the generating station in accordance with the 2004 regulations. The balance useful life of the generating station works out to 6.81 years as on 1.4.2004.

44. Based on the above, for the period 1.4.2004 to 31.3.2009 the depreciation works out to Rs. 724 lakh each year as shown below:

(Rs. in lakh)

Details of Depreciation	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block as on 31.3.2004	45938	45938	45938	45938	45938	45938
Depreciable Value	41242	41242	41242	41242	41242	41242
Balance Useful life of the asset		6.81	5.81	4.81	3.81	2.81
Remaining Depreciable Value		4933	4208	3484	2760	2035
Depreciation	**724**	**724**	**724**	**724**	**724**	**724**

ADVANCE AGAINST DEPRECIATION

45. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

46. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

47. The petitioner has not claimed Advance Against Depreciation. Therefore, the petitioner's entitlement to Advance Against Depreciation is "nil".

O&M EXPENSES

48. The 2004 regulations have prescribed the following O&M expense norms for gas turbine/Combined Cycle generating stations, other than small gas turbine power generating station with warranty spares -

(Rs. in lakh /MW)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses/ MW	5.2	5.41	5.62	5.85	6.08

49. The petitioner has claimed O&M expenses are as detailed below, stated to have been worked out based on actual expenses for the preceding 5 years:

Years	2004-05	2005-06	2006-07	2007-08	2008-09
O&M Expenses (Rs in. lakh)	3933	4090	4254	4424	4601

50. The petitioner has stated that the normative O&M expenses specified in the 2004 regulations are highly inadequate in case of gas-based generating stations. The petitioner has, therefore, submitted that O&M expenses should be based on actual figures for it to be more realistic.

51. The petitioner has submitted that the 10 year warranty period has expired in November 1998 and O&M charges claimed by them are higher than the normative O&M expenses due to the following reasons:

(i) Higher repair and maintenance (R&M) expenses due to aging, higher replacement cost of spares, equipment failure etc. and

(ii) Inclusion of cost of spares consumed at actuals after the warranty period and inclusion of additional capitalisation disallowed.

52. The Commission vide order dated 16.2.2006 had directed the petitioner to place on record the following information before a view on the revision of O&M expenses for the five gas based stations was taken:

(a) Details of actual O&M expenses from the date of commercial operation of 1st GT of each of the generating stations to 2004-05,

(b) O&M expenses recovered in tariff from the date of commercial operation of 1st GT to 2004-05;

(c) Whether or not the capital spares issued at zero cost already included in the capital cost for the purpose of tariff; and

(d) Basis of estimation of embedded cost of spares in respect of each of the above named gas based generating stations.

53. The issue of revision of O&M expenses as claimed by the petitioner shall be considered on merits after filing of the above information by the petitioner, after a comprehensive examination of the issue for all the five gas based generating stations of the petitioner. In the meanwhile, tariff is being awarded with O&M based the 2004 regulations.

54. The petitioner has prayed for a specific deviation pertaining to water charges in O&M. The petitioner has submitted that in the past years, the State Governments. have been resorting to manifold increase in the rates of water charges / royalty payable, which is not normally based on common commercial principles. Therefore, this increase cannot be covered under the normal O&M expenses allowed in the tariff. The petitioner has, therefore, submitted that any increase in the rates of water charges / royalty etc. by more than 4% per annum over the rates prevailing on 31.3.2004 should be additionally payable by the respondent beneficiaries.

55. The normative O&M expenses were finalized by the Commission after going through the transparent process of hearing and consulting all concerned and were based on the data furnished by the concerned utilities for different components of O&M, including water charges. Further, an escalation of 4% per year is inbuilt in the normative O&M expenses specified by the Commission. There may be other heads in

O&M expenses where actual expenses may be less than the normative expenses specified by the Commission. Therefore, we do not consider it to be justified to allow increase under one head, that is, water charges in isolation. As such, the direct recovery of additional O&M expenses on account of any increase in the rates of water charges / royalty etc. during tariff period cannot be allowed. However, the petitioner is at liberty to approach the Commission in accordance with law for recovery of additional water charges with proper justification and details of actual expenses recovered under other heads if State Governments resort to abnormal increase in the rates of water charges / royalty.

