

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 238/2009

**Coram:
Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V.S.Verma, Member**

DATE OF HEARING: 7.1.2010

DATE OF ORDER: 11.2.2010

IN THE MATTER OF

Determination of impact of annual fixed charges on account of release of balance deferred liability and additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09, in respect of Dhauliganga Hydroelectric Project, Stage-I.

AND IN THE MATTER OF

NHPC Ltd, Faridabad
Vs

..... **Petitioner**

1. Punjab State Electricity Board, Patiala
2. Haryana Power Generation Corporation Ltd, Panchkula
3. BSES-Rajdhani Power Ltd, New Delhi
4. BSES-Yamuna Power Ltd, New Delhi
5. North Delhi Power Ltd, Delhi
6. Uttar Pradesh Power Corporation Ltd, Lucknow
7. Jaipur Vidyut Vitaran Nigam Ltd., Jaipur
8. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
9. Uttarakhand Power Corporation of Ltd., Dehradun
10. Jodhpur Vidyut Vitaran Nigam Ltd., Jodhpur
11. Himachal Pradesh State Electricity Board, Shimla
12. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
13. Engineering Department, UT Secretariat, Chandigarh
14. Power Development Department, Govt. of J&K, Jammu

....**Respondents**

The following were present:

1. Shri. Prashant Kaul, NHPC
2. Shri Ansuman Ray, NHPC
3. Shri M.S.Babu, NHPC

ORDER

This petition has been filed by the petitioner, NHPC Ltd, for revision of annual fixed charges after considering the impact of additional capital expenditure for the years 2006-07 to 2008-09, in respect of Dhauliganga Hydroelectric Project, Stage-I (4 x 70 MW) (hereinafter referred to as "the generating station") for the period from 1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations"). The petitioner has made the following specific prayer:

- (i) Approve the revised annual fixed charges in respect of Dhauliganga HE Project, Stage-I after considering the impact of discharge of deferred liability as well as impact of net additional capitalization done during the years 2006-07, 2007-08, and 2008-09 as per the details given in Annexure-I.*
- (ii) Allow the servicing of the expenditure from the year the same is incurred.*
- (iii) Allow the reimbursement of filing fee of this petition by the respondents.*
- (iv) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above".*

2. The date of commercial operation of the generating station is 1.11.2005. The tariff of the generating station for the period from 1.10.2005 to 31.3.2009 was approved by the Commission vide its order dated 13.12.2007 in Petition No.107/2006 and was subsequently revised by order dated 20.10.2008 in Petition No.107/2006. The annual fixed charges approved by the Commission by order dated 20.10.2008 based on the capital cost of Rs.170397.43 lakh as on 31.3.2006 (including additional capital expenditure for the period from 1.11.2005 to 31.3.2006) is as under:

| Particulars | (Rs in lakh) | | | | |
|---------------------------------|----------------------------|---------------------------|---------|---------|---------|
| | 1.10.2005 to 31.10.2005 | 1.11.2005 to 31.3.2006 | 2006-07 | 2007-08 | 2008-09 |
| Depreciation | 78.66 | 1581.64 | 3943.07 | 3979.78 | 3979.78 |
| Interest on Loan | 83.41 | 1667.57 | 4059.46 | 3961.93 | 3821.13 |
| Return on Equity | 129.73 | 2590.67 | 6481.89 | 6549.14 | 6549.14 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 80.36 |

| | | | | | |
|-----------------------------|---------------|----------------|-----------------|-----------------|-----------------|
| Interest on Working Capital | 9.99 | 198.27 | 492.44 | 505.67 | 518.46 |
| O & M Expenses | 51.48 | 1012.36 | 2544.98 | 2646.78 | 2752.65 |
| Total | 353.27 | 7050.51 | 17521.84 | 17643.30 | 17701.52 |

3. The respondents 7 and 10 namely, JVVNL and JoVVNL have filed reply.

Additional Capitalization

4. Regulation 34 of the 2004 regulations provides for considering the additional capital expenditure for tariff purposes as under:

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission subject to prudence check.

- (i) Deferred liabilities,*
- (ii) Works deferred for execution,*
- (iii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 33,*
- (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and*
- (v) On account of change in law.*

Provided that original scope of works along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of generating station.

- (2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:*
 - (i) Deferred liabilities relating to works/services within the original scope of work;*
 - (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court;*
 - (iii) On account of change in law; and*
 - (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.*

(3) Any expenditure incurred on acquiring minor items/assets like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, T.V, washing machine, heat-convector, mattresses, carpets, etc brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

Note

The list of items is illustrative and not exhaustive.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut off date.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original capital cost, except such items as are listed in Clause (3) of this regulation.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 4

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 36 after writing off the original amount of the replaced assets from the original capital cost."

