CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram:
1.Shri Bhanu Bhushan, Member
2.Shri R Krishnamoorthy, Member

Petition No. 20/2008

In the matter of

Approval of final tariff in respect of Nathpa Jhakri Hydroelectric Project (6x250 MW) for the period 1.4.2004 to 31.3.2009.

And in the matter of

Satluj Jal Vidyut Nigam Limited, Shimla **……..Petitioner**

Vs

1. Punjab State Electricity Board, Patiala
2. (i) Haryana Power Generation Corporation Limited, Panchkula
   (ii) Haryana Vidyut Prasaran Nigam Limited, Panchkula
3. (i) Delhi Transco Limited, New Delhi
   (ii) North Delhi Power Limited, New Delhi
   (iii) BSES Rajdhani Power Limited, New Delhi
   (iv) BSES Yamuna Power Limited, New Delhi
4. (i) Jaipur Vidyut Vitaran Nigam Limited, Jaipur
   (ii) Ajmer Vidyut Vitaran Nigam Limited, Jaipur
   (iii) Jodhpur Vidyut Vitaran Nigam Limited, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Power Development Department, Govt of J & K, Jammu
7. Engineering Department, UT Secretariat, Chandigarh
8. U.P. Power Corporation Limited, Lucknow
9. Uttaranchal Power Corporation Limited, Dehradun
10. Principal Secretary (MPP & Power), Govt. of Himachal Pradesh, Shimla **…….Respondents**

The following were present

1. Shri R.K. Aggarwal, SJVNL
2. Shri Ashwin Bhardwaj, SJVNL
3. Shri Sanjay Kumar, SJVNL
4. Shri Jaspal Singh, SJVNL
5. Shri Suresh Kumar, SJVNL
6. Shri R.S.Rana, SJVNL
7. Shri H.B.Sahay, SJVNL
8. Shri Rajeev Aggarwal, SJVNL

9. Shri A.K.Datta, NDPL
10. Shri T. P. S. Bawa, PSEB
11. Shri Padamjit Singh, (consumer)

ORDER
(DATE OF HEARING: 22.4.2008)

This petition has been filed by the petitioner, Satluj Jal Vidyut Nigam Ltd (SJVNL) for approval of final tariff of Nathpa Jhakri Hydroelectric Project (6x250 MW) (hereinafter referred to as "the generating station") for the period 1.4.2004 to 31.3.2007 and provisional tariff from 1.4.2007 to 31.3.2009 in terms of Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations").

2. The generating station, located in the State of Himachal Pradesh, with an installed capacity of 1500 MW (6X250 MW) has been constructed by the petitioner, a joint venture between the Government of India and Government of Himachal Pradesh, as a run-of-river project with pondage. The generating station is designed to generate energy to the extent of 6984 MUs per annum in a 90% dependable year and 1500 MW of peak power. The dates of commercial operation of the different units of the generating station are as under:

Unit	Date of commercial operation
Unit – 5	6.10.2003
Unit – 6	2.1.2004
Unit – 4	30.3.2004
Unit – 3	31.3.2004
Unit – 2	6.5.2004
Unit – 1	18.5.2004 (date of commercial operation of the generating station)

3. On commissioning of all the six units of the generating station, the petitioner filed Petition No.184/2004 for approval of provisional tariff for the generating station for the period 1.4.2004 to 31.3.2009. The Commission vide order dated 17.6.2005 allowed provisional tariff @ Rs.2.35/Kwh, translated into two part tariff, for the years 2004-05 and 2005-06 which was based on the consensus reached between the petitioner and the beneficiaries of Northern Region. The Annual fixed charges of Rs.133525 lakh and Rs.141483 lakh were provisionally allowed for the years 2004-05 and 2005-06 respectively. Subsequently, the Commission approved the continuation of provisional tariff @ Rs.2.35/kwh up to 31.3.2007. The Commission extended continuation of the provisional tariff till 31.3.2008 and approved Annual Fixed Charges of Rs.127812 lakh for 2007-08 on the basis of RCE –II approved cost of Rs.766631 lakh vide order dated 5.9.2007 in I.A. No. 13/2007.