56. Based on above discussion, the year wise O&M expenses for the generating station work out as follows-

(Rs. in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses	**2181**	**2269**	**2357**	**2453**	**2550**

57. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, O &M expenses should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per actuals for extra cost to be incurred consequent to wage revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

INTEREST ON WORKING CAPITAL

58. In accordance with clause (v) of Regulation 21 of the 2004 regulations, working capital in case of gas based generating stations shall cover:

(i) Fuel cost for one month corresponding to the target availability duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

(ii) Liquid fuel stock for ½ month;

(iii) Operation and maintenance expenses for one month;

(iv) Maintenance spares at 1% of the historical cost escalated @ 6% per annum from the date of commercial operation ; and

(v) Receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on target availability.

59. Under the 2004 regulations, the rate of interest on working capital shall be on a normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later. Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

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

(a) Fuel Cost

The petitioner has claimed following cost for fuel component in working capital based on price and GCV of gas and liquid fuel (Naphtha) for preceding three

months from January 2904 to March 2004, stated to be based on actual operating pattern for 2003-04, that is, (84% on Gas and 16% on Liquid Fuel):

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08 (Leap Year)	2008-09
Fuel Cost for 1 Month	3267	3267	3267	3275	3267
Liquid fuel stock for 1/2 month	4438	4438	4438	4450	4438

The petitioner has claimed liquid fuel stock for ½ month by considering the availability of the generating station on liquid fuel through out the year. However, as noted above 84% availability of the generating station was declared on gas and the remaining 16% on liquid fuel. Therefore, the liquid fuel stock for ½ month is to be considered in proportion to the availability declared on that fuel and it has been calculated accordingly.

The petitioner has pleaded that there has been sharp rise in the fuel price in the recent months as a result of which there would be increase in the working capital and they will be filing a separate application for revision of IWC on account of steep and abnormal rise in fuel price. As per provisions of the 2004 regulations, interest on working capital has to be frozen as normative number at the beginning of the tariff setting based on the price and GCV of the fuel during preceding three months prevailing applicable rate of interest and is not to be revised based on subsequent revision of the price of fuel or applicable rate of interest. As such, the prayer of the petitioner to allow interest on working capital based on escalated fuel price cannot be accepted. The fuel stock has been worked out for two months on the basis of operational parameters given in the 2004 regulations. Based on the weighted average GCV and price of

fuels the fuel component in working capital works out as follows for different years during tariff period

(Rs in lakh)

Description	1.4.2004 to 31.3.2007 and 1.4.2008 to 31.3.2009	1.4. 2007 to 31.3.2008 (Leap Year)
Value of stock of Naphtha for 1/2 month	**710.06**	**712.01**
Fuel Cost-1Month	**3266.62**	**3275.57**
Energy Charges for Two month	**6533.24**	**6551.14**

(b) O&M Expenses: O&M expenses for working capital have been worked out for 1 month of O&M expenses approved above are considered in tariff of the respective year:

(c) Spares: The petitioner has calculated the value of maintenance spares for the purpose of working capital considering additional capital expenditure in respective years after the date of commercial operation. The amount claimed for maintenance spares for working capital calculation by the petitioner are as given below **:**

(Rs.in lakh).

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**
Amount claimed for maintenance spares	978	1037	1099	1165	1235

In our calculations, the spares requirement has been worked out based on the capital cost of Rs. Rs. 29990 lakh as on 1.8.1990, as claimed, after deducting amount decapitalised upto the date of commercial operation under the head of balance payments (category 10A).

(d) **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

	2004-05	**2005-06**	**2006-07**	**2007-08**	**2008-09**
Variable Charges Rs./kWh	1.375	1.375	1.375	1.375	1.375
Variable Charges per year (Rs.)	39199	39199	39199	39307	39199
Variable Charges -2 months (Rs in lakh)	6533	6533	6533	6551	6533
Fixed Charges - 2 months (Rs in lakh)	1238	1251	1267	1284	1301
Receivables (Rs in lakh)	7771	7784	7800	7836	7835

61. The average SBI PLR of 10.25% as applicable on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period 2004-05 to 2008-09.