5. The additional capital expenditure for the years 2006-07, 2007-08 and 2008-09 claimed by the petitioner, after reconciliation with the books of accounts, is as under:

| (Rs. in lakh) | | | | |
|---------------|---|--------------------|---------------|-----------------|
| Sl.No | Particulars | 2006-07 | 2007-08 | 2008-09 |
| (1) | Additional Capitalization as per books of Accounts | (-) 2604.01 | 905.49 | 24485.03 |
| (2) | Exclusions : | | | |
| (a) | Addition (under Exclusion) | | | |
| (i) | Minor assets (Regulation 34(3)) | 0.00 | 39.22 | 37.78 |
| (ii) | FERV | (-) 3256.77 | 0.00 | 24314.47 |
| (iii) | Addition- Assets not in use ending 31st March (obsolete / unserviceable Assets) | 13.11 | 8.91 | 3.93 |
| (iv) | Capital Spares as per AS-2 | 0.00 | 0.00 | 0.14 |
| | Sub-Total (Addition) (i to iv) | (-) 3243.66 | 48.13 | 24356.32 |
| (b) | Deletion (under Exclusion) | | | |
| (i) | Deletion of assets on account of asset transferred to other projects-(Regulation 34(3)) | 0.00 | 1.73 | 2.97 |
| (ii) | Deletion of assets during the year- Regulation 34(3)) | 0.00 | 11.90 | 5.22 |

| | | | | |
|-------|--|--------------------|---------------|-----------------|
| (iii) | Deletion of Assets of Minor value | 0.00 | 0.00 | 0.00 |
| (iv) | Deletion against the capital spares | 0.00 | 0.00 | 0.00 |
| (v) | Deletion amount of WDV transferred to obsolete / unserviceable assets from other HOAs} | 0.00 | 16.11 | 3.19 |
| | Sub-Total (Deletion) (i to v) | 0.00 | 29.74 | 11.38 |
| | Net Exclusion(2 (a) – 2 (b)) | (-) 3243.66 | 18.39 | 24344.94 |
| (3) | Net Additional Capitalization [(1)-(2)] | 639.65 | 887.10 | 140.08 |

6. The difference in the amount of additional capital expenditure as per books of accounts and the claim as above is on account of exclusion of certain positive and negative entries in the books of accounts.

Exclusions

7. In the first instance, we consider the exclusions under different heads in the claim.

(a) **Minor assets:** In terms of clause (3) of Regulation 34, the petitioner has excluded amounts of Rs.39.22 lakh and Rs.37.78 lakh for the years 2007-08 and 2008-09 respectively against minor assets like computers, printers, air-conditioners furniture's and fixtures, telephone and telex machines, etc. The exclusions claimed have been allowed.

(b) **FERV:** The claim for exclusion of an amount of (-) Rs. 3256.77 lakh and Rs.24314.47 lakh for the years 2004-07 and 2008-09 respectively on account of FERV is allowed, as the petitioner has billed the impact of FERV directly to the beneficiaries in accordance with the 2004 regulations.

(c) **Assets not in use:** The petitioner has excluded amounts of Rs.13.11 lakh, Rs. 8.91 lakh and Rs. 3.93 lakh for the years 2006-07, 2007-08 and 2008-09 respectively towards old/unserviceable items like dumpers, dozers, bus, pumps, and trucks etc, which were not in use. The same is in order and hence exclusion is allowed.

(d) **Capital spares as per AS-2:** Since capitalization of spares over and above initial spares procured after the cut-off date are not allowed for the purpose of tariff, the petitioner has excluded an amount of Rs.0.14 lakh for the year 2008-09. The exclusion under this head is allowed.

(e) **Deletion of assets transferred to other project {Regulation 34 (3)}:** The petitioner has excluded amounts of Rs.1.73 lakh and Rs.2.97 lakh for the years 2007-08 and 2008-09 respectively, in the books of accounts corresponding to de-capitalization of minor assets transferred to other project, apparently on the ground that since capitalization of minor assets are not being allowed for the purpose of tariff, de-capitalization of minor assets shall also be excluded for the purpose of tariff. Capitalization of minor assets has been disallowed in terms of the 2004 regulations and as such the minor assets which are sought to be de-capitalized are the ones which were not allowed to be capitalized for the purpose of tariff. It has been consciously decided by the Commission that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, the deletion of exclusion of minor assets may not be allowed for the purpose of tariff.

(f) **Deletion of assets during the year {Regulation 34 (3)}:** The petitioner has excluded an amount of Rs.11.90 lakh and Rs.5.22 lakh for the years 2007-08 and 2008-09, appearing in books corresponding to de-capitalization of minor assets, apparently on the ground that since capitalization of minor assets is not being allowed for the purpose of tariff, de-capitalization of minor assets shall also be excluded for the purpose of tariff. Capitalization of minor assets has been disallowed in terms of the 2004 regulations and as such the minor assets which are sought to be de-capitalized are the ones which were not allowed to be capitalized for the purpose of tariff. It has been consciously

decided by the Commission that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, the deletion of exclusion of minor assets is not allowed for the purpose of tariff.

