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.146/2005

In the matter of

Approval of revised fixed charges on account of additional capital expenditure for the period 1.4.2001 to 31.3.2004 in respect of Kahalgaon STPS (840 MW)

And in the matter of

National Thermal Power Corporation Ltd.

---- Petitioner

Vs

- 1. West Bengal State Electricity Board, Kolkata
- 2. Bihar State Electricity Board, Patna
- 3. Jharkhand State Electricity Board, Ranchi.
- 4. Grid Corporation of Orissa Limited, Bhubaneshwar.
- 5. Damodar Valley Corporation, Kolkata.
- 6. Power Department, Sikkim.
- 7. Tamil Nadu Electricity Board, Chennai.
- 8. Union Territory of Pondicherry, Pondicherry
- 9. Uttar Pradesh Power Corporation Limited
- 10. Power Development Department, Srinagar.
- 11. Power Department, Chandigarh.
- 12. Maharastra State Electricity Board, Mumbai.
- 13. Madhya Pradesh State Electricity Board, Jabalpur.
- 14. Gujarat Urja Vikas Nigam Limited, Baroda.
- 15. Electricity Department, Administration of Daman & Diu, Daman
- 16. Electricity Department, Administration of Dadra & Nagar Haveli, Silvassa.
- 17. Delhi Transco Limited, New Delhi.

-----Respondents

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The following were present:

- 1. Shri V.B.K. Jain, NTPC
- 2. Shri N.N. Sadasivan, NTPC

- 3. Shri S.K. Sharma, NTPC
- 4. Shri A.S.Pandey, NTPC
- 5. Shri Alka Saigal, NTPC
- 6. Shri Gaurav Maheshwar, NTPC
- 7. Shri P.M.Matey, MSEDCL
- 8. Shri D.Khandelwal, MPSEB
- 9. Shri D.Srivastava, MPSEB.

ORDER (DATE OF HEARING: 27.12.2005)

Through this petition, the petitioner seeks approval for the revised fixed charges in respect of Kahalgaon STPS, (840 MW) (called the "generating station") for the period 1.4.2001 to 31.3.2004, after considering the impact of additional capital expenditure incurred during the period.

2. Kahalgaon STPS with a capacity of 840 MW comprises of four units of 210 MW each (4 x 210MW). The date of Commercial operation (COD) of the units of the station are as follows:

| Unit - I | January 1995 |
|------------|---------------|
| Unit- II | April 1995 |
| Unit - III | February 1996 |
| Unit –IV | August 1996 |

The Central Government by its letter dated 1.6.1992 had accorded investment approval for the capital cost of the station for Rs.17007 lakh including IDC of Rs.7860 lakh and excluding working capital margin of Rs.15.15 crore. Further, the Central Government in a project specific notification, dated 9.12.1998, admitted the capital cost for Rs.183897 lakh (as on 31.3.1997). The Board of Directors of the petitioner company, on 13.3.2004, approved the revised cost of the

station for Rs 200205 lakh including IDC of Rs 26138 lakh and exchange rate liability of Rs 6749 lakh upto 31.3.1997 as of 3rd quarter price level. In addition, the CEA, by its letter dated 10.7.1996, approved the Environmental Action Plan amounting to Rs 1300 lakh.

- 3. The Commission by its order dated 21.3.2005, (in Petition No.98/2002) had approved the tariff of the generating station, for the period 1997-01, by admitting the additional capitalization of Rs 8444 lakh and FERV of Rs 3634 lakh.
- 4. Also, the Commission by its order dated 4.8.2005, (in Petition No.37/2001) had approved the tariff of the generating station for the period from 1.4.2001 to 31.3.2004, considering the admitted capital cost at Rs 195975 lakh, as on 1.4.2001.
- 5. The additional capital expenditure as claimed by the Petitioner, year wise, as per balance sheet is as follows:

(Rs.in lakh)

| (10:11 10:11) | | | | |
|-------------------------------------|-----------|---------|------------|------------|
| | 2001-02 | 2002-03 | 2003-04 | Total |
| Total additional expenditure on the | 2488.12 | 4104.62 | 367.75 | 6960.49 |
| station as per books of accounts | | | | |
| after excluding stage –II expenses | | | | |
| (A) | | | | |
| Exclusions | | | | |
| FERV Exclusion (B) | (-) 63.73 | 598.12 | 5.10 | 539.49 |
| Replacement Exclusion (C) | 0 | 0 | (-) 138.73 | (-) 138.73 |
| Inter unit Transfers Exclusion (D) | 0 | 0 | (-) 9.80 | (-) 9.80 |
| Sub Total Exclusions | (-) 63.73 | 598.12 | (-) 143.43 | 390.96 |
| (E)=(B)+(C)+(D) | | | | |
| Additional capital expenditure | 2551.86 | 3506.50 | 511.19 | 6569.55 |
| (A) - (E) | | | | |

- 6. Based on the above, the petitioner has claimed the revised fixed charges.
- 7. Clause 1.10 of the notification dated 26.3.2001, provides as follows:
 - "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 such expenditure is less than 20%, tariff revision shall be considered in the next tariff period."
- 8. The petitioner has claimed an additional capitalisation of Rs.6570 lakh which is about 3.35% of the admitted cost of Rs 195975 lakh as on 1.4.2001.
- 9. The respondents WBSEB and WBSEB have filed their replies and have objected to the petitioners claim of revised fixed charges due to additional capitalisation.

Exclusions

10. It is observed that additional capitalization as per books of accounts is Rs 6960.49 lakh including FERV of Rs 539.49 lakh. Since impact of FERV was being claimed separately from the beneficiaries, the total capital expenditure claimed for the station, after excluding FERV, should be Rs 6421 lakh. However, the petitioner has claimed additional capitalisation of Rs.6569.55 lakh. The difference is mainly on account of re-inclusion (negative entries in exclusions in above table) of certain unserviceable assets in capital base.

- 11. In the first instance, we consider the exclusions in the claim for additional capital expenditure.
- (a) **FERV**: The exclusion of an amount of Rs. 539.49 lakh for 2001-04 on account of impact of FERV claimed has been allowed, as the amount has been billed directly to the beneficiaries, as per notification dated 26.3.2001.
- (b) **Replacement exclusion**: An amount of (-) Rs 138.73 lakh for the year 2001-04, has been excluded under this head. The petitioner by way of negative entries in exclusions has sought to re-include certain miscellaneous assets like crane, jeep etc. The petitioner submitted that these assets had become unserviceable and hence the same were decapitalised from the books as a requirement of accounting standard. It was also submitted that the servicing of the assets had to be continued for the purposes of tariff as the investments made in the items had not been returned.

The submission of the petitioner is not acceptable, These assets were part of the admitted capital cost, and the same had been decapitalised on becoming unserviceable. As such these assets will have to be decpaitalised for the purposes of tariff. Since these items are no longer in use, the re-inclusion of such items as replacement cannot be allowed.

(c) Inter-unit transfer exclusion: An amount of (-) Rs 9.8 lakh has been excluded under this head on account of transfer of spares to FSTPP on returnable basis. The petitioner has submitted that the value of these spares which was

capitalized at FSTPP was allowed to be excluded by the Commission in its order dated 17.6.2005 (in petition No 170/2004) and hence, the exclusion should also be allowed at the instant station. The Commission while dealing with additional capitalisation petitions of other generating stations of the petitioner, had decided that both positive and negative entries arising out of inter-unit transfer of temporary nature shall be ignored, for the purposes of tariff. In consideration of the above, the exclusion of the amount of (-) Rs. 9.8 lakh is allowed.

Additional Capitalisation

12. Now we consider the admissibility of additional capital expenditure claimed in the present petition. The year–wise and category –wise break up of additional capital expenditure claimed is as follows:

(Rs. in lakh)

| Details of additional capitalization claim | 2001-02 | 2002-03 | 2003-04 | Total | |
|---|------------|------------|------------|-------------|--|
| (A) Within the Scope of approved Cost or admitted works | | | | | |
| (a) Balance payment against works | (-) 426.76 | (-) 183.33 | (-) 529.05 | (-) 1139.14 | |
| admitted by the Central Government / | | | | | |
| Commission. (Category-10A) | | | | | |
| (b) New works within approved REC. | 2044.64 | 2328.60 | 853.20 | 5226.45 | |
| (Category-21A) | | | | | |
| (c) Capital spares within approved cost | 933.98 | 1361.23 | 226.18 | 2521.38 | |
| (Category-22A) | | | | | |
| (d) Inter-unit transfer (Category-11) | 0.00 | 0.00 | (-) 39.14 | (-) 39.14 | |
| Sub Total (A) | 2551.86 | 3506.5 | 511.19 | 6569.55 | |

Additional capital expenditure within the scope of the approved cost

Additional Capital Expenditure relating to balance payments

13. The negative entry arising out of balance payment of (-) Rs.1139.14 lakh against works admitted by the Central Government / Commission, is found to be in order and has been allowed.