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

Calculation of Interest on Working Capital

(Rs. in lakh)

	2004-2005	2005-2006	2006-07	2007-2008	2008-09
Fuel Cost	3267	3267	3267	3276	3267
Naphtha Stock	710	710	710	712	710
O & M expenses	182	189	196	204	213
Spares	665	705	747	792	840
Receivables	7771	7784	7800	7836	7835
Total Working Capital	12595	12655	12721	12820	12864
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	1291	1297	1304	1314	1319

ANNUAL FIXED CHARGES

63. A summary sheet showing the details of capital cost, etc is annexed with this order. The annual fixed charges for the period 1.4.1999 to 31.3.2004 allowed in this order are summed up as below:

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	724	724	724	724	724
Interest on Loan	16	0	0	0	0
Return on Equity	3216	3216	3216	3216	3216
Advance against Depreciation	0	0	0	0	0
Interest on Working Capital	1291	1297	1304	1314	1319
O & M Expenses	2181	2269	2357	2453	2550
TOTAL	**7427**	**7506**	**7601**	**7707**	**7808**

ENERGY/VARIABLE CHARGES

64. The petitioner has claimed following base energy charges:

Description	Unit	**Combined Cycle**	**Open Cycle**
Rate of Energy Charge ex-bus per kWh sent (GAS)	Paise/ /kWh	**92.54**	**131.53**
Rate of Energy Charge ex-bus per kWh sent (NAPHTHA)	Paise/ /kWh	**373.65**	**531.07**

65. The generating station is a combined cycle thermal power station designed for duel fuel firing, that is, natural gas and liquid fuel. The petitioner has claimed the energy charges based on the following operational norms as per the 2004 regulations-

Description	Unit	Combined Cycle Operation	Open Cycle Operation
Gross Station Heat Rate	kCal/kWh	2075.00	3010.00
Auxiliary Energy Consumption	%	3.00	1.00

66. The petitioner in its affidavit dated 15.2.2006 has submitted the auditors certificate regarding Price and GCV of fuels. The following table containing the prices and GCV of the fuel as certified by the auditors have been adopted in our calculations for base energy charges-

Description	**Data furnished vide affidavit dated 15.2.2006**
Gas price (Rs./1000 SCM)	3910.16
Gas GCV (kcal/SCM)	9038.82
Naphtha price (Rs./MT)	19790.49
GCV of Naphtha (Kcal/kg)	11330.22

67. The base energy charges claimed by the petitioner for combined cycle operation based on above operational norms and price and GCV of gas and Naphtha are in order and have been allowed.

68. The Base Energy Charges have 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 2004 regulations provide 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 adjustment shall be as given below: -

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

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

69. FPA shall further be subjected to adjustment for monthly operating pattern adjustment (MOPA) for percentage open cycle operation as certified by REB/SLDC and corresponding to Gross Station Heat Rate of 3045 kCal/kWh and auxiliary energy consumption of 1%, as per formula given below:

$$\textbf{MOPA} = (\text{BEC} + \text{FPA}) \times \left(\frac{\{(SHR_{no})/(100-AC_{no})\}}{\{(SHR_{nc})/(100-AC_{nc})\}} - 1 \right) \times \text{POCM}/100$$

Where,

MOPA - Monthly Operating Pattern Adjustment in Paise/kWh Sent out

BEC - Base Energy Charge as per tariff order in Paise/kWh sent out

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

SHR_{no} - Normative Gross Station Heat Rate for Open cycle operation expressed in kCal/kWh (3045 kCal/kWh)

SHR_{nc} - Normative Gross Station Heat Rate for Combined cycle operation expressed in kCal/kWh (2100 kCal/kWh)

AC_{no} - Normative Auxiliary Consumption for Open cycle operation in percentage (1%)

AC_{nc} - Normative Auxiliary Consumption for Combined cycle operation in percentage (3%)

POCM - Open cycle generation during the month in percentage

70. Since there is provision for monthly operating pattern adjustment to take care of open cycle operation, there is no need for specifying base energy charges for open cycle operation.

Impact of additional capitalization for the years 2001-04

71. In petition No 174/2004 filed by the petitioner for approval of revised fixed charges for additional capitalization for the period 1.4.2001 to 31.3.2004, the Commission has decided that additional capital expenditure be added to the gross block as on 1.4.2001 to arrive at gross block as on 1.4.2004 for the purpose of fixation of tariff for the period 2004-05 to 2008-09. The Commission has further ordered that the petitioner would be entitled to earn return on equity @ 16% on equity portion of additional capitalization approved and interest on loan at the rate as applicable during 2001-02 to 2003-04. The return on equity and interest on loan are payable on additional capitalization from 1st April of the financial year following the financial year to which additional capital expenditure relates.