4. In the present petition, the petitioner has claimed the following fixed charges in its affidavit dated 14.5.2008:

(Rs in lakh)

Period	2004-05				2005-06	2006-07	2007-08	2008-09
	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	Total				
Depreciation	1197.45	520.05	17320.70	19038.20	20098.44	20067.27	20307.27	20437.74
Interest on loan	1968.54	861.51	30063.60	32893.64	28357.02	25566.80	22813.59	16572.64
Return on Equity	3822.25	1624.09	48347.36	53793.7	56592.55	56725.15	57318.83	57713.81
Advance against Depreciation	0.00	0.00	5773.78	5773.78	22949.75	22821.15	22787.07	22495.96
Interest on Working capital	233.74	90.74	2784.40	3108.88	3451.57	3482.74	3531.92	3507.91
O&M expenses	1195.65	409.94	10863.34	12468.93	12885.92	13539.96	14223.92	14818.73
Total	8417.65	3506.32	115153.18	127077.14	144335.24	142203.09	140982.61	135546.79

5. The details of the working capital furnished by the petitioner and its claim of interest thereon are summarized as under:

(Rs in lakh)

Period	2004-05				2005-06	2006-07	2007-08	2008-09
	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	Total				
Maintenance Spares	778	267	7067	8112	8544	9149	9775	10397
O & M expenses	100	34	905	1039	1074	1128	1185	1235
Receivables	1403	584	19192	21180	24056	23701	23497	22591
Total Working Capital	2280	885	27165	30331	33674	33978	34458	34224
Interest Rate	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	234	91	2784	3109	3452	3483	3532	3508

6. The replies to the petition have been filed by the respondents, PSEB, NDPL, JVVNL, JdVVNL, AVVNL and Shri Padamjit Singh, a consumer. We have also heard the representatives of the parties. Based

on the pleadings and oral submissions made by the petitioner and the respondents, we proceed to fix the tariff of the generating station as discussed in the succeeding paragraphs.

Capital Cost

7. The project was originally approved by the Central Government vide Ministry of Energy, Department of Power, letter dated 5.4.1989 at an estimated cost of Rs.167802 lakh, including IDC of Rs.20602 lakh (September, 1988 price level) with the completion schedule of March, 1996 including 1 ½ years for infrastructure works which were under development. The first revised cost estimates (RCE-I) were approved by the Central Government vide Ministry of Power letter dated 24.6.1993 for Rs.433795 lakh, including IDC of Rs.64869 lakh with the revised commissioning schedule of December, 1998. The second revised cost estimates (RCE-II) were approved by the Central Government vide Ministry of Power letter dated 10.5.1999 at an estimated cost of Rs.766631 lakh, including IDC of Rs.173479 lakh (June 1998 price level) with the commissioning schedule of March 2002. The third revised cost estimates (RCE-III) were approved by the Central Government vide Ministry of Power letter dated 14.8.2007 at the cost of Rs.818771 lakh, including IDC of Rs.195181 lakh but excluding an expenditure of Rs.14500 lakh which had already been incurred as advances to contractors on account of extension of time (EOT), Dispute Review Board (DRB) and other claims in respect of major civil works.

8. The cost of the project, excluding the transmission component, and power benefit (after excluding 12% free power to the home state) was to be shared between the Central Government and the Govt. of Himachal Pradesh (hereinafter referred to as "State Government") in the ratio of 3:1.

Time and Cost Over-Run

9. From the date of original sanction of the project in April 1989, the final sanctioned cost has exceeded by about 388% over the original sanctioned cost and as against original completion schedule of 7 years, project has been completed in 15 years implying a delay of 8 years. The details of original approved cost, subsequent revised cost, approved schedule, excess cost and time over-run are summarized in the following table:

Stages	Sanction date	Project cost (Rs. in lakh)	Cost over-run (Rs. in lakh)	Schedule date of completion	Time over-run (in months)
Original approval	April 1989	167802	-	March 1996	-
RCE-I (at the stage of award of contracts)	June 1993	433795	265993	December 1998	33
RCE-II	May 1999	766631	332836	March 2002	39
RCE-III	August 2007	818771	52140	May 2004	26
Escalation from original approval		650969	388%		98

10. The Central Government constituted a Standing Committee for examination of the cost and time over-run vis-a-vis RCE-II. The Committee came to the conclusion that the project had suffered an excess cost of Rs.71357 lakh (9.31% of sanctioned RCE-II) and a delay of about 26 months. The major factors for time over-run were identified as the unprecedented flash flood on 1.8.2000 in the river Satluj (12 months)

and additional support measures necessitated in desilting chamber and HRT due to poor rock strata (14 months). As regards the cost over-run, the Committee noted that increase in interest by Rs.26321 lakh on IDC, price variation of Rs.14385 lakh, FERV of Rs.8275 lakh and unforeseen / additional works to the tune of Rs.45228 lakh necessitated on account of additional support measures for desilting chamber and HRT had substantially contributed towards cost escalation. The Committee further observed that establishment expenditure, which constituted about 9% of total hard cost (excluding land cost) as against CWC norms of 8% was on higher side. However, the Committee did not hold the petitioner in any way responsible for time and cost over-run.