Additional Capital Expenditure on new works within approved cost

14. The petitioner has claimed additional capital expenditure of Rs.5226.45 lakh on new works within approved cost. This expenditure relates to Ash dyke, Liquid waste treatment plant, Auxillary systems of the plant, ash water recirculation system, fire protection system in additional areas such as fuel oil pump house, excitation room cable gallery and fire sealing of main cable gallery, civil works like construction of administrative building boundary walls, balance roads, employees recreation centre garages, bus stand and expenditure on training centre, township electrification, satellite communication system, IT equipment, hospital equipment etc. All these assets /works capitalized by the petitioner are within the scope of the approved cost and are essential for the smooth and efficient functioning of the generating station. Moreover, as per notification dated 26.3.2001, there is no time restriction on a generating station to take up or to complete the balance works after the date of completion. Hence the additional expenditure of Rs. 5226.45 lakh pertaining to the period 2001-04, is allowed.

Expenditure on spares

- 15. The petitioner has procured capital spares of Rs. 2521.38 lakh during the period 2001-04 and are categorized as follows:
 - (i) T.G.spares.
 - (ii) S.G.spares.
 - (iii) C& I spares.
 - (iv) Electrical system spares.
 - (v) C.W.system spares.
 - (vi) Service and General Equipment spares.

(vii) Coal transportation system spares.

The date of completion of the generating station is 1.8.1996 and there has been a substantial delay on the part of the petitioner in procuring initial spares. As regards delay in procurement of initial spares, the petitioner has submitted, that the vendor M/s Soviet Technopromexport, with whom a contract was signed by the petitioner for supply of the equipments and spares, failed to supply the same, during the implementation of the project, for the reasons mentioned at page 8 of the petition. It was also submitted by the petitioner that the process of locating alternate vendors as well as developing necessary design, drawing and manufacture of the items took enormous time and effort in getting the spares and hence the delay.

As per order of the Commission dated 21.3.2005 (in Petition 98/2002), determining the tariff for the period 1997-01, of the generating station of the petitioner, the admitted capital cost is Rs 195975 lakh as on 31.3.2001 and includes the initial spares of Rs 3014 lakh. This is 1.50% of the revised completion cost accepted by the Commission and include initial spares of Rs 1746 lakh procured during 1997-2001. The Commission has allowed capitalisation of initial spares of Rs 1746 lakh during 1997-01, after considering the facts of the case and the reasonableness of the amount involved and that the expenditure on spares were within the approved cost. The petitioner has now sought capitalisation of additional spares of Rs 2521.38 lakh after a lapse of many years, on the strength of the above order of the Commission.

As per notification dated 26.3.2001, of the Commission, the project cost shall include reasonable amount of initial spares. In the present case if the amount of Rs

2521.38 lakh is allowed to be capitalised for the purpose of tariff, the gross value of the initial spares will be Rs 5535 lakhs, which is 2.76% of the approved cost of Rs 200205 lakh. As the Revised Cost Estimate of Rs 200205 lakh approved by the petitioner Board and accepted by the Commission envisaged the initial spares of Rs 4627 lakh, the aggregated amount of initial spares is restricted to Rs 4627 lakh. Accordingly initial spares of Rs.1613 lakh (4627-3014) is allowed to be capitalized under this head.

Expenditure on Inter-unit transfer

- 16. An amount of (-) Rs.3914 lakh has been indicated under this head on account of the inter-unit transfer of Ganty crane -30 T (to Unchahar) and Refrigerator (from VSTPP) by the petitioner. As corresponding reverse entries were allowed by the Commission, in the additional capitalisation petitions filed by the petitioner, in respect of the said generating stations, the amount of (-) Rs.3914 lakh is also allowed under this head, for the purpose of tariff, in the instant generating station.
- 17. The following additional capital expenditure has been allowed, based on discussions in the above paragraphs.

