CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram:

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

Petition No.53/2007

In the matter of

Approval under Section 17(3) of the Electricity Act, 2003 for transfer of ownership of switchyard associated with Rajiv Gandhi Combined Cycle Power Project situated at Kayamkulam to NTPC.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon Vs

..Petitioner

- 1. Kerala State Electricity Board, Thiruvanathapuram
- 2. National Thermal Power Corporation Ltd., New Delhi Respondents

The following were present:

- 1. Shri U.K. Tyagi, PGCIL
- 2. Shri C. Kannan, PGCIL
- 3. Shri M.M. Mondal, CM (Fin), PGCIL
- 4. Shri Rakesh Prasad, PGCIL
- 5. Shri V.V.Sharma, PGCIL
- 6. Shri Harmeet Singh, PGCIL
- 7. Shri A.K.Nagpal, PGCIL
- 8. Shri S.N.Goel, NTPC
- 9. Shri Sameer Agarwal, NTPC
- 10. Shri A.K.Juneja, NPTC
- 11. Shri D.G.Salpekar, NTPC

ORDER (DATE OF HEARING: 26.2.2008)

The petition has been filed seeking approval under Section 17(3) of the Electricity Act, 2003 (the Act) for transfer of ownership of switchyard, forming part of Kayamkulam Transmission System (the transmission system) and associated with Rajiv Gandhi Combined Cycle Power Project (the generating station) to the second respondent, NTPC, based on Ministry of Power letter No. 5/33/99-Th.2 dated 31.8.2000. The petitioner has prayed that after approval of de-capitalization on

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account of transfer of switchyard to NTPC it be allowed to pass on the credit to/ adjust the transmission charges for the transferred assets with the first respondent, KSEB.

- 2. Ministry of Power vide its letter dated 31.8.2000 ibid, inter alia, decided to transfer ownership and control of the switchyard from the petitioner to the second respondent, NTPC.
- 3. In response to query from the Commission, the petitioner vide IA No. 22/2007 had prayed for `in principle` approval and effective date of transfer of ownership of the switchyard as 1.4.2007 or any other date as deemed proper by the Commission. Subsequently, the petitioner informed that the switchyard was transferred to NTPC on 1.9.2007. The petitioner submitted a copy of the Memorandum of Agreement signed with NTPC. Thus, the effective date of transfer of the switchyard to NTPC, as agreed to between the parties is 1.9.2007. We have accepted this date.
- 4. The following assets form part of the transmission system, namely:-
 - (a) 220 kV D/C Kayamkulam-Edmon transmission line along with associated bays (Asset-I), and
 - (b) 220 kV D/C Kayamkulam-Pallom transmission line along with associated bays (Asset-II).
- 5. The annual transmission charges from 1.4.2001 to 31.3.2004 were decided by the Commission in its order dated 30.6.2003 in Petition No.52/2002 considering capital cost of Rs. 12655.33 lakh and Rs. 7848.04 lakh for Asset-I and Asset-II, respectively. The annual transmission charges for the period 2004-09 were approved by the Commission in its order dated 9.5.2006 in Petition No. 74/2004, which were subsequently revised vide order dated 16.4.2008 based on the Appellate Tribunal's

judgment dated 4.10.2006 in Appeals No. 135-140/2005 as under, considering additional capitalization of Rs. 259.61 lakh on works for Kayamkulam-Pallom line and Rs. 585.82 lakh and Rs. 261.05 lakh for Asset-I and Asset-II respectively on account of FERV for the period 1.4.2001 to 31.3.2004:

(Rs. in lakh)

| | Asset-I | | | | Asset-II | | | | | |
|--------------------------------|---------|---------|---------|---------|----------|---------|---------|---------|---------|---------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 405.57 | 405.57 | 405.57 | 405.57 | 405.57 | 256.80 | 256.80 | 256.80 | 256.80 | 256.80 |
| Interest on Loan | 610.20 | 521.98 | 431.65 | 339.07 | 258.15 | 422.74 | 366.84 | 310.03 | 252.25 | 199.25 |
| Return on Equity | 213.73 | 213.73 | 213.73 | 213.73 | 213.73 | 200.10 | 200.10 | 200.10 | 200.10 | 200.10 |
| Advance against Depreciation | 0.00 | 304.63 | 683.74 | 724.02 | 560.84 | 0.00 | 269.65 | 417.83 | 435.24 | 368.58 |
| Interest on Working Capital | 41.14 | 46.01 | 52.21 | 52.54 | 49.61 | 27.58 | 31.96 | 34.26 | 34.30 | 33.00 |
| O & M Expenses | 147.89 | 153.82 | 160.06 | 166.30 | 173.10 | 133.82 | 139.18 | 144.80 | 150.49 | 156.60 |
| Total | 1418.54 | 1645.74 | 1946.96 | 1901.22 | 1661.00 | 1041.04 | 1264.53 | 1363.83 | 1329.18 | 1214.33 |

6. The petitioner vide its affidavit dated 15.1.2008 filed its claim for the revised transmission charges for the years 2007-08 and 2008-09 in both the assets after decapitalization of the capital cost on account of transfer of the switchyard, at Kayamkulam, as under:

(Rs. in lakh)

| | 200 | 2008-09 | |
|----------|-----------------------|---------|--------|
| | 1.4.2007 to 31.8.2007 | | |
| Asset-I | 800.34 | 400.68 | 656.32 |
| Asset-II | 559.76 | 310.77 | 511.87 |

7. The line length and number of bays left with the petitioner after transfer of the switchyard to NTPC are as under:

| | | Line Length (0 | No of bays | | | |
|----------|---|---------------------|---|---|---------------------|--|
| | As per order dated 9.5.2006 in Petition No. 74/2004 | Transferred to NTPC | Balance with petitioner, subsequent to transfer | As per order dated 9.5.2006 in Petition No. 74/2004 | Transferred to NTPC | Balance with petitioner subsequent to transfer |
| Asset-I | 156.00 | 0.00 | 156.00 | 04 | 02 | 02 |
| Asset-II | 94.00 | 0.00 | 94.00 | 04 | 02 | 02 |
| Total | 250.00 | 0.00 | 250.00 | 08 | 04 | 04 |

8. The petitioner has submitted an auditor's certificate dated 11.1.2008 containing the following details of the capital cost of the switchyard transferred to NTPC:

(Rs in lakh)

| Asset-I | | | Asset-II | | | Total | | | |
|----------|-----------|--------------|-----------|-----------|--------------|-------------|-----------|---------------|-----------|
| | Gross | Depreciation | Net Block | Gross | Depreciation | Gross Block | Net Block | Depreciation | Net Block |
| | Block as | recovered | as on | Block as | recovered as | as on | as on | recovered as | as on |
| | on | as on | 1.9.2007 | on | on | 1.9.2007 | 1.9.2007 | on 31.8.2007* | 1.9.2007 |
| | 31.8.2007 | 31.8.2007* | | 31.8.2007 | 31.8.2007* | | | | |
| Building | 0.00 | 0.00 | 0.00 | 263.48 | 71.27 | 192.21 | 263.48 | 71.27 | 192.21 |
| Sub- | 5512.32 | 1847.14 | 3665.18 | 2845.03 | 769.58 | 2075.45 | 8357.35 | 2616.72 | 5740.63 |
| station | | | | | | | | | |
| PLCC | 38.53 | 12.91 | 25.62 | 50.58 | 13.68 | 36.90 | 89.11 | 26.59 | 62.52 |
| Total | 5550.85 | 1860.05 | 3690.80 | 3159.09 | 854.53 | 2304.56 | 8709.94 | 2714.58 | 5995.36 |