11. We find that the reasons for the time and cost over-run in completion of the generating station can be attributed to major catastrophic natural calamities including unprecedented flash flood in August, 2000, geological surprises and adverse physical conditions. While taking note of the findings of the Standing Committee, we are of the view that the reasons for cost and time over-run were beyond the control of the petitioner.

12. Capital cost as claimed by the petitioner during the tariff period 2004-09 is summarized below:

(Rs. in lakh)

Period	2004-05			2005-06	2006-07	2007-08	2008-09
	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005				
Opening capital cost	501786.89	637088.94	774324.61	811190.77	805739.22	814979.48	822701.48
Add: capital cost/ additional capital expenditure	135302.05	137235.67	36866.16	(-) 5451.55	9240.26	7722.00	3563.00
Closing capital cost	637088.94	774324.61	811190.77	805739.22	814979.48	822701.48	826264.48

13. Four out of total six units of the generating station were commissioned between 6.10.2003 to 31.3.2004 during the tariff period 2001-04. Final tariff for the said period, on the commissioning of four units, was approved by the Commission in order dated 21.3.2007 in Petition No. 87/2005 on the capital base of Rs.501786.89 lakh. The same capital base has been considered as the opening capital cost for determination of tariff during the period 2004-09. Based on the details submitted by the petitioner vide affidavits dated 14.5.2008 and 15.9.2008, the capital cost has been summarized in the following table:

(Rs. in lakh)

Particulars	As on 5.5.2004	As on 17.5.2004	As on 31.3.2005	As on 31.3.2006	As on 31.3.2007
(i) Gross block as per balance sheet	621115	756243	797904	796970	815271
(ii) Less :capitalized un-discharged liabilities, not paid in cash, as per balance sheet	12903	11983	9857	11675	17239
(iii) Less : Advances paid to the Contractors, capitalised but not approved by GOI in	0	13983.44	12359.00	11346.16	11338.6

RCE-III					
(iv) Add: cost of assets in use, paid in cash but not capitalised	19057	20700	15172	14041	12564
(v) Less-ERV to be claimed separately	435	1021	2415	3982	6002
(vi) Add. interest /OFC as per RSVPN	10256	10386	10386	10386	10386
(vii) Net Gross Block for tariff purpose	**637090**	**760341.56**	**798831**	**794393.84**	**803641.40**
(vii) Gross block as per petition*	**637089**	**774325.56**	**811191**	**805739**	**814979**

* includes advances paid to contractors and capitalized, but not approved by the Central Government in RCE-III.

14. Since the Central Government while approving the RCE-III had not approved the expenditure of Rs.14500 lakh incurred as advances to contractors on account of extension of time (EOT), Dispute Review Board (DRB) and other claims in respect of major civil works, this expenditure has not been admitted for the purpose of tariff. As and when disputes related to these claims are finally settled, the petitioner may take up the case with Central Government for approval and, if approved by the Central Government, the petitioner may approach the Commission to claim the expenditure as additional capital expenditure in accordance with the prevailing regulations.

15. From the reconciliation statement of gross block claimed vis-a-vis capitalised gross block as per balance sheet as on 31.3.2007 submitted by the petitioner, it is observed that the petitioner has claimed the additional capital expenditure for the years 2007-08 and 2008-09 on projected basis. As additional capital expenditure can be claimed only when it is actually incurred and not based on projection, the expenditure

incurred upto 31.3.2007, subject to prudence check by the Commission shall be considered.

Capital cost as on 1.4.2004(Units 3, 4, 5 and 6)

16. As already mentioned, the capital cost amounting to Rs.501786.89 lakh was admitted by the Commission as on 31.3.2004. This has been considered as the starting point for the purpose of tariff. However, this amount includes undischarged liability of Rs.12903 lakh which has been taken