(g) **Deletion of assets of minor value:** The petitioner has excluded amount of Rs.207 and Rs.175 de-capitalized during the years 2007-08 and 2008-09 respectively, under this head. Capitalization of minor assets has been disallowed in terms of the 2004 regulations and as such the minor assets which are sought to be de-capitalized are the ones which were not allowed to be capitalized for the purpose of tariff. It has been consciously decided by the Commission that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, deletion of exclusion of minor assets is not allowed for the purpose of tariff.

(h) **Deletion of amount of WDV transferred to obsolete / unserviceable assets:** The petitioner has excluded amounts of Rs.16.11 lakh and Rs.3.19 lakh de-capitalized during the years 2007-08 and 2008-09 respectively, under this head. This exclusion may be allowed.

8. The Commission by its letter dated 9.11.2009 directed the petitioner to furnish certain additional information in respect of the additional capital expenditure and the petitioner by affidavit dated 23.11.2009 has submitted the relevant information. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner are as under:

(Rs in lakh)

| Sl. No. | Additional Capitalization | 2006-07 | 2007-08 | 2008-09 |
|---------|--|---------|---------|---------|
| 1 (a) | Additions | | | |
| i. | Deferred liabilities -Regulation 34 (1)(i) | 459.12 | 0.00 | 0.00 |
| ii. | Works deferred for execution Regulation 34 (1)(ii) | 158.09 | 0.00 | 0.00 |

| | | | | |
|-------|--|---------------|----------------|---------------|
| iii. | Procurement of initial capital spares in the original scope of works Regulation 34 (1)(iii) | 115.86 | 0.00 | 0.00 |
| iv. | Liabilities to meet award of arbitration or in compliance of the order or decree of a court Regulation 34 (1)(iv) | 0.90 | 0.00 | 0.00 |
| v. | On account of change in law Regulation 34 (1)(v) | 19.49 | 0.00 | 0.00 |
| vi. | Deferred liabilities relating to works/services within the original scope of work Regulation 34 (2)(i) | 0.00 | 897.34 | 42.15 |
| vii. | Liabilities to meet award of arbitration or in compliance of order or decree of the court Regulation 34 (2)(ii) | 0.00 | 1.99 | 15.89 |
| viii. | Additional works / service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.- Regulation 34 (2)(iv) | 0.00 | 74.02 | 22.48 |
| ix. | Replacement of old assets Regulation 34 (2) & Note 2 | 0.00 | 0.00 | 107.44 |
| x. | Capital expenditure not within the original scope of work incurred before cut-off date and not falling under any of the above category (Regulation 34(1) | 13.91 | 0.00 | 0.00 |
| xi. | Rectification of assets (Addition) | 0.06 | 102.67 | 128.65 |
| | Sub-Total -Addition | 767.42 | 1076.02 | 316.62 |
| 1(b) | Deletions | | | |
| i. | Deletion of Assets on account of Sale of Assets during the year | 0.91 | 18.54 | 1.56 |
| ii. | Deletion of Assets on account of assets transferred to other projects | 0.00 | 0.00 | 5.02 |
| iii. | Surveyed Off/Write Off during the year | 0.85 | 1.74 | 6.28 |
| iv. | Deletion of assets on account of others | 111.70 | 49.53 | 31.09 |
| v. | Deletion of Assets on account of Asset Transferred to obsolete head | 14.26 | 13.89 | 3.93 |
| vi. | Rectification of assets(Deletion) | 0.06 | 102.67 | 128.65 |
| vii. | Deletion against consumption of spares | 0.00 | 2.54 | 0.00 |
| | Sub-Total -Deductions | 127.77 | 188.91 | 176.54 |
| | Net Additional Capitalization(1(a)-1(b)) | 639.65 | 887.10 | 140.08 |

9. After examining the asset-wise details and justification for additional capitalization/de-capitalization claimed by the petitioner, under various categories

and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.

Deferred liabilities- Regulation 34(1)(i)

10. The petitioner has claimed an amount of Rs.459.12 lakh during the year 2006-07 under this head in respect of assets which include building containing GPM, construction of residential quarters, hydro-mechanical works in respect of dam & barrages, tunnels and canals, EHV switchgear systems, air-conditioning and ventilation systems, auxiliary and ancillary systems, miscellaneous power plant equipments and other assets. As the claim relates to deferred liabilities up to the cut-off date, capitalization of the amount is allowed.

Works deferred for execution- Regulation 34(1)(ii):

11. The petitioner has claimed an amount of Rs.158.09 lakh during the year 2006-07 under this head in respect of assets which include miscellaneous power plant equipments, store and godown buildings, power tunnels and pipelines, main generating equipment, other power plant transformer, switch gear including cable connections, furniture & fixtures in respect of office, dam and barrages and other assets. As the claim relates to works deferred for execution up to the cut-off date, capitalization of the amount is allowed for the purpose of tariff.

Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 33- Regulation 34(1)(iii):

12. The petitioner has claimed an amount of Rs.115.86 lakh during the year 2006-07 under this head in respect of assets like DC systems / battery systems, power and control cables, switch gear including cable connections and other assets. The Capital cost of the generating station as on the cut-off date, including the claim of initial spares, is Rs.173841.44 lakh. As per order dated 13.12.2007 in Petition

No.107/2006, the initial spares as on date of commercial operation of the generating station admitted by the Commission was Rs.837.81 lakh. The total initial spares, as on the cut-off date, i.e. 31.3.2007, including the claim of Rs.115.86 lakh is Rs.953.67 lakh, which works out to 0.55% of the capital cost as on the cutoff date of the generating station, which is within the norms of 1.5% specified by the Commission. Hence, the said amount is allowed to be capitalized under this head.

Liabilities to meet award of arbitration or in compliance of the order or decree of a court- Regulation 34(1)(iv):

13. The petitioner has claimed an amount of Rs.0.90 lakh during the year 2006-07 under this head. The claim pertains to liabilities incurred in order to make payment of arbitration award in compliance of the order or decree of a court. Hence, the amount of Rs 0.90 lakh is allowed.

On account of change in law- Regulation 34(1)(v):

14. The petitioner has claimed an amount of Rs.19.49 lakh during the year 2006-07 under this head for power tunnels and pipelines. The claim pertains to the reimbursement of entry tax to Samsung Corporation. Hence, the said amount is allowed.

Deferred liabilities relating to works/services within the original scope of work- Regulation 34(2)(i):

15. The petitioner has claimed amounts of Rs.897.34 lakh and Rs.42.15 lakh during the years 2007-08 and 2008-09 respectively under this head in respect of assets like club building, power tunnels and pipelines, hydro-mechanical works in respect of dam & barrages and tunnels and canals, main generating equipment, miscellaneous power plant equipments, furniture and fixtures in respect of office, TV/music system (projectors, audio-visual equipments)-other than for office, permanent residential building, pumps, photocopy / duplicating machines and

other assets. The expenditure for these assets is in the nature of deferred liabilities relating to works/ services within the original scope of work. The claim is in order and hence, allowed.

Liabilities to meet award of arbitration or in compliance of order or decree of the court- Regulation 34(2) (ii):

16. The petitioner has claimed amounts of Rs.1.99 lakh and Rs.15.89 lakh during the years 2007-08 and 2008-09 respectively under this head in respect of assets like permanent residential building and other assets. The claim is in order and hence, allowed.

Additional works / service which has become necessary for efficient and successful operation of plant but not included in the original capital cost- Regulation 34 (2) (iv)

17. The petitioner has claimed an amount of Rs.74.02 lakh and Rs.22.48 lakh during the years 2007-08 and 2008-09 respectively under this head in respect of assets like buildings, diesel generating sets, fork lifters, free hold land and other assets. The expenditure amounting to Rs.1.84 lakh for the year 2007-08 for 'construction of boat shelter at dam' and Rs.0.19 lakh for 'life jacket and life buoy' is not allowed as the assets do not contribute/impact the efficient and successful operation of the generating station. The claim for Rs.0.58 lakh for the year 2007-08 which includes 'chain pulley block' and 'aluminum ladder, door frame and metal detector' amounting to Rs.1.45 lakh, 'energy meter' amounting to Rs.0.14 lakh and 'grease gun' amounting to Rs.0.23 lakh are in the nature of tools and tackles, and are not allowed, being minor assets. Similarly, the claim for the year 2008-09 which includes 'hammer electric drill machine' amounting to Rs.0.06 lakh, 'gas cutter' amounting to Rs.0.14 lakh, 'dissolved oxygen meter' amounting to Rs.0.17 lakh, 'digital satellite receiver' and 'HP mono block pump single phase' amounting to Rs.0.11 lakh, 'pen evaporimeter' amounting to Rs.0.10 lakh and 'pooling and lifting machine' amounting to Rs.2.14 lakh are in the nature of tools and tackles and are not allowed,

being minor assets. The claim of Rs.0.37 lakh for the year 2008-09 which includes '2 nos. thief proof rifle racks' is not allowed being minor asset in the nature of furniture and fixtures. Based on prudence check, amounts of Rs.69.59 lakh and Rs. 19.40 lakh for the years 2007-08 and 2008-09 respectively, is allowed.

Replacement of old assets- Regulation 34 (2) and Note 2:

18. The petitioner has claimed amount of Rs.107.44 lakh during the year 2008-09 under this head towards replacement of cranes. Based on the prudence check, the amount of Rs.107.44 lakh for the year 2008-09, is allowed.