- * Cumulative deprecation on pro rata basis to the depreciation allowed for entire transmission system vide order dated 9.5.2006 in Petition No. 74/2004.
- 9. The reply to the petition has been filed by NTPC and Kerala State Electricity Board (KSEB).
- 10. The second respondent, NTPC vide its affidavit dated 25.4.2007 sought 'in principle' approval, that it shall approach the Commission at later date to claim revision of capacity charges of the generating station from the date of transfer, based on final transfer price along with additional statutory duties or taxes and other related cost through a separate petition. Pending revision of the capacity charges, NTPC has prayed for approval of provisional billing of the additional capacity charges of the generating station, as was being billed by the petitioner, subject to retrospective adjustment after determination of the revised capacity charges.
- 11. The first respondent, KSEB vide its affidavit dated 25.4.2007 has contended that any additional liability on account of stamp duty and registration fee, stated to be of Rs. 7.8629 crore, accompanying the transfer should not be charged to the beneficiary and should be accounted for in the utilitie's account as this transfer no way benefits KSEB. KSEB pointed out that the split-up details of cost for arriving at

net block had not been submitted. It was urged that the net block of the switchyard for tariff calculation may be considered only after discounting the depreciation as well as advance, against components effective in retrospective tariff. According to KSEB, while fixing the revised charges, after the transfer the switchyard, debt-equity ratio already considered for the assets constituting the transmission system be maintained and the life of the switchyard may be adopted as 35 years so that the tariff does not increase due to constriction of the gestation period. It has also pointed out that if the asset had been transferred in the year 2000 itself when the transfer was approved by Ministry of Power, it would have been relieved of paying depreciation as well as Advance Against Depreciation for almost 6 years.

- 12. The petitioner in its replication has stated that it had approached the Commission for 'in principle' approval of transfer of asset to NTPC in accordance with sub-section (3) of Section 17 of the Act and after approval, the basis of determination of de-capitalised value of the switchyard, against the total capital cost of the transmission system needed to be firmed up. The petitioner summed up that KSEB's concerns may get addressed at the time of determination of de-capitalised/transfer value of the switchyard and tariff thereof. The petitioner subsequently furnished the details of net value of the switchyard on the date of transfer to NTPC
- 13. NTPC has no objection to the transfer value of the switchyard as extracted in para 8 above. However, the additional charges in the form of stamp duty levied by the State Government and paid by NTPC have been sought to be capitalised.
- 14. None was present at the hearing on behalf of KSEB.

CAPITAL COST

15. The petitioner has considered the capital expenditure admitted by the Commission in the order dated 9.5.2006 ibid. The petitioner has considered decapitalization of Rs. 5550.85 lakh and Rs. 3159.09 lakh as on 31.8.2007 on account of transfer of switchyard to NTPC for Asset-I and Asset-II respectively. Accordingly, based on the audited accounts the capital expenditure including de-capitalization as on 1.9.2007 considered by the petitioner for tariff of the left-over portion of transmission system is given hereunder:

| | | | (Rs.in lakh) |
|--------------------|------------------------------|---|---|
| Name of the Assets | Capital cost as on 31.8.2007 | Expenditure de- capitalized as on 31.8.2007 | Capital expenditure as on 1.9.2007 left with the petitioner |
| Asset-I | 13240.94 | 5550.85 | 7690.09 |
| Asset-II | 8368.70 | 3159.09 | 5209.62 |

16. The details submitted by the petitioner in support of its claim for decapitalisation are given hereunder:

| Asset-I | Asset-II |
|---|--|
| Nature of expenditure | Nature of expenditure |
| Sub-station = Rs. 5512.32 lakh PLCC = Rs. 38.53 lakh | Buildings = Rs. 263.48 lakh Sub-station = Rs. 2845.03 lakh PLCC = Rs. 91.61 lakh |
| Total = Rs. 5550.85 lakh | Total = Rs. 3159.09 lakh |

- 17. The de-capitalization claimed is based on audited accounts and accordingly, has been allowed.
- 18. Based on the above, gross block as given below has been considered for the purpose of tariff for each of the element, after allowing de-capitalization on works and as claimed by the petitioner:

