CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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

Petition No.60/2005

In the matter of

Approval of transmission charges for Stage-I of 400 kV Thyristor controlled series compensation project (FACTs devices) on Kanpur—Ballabgarh 400 kV S/C line at Ballabgarh in Northern Region for the period from 1.4.2004 to 31.3.2009 and for additional capitalisation during 2001-04.

And in the matter of

Power Grid Corporation of India Limited

.....Petitioner

Vs

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
- 2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
- 3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
- 8. Power Development Department, Govt. of J&K, Srinagar
- 9. Uttar Pradesh Power Corporation Ltd., Lucknow
- 10. Delhi Transco Ltd. New Delhi
- 11. Chandigarh Administration, Chandigarh
- 12. Uttranchal Power Corporation Ltd, Dehradun
- 13. North Centre Railway, Allahabad

.....Respondents

The following were present:

- 1. Shri U.K. Tyagi, PGCIL
- 2. Shri C. Kannan, PGCIL
- 3. Shri M.M.Mondal, PGCIL
- 4. Shri S.R.G.Sabal, AVVNL
- 5. Shri A.S.Chauhan, JVVNL
- 6. Shri T.P.S.Bawa, PSEB
- 7. Shri V.K.Gupta, Consultant, PSEB
- 8. Shri S.P.Srivastava, EE, UPPCL

ORDER (DATE OF HEARING: 7.3.2006)

The present petition has been filed for approval for transmission charges for Stage-I of 400 kV Thyristor controlled series compensation project (FACTs devices) on Kanpur – Ballabgarh 400 kV S/C transmission line at Ballabgarh in Northern Region for the period from 1.4.2004 to 31.03.2009, based on Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations") and for additional capitalisation during 2001-04. The petitioner has also prayed that it be reimbursed the expenditure by the beneficiaries towards publishing of notices in Newspapers and petition filing fee.

- 2. The investment approval for the transmission assets was accorded by the Board of Directors of the petitioner company under Memorandum dated 12.5.2000 at an estimated cost of Rs 1476 lakh, including IDC of Rs 83 lakh.
- 3. The asset has been declared under commercial operation with effect from 1.7.2002 and the completion cost of the asset is stated to be Rs 1499.18 lakh.
- 4. The tariff for the above said asset for the period 1.7.2002 to 31.3.2004 was approved by the Commission by its order dated 23.3.2005 in Petition No.116/2002, by admitting the capital expenditure of Rs 1486.75 lakh as on date of commercial operation.
 - 5. The petitioner has claimed the transmission charges as under:

(Rs.in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--------------------------------|---------|---------|---------|---------|---------|
| Depreciation | 53.97 | 53.97 | 53.97 | 53.97 | 53.97 |
| Interest on Loan | 116.32 | 105.78 | 95.24 | 84.69 | 74.15 |
| Return on Equity | 53.93 | 53.93 | 53.93 | 53.93 | 53.93 |
| Advance against Depreciation | 0.00 | 1.94 | 41.10 | 41.10 | 41.10 |
| Interest on Working Capital | 6.36 | 6.35 | 6.98 | 6.95 | 6.92 |
| O & M Expenses | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 |
| Total | 258.70 | 251.21 | 281.64 | 272.26 | 262.96 |

6. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(Rs in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--------------------|---------|---------|---------|---------|---------|
| Maintenance Spares | 16.61 | 17.60 | 18.66 | 19.78 | 20.96 |
| O & M expenses | 2.34 | 2.44 | 2.54 | 2.64 | 2.74 |
| Receivables | 43.12 | 41.87 | 46.94 | 45.38 | 43.83 |
| Total | 62.07 | 61.91 | 68.13 | 67.79 | 67.53 |
| Rate of Interest | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% |
| Interest | 6.36 | 6.35 | 6.98 | 6.95 | 6.92 |

7. The replies to the petition have been filed by Punjab State Electricity Board, Jaipur Vidyut Vitran Nigam Ltd, Jodhpur Vidyut Vitran Nigam Ltd and Ajmer Vidyut Vitran Nigam Ltd. No comments and or suggestions have been received, in response to the notices published by the petitioner, in the newspapers.