Capital expenditure not within the original scope of work incurred before cut-off date and not falling under any of the above category (Regulation 34(1))

19. The petitioner has claimed an amount of Rs.13.91 lakh during the year 2006-07 under this head in respect of assets like boats, furniture and fixtures for office, satellite communication system, telephone and telex machine, fixed assets of minor values and other office equipments. The assets claimed do not fall under any of the sub-clauses of Regulation 34 of the 2004 regulations. Hence, the claim for Rs 13.91 lakh is disallowed.

Rectification of Assets:

20. The petitioner has claimed amounts of Rs.0.06 lakh, Rs.102.67 lakh and Rs.128.65 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The addition of these assets is on account of rectification of journal entries and accordingly the amounts have also been shown as deletion in the respective years. In view of this, the amounts are allowed.

21. In addition to the capitalization under above categories, the petitioner has de-capitalized amounts of Rs.127.77 lakh, Rs.188.91 lakh and Rs.176.54 lakh during the years 2006-07, 2007-08 and 2008-09 respectively and the details are as under:

(a) **Deletion of assets on account of sale of assets during the year:** The petitioner has de-capitalized assets amounting to Rs.0.91 lakh, Rs.18.54 lakh and Rs.1.56 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The same is in order and hence allowed.

(b) **Deletion of assets on account of assets transferred to other projects:** The petitioner has de-capitalized assets amounting to Rs.5.02 lakh during the year 2008-09, under this head. The same is in order and hence allowed.

(c) **Assets surveyed off/written off during the year:** The petitioner has de-capitalized assets amounting to Rs.0.85 lakh, Rs.1.74 lakh and Rs.6.28 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The same is in order and hence allowed.

(d) **Deletion of assets on account of others:** The petitioner has de-capitalized assets amounting to Rs.111.70 lakh, Rs.49.53 lakh and Rs.31.09 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The same is in order and hence allowed.

(e) **Deletion of assets on account of asset transferred to obsolete head:** The petitioner has de-capitalized assets amounting to Rs.14.26 lakh, Rs.13.89 lakh and Rs.3.93 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The same is in order and hence allowed.

(f) **Rectification of assets (Deletion):** The petitioner has claimed amounts of Rs.0.06 lakh, Rs.102.67 lakh and Rs.128.65 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The addition of these assets is on account of rectification of journal entries and accordingly the amounts have also been shown as deletion in the respective years. In view of this, the amounts are allowed.

(g) **Deletion against consumption of spares:** The petitioner has de-capitalized assets amounting to Rs.2.54 lakh during the year 2007-08, under this head. The same is in order and hence allowed.

22. Based on the above discussions, the additional capital expenditure allowed (excluding un-discharged liabilities) is as under:

(Rs in lakh)

| Sl. No. | Particulars | 2006-07 | 2007-08 | 2008-09 |
|---------|--|---------|---------|---------|
| 1(a) | Addition | | | |
| i. | Deferred liabilities -Regulation 34 (1)(i) | 459.12 | 0.00 | 0.00 |
| ii. | Works deferred for execution Regulation 34 (1)(ii) | 158.09 | 0.00 | 0.00 |
| iii. | Procurement of initial capital spares in the original scope of works Regulation 34 (1)(iii) | 115.86 | 0.00 | 0.00 |
| iv. | Liabilities to meet award of arbitration or in compliance of the order or decree of a court Regulation 34 (1)(iv) | 0.90 | 0.00 | 0.00 |
| v. | On account of change in law Regulation 34 (1)(v) | 19.49 | 0.00 | 0.00 |
| vi. | Deferred liabilities relating to works/services within the original scope of work Regulation 34 (2)(i) | 0.00 | 897.34 | 42.15 |
| vii. | Liabilities to meet award of arbitration or in compliance of order or decree of the court Regulation 34 (2)(ii) | 0.00 | 1.99 | 15.89 |
| ix. | Additional works / service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.- Regulation 34 (2)(iv) | 0.00 | 69.59 | 19.40 |
| x. | Replacement of old assets Regulation 34 (2) & Note 2 | 0.00 | 0.00 | 107.44 |