(Rs. in lakh)

| Name of the Assets | Capital expenditure as on 31.8.2007 | Expenditure de-capitalised as on 31.8.2007 | Capital expenditure as on 1.9.2007 | |
|--------------------|-------------------------------------|--|------------------------------------|--|
| Asset-I | 13240.94 | 5550.85 | 7690.09 | |
| Asset-II | 8368.70 | 3159.09 | 5209.62 | |

<u>DEBT- EQUITY RATIO</u>

19. The petitioner has claimed tariff based on debt-equity ratio as considered by the Commission in its order dated 9.5.2006. Based on this, the debt-equity ratio claimed by the petitioner for the purpose of revision of tariff in the present petition is indicated below:

| Name of the Element | Debt-equity ratio |
|---------------------|-------------------|
| Asset-I | 88.47:11.53 |
| Asset-II | 82.92:17.08 |

20. The petitioner has claimed tariff after accounting for the de-capitalization expenditure of Rs. 5550.85 lakh and Rs. 3159.09 lakh for Asset-I and Asset-II respectively. For the purpose of approval of tariff, de-capitalised amount has been segregated into same debt-equity ratio as considered in the order dated 9.5.2006. Therefore, equity considered for tariff for each asset is as under:

(Rs. in lakh)

| | | | | (|
|---------------------|------------------------------------|--------------------------------|--|-------------------------------|
| Name of the Element | Equity as per order dated 9.5.2006 | Expenditure De- capitalised | Equity corresponding to de-capitalised expenditure | Balance equity as on 1.9.2008 |
| Asset-I | 1169.70 | 5550.85 | 639.99 | 886.63 |
| Asset-II | 1526.62 | 3159.09 | 539.55 | 889.76 |

RETURN ON EQUITY

21. The petitioner has claimed return on equity on the basis of order dated 9.5.2006 ibid along with minus equity corresponding to de-capitalization on account of transfer of the switchyard to NTPC. However, we have already arrived at equity as given in the table under para 20. Thus, return on equity recoverable each year is given hereunder:

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| Name of the Asset | Equity | Return on equity | | | | |
|----------------------|--------|-----------------------|-----------------------|--------|--|--|
| | | 200 | 2008-09 | | | |
| | | 1.4.2006 to 31.8.2007 | 1.9.2007 to 31.3.2008 | | | |
| Asset-I | 886.63 | 89.05 | 72.41 | 124.13 | | |
| Asset-II | 889.76 | 83.38 | 72.66 | 124.57 | | |

INTEREST ON LOAN

- 22. The petitioner has claimed interest on loan in the following manner:
 - (i) Gross loans opening has been considered from 2005-06 for both assets;
 - (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 at (i) above has been considered and the weighted average rate of interest on loan for respective years as per above has been has been multiplied to arrive at interest on loan.
 - (iv) For the years 2007-08 and 2008-09, the petitioner has considered the net loan opening in proportion to the value of the asset being transferred.
 - (v) Repayment during 2007-08 as per the order dated 16.4.2008 in petition No. 74/2004 has been considered and calculated on pro rata for the period 1.4.2007 to 31.8.2007.
 - (vi) Cumulative repayment up to previous year (corresponding to 1.4.2007 to 31.8.2007) has been added to the pro rata figure arrived at in (v) above and this sum has been considered proportionately to the

percentage of assets left with the petitioner as on 1.9.2007 to arrive at the cumulative repayment of loan figure for the period 1.9.2007 to 31.3.2008.

