

**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.128/2005

In the matter of

Approval of transmission charges for Khammam-Nagarjunasagar 400 kV S/C transmission line along with extensions of Khammam and Nagarjunasagar 400/220 kV sub-station under the scheme for strengthening of Grid System and evacuation of power from Ramagundam Stage-III in Southern Region for the period from 1.4.2004 to 31.3.2009.

And in the matter of

Power Grid Corporation of India Limited

..Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Pondicherry, Pondicherry
6. Electricity Department, Govt. of Goa, Panaji

Respondents

The following were present:

1. Shri P.C. Pankaj, PGCIL
2. Shri U.K. Tyagi, PGCIL
3. Shri C.Kannan, PGCIL
4. Shri Rakesh Prasad, PGCIL
5. Shri M.M. Mondal, PGCIL
6. Shri S.Sowmyanarayanan, TNEB

ORDER

(DATE OF HEARING: 30.3.2006)

The petition has been filed for approval for transmission charges for the Khammam-Nagarjunasagar 400 kV S/C transmission line along with extensions of Khammam and Nagarjunasagar 400/220 kV sub-station (the transmission line) under the scheme for strengthening of Grid System and evacuation of power from Ramagundam Stage-III (the scheme) in Southern Region 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”). The petitioner has also prayed that it be allowed additional capitalization for the capital expenditure during 2001-2004 after date of commercial operation and the return on equity thereon, and that the reimbursement of expenditure from the beneficiaries towards publishing of notices in newspapers and petition filing fee be approved.

2. The investment approval for construction of the transmission scheme was accorded by the Central Government in Ministry of Power vide its letter dated 29.8.2001 at an estimated cost of Rs. 39012.00 lakh, including IDC of Rs. 4204.00 lakh, based on 4th quarter 2000 price level. The apportioned approved cost of the transmission line is Rs. 5768.00 lakh. The date of commercial operation of the transmission asset is 1.3.2004. The line length for the purpose of O & M is 144.58 ckt.kms.

3. The annual transmission charges for the period from 1.3.2004 to 31.3.2004 were decided by the Commission in its order dated 18.8.2005 in petition No.188/2004 at a gross block of Rs. 4586.99 lakh, as on the date of commercial operation.

4. The petitioner has claimed the transmission charges as under:

| | (Rs. in lakh) | | | | |
|------------------------------|---------------|---------|---------|---------|---------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 126.91 | 126.99 | 126.99 | 126.99 | 126.99 |
| Interest on Loan | 141.70 | 141.38 | 137.91 | 131.26 | 124.26 |
| Return on Equity | 127.83 | 128.13 | 128.13 | 128.13 | 128.13 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 14.19 | 14.58 | 14.93 | 15.25 | 15.59 |
| O & M Expenses | 89.06 | 92.62 | 96.41 | 100.13 | 104.26 |
| Total | 499.69 | 503.70 | 504.37 | 501.76 | 499.23 |

5. 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 | 47.69 | 50.57 | 53.61 | 56.82 | 60.23 |
| O & M expenses | 7.42 | 7.72 | 8.03 | 8.34 | 8.69 |
| Receivables | 83.28 | 83.95 | 84.06 | 83.63 | 83.21 |
| Total | 138.39 | 142.24 | 145.70 | 148.79 | 152.13 |
| Rate of Interest | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% |
| Interest | 14.19 | 14.58 | 14.93 | 15.25 | 15.59 |

6. The replies to the petition have been filed by Tamil Nadu Electricity Board and Karnataka Power Transmission Power Corporation Ltd. No comments or suggestion have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

Additional capitalization on works-2003-04

7. The petitioner has claimed an additional capitalization of Rs.156.12 lakh incurred on account of balance payments for the period 2003-2004. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereunder:

| Year | Particulars | Amount (Rs. in lakh) | Nature of expenditure |
|---------|-------------------|----------------------|--|
| 2003-04 | Transmission line | 156.12 | Balance payments (Supply payment, retention payment and compensation payments) |
| Total | | 156.12 | |

8. The expenditure was not considered by the Commission in its order dated 18.8.2005 ibid while approving tariff for the period ending 31.3.2004. The capital expenditure claimed is found to be in order as it is against the committed liability. Therefore, the additional capital expenditure of Rs. 156.12 lakh has been approved.