CAPITAL COST

8. As per clause (2) of Regulation 52 of the 2004 regulations, in case of the projects existing as on 31.3.2004, the project cost admitted by the Commission for determination of tariff prior to 1.4.2004 shall form the basis for determination of tariff.

- 9. The petitioner has claimed the capital expenditure of Rs.1499.18 lakh which includes Rs.1486.75 lakh as admitted by the Commission in its order dated 23.3.2005 ibid and Rs. 12.43 lakh towards additional capital expenditure incurred during 2001-04 after the date of commercial operation.
- 10. As per the auditors certificate dated 6.10.2003 furnished by the petitioner, the actual completion cost of the transmission line is Rs 1499.18 lakh. Based on the audited expenditure submitted by the petitioner ,the gross block is worked out as under:

(Rs in lakh).

| | (1 (3 111 Idi(11). |
|---|---------------------|
| Expenditure up to the date of commercial operation (1.7.2002) | 1486.75 |
| Gross block on date of commercial operation. | 1486.75 |
| Additional Capital expenditure from the date of commercial operation to 31.3.2003 | 12.43 |
| Gross block as on 31.3.2003 | 1499.18 |
| Additional Capital expenditure from 1.4.2003 to 31.3.2004 | 0.00 |
| Gross block on 31.3.2004 | 1499.18 |

Additional Capitalisation Expenditure during 2001-04

11. As per Regulation 1.10 of the CERC (Terms and conditions of Tariff) Regulations, 2001, the tariff revisions during the tariff period on account of Capital expenditure within the approved project cost incurred during the tariff period may be entertained by the Commission only if such expenditure exceeds 20% of the approved cost. In all cases, where the expenditure is less than 20%,tariff revision shall be considered in the next tariff period.

12. The petitioner has claimed an additional capitalisation of Rs. 12.43 lakh during 2001-04 which is less than 20% of the approved cost. As the claim of additional capitalisation of Rs 12.43 lakh by the petitioner is for the release of retention payments and is within the original scope of work, the said additional capitalisation of Rs 12.43 lakh is allowed.

Extra Rupee Liability during the years 2001-04

- 13. The petitioner has not claimed additional capitalisation on account of FERV as there are no foreign loans.
- 14. Also, the petitioner has stated that the assets are in good health and expected to provide satisfactory services and that no part of the asset have been taken out of service or decpaitalised.
- 15. In consideration of the above, the gross block of Rs 1499.18 lakh as on 31.3.2004 without FERV, as indicated by the petitioner, has been considered.

DEBT-EQUITY RATIO

- 16. Regulation 54 of the 2004 regulations *inter alia* provides that,-
 - (i) In case of the existing project, 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.
 - (ii) In case of the transmission system for which investment approval was accorded prior to 1.4.2004 and which is likely to be declared under commercial

operation during the period 1.4.2004 to 31.3.2009, debt-equity in the ratio of 70:30 shall be considered.

Provided that where deployment of equity is less than 30%, the actual equity deployed shall be considered for the purpose of determination of tariff.

Provided further that the Commission may in appropriate case consider equity higher than 30% for the purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% was in the interest of general public;

(iii) In case of the transmission system for which investment approval is accorded on or after 1.4.2004, debt-equity in the ratio of 70:30 shall be considered for the purpose of determination of tariff:

Provided that where deployment of equity is less than 30%, the actual equity deployed shall be considered for the purpose of determination of tariff.

- (iv) The debt and equity amount arrived at in accordance with above subclause (1), (2) or (3), as the case may be, shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation."
- 17. The petitioner has claimed tariff based on debt--equity ratio of 74.93: 25.07 as considered by the Commission in its order dated 23.3.2005 ibid. Further, the additional capital expenditure for the years 2002-03 and 2003-04, amounting to Rs 12.43 lakh has been adjusted by the petitioner against equity. However in order to make over all debt –equity ratio close to the approved debt-equity ratio of 80: 20, the entire amount of additional capital expenditure has been considered as loan. Accordingly the adjusted debt-equity ratio as on 31.3.2004, works out to 75.14: 24.86. Based on this,

an amount of Rs. 372.75 lakh as on 1.4.2004 has been considered as the equity, for the purpose of determination of tariff in the present petition.