| | | | | |
|------|---|-------------|-----------|----------|
| xi. | Capital expenditure not within the original scope of work incurred before cut-off date and not falling under any of the above category (Regulation 34(1)) | 0.00 | 0.00 | 0.00 |
| x. | Rectification of assets (Addition) | 0.06 | 102.67 | 128.65 |
| | Sub-Total -Addition | 753.52 | 1072.59 | 313.54 |
| 1(b) | Deletions/Deductions | | | |
| i. | Deletion of Assets on account of Sale of Assets during the year | 0.91 | 18.54 | 1.56 |
| ii. | Deletion of Assets on account of assets transferred to other projects | 0.00 | 0.00 | 5.02 |
| iii. | Surveyed Off/Write Off during the year | 0.85 | 1.74 | 6.28 |
| iv. | Deletion of assets on account of others | 111.70 | 49.53 | 31.09 |
| v. | Deletion of Assets on account of Asset Transferred to obsolete head | 14.26 | 13.89 | 3.93 |
| vi. | Rectification of assets(Deletion) | 0.06 | 102.67 | 128.65 |
| vii. | Deletion against consumption of spares | 0.00 | 2.54 | 0.00 |
| | Sub-Total -Deductions | 127.77 | 188.91 | 176.54 |
| | Net Additional Capitalization(1(a)-1(b)) | 625.74 | 882.67 | 137.00 |
| 2 | Exclusions : | | | |
| 2(a) | Addition (under Exclusion) | | | |
| i. | Minor assets (Regulation 34(3)) | 0.00 | 39.22 | 37.78 |
| ii. | FERV | (-) 3256.77 | 0.00 | 24314.47 |
| iii. | Addition- Assets not in use ending 31st March (obsolete / unserviceable Assets) | 13.11 | 8.91 | 3.93 |
| iv. | Capital Spares as per AS-2 | 0.00 | 0.00 | 0.14 |
| | Sub-Total (Addition) (i to iv) | (-) 3243.66 | 48.13 | 24356.32 |
| 2(b) | Deletion (under Exclusion) | | | |
| i. | Deletion of assets on account of asset transferred to other projects- (Regulation 34(3)) | 0.00 | 0.00 | 0.00 |
| ii. | Deletion of assets during the year- Regulation 34(3) | 0.00 | 0.00 | 0.00 |
| iii. | Deletion of Assets of Minor value | 0.00 | 0.00 | 0.00 |
| iv. | Deletion against the capital spares | 0.00 | 0.00 | 0.00 |
| v. | Deletion amount of WDV transferred to obsolete / unserviceable assets from other Head of Accounts | 0.00 | 16.11 | 3.19 |
| | Sub-Total (Deletion) (i to v) | 0.00 | 16.11 | 3.19 |
| | Net Exclusion(2 (a) – 2 (b)) | (-) 3243.66 | 32.02 | 24353.14 |
| 3 | Exclusion disallowed | 0.00 | (-) 13.64 | (-) 8.19 |
| 4 | Additional capital expenditure allowed after adjustment of Exclusions disallowed | 625.74 | 869.04 | 128.81 |

Un-discharged Liabilities

23. The petitioner vide affidavit dated 23.10.2009 has submitted the following details of the un-discharged liabilities in its claim of additional capital expenditure:

(Rs. in lakh)

| Sl. No. | Reference No. | Un-discharged liabilities | | | | | |
|---------|---|---------------------------|--------------|-------------|-------------|---------------|--------------|
| | | Claimed | | | Discharged | | |
| | | 2006-07 | 2007-08 | 2008-09 | 2006-07 | 2007-08 | 2008-09 |
| 1. | Appendix-I to Annexure-V, Sl.no.1, Page 33. | 384.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2. | Appendix-I to Annexure-V, Sl.no.2, Page 33. | 0.00 | 0.00 | 0.00 | 0.00 | 145.39 | 32.24 |
| 3. | Appendix-I to Annexure-V, Sl.no.3, Page 33. | 0.00 | 87.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4. | Appendix-I to Annexure-V, Sl.no.4, Page 33. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.72 |
| 5. | Appendix-I to Annexure-V, Sl.no.5, Page 33. | 0.00 | 0.00 | 7.34 | 0.00 | 0.00 | 0.00 |
| | TOTAL | 384.28 | 87.48 | 7.34 | 0.00 | 145.39 | 54.96 |

24. Accordingly, the above amounts have been deducted during the year in which the liabilities have been charged and adjusted during the year in which the liabilities have been discharged.

25. In view of the above, additional capital expenditure allowed for the purpose of tariff, after considering the un-discharged liabilities and liabilities discharged are as under:

(Rs in lakh)

| Sl. No. | | 2006-07 | 2007-08 | 2008-09 |
|---------|---|---------|---------|---------|
| (i) | Additional capital expenditure allowed before adjustment on account of un-discharged liabilities | 625.74 | 869.04 | 128.81 |

| | | | | |
|-------|---|----------------|---------------|---------------|
| (ii) | Undischarged Liabilities during the financial year | 384.28 | 87.48 | 7.34 |
| (iii) | Liabilities discharged during the financial year | 0 | 145.39 | 54.96 |
| (iv) | Additional capital expenditure allowed for the purpose of tariff (iv)=[(i)-(ii)+(iii)] | 241.46 | 926.95 | 176.43 |
| (v) | Additional Capitalization already allowed vide order dated 13.12.2007 in Petition No.107/2006 | 3202.55 | 0 | 0 |
| (vi) | Additional capital expenditure allowed for the purpose of tariff (vi)=[(iv) +(v)] | 3444.01 | 926.95 | 176.43 |

Capital cost

26. As stated above, the Commission in its order dated 13.12.207 in Petition No. 107/2006 has considered a capital cost of Rs. 170397.43 lakh as on 31.3.2006, for the purpose of tariff. This has been considered for determination of capital cost as on 1.4.2006.