Additional capitalization on works- 2004-05

9. The petitioner has sought approval of tariff after accounting for additional capital expenditure of Rs. 4.23 lakh incurred on account of balance payment as per details given below:

| Year | Particulars | Amount (Rs. in lakh) | Nature of expenditure |
|---------|-------------|----------------------|--------------------------------------|
| 2004-05 | Sub-station | 4.23 | Balance payment (Retention payment,) |
| Total | | 4.23 | |

10. The additional capital expenditure claimed is within the original scope of work and is admissible. However, the petitioner has not furnished the loan reconciliation details for the year 2004-05. Therefore, this additional capital expenditure has not been considered for the purpose of tariff. However, the petitioner is at liberty to seek revision of tariff based on this expenditure after finalisation of loan reconciliation statement.

CAPITAL COST

11. As per clause (2) of Regulation 52 of the 2004 regulations in case of the projects existing up to 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.

12. The petitioner has considered the capital expenditure of Rs. 4658.82 lakh after accounting for additional capitalization of Rs. 156.12 lakh and decapitalization on account of FERV of Rs. 88.52 lakh for the period 2003-04 and additional capitalization of Rs. 4.23 lakh for the year 2004-05 over the capital expenditure of Rs. 4586.99 lakh admitted by the Commission in the order dated 18.8.2005 *ibid*.

Extra Rupee Liability during the years 2001-04:

13. 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

14. Regulation 1.7 of the 2001 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.

15. As no objection is raised by the beneficiaries to the petitioner's claim for decapitalization of Rs. 88.52 lakh on account of FERV, and FERV worked out by the petitioner is matching with calculations submitted, and is in accordance with provisions of AS-11, applicable for the period up to 31.3.2004, the petitioner's claim for decapitalization has been considered for tariff calculations.

16. Based on the above, gross block of Rs. 4654.59 lakh, including additional capitalization of Rs. 156.12 lakh and decapitalization of FERV of Rs. 88.52 lakh, as on 1.4.2004 has been considered for the purpose of tariff.

DEBT- EQUITY RATIO

17. Regulation 54 of the 2004 regulations *inter alia* provides that,-

(1) 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.

(2) 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;

(3) 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.

(4) The debt and equity amount arrived at in accordance with above sub-clause (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.”

18. The petitioner has claimed tariff based on debt-equity ratio of 83.22:16.78 as considered by the Commission in its order dated 18.8.2005 *ibid*. The petitioner has adjusted the entire amount of additional capitalization of Rs. 156.12 lakh on works against equity and has allocated the decapitalization of Rs. 88.52 lakh on account of FERV between debt and equity in the ratio of 83.22:16.78.

19. The petitioner has indicated approved debt-equity ratio of 80:20. Therefore, in order to bring debt and equity as close to the approved debt-equity ratio of 80.20, the entire additional capitalization of Rs. 156.12 lakh on account of works has been treated as equity and decapitalization on account of FERV of Rs. 88.52 lakh has been adjusted against loan. This works out debt-equity ratio of 80.11:19.89. Accordingly, for the purpose of tariff, an amount of Rs. 925.84 lakh has been considered as equity as on 1.4.2004.

RETURN ON EQUITY

20. 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.

21. The petitioner has claimed return on equity of Rs. 913.11 lakh after accounting for equity of Rs. 156.12 lakh on account of additional capitalization for the period 2003-04 and decapitalization of Rs. 14.85 lakh on account of FERV for that period and further Rs. 4.23 lakh for 2004-05 . For the reasons already discussed, we have not

considered expenditure for the year 2004-05. Accordingly, we have taken equity of Rs. 925.84 lakh. Therefore, the petitioner shall be entitled to return on equity @ Rs. 129.62 lakh each year during the tariff period.

INTEREST ON LOAN

22. 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.

23. The partitioner has claimed interest on loan in the following manner:

- (i) Gross loans, cumulative loan repayment up to previous year as admitted by the Commission in the order dated 18.8.2005 have been taken as opening balance as on 1.4.2004.
- (ii) 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.
- (iii) Gross loans as admitted by the Commission in the order dated 18.8.2005 ibid has been considered as notional loan and the weighted average rate of interest on loan for respective years as per above has been multiplied to arrive at interest on loan.
- (iv) Notional loan component of FERV have been considered separately and actual applicable rate of interest on foreign loan have been considered to workout the interest on this component

24. In our calculation, the interest on loan has been worked out 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, exchange rate as on 31.3.2004 etc. have been taken from the loan allocation statement submitted by the petitioner for working out weighted average rate of interest though the repayment instalment of ADB-uv and ADB-lb loans is different from the details submitted by the petitioner in the main petition.
- (ii) Gross notional loan and cumulative repayment up to 31.3.2004 have been taken from the order dated 18.8. 2005.
- (iii) Notional loan arising out of FERV during the year 2003-04 has been considered.