(vii) Finally, the repayment of the loan for the period from 1.9.2007 to 31.3.2008 has been arrived at by using the following formula:

Repayment=(Actual repayment of loans during the year/Actual net loan opening)x (notional net loan opening)x (1.9.2007 to 31.3.2008 in years)

- 23. In our calculation, interest on loan has been worked out as detailed below:
 - (i) Gross amount of loan, repayment of instalments and rate of interest as per the loan details considered in the order dated 16.4.2008 ibid have been used to work out weighted average rate of interest on actual loan.
 - (ii) Normative loan and normative repayments up to 31.3.2007 as those considered in the order dated 16.4.2008 have been taken. Repayment for the period 1.4.2007 to 31.8.2007 has been worked out on pro rata basis against repayment for the year 2007-08.
 - (iii) Gross normative loan as on 1.9.2007 is the loan part remaining after decapitalization. Cumulative repayment up to the previous period has been multiplied by the percentage of the assets remaining after decapitalization to arrive at the cumulative repayment for the period from 1.9.2007 to 31.3.2008.
 - (iv) Repayment of loan during the period from 1.9.2007 to 31.3.2008 has been calculated by using the following formula:

{(Gross normative loan during Period-II)/ (Gross normative loan for the period from 1.4.2007 to 31.8.2007)}

X [(Repayment during Period-I converted to yearly repayment) X (for the period from 1.9.2007 to 31.3.2008 in years)]

- (v) Weighted average rate of interest on actual loan worked out as per (i) above has been applied on the average loan during the year to arrive at the interest on loan.
- 24. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs. in lakh)

| | | A 1 | | (110: III laiti) | | | |
|---------------------------|-------------|-------------|----------|------------------|-------------|---------|--|
| | | Asset-I | Asset-II | | | | |
| | 2007 | -08 | 2008-09 | 200 | 07-08 | 2008-09 | |
| | 1.4.2007 to | 1.9.2007 to | | 1.4.2007 | 1.9.2007 to | | |
| | 31.8.2007 | 31.3.2008 | | to | 31.3.2008 | | |
| | | | | 31.8.2007 | | | |
| Gross Normative Loan | 11714.32 | 6803.46 | 6803.46 | 6939.40 | 4319.85 | 4319.85 | |
| Cumulative Repayment | 5943.56 | 3725.26 | 4107.95 | 3143.48 | 2136.36 | 2387.66 | |
| upto Previous Year | | | | | | | |
| Net Loan-Opening | 5770.76 | 3078.20 | 2695.51 | 3795.92 | 2183.50 | 1932.20 | |
| Repayment during the year | 470.66 | 382.69 | 561.27 | 288.35 | 251.30 | 389.31 | |
| Net Loan-Closing | 5300.10 | 2695.51 | 2134.23 | 3507.56 | 1932.20 | 1542.89 | |
| Average Loan | 5535.43 | 2886.85 | 2414.87 | 3651.74 | 2057.85 | 1737.54 | |
| Weighted Average Rate of | 6.5131% | 6.5131% | 6.2086% | 7.3118% | 7.3118% | 7.1384% | |
| Interest on Loan | | | | | | | |
| Interest | 150.22 | 109.68 | 149.93 | 111.25 | 87.77 | 124.03 | |

DEPRECIATION

25. Depreciation allowed has been worked out as calculated below:

(Rs.in lakh)

| | | | | | | (INS.III IANII) | |
|----------------------------------|-----------------|-------------|----------|-------------|-------------|-----------------|--|
| | | Asset-I | | Asset-II | | | |
| | 2007-08 2008-09 | | | 2007 | 2008-09 | | |
| | 1.4.2007 to | 1.9.2007 to | | 1.4.2007 to | 1.9.2007 to | | |
| | 31.8.2007 | 31.3.2008 | | 31.8.2007 | 31.3.2008 | | |
| Gross Block as | 13240.94 | 7690.09 | 7690.09 | 8368.71 | 5209.62 | 5209.62 | |
| Rate of Depreciation | 2.66336% | 2.66336% | 2.66336% | 2.81412% | 2.81412% | 2.81412% | |
| Depreciable Value | 11916.85 | 6921.08 | 6921.08 | 7479.05 | 4635.87 | 4635.87 | |
| Balance Useful life of the asset | | - | - | | - | - | |
| Remaining Depreciable Value | 5973.29 | 5502.63 | 7243.20 | 4335.57 | 4047.22 | 4816.23 | |
| Depreciation | 168.99 | 119.48 | 204.81 | 107.00 | 85.52 | 146.60 | |