27. Taking into consideration the capital cost of the generating station as on 1.4.2006 and the additional capital expenditure approved as per para 25 above, the capital cost is worked out as under:

| (Rs in lakh) | | | |
|--|------------------|------------------|------------------|
| Year | 2006-07 | 2007-08 | 2008-09 |
| Opening capital cost as on 1 st April of the financial year | 170397.43 | 173841.44 | 174768.39 |
| Additional capitalization allowed | 3444.01 | 926.95 | 176.43 |
| Capital cost as on 31 st March of the financial year | 173841.44 | 174768.39 | 174944.82 |

Debt-Equity Ratio

28. Regulation 36 of the 2004 Regulations provides as under:

"(1) In case of the existing generating stations, debt-equity ratio considered by the Commission for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 1.4.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing generating stations where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 34, equity in the additional capitalization to be considered shall be,-

30% of the additional capital expenditure admitted by the Commission, or equity approved by the competent authority in the financial package, for additional capitalization, or actual equity employed, whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

(2) In case of the generating stations for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:

Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided further that the Commission may in appropriate cases consider equity higher than 30% for determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public".

(3) In case of the generating stations for which investment approval is accorded on or after 1.4.2004, debt and equity in the ratio of 70:30 shall be considered for determination of tariff:

Provided that where equity actually employed is more than 30%, equity in excess of 30% shall be treated as notional loan;

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

(4) The debt and equity amount arrived at in accordance with above 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."

29. The petitioner has stated that the additional capital expenditure has been financed through internal accruals/resources. Debt-equity ratio of 70:30 has been considered for additional capitalization in terms of Regulation 36 of the 2004 regulations. Accordingly, additional notional equity for the generating station on account of capitalization approved, works out as under:

| | (Rs. in lakh) | | |
|----------------------------|---------------|---------|---------|
| | 2006-07 | 2007-08 | 2008-09 |
| Additional Notional equity | 1033.20 | 278.08 | 52.93 |

Return on Equity

30. Return on equity is allowed @ 14% on the average normative equity, as under:

(Rs. in lakh)

| Return on Equity | 2006-07 | 2007-08 | 2008-09 |
|--|----------------|----------------|----------------|
| (a)Opening Equity | 45818.81 | 46852.01 | 47130.10 |
| (b)Addition due to Additional Capitalization | 1033.20 | 278.08 | 52.93 |
| c)De-capitalization on account of initial spares and capitalized liabilities | 0.00 | 0.00 | 0.00 |
| d)Closing Equity (a+b-c) | 46852.01 | 47130.10 | 47183.03 |
| Average Equity ((a+d)/2) | 46335.41 | 46991.06 | 47156.56 |
| Return on Equity | 6486.96 | 6578.75 | 6601.92 |

Interest on loan

31. The petitioner has not considered any fresh loan for additional capitalization during the years 2006-07, 2007-08 and 2008-09. Hence the actual weighted average rate of interest worked out in order dated 25.6.2009 in Petition No. 24/2009, has been considered. Based on the same the Interest on loan has been computed as under:

(Rs. in lakh)

| Interest on Loan | 2006-07 | 2007-08 | 2008-09 |
|--|----------------|----------------|----------------|
| Gross Opening Loan | 124578.62 | 126989.43 | 127638.29 |
| Cumulative Repayment upto previous Year | 1581.64 | 5527.48 | 9523.43 |
| Net Loan-Opening | 122996.98 | 121461.94 | 118114.86 |
| Addition due to additional capitalization | 2410.81 | 648.86 | 123.50 |
| Repayment during the year | 3945.84 | 3995.94 | 4166.99 |
| Net Loan-Closing | 121461.94 | 118114.86 | 114071.38 |
| Average Loan | 122229.46 | 119788.40 | 116093.12 |
| Annualized Weighted Average Rate of Interest on Loan | 3.3234% | 3.3208% | 3.3156% |
| Interest | 4062.22 | 3977.96 | 3849.20 |

Depreciation

32. For calculating depreciation, the cumulative depreciation of Rs. 1660.30 lakh and the weighted average rate of depreciation of 2.2925% as per the order dated 20.10.2008 in Petition No. 107/2006 has been considered.

33. The additional capitalization admitted during the years 2007-08 and 2008-09 include an amount of Rs.1.99 lakh and Rs.7.28 lakh respectively, towards cost of land.

As land cost is not a depreciable asset, this cost has not been considered for the purpose of calculation of depreciation.