RETURN ON EQUITY

- 18. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 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.
- 19. The petitioner has claimed return on equity of Rs. 385.18 lakh, which includes equity amounting to Rs. 12.43 lakh, on account of capital expenditure incurred during 2002-03 and 2003-04. Since the additional capital expenditure amounting to Rs.12.43 lakh has been adjusted against loan, for the reasons stated in para 17 above, a sum of Rs 372.75 lakh is considered for the purpose of return of equity. Accordingly, the petitioner shall be entitled to return on equity @ Rs. 52.19 lakh each year during the tariff period.

INTEREST ON LOAN

- 20. Clause (i) of regulation 56 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 54.
 - (b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan as per regulation 54 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 transmission licensee 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.
- The petitioner has claimed interest on loan in the following manner:
 - (i) Gross loans, cumulative loan repayment up to previous year as
 - (ii) admitted by the Commission in the order dated 23.3.2005 have been taken as the Opening Balance as on 1.4.2004.
 - (iii) On the basis of actual rate of interest on actual average loan, the weighted average rate of interest on loan is worked out for various years,
 - (iv) Gross loans as admitted by the Commission in the order dated 23.3.2005 ibid has been considered as notional loan and the weighted
 - (v) Average rate of interest on loan for respective years as per above has been multiplied to arrive at interest on loan.
- 22. In our calculation, the interest on loan has been worked as detailed below:

- (i) Details of net outstanding loan as on 31.3.2004, repayment schedule for the period 2004-09, rate of interest as on 1.4.2004, etc. have been taken from loan reconciliation statement submitted by the petitioner for working out weighted average rate of interest.
- (ii) Gross notional loan and cumulative repayment up to 31.3.2004 have been taken from the order dated 23.3.2005 ibid.
- (iii) Notional loan arising out of Additional Capitalisation during the years 2001-04 has been considered.
- (iv) Tariff is worked out considering normative loan and normative repayments. Once the normative loan is arrived at, it is considered for all purposes in the tariff. Normative repayment is worked out by the following formula:

Actual repayment of actual loan during the year -----X
Opening balance of actual loan during the year

Opening balance of normative loan during the year

- (v) Moratorium in repayment of loan is considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it is considered as moratorium and depreciation during the year is deemed as normative repayment of loan during the year.
- (vi) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 23. Based on the above the interest on loan has been calculated as per details given below:

(Rs in lakh)

| 1-44 1 | 11-4- | 0004.05 | 0005.00 | · · · · · · · · · · · · · · · · · · · | 0007.00 | 0000 00 |
|---------------------------|---------|----------|----------|---------------------------------------|----------|----------|
| Interest on Loan | Upto | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| | 31.3.04 | | | | | |
| Gross Loan as per last | 1114.00 | - | - | - | - | - |
| Order | | | | | | |
| Addition due to | 12.43 | _ | - | - | - | - |
| Additional Capitalisation | | | | | | |
| Addition due to FERV | 0.00 | - | - | - | - | - |
| Gross Normative Loan | 1126.43 | 1126.43 | 1126.43 | 1126.43 | 1126.43 | 1126.43 |
| Cumulative Repayment | - | 13.55 | 109.68 | 205.80 | 301.93 | 398.06 |
| upto previous Year | | | | | | |
| Net Loan-Opening | - | 1112.88 | 1016.75 | 920.63 | 824.50 | 728.37 |
| Repayment during the | - | 96.13 | 96.13 | 96.13 | 96.13 | 96.13 |
| year | | | | | | |
| Net Loan-Closing | - | 1016.75 | 920.63 | 824.50 | 728.37 | 632.24 |
| Average Loan | - | 1064.82 | 968.69 | 872.56 | 776.43 | 680.31 |
| Weighted Average Rate | - | 11.0460% | 11.0416% | 11.0363% | 11.0296% | 11.0210% |
| of Interest on Loan | | | | | | |
| Interest | - | 117.62 | 106.96 | 96.30 | 85.64 | 74.98 |

DEPRECIATION

- 24. Sub-clause (a) of clause (ii) of Regulation 56 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.
- 25. Depreciation for individual items of capital expenditure has been calculated on the capital cost of 1499.18 lakh, including the additional capital expenditure, at the rates prescribed in the 2004 regulations. Depreciable value is worked out as 0.9 x 1499.18 lakh which is Rs 1349.26 lakh. Cumulative depreciation and Advance Against Depreciation recovered upto 31.3.2004 is 93.66 lakh. Remaining depreciable value as on 1.4.2000 is Rs 1255.66 lakh. Based on the above, depreciation during 2004-09 has been worked out as under:

(Rs in lakh)

| Details of | | Upto | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|---------------------|------|-----------|---------|---------|---------|---------|---------|
| Depreciation | | 31.3.2004 | | | | | |
| As per dated | | 1486.75 | | | | | |
| 23.3.05 | | | | | | | |
| Addition during | | 12.43 | | | | | |
| 2001-04 due to | | | | | | | |
| Additional | | | | | | | |
| Capitalisation | | | | | | | |
| Addition during | | 0.00 | | | | | |
| 2001-04 due to | | | | | | | |
| FERV | | | | | | | |
| Gross Block as on | | 1499.18 | 1499.18 | 1499.18 | 1499.18 | 1499.18 | 1499.18 |
| 31.3.2004 | | | | | | | |
| Rate of | 3.6% | | | | | | |
| Depreciation | | | | | | | |
| Depreciable Value | 90% | | 1349.26 | 1349.26 | 1349.26 | 1349.26 | 1349.26 |
| Balance Useful life | | | | | - | - | - |
| of the asset | | | - | - | | | |
| Remaining | | | 1255.60 | 1201.63 | 1143.46 | 1047.33 | 951.20 |

| Depreciable Value | | | | | | |
|-------------------|--|-------|-------|-------|-------|-------|
| Depreciation | | 53.97 | 53.97 | 53.97 | 53.97 | 53.97 |

ADVANCE AGAINST DEPRECIATION

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.

- 27. 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.
- 28. The petitioner had claimed Advance Against Depreciation as follows:
 - (i) 1/10th of the gross notional loan as admitted by the Commission in the order dated 23.3.2005.
 - (ii) Cumulative loan as well as repayment of notional loan during the year have been considered.
 - (iii) Depreciation as claimed in the petition has been taken into account.
- 29. In our calculation ,the Advance Against Depreciation has been worked out as under:
 - (i) 1/10th of gross loan is worked out from gross notional loan as per para 23 above.

- (ii) Repayment of notional loan during the year is considered as per para 23 above.
- (iii) Depreciation is worked out as per para 25 above.
- (iv) Cumulative depreciation upto 31.3.2004 is worked out considering cumulative depreciation / AAD as per the last tariff order.
- 30. The petitioner's entitlement to Advance Against Depreciation is worked out as under:

(Rs in lakh)

| | | | | (130 III Idili | ' / |
|---|---------|---------|---------|----------------|---------|
| Advance against Depreciation | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| 1/10th of Gross Loan(s) | 112.64 | 112.64 | 112.64 | 112.64 | 112.64 |
| Repayment of the Loan | 96.13 | 96.13 | 96.13 | 96.13 | 96.13 |
| Minimum of the above | 96.13 | 96.13 | 96.13 | 96.13 | 96.13 |
| Depreciation during the year | 53.97 | 53.97 | 53.97 | 53.97 | 53.97 |
| (A) Difference | 42.16 | 42.16 | 42.16 | 42.16 | 42.16 |
| Cumulative Repayment of the Loan | 109.68 | 205.80 | 301.93 | 398.06 | 494.19 |
| Cumulative Depreciation/ Advance against Depreciation | 147.63 | 201.60 | 259.77 | 355.90 | 452.03 |
| (B) Difference | -37.95 | 4.20 | 42.16 | 42.16 | 42.16 |
| Advance against Depreciation Minimum of (A) and (B) | 0.00 | 4.20 | 42.16 | 42.16 | 42.16 |

OPERATION & MAINTENANCE EXPENSES

31. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses:

(Rs in lakh)

| | Year | | | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|--|--|--|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | | | |
| O&M expenses (Rs in lakh per ckt-km) | 0.227 | 0.236 | 0.246 | 0.255 | 0.266 | | | |
| O&M expenses (Rs in lakh per bay) | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 | | | |

32. The petitioner has claimed O & M expenses for one bay for the respective year and the same has been considered and allowed as given hereunder:

(Rs. in lakh)

| | Year | | | | | | | |
|-----------------|---------|---------|---------|---------|---------|--|--|--|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | | | |
| Allowable O & M | | | | | | | | |
| for 1 bay | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 | | | |
| Total | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 | | | |
| | | | | | | | | |

INTEREST ON WORKING CAPITAL

33. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @1% of the historical cost escalated @ 6% per annum from the date of commercial operation. In the present case, maintenance spares have been worked out @1% of the capital cost of Rs 1486.75 lakh as on the date of commercial operation as per the last tariff setting and escalating @6% per annum.