- (iv) Repayment of notional loan arising due to FERV during the year 2003-04 has been worked out by the following formula:

$$\frac{\text{Actual repayment of actual loan during each year}}{\text{Opening balance of actual loans during corresponding year}} \times (\text{Opening balance} + \text{addition of normative loan during corresponding Year})$$

- (v) 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 :

$$\frac{\text{Actual repayment of actual loan during the year}}{\text{Opening balance of actual loan during the year}} \times \text{Opening balance of normative loan during the year}$$

- (vi) 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.
- (vii) 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.
- (viii) PNB-II, OBC,, ADB-uv and ADB-lb loans carry the floating rates of interest and rates of interest as applicable as on 1.4.2004 have been considered in the calculation, subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.

25. Based on the above, the year-wise details of interest worked out are given hereunder:

| (Rs. in lakh) | | | | | | |
|---|-----------------|---------|---------|---------|---------|---------|
| Details of loan | Up to 31.3.2004 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Interest on Loan | | | | | | |
| Gross loan as per order dated 18.8.2005 | 3817.27 | | | | | |
| Addition due to additional capitalisation | 0.00 | | | | | |
| Addition due to FERV | (-)88.52 | | | | | |

| | | | | | | |
|---|---------|---------------|---------------|---------------|---------------|---------------|
| Gross Normative Loan | 3728.75 | 3728.75 | 3728.75 | 3728.75 | 3728.75 | 3728.75 |
| Cumulative Repayment up to Previous Year | | 0.00 | 126.83 | 253.66 | 383.61 | 523.00 |
| Net Loan-Opening | | 3728.75 | 3601.92 | 3475.09 | 3345.14 | 3205.75 |
| Repayment during the year | | 126.83 | 126.83 | 129.94 | 139.39 | 150.06 |
| Net Loan-Closing | | 3601.92 | 3475.09 | 3345.14 | 3205.75 | 3055.69 |
| Average Loan | | 3665.33 | 3538.50 | 3410.11 | 3275.45 | 3130.72 |
| Weighted Average Rate of Interest on Loan | | 3.7890% | 3.7838% | 3.7641% | 3.7301% | 3.6951% |
| Interest | | 138.88 | 133.89 | 128.36 | 122.18 | 115.68 |

DEPRECIATION

26. 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.

27. The gross depreciable value of the asset, as per (ii) above, is 0.9 x Rs. 4654.59 lakh = Rs. 4189.13 lakh. Cumulative depreciation and AAD recovered in tariff up to 31.3.2004 is Rs. 10.34 lakh. Remaining depreciable value as on 1.4.2004 is thus Rs.4178.79 lakh.

28. For the period 1.4.2004 to 31.3.2009 the depreciation works out to Rs. 126.83 lakh each year by applying rate of depreciation of 2.7249%, as shown below:

(Rs. in lakh)

| Details of Depreciation | | Up to 31.3.2004 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--|---------|--------------------|---------------|---------------|---------------|---------------|---------------|
| As per order dated 18.8.2005 | | 4586.99 | | | | | |
| Addition during 2001-04 due to Additional Capitalisation | | 156.12 | | | | | |
| Addition during 2001-04 due to FERV | | (-)88.52 | | | | | |
| Gross Block as on 31.3.2004 | | 4654.59 | 4654.59 | 4654.59 | 4654.59 | 4654.59 | 4654.59 |
| Rate of Depreciation | 2.7249% | | | | | | |
| Depreciable Value | 90% | | 4189.13 | 4189.13 | 4189.13 | 4189.13 | 4189.13 |
| Balance Useful life of the asset | | | - | - | - | - | - |
| Remaining Depreciable Value | | | 4178.79 | 4051.96 | 3925.13 | 3798.30 | 3666.13 |
| Depreciation | | | 126.83 | 126.83 | 126.83 | 126.83 | 126.83 |

ADVANCE AGAINST DEPRECIATION

29. 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

30. 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.