34. Assets amounting to Rs.127.71 lakh, Rs.97.34 lakh and Rs.56.08 lakh have been decapitalised during 2006-07, 2007-08 and 2008-09 respectively. As per the prevailing practice, the amount of cumulative depreciation allowed in tariff against those decapitalised assets has been calculated on pro-rata basis. The same has been adjusted from the cumulative depreciation in the year of de-capitalization. Accordingly, depreciation has been worked out as under:

| (Rs in lakh) | | | |
|---|----------------|----------------|----------------|
| | 2006-07 | 2007-08 | 2008-09 |
| Gross block | | | |
| (a) Opening Gross Block | 170397.43 | 173841.44 | 174768.39 |
| (b) Addition due to Additional Capitalization | 3444.01 | 926.95 | 176.43 |
| (c) De-capitalization on account of capitalized liabilities | 0.00 | 0.00 | 0.00 |
| (d) Closing Gross Block (a+b-c) | 173841.44 | 174768.39 | 174944.82 |
| Average Gross Block ((a+d)/2) | 172119.44 | 174304.91 | 174856.60 |
| Rate of Depreciation | 2.2925% | 2.2925% | 2.2925% |
| Depreciable Value @ 90% | 154004.72 | 155969.86 | 156459.83 |
| Balance Useful life of the asset | - | - | - |
| Remaining Depreciable Value | 152344.42 | 150367.83 | 146867.20 |
| Depreciation | 3945.84 | 3995.94 | 4008.59 |

Advance against Depreciation

35. Advance against Depreciation has been calculated after considering the additional capital expenditure which has been worked out as per details given hereunder:

| (Rs in lakh) | | | |
|--|-------------|-------------|--------------|
| Advance against Depreciation | 2006-07 | 2007-08 | 2008-09 |
| 1/10th of Gross Loan(s) | 12457.86 | 12698.94 | 12763.83 |
| Repayment of the Loan | 3945.84 | 3995.94 | 4166.99 |
| Minimum of the above | 3945.84 | 3995.94 | 4166.99 |
| Depreciation during the year | 3945.84 | 3995.94 | 4008.59 |
| (A) Difference | 0.00 | 0.00 | 158.39 |
| Cumulative Repayment of the Loan | 5527.48 | 9523.43 | 13690.41 |
| Cumulative Depreciation/ Advance against Depreciation | 5606.14 | 9597.97 | 13601.22 |
| (B) Difference | (-) 78.66 | (-) 74.54 | 89.19 |
| Advance against Depreciation Minimum of (A) and (B) | 0.00 | 0.00 | 89.19 |

O&M Expenses

36. O&M expenses as allowed in the order dated 20.10.2008 in Petition No. 107/2006 have been considered.

Interest on Working Capital

37. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 20.10.2008 in Petition No. 107/2006 have been kept unchanged. The "receivables" component of the working capital in the order dated 20.10.2008 in Petition No. 107/2006 have been revised for the reason of revision of return on equity, interest on loan, etc.

38. The SBI PLR of 10.25% as on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period as considered in order dated 20.10.2008 in Petition No. 107/2006. The interest on working capital is calculated as under:

(Rs in lakh)

| Interest on Working Capital | 2006-07 | 2007-08 | 2008-09 |
|------------------------------------|----------------|----------------|----------------|
| Maintenance Spares | 1671.89 | 1772.20 | 1878.54 |
| O & M expenses (1 month) | 212.08 | 220.56 | 229.39 |
| Receivables | 2922.10 | 2951.03 | 2970.35 |
| Total | 4,806.08 | 4,943.80 | 5,078.27 |
| Interest | 492.62 | 506.74 | 520.52 |

Annual Fixed Charges

39. The revised annual fixed charges for the period from 1.4.2006 to 31.3.2009 are summarized as under:

(Rs in lakh)

| Annual Fixed Charges | 2006-07 | 2007-08 | 2008-09 |
|------------------------------|-----------------|-----------------|-----------------|
| Depreciation | 3945.84 | 3995.94 | 4008.59 |
| Interest on Loan | 4062.22 | 3977.96 | 3849.20 |
| Return on Equity | 6486.96 | 6578.75 | 6601.92 |
| Advance against Depreciation | 0.00 | 0.00 | 89.19 |
| Interest on Working Capital | 492.62 | 506.74 | 520.52 |
| O & M Expenses | 2544.98 | 2646.78 | 2752.65 |
| Total | 17532.62 | 17706.16 | 17822.08 |

40. The reimbursement of the filing fee is not being allowed in view of the Commission's general order dated 11.9.2008 in Petition No.129/2005.

41. The petitioner shall claim the difference between the fixed charges approved vide order dated 20.10.2008 in Petition No. 107/2006 and those approved now, from the beneficiaries in three equal monthly installments.

42. Petition No.238/2009 stands disposed of in terms of the above.

**Sd/-
(V.S.VERMA)
MEMBER**

**Sd/-
(S. JAYARAMAN)
MEMBER**

**Sd/-
(DR.PRAMOD DEO)
CHAIRPERSON**