ADVANCE AGAINST DEPRECIATION

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

- (i) 1/10th of gross loan considered for tariff computation.
- (ii) Cumulative loan as well as repayment of notional loan considered during the year.
- (iii) Depreciation as claimed in the petition.
- 27. In our calculation, 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 24 above.
 - (ii) Repayment of notional loan during the year has been considered as per para 24 above.
 - (iii) Depreciation as worked out as per para 25 above has been taken into account.
 - (iv) In calculations of Advance Against Depreciation, cumulative depreciation/
 Advance Against Depreciation up to preceding year along with the
 depreciation of the current year has been considered for working out the
 Advance Against Depreciation. Therefore this figure of cumulative
 depreciation/ Advance Against Depreciation would be different from the
 figure appearing under the similar head elsewhere in tariff calculations
 where Advance Against Depreciation for the current year is also included for
 90% restriction of the depreciation.
 - (iv) The cumulative repayment of loan for the period from 1.4.2007 to 31.8.2007 is the sum of the cumulative repayment up to the previous year and the repayment during the period for the period from 1.4.2007 to 31.8.2007 as considered for working out the interest on loan.

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28. The details of Advance Against Depreciation allowed for both assets are given hereunder:

(Rs. in lakh)

| | Asset-I | | | Asset-II | | |
|--------------------------|-----------|-------------|---------|-------------|-------------|---------|
| | | | 2008-09 | 2006-07 | | 2008-09 |
| | 200 | 07-08 | | | 2007-08 | |
| | 1.4.2007 | 1.9.2007 to | | 1.4.2007 to | 1.9.2007 to | |
| | to | 31.3.2008 | | 31.8.2007 | 31.3.2008 | |
| | 31.8.2007 | | | | | |
| 1/10th of Gross Loan(s) | 1171.43 | 680.35 | 680.35 | 693.94 | 693.94 | 431.99 |
| Repayment of the Loan | 470.66 | 382.69 | 561.27 | 674.63 | 288.35 | 389.31 |
| Minimum of the above | 470.66 | 382.69 | 561.27 | 674.63 | 288.35 | 389.31 |
| Depreciation during the | 168.99 | 119.48 | 204.81 | 256.80 | 107.00 | 146.60 |
| year | | | | | | |
| (A) Difference | 301.67 | 263.22 | 356.46 | 417.83 | 181.35 | 242.70 |
| Cumulative Repayment of | 6414.22 | 4107.95 | 4669.22 | 3143.48 | 3431.83 | 2776.97 |
| the Loan | | | | | | |
| Cumulative Depreciation/ | 6112.54 | 4673.64 | 4878.46 | 2725.65 | 3250.48 | 2809.43 |
| Advance against | | | | | | |
| Depreciation | | | | | | |
| (B) Difference | 301.67 | -565.69 | -209.24 | 417.83 | 181.35 | -32.46 |
| Advance against | 301.67 | 0.00 | 0.00 | 417.83 | 181.35 | 0.00 |
| Depreciation Minimum of | | | | | | |
| (A) and (B) | | | | | | |

OPERATION & MAINTENANCE EXPENSES

29. 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 2 | | | | 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 |

30. The petitioner has claimed the revised O & M expenses for 156 ckt-km of line length and 2 bays for Asset-I and 94 ckt.km of line length and 2 bays for Asset-II, which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

| | Asse | et-l | | Asset-II | |
|--|---------------------------------------|---------|---|---------------------------------------|---------|
| | 2007-08 (1.9.2007 to 31.3.2008) | 2008-09 | | 2007-08 (1.9.2007 to 31.3.2008) | 2008-09 |
| O&M expenses for 156 Ckt km of line length | 13.98 | 25.00 | O&M expenses for 94 Ckt km of line length | 23.21 | 41.50 |
| O&M expenses for 2 bays | 36.90 | 65.80 | O&M expenses for 2 bays | 36.90 | 65.80 |
| | 50.88 | 90.80 | | 60.11 | 107.30 |