31. The petitioner has claimed Advance Against Depreciation in the following manner:

- (i) 1/10th of gross loan is worked out from the gross notional loan admitted by the Commission order dated 18.8. 2005.
- (ii) Cumulative loan as well as repayment of notional loan during the year have been considered.
- (iii) Depreciation as claimed in the petition.
- (iv) In cumulative depreciation, Advance Against Depreciation allowed up to 2003-04 as per order dated 18.8.2005 ibid has not been considered.

32. In our calculation, the Advance Against Depreciation has been worked as under:

- (i) 1/10th of gross loan has been worked out from the gross notional loan as per para 25 above.
- (ii) Cumulative loan as well as repayment of notional loan during the year has been considered as per para 25 above.
- (iii) Depreciation as worked out as per para 28 has been taken into account.
- (iv) Cumulative depreciation up to 31.3.2004 is worked out considering cumulative depreciation/Advance Against Depreciation up to 2003-04 has been included as per order dated 18.8. 2005 ibid.

33. The details of Advance Against Depreciation allowed for the transmission system, is given hereunder:

(Rs. in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--|----------|----------|---------|---------|---------|
| 1/10th of Gross Loan(s) | 372.87 | 372.87 | 372.87 | 372.87 | 372.87 |
| Repayment of Loan | 126.83 | 126.83 | 129.94 | 139.39 | 150.06 |
| Minimum of the above | 126.83 | 126.83 | 129.94 | 139.39 | 150.06 |
| Depreciation during the year | 126.83 | 126.83 | 126.83 | 126.83 | 126.83 |
| (A) Difference | 0.00 | 0.00 | 3.11 | 12.56 | 23.23 |
| Cumulative Repayment of the Loan | 126.83 | 253.66 | 383.61 | 523.00 | 673.06 |
| Cumulative Depreciation/ Advance against Depreciation | 137.17 | 264.00 | 390.83 | 517.66 | 649.83 |
| (B) Difference | (-)10.34 | (-)10.34 | (-)7.22 | 5.34 | 23.23 |
| Advance Against Depreciation Minimum of (A) and (B) | 0.00 | 0.00 | 0.00 | 5.34 | 23.23 |

OPERATION & MAINTENANCE EXPENSES

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

| | 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 |

35. The petitioner has claimed O & M expenses for 144.58 ckt.kms. and two bays, one each at Khammam and Nagarjunasagar sub-station which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

| | Year | | | | |
|--|--------------|--------------|--------------|---------------|---------------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| O&M expenses for 144.58 ckt.km line length | 32.82 | 34.12 | 35.57 | 36.87 | 38.46 |
| O&M expenses for 2 bays | 56.24 | 58.50 | 60.84 | 63.26 | 65.80 |
| Total | 89.06 | 92.62 | 96.41 | 100.13 | 104.26 |

36. 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

37. 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, element-wise capital expenditure on the date of commercial operation is Rs. 4586.99 lakh, which has been considered as the historical cost for the purpose of the present petition and maintenance spares haven worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the value of maintenance spares works out to Rs. 46.10 lakh as on 1.4.2004.

(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 as claimed 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 the receivables on the basis 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 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.

38. The necessary computations in support of interest on working capital are appended hereinbelow:

(Rs. in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|--------------------|----------------|----------------|----------------|----------------|----------------|
| Maintenance Spares | 46.10 | 48.87 | 51.80 | 54.90 | 58.20 |
| O & M expenses | 7.42 | 7.72 | 8.03 | 8.34 | 8.69 |
| Receivables | 83.06 | 82.88 | 82.64 | 83.18 | 85.88 |
| Total | 136.59 | 139.46 | 142.47 | 146.43 | 152.77 |
| Rate of Interest | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% |
| Interest | 14.00 | 14.29 | 14.60 | 15.01 | 15.66 |

TRANSMISSION CHARGES

39. The capital cost and other relevant details are contained in the summary sheet attached. The transmission charges being allowed for transmission line are summarised below:

(Rs.in lakh)

| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation | 126.83 | 126.83 | 126.83 | 126.83 | 126.83 |
| Interest on Loan | 138.88 | 133.89 | 128.36 | 122.18 | 115.68 |
| Return on Equity | 129.62 | 129.62 | 129.62 | 129.62 | 129.62 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 5.34 | 23.23 |
| Interest on Working Capital | 14.00 | 14.29 | 14.60 | 15.01 | 15.66 |
| O & M Expenses | 89.06 | 92.62 | 96.41 | 100.13 | 104.26 |
| Total | 498.39 | 497.25 | 495.82 | 499.10 | 515.28 |

40. 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 Southern Region and shall be shared by the regional beneficiaries in accordance with the 2004 regulations.