(ii) O & M expenses

Regulation 56 (v) (1) (a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the respective year in the petition. This has been considered in the working capital.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed receivables on the basis of 2 months' of annual transmission charges claimed in the petition, In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v)(2) of the 2004 regulations, rate of interest on working capital shall be on 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 project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2004, which is in accordance with the 2004 regulations and has been allowed.

34. The necessary computations in support of interest on working capital are appended herein below:

(Rs. in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--------------------|---------|---------|---------|---------|---------|
| Maintenance Spares | 16.47 | 17.46 | 18.50 | 19.61 | 20.79 |
| O & M expenses | 2.34 | 2.44 | 2.54 | 2.64 | 2.74 |
| Receivables | 43.04 | 42.15 | 47.00 | 45.42 | 43.85 |
| Total | 61.85 | 62.05 | 68.04 | 67.67 | 67.38 |
| Rate of Interest | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% |
| Interest | 6.34 | 636 | 6.97 | 6.94 | 6.91 |

ANNUAL TRANSMISSION CHARGES

35. A summary sheet showing basic details of capital cost and other related aspects is annexed to this order. The transmission charges being allowed for the transmission system are summarised below.

(Rs.in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|-----------------------------|---------|---------|---------|---------|---------|
| Depreciation | 53.97 | 53.97 | 53.97 | 53.97 | 53.97 |
| Interest on Loan | 117.62 | 106.96 | 96.30 | 85.64 | 74.98 |
| Return on Equity | 52.19 | 52.19 | 52.19 | 52.19 | 52.19 |
| Advance against | 0.00 | 4.20 | 42.16 | 42.16 | 42.16 |
| Depreciation | | | | | |
| Interest on Working Capital | 6.34 | 6.36 | 6.97 | 6.94 | 6.91 |
| O & M Expenses | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 |
| Total | 258.24 | 252.93 | 282.00 | 272.52 | 263.10 |

Impact of additional capitalization for the years 2001-04.

36. In the petitions filed by NTPC for approval of revised fixed charges for additional capitalisation 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 trhe gross block as on 1.4.2004 for the purposes of fixation of tariff for the period 2004-05 to 2008-09. The Commission has further ordered that NTPC would be entitled to earn return on equity @ 16% on equity portion of additional capitalisation 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 capitalisation from 1st April of the financial year following the financial year to which additional expenditure relates. Impact of additional capitalisation for the years 2001-04 in respect of 400 kV Kanpur –Ballabgarh transmission line as shown below, shall be recovered by the petitioner from the respondents along with tariff for the current period.

(Rs in lakh)

| | | 2001-02 | 2002-03 | 2003-04 | Total |
|--------------------------------------|-----|---------|----------|----------|-------|
| Additional Capitalisation | | • | 12.43 | 0.00 | 12.43 |
| Financing of Additional | | | | | |
| Capitalisation | | | | | |
| Notional Loan | | - | 12.43 | 0.00 | 12.43 |
| Notional Equity | | - | 0.00 | 0.00 | 0.00 |
| Total | | | 12.43 | 0.00 | 12.43 |
| Effective Additional Capitalisation | | | | | |
| Opening Loan Balance | | 0.00 | 0.00 | 12.43 | - |
| Addition of Loan | | 0.00 | 12.43 | 0.00 | 12.43 |
| Repayment of Loan | | 0.00 | 0.00 | 0.15 | 0.15 |
| Closing Loan Balance | | 0.00 | 12.43 | 12.28 | - |
| Effective Loan | | | 0.00 | 12.43 | - |
| Weighted Average Rate of Interest on | | 0.00% | 11.0725% | 11.0390% | - |
| Loan | | | | | |
| Effective Equity | | • | 0.00 | 0.00 | • |
| Interest on Loan | | - | 0.00 | 1.37 | 1.37 |
| Return on Equity | 16% | - | 0.00 | 0.00 | 0.00 |
| Impact of Additional Capitalisation | | _ | 0.00 | 1.37 | 1.37 |

- 37. The petitioner has sought approval for the reimbursement of the expenditure of Rs 2,53,106/- 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 transmission charges. The petitioner has also sought reimbursement of filing fee paid. A final view 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.
- 38. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations. These transmission charges shall be included in the

regional transmission tariff for Northern Region and shall be shared by the regional beneficiaries in accordance with the 2004 regulations.