31. O&M expenses for the period 1.4.2007 to 31.8.2007 have been calculated on pro rata basis for 5 months of O&M expenses for the year 2007-08 approved by the Commission in the order dated 9.5.2006 ibid.

INTEREST ON WORKING CAPITAL

32. 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, the capital cost as on 1.9.2007, for Asset-I and Asset-II retained by the petitioner is 58.08% and 62.25%, respectively of gross blocks as on 1.4.2004.

The petitioner has claimed cost of maintenance spares of Rs. 62.62 lakh for 7 months (1.9.2007 to 31.3.2008) in respect of Asset-II. Escalating Rs. 62.62 lakh by 6%, the cost of maintenance spares of Rs. 66.38 lakh for the year 2008-09 has been claimed. The cost of maintenance spares as on 31.3.2007 was Rs. 94.83 lakh. This has been escalated by 6% and its share on pro rata basis for 5 months (1.4.2007 to 31.8.2007) is Rs. 97.20 lakh. The petitioner has claimed cost of maintenance spares for 7 months (1.9.2007 to 31.3.2008) by using of Rs. 97.20 lakh and escalated it by 6%. In this way, there is a double escalation since Rs. 97.20 lakh has already escalated and beneficiaries will have to pay more. This aspect has been taken by considering cost of Rs. 94.83 lakh, which originally existing on 31.3.2007, for calculation of maintenance spares for 7 months (1.7.2007 to 31.3.2008) and the same works out to be Rs. 61.10 lakh. Escalating it by 6%, the cost of maintenance spares for the period 2008-09

work out to be Rs. 64.76 lakh. The above methodology as considered for Asset-II will also applies for Asset-I. Accordingly, the cost of maintenance spares has been taken as under:

(Rs. in lakh)

| | Asset-I | Asset-II |
|--------------------------------|-----------------------------|-----------------------------|
| Maintenance spares as on | | |
| 31.3.2007 | 171.53 | 94.83 |
| Maintenance spares for 5 | | |
| months (1.4.2007 to 31.8.2007) | 175.81 | 97.20 |
| | {171.53 x (1+ 5/12 x 0.06)} | {94.83 x (1+ 5/12 x 0.06)} |
| Maintenance spares for 7 | | |
| months (1.9.2007 to 31.3.2008) | 103.11 | 61.10 |
| | {171.53 x 0.5808 x (1+ | {94.83 x 0.6225 x (1+7/12 x |
| | 0.06)} | 0.06)} |
| 2008-09 | 109.30 | 64.76 |

(ii) O & M expenses

The 2004 regulations provide for operation and maintenance expenses for one month as a component of working capital, which has been considered in the working capital.

(iii) Receivables

In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(iv) Rate of interest on working capital

The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2004, as in the Petition No, 74/2004 which is in accordance with the 2004 regulations and has been allowed.

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

| | Asset-I | | | Asset-II | | |
|--------------------|-------------|-------------|---------|-------------|-------------|---------|
| | 2007-08 | | 2008-09 | 2007-08 | | 2008-09 |
| | 1.4.2007 to | 1.9.2007 to | | 1.4.2007 to | 1.9.2007 to | |
| | 31.8.2007 | 31.3.2008 | | 31.8.2007 | 31.3.2008 | |
| Maintenance Spares | 175.81 | 103.11 | 109.29 | 97.20 | 61.10 | 64.76 |
| O & M expenses | 5.77 | 5.01 | 8.94 | 5.23 | 4.24 | 7.57 |
| Receivables | 135.28 | 63.21 | 101.45 | 94.31 | 51.47 | 83.67 |
| Total | 316.87 | 171.32 | 219.68 | 196.73 | 116.80 | 155.99 |
| Rate of Interest | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% |
| Interest | 32.48 | 17.56 | 22.52 | 20.16 | 11.97 | 15.99 |