41. The petitioner has sought approval for the reimbursement of expenditure of Rs. 84,559/- 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 of Rs.5 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.

Impact of additional capitalization for the years 2001-04

42. In the petitions filed by NTPC 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 NTPC 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. Though the entire amount of additional capitalization of Rs. 156.12 lakh allowed for the year 2003-04 has been considered as equity, this does not have any impact on the return on equity for that year.

43. 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.

44. This order disposes of Petition No.128/2005.

Sd-/
sd-/
sd-/
sd-/
(A.H. JUNG) (BHANU BHUSHAN) (K.N. SINHA) (ASHOK BASU)
MEMBER MEMBER MEMBER CHAIRPERSON
 New Delhi dated the 5th May 2006

Summary Sheet

| | |
|--------------------------------------|--|
| Name of the Company: | PGCIL |
| Name of the Element: | Khammam- Nagarjunasagar 400 KV S/C Tr. line along with extensions of Khammam & Nagarjunasagar 400/220 KV S/S under scheme for strengthening of Grid System and evacuation of power from Ramagundam Stage-III |
| Actual DOCO: | 1. 3.2004 |
| Petition No.: | 128/2005 |
| Tarrif setting Period: | 2004-09 |
| 1 Capital Cost of the Project | (Rs.in lakh) 5768.00 |

| | | | | |
|-----------|---|------------|----------------|-----------------|
| 2 | Admitted Capital Cost as on 1. 4.2004 for Calculation of Debt and Equity | | | 4586.99 |
| 3 | Additional Capitalisation(works) | | | 156.12 |
| | 2001-02 | | 0.00 | |
| | 2002-03 | | 0.00 | |
| | 2003-04 | | 156.12 | |
| | Total | | 156.12 | |
| 4 | Additional Capitalisation(FERV) | | | (-)88.52 |
| | 2001-02 | | 0.00 | |
| | 2002-03 | | 0.00 | |
| | 2003-04 | | (-)88.52 | |
| | Total | | (-)88.52 | |
| 5 | Total Capital Cost as on 1. 4.2004(2+3+4) | | | 4654.59 |
| 6 | Means of Finance¹ : | | | |
| | Debt | 80.11% | 3728.75 | |
| | Equity | 19.89% | 925.84 | |
| | Total | 100.00% | 4654.59 | |
| 7 | Gross Loan as on 1. 4.2004 | | | 3728.75 |
| 8 | Cumulative Repayment up to 31.3.2009 : | | | 673.06 |
| | Repaid up to 31. 3.2004 | | 0.00 | |
| | 1. 4.2001 to 31. 3.2004 (ACE & FERV) | | 0.00 | |
| | 1. 4.2004 to 31. 3.2009 | | 673.06 | |
| | Total | | 673.06 | |
| 9 | Balance Loan to be repaid beyond 31. 3.2009 : | | | 3055.69 |
| 10 | Depreciation recovered up to 31. 3.2009 : | | | 673.06 |
| | | Dep | AAD | Total |
| | Recovered up to 31. 3.2004 | 10.44 | 0.00 | 10.44 |
| | 1. 4.2001 to 31. 3.2004 (ACE & FERV) | (-)0.10 | 0.00 | (-)0.10 |
| | 1. 4.2004 to 31. 3.2009 | 634.16 | 28.56 | 662.72 |
| | Total | | | 673.06 |
| 11 | Balance Depreciation to be recovered beyond 31.03.2009 : | | | 3516.07 |
| | Capital cost for the purpose of Depreciation | | 4586.99 | |
| | ACE + FERV | | 67.60 | |
| | Capital cost as 1. 4.2004 | | 4654.59 | |
| | Less: Land Cost | | 0.00 | |
| | | | 4654.59 | |
| | 90% of Capital Cost as above | | 4189.13 | |
| | Cum. Depreciation to be recovered up to 31. 3.2009 | | 673.06 | |
| | | | | |