72. Based on the above, the petitioner shall be entitled to recover the following amounts from the respondents through tariff on account of return on equity and interest on loan on account of additional capitalisation on works.:

(Rs. in lakh)

		2001-02	2002-03	2003-04	Total
Period		1.00	1.00	1.00	
Additional Capitalisation		**28.74**	**44.13**	**29.68**	**102.55**
Financing of Additional Capitalisation					
Notional Loan		14.37	22.06	14.84	51.27
Notional Equity		14.37	22.06	14.84	51.27
Total					

Effective Additional Capitalisation					
Opening Loan Balance		0.00	14.37	36.43	
Addition of Loan		14.37	22.06	14.84	**51.27**
Repayment of Loan		0.00	0.00	0.00	**0.00**
Closing Loan Balance		14.37	36.43	51.27	
Effective Loan			14.37	36.43	
Weighted Average Rate of Interest on Loan			4.7600%	8.0800%	
Effective Equity			14.37	36.43	
Interest on Loan			0.68	2.94	**3.63**
Return on Equity	16%		2.30	5.83	**8.13**
Impact of Additional Capitalisation			2.98	8.77	**11.76**

73. The petitioner has sought approval for the reimbursement of expenditure of Rs. 263917/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one installment in the ratio applicable for sharing of fixed charges. The petitioner has also sought reimbursement of filing fee of Rs.25 lakh paid. A final view on reimbursement of filing fee is yet to be taken by the Commission for which views of the stakeholder have been called for. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.

74. In addition to the charges approved above, the petitioner is entitled to recover other charges also like incentive, claim for reimbursement of Income-tax, other taxes, cess levied by a statutory authority, and other charges in accordance with the 2004 regulations, as applicable.

75. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's interim directions. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.

76. This order disposes of Petition No 160/2004.

Sd/-	Sd/-	Sd/-	Sd/-
(A.H. JUNG)	**(BHANU BHUSHAN**	**(K.N. SINHA)**	**(ASHOK BASU)**
MEMBER	**MEMBER**	**MEMBER**	**CHAIRPERSON**

New Delhi dated the 9th May 2006

Summary Sheet					
Company:				**NTPC Ltd.**	
Power Station:				**ANTA GPS**	
Petition No.				**160/2004**	
Tariff Setting Period				**2004-09**	
					(Rs. in lakh)
1	**Capital Cost of the Project**				**45938**
2	**Admitted Capital Cost as on 1.4.2004 for Calculation of Debt and Equity**				**45167**
3	**Additional Capitalisation(works)**				**103**
	2001-02			29	
	2002-03			44	
	2003-04			30	
	Total			103	
4	**Additional Capitalisation(FERV)**				**668**
	2001-02			-179	
	2002-03			847	
	2003-04			0.00	
	Total			668	
5	**Total Capital Cost as on 1.4.2004(2+3+4)**				**45938**
6	**Means of Finance[1] :**				
	Debt		50.00%	22969	
	Equity		50.00%	22969	
	Total		100.00%	45938	
7	**Gross Normative Loan as on 1.4.2004**				**0**
8	**Cumulative Repayment up to 31.3.2009 :**				**22969**
	Repaid up to 31.3.2004			22584.00	
	1.4.2001 to 31.3.2004 (ACE & FERV)			0.00	
	1.4.2004 to 31.3.2009			385	
	Total			22969	
9	**Balance Loan to be repaid beyond 31.3.2009 :**				**0**
10	**Depreciation recovered upto 31.3.2009 :**				**39931**
		Dep	**AAD**	**Total**	
	Recovered up to 31.3.2004	36385	0	36385	
	1.4.2001 to 31.3.2004 (ACE & FERV)	83	0	83	
	1.4.2004 to 31.3.2009	3622	0	3622	
	Adjustment of Cumulative Depreciation due to decapitalisation	(-)159	0	-159	
	Total			39931	
11	**Balance Depreciation to be recovered beyond 31.3.2009 :**				**1311**
	Capital cost for the purpose of Depreciation			**45167**	
	ACE + FERV			**770**	
	Capital cost as 1.4.2004			**45938**	
	Less: Land Cost			**113**	
				45825	
	90% of Capital Cost as above			**41242**	
	Cum. Depreciation to be recovered up to 31.3.2009			**39931**	
	Balance Depreciation to be recovered beyond 31.3.2009			**1311**	