(Rs in lakh)

| Details | 2001-02 | 2002-03 | 2003-04 | Total | |
|--|------------|------------|------------|-------------|--|
| (A) Within the Scope of approved Cost or admitted works by the Central | | | | | |
| Government / Commission after the date of commercial operation | | | | | |
| (a) Balance payment against | (-) 426.76 | (-) 183.33 | (-) 529.05 | (-) 1139.14 | |
| works admitted by the | | | | | |
| Central Government / | | | | | |
| Commission.(Category-10A) | | | | | |
| (b)New works within | 2044.64 | 2328.60 | 853.20 | 5226.45 | |
| approved Revised Cost | | | | | |
| Estimates | | | | | |

| (Category-21A) | | | | |
|--|---------|---------|------------|------------|
| (c) Capital spares within approved cost (Category-22A) | 933.98 | 679.02 | 0 | 1613 |
| (d) Inter–unit transfer (Category 11) | 0.00 | 0.00 | (-) 39.14 | (-) 39.14 |
| Sub Total (A) | 2551.86 | 2824.29 | 285.01 | 5661.17 |
| Exclusions not permitted (B) | | | | |
| Replacement Exclusion | 0.00 | 0.00 | (-) 138.73 | (-) 138.73 |
| Sub Total (B) | 0.00 | 0.00 | (-) 138.73 | (-) 138.73 |
| Total Additional Capitalisation allowed (A)+(B) | 2551.86 | 2824.29 | 146.28 | 5522.44 |

- 18. Next arises the question of revision of fixed charges for the period 1.4.2001 to 31.3.2004. In the order dated 31.3.2005 in Petition No. 139/2004, (National Thermal Power Corporation Ltd Vs Uttar Pradesh Power Corporation Ltd and others) the Commission has held that the additional capital expenditure incurred during the tariff period, not exceeding 20% of the approved capital cost, does not qualify for retrospective revision of tariff. In the present case, the additional capital expenditure approved is less than 20% of the approved cost. For the reasons given in the said order dated 31.3.2005, the retrospective revision of fixed charges for the period 1.4.2001 to 31.3.2004 is not warranted. However, the additional capital expenditure approved shall be added to the gross block as on 1.4.2001 to arrive at the gross block as on 1.4.2004 for the purpose of fixation of tariff for the tariff period 2004-05 to 2008-09.
- 19. After including the additional capital expenditure as above for the period 201-04, the capital cost as on 31.3.2004,excluding FERV for the period 2001-04, works

out to Rs 201497 lakh (Rs 195975 + 5522) as against the aggregated approved cost of Rs 205139 lakh.

- 20. In view of the fact that capital cost of Rs 201497 lakh as on 31.3.2004, after including the additional capital expenditure of Rs 5522 lakh, is less than the aggregated approved cost of Rs 205139 lakh, the additional expenditure amount amount of Rs 5522 lakh is allowed for the purpose of tariff.
- 21. After taking into account the additional capitalization allowed, the opening gross block, as on 31.3.2004 works out as follows:

 Capital cost as on 1.4.2001
 195975

 Additional capitalisation for 2001-02
 2552

 Capital cost as on 31.3.2002
 198527

 Additional capitalisation for 2002-03
 2824

 Capital cost as on 31.3.2003
 201351

 Additional capitalisation,for 2003-04
 146

 Capital cost as on 31.3.2004
 201497

22. Further, for the reasons recorded in order dated 31.3.2005 in Petition No.139/2004, the petitioner shall be entitled to earn return on equity @ 16% on the equity portion of additional capitalisation now approved by us. Similarly, the petitioner shall also be entitled to interest on loan at the rate, as applicable, during the relevant period. Return on equity and interest shall be worked out on the additional capitalisation from 1st April of the financial year following the financial year to which additional capital expenditure relates and up to 31.3.2004. The lump sum of the amount of return on equity and interest on loan so arrived shall be payable by the

respondents along with the tariff for the period 2004-09 to be approved by the Commission. The exact entitlement of the petitioner on this account shall be considered by the Commission while approving tariff for the period 2004-09.

23. With the above, the present petition stands disposed of.

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

New Delhi dated the 9th day of May 2006