TRANSMISSION CHARGES

34. The revised transmission charges for the year 2007-08 and 2008-09 being allowed are summarized below.

| | | | | | (Rs.in la | kh) |
|------------------------------|-----------|-----------|---------|-----------|-----------|---------|
| | | Asset-I | | Asset-II | | |
| | 2007-08 | | 2008-09 | 2007-08 | | 2008-09 |
| | 1.4.2007 | 1.9.2007 | | 1.4.2007 | 1.9.2007 | |
| | to | to | | to | to | |
| | 31.8.2007 | 31.3.2008 | | 31.8.2007 | 31.3.2008 | |
| Depreciation | 168.99 | 119.48 | 204.81 | 107.00 | 85.52 | 146.60 |
| Interest on Loan | 150.22 | 109.68 | 149.93 | 111.25 | 87.77 | 124.03 |
| Return on Equity | 89.05 | 72.41 | 124.13 | 83.38 | 72.66 | 124.57 |
| Advance against Depreciation | 301.67 | 0.00 | 0.00 | 181.35 | 0.00 | 0.00 |
| Interest on Working Capital | 32.48 | 17.56 | 22.52 | 20.16 | 11.97 | 15.99 |
| O & M Expenses | 69.29 | 60.11 | 107.30 | 62.70 | 50.88 | 90.80 |
| Total | 811.70 | 379.23 | 608.69 | 565.85 | 308.81 | 501.99 |

- 35. 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.
- 36. The petitioner is allowed to pass credit to/adjust the revised transmission charges with the first respondent, KSEB. The excess recovery of the transmission charges, if any, made by the petitioner based on the order dated 9.5.2006, shall be adjusted in three months against the future bills.
- 37. We permit NTPC to provisionally claim the charges for the switchyard transferred from the petitioner w.e.f. 1.9.2007 as under:

(Rs. in lakh)

| | Ass | et-l | Asset-II | | |
|--------------------------------|--------------|---------|--------------|---------|--|
| | 2007-08 | 2008-09 | 2007-08 | 2008-09 | |
| | (1.9.2007 to | | (1.9.2007 to | | |
| | 31.3.2008) | | 31.3.2008) | | |
| Depreciation | 117.10 | 200.76 | 64.28 | 110.20 | |
| Interest on Loan | 79.17 | 108.22 | 53.23 | 75.21 | |
| Return on Equity | 52.27 | 89.60 | 44.06 | 75.54 | |
| Advance against Depreciation | 422.35 | 560.84 | 253.89 | 368.58 | |
| Interest on Working Capital | 2.50 | 27.09 | 2.17 | 17.01 | |
| O & M Expenses | 36.90 | 65.80 | 36.91 | 65.80 | |
| Total | 710.29 | 1052.21 | 454.54 | 712.34 | |

- 38. The provisional charges being allowed as above are the difference of the transmission charges for Asset-I and Asset-II approved by order dated 16.4.2008 and the transmission charges approved in para 34 above, for the period from 1.9.2007 to 31.3.2009. NTPC is directed to file a petition for approval of the revised capacity charges for the generating station after accounting for the capital cost of the switchyard transferred to it, by 31.10.2008. A view on the issues raised by KSEB will be taken while considering the revised capacity charges in the petition to be filed by NTPC.
- 39. The petitioner is directed to deposit balance filing fee of Rs. 80,000/-, since it has paid fee of Rs. 20,000/- only.
- 40. This order disposes of Petition No.53/2007.

Sd/(R.KRISHNAMOORTHY)
MEMBER
New Delhi dated , the 17th June 2008

sd/-(BHANU BHUSHAN) MEMBER