- 39. 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.
- 40. This order disposes of Petition No.60 /2005

Sd/- 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

| Name of the Company: | | PGCIL | PGCIL | | | |
|--|--|--|--|------------------|------------|--|
| Name of the Element: | | compensati Kanpur – B Ballabgarh | Stage - I of 400 kV Thyristor controlled series compensation project (FACTs devices) on Kanpur – Ballabgarh 400 KV s/c line at Ballabgarh in Northern Region | | | |
| Actual DOCO: 1 st July 2002 | | | | | | |
| Petition No.: 60/2005 | | | | | | |
| Tariff setting Period: 2004-09 | | | | | s.in lakh) | |
| | | | | | | |
| 1 | Capital Cost of the Project | | | | 1486.75 | |
| 2 | Admitted Capital Cost as on 1. 4.2004 for Calculation of Debt and Equity | | | | 1486.75 | |
| 3 | Additional Capitalisation(works) | | | | 12.43 | |
| | 2001-02 | | | 0.00 | | |
| | 2002-03 | | | 12.43 | | |
| | 2003-04 | | | 0.00 | | |
| | Total | | | 12.43 | | |
| 4 | Additional Capitalisation(FERV) | | | | 0.00 | |
| | 2001-02 | | | 0.00 | | |
| | 2002-03 | | | 0.00 | | |
| | 2003-04 | | | 0.00 | | |
| | Total | | | 0.00 | 4 400 40 | |
| 5 | Total Capital Cost as on 1 4.2004(2+3+4) Means of Finance ¹ : | | | | 1499.18 | |
| 6 | | | | T | | |
| | Debt | | 75.14% | 1126.43 | | |
| | Equity | | 24.86% | 372.75 | | |
| | Total | | 100.00% | 1499.18 | | |
| 7 | Gross Loan as on 1. 4.2004 | | | | 1126.43 | |
| 8 | Cumulative Repayment up to 31.3.2009 : | | | | 494.19 | |
| | Repaid up to 31. 3.2004 | | | 13.40 | | |
| | 1. 4.2001 to 31. 3.2004 (ACE & FERV) | | | 0.15 | | |
| | 1. 4.2004 to 31. 3.2009 Total | | | 480.64 494.19 | | |
| 9 | 1.5.10. | | | | 632.24 | |
| 10 | Balance Loan to be repaid beyond 31. 3.2009 : Depreciation recovered up to 31. 3.2009 : | | | | 494.19 | |
| 10 | Depreciation recovered up to 31, 3,2009 : | Don | AAD | Total | 494.19 | |
| | Recovered up to 31. 3.2004 | Dep | 0.00 | 93.66 | | |
| | Recovered up to 31. 3.2004 | 93.66 | 0.00 | 93.00 | | |
| | 1. 4.2001 to 31. 3.2004 (ACE & FERV) | 0.00 | 0.00 | 0.00 | | |
| | 1. 4.2004 to 31. 3.2009 | 269.85 | 130.67 | 400.53 | | |
| | Total | L | | 494.19 | | |
| 11 | Balance Depreciation to be recovered beyond 31. 3.2009 : | | | | 855.08 | |
| | Capital cost for the purpose of Depreciation 1486.75 | | | | | |
| | ACE + FERV | | | 12.43 | | |
| | Capital cost as 1. 4.2004 | | | 1499.18 | | |
| | Less: Land Cost | | | 0.00 | | |
| | | | | 1499.18 | | |
| | 90% of Capital Cost as above | | | 1349.26 | | |
| | Cum. Depreciation to be recovered up to 31. 3.2009 | | | 494.19 | | |
| | Balance Depreciation to be recovered beyond 31. 3.2009 | | | 855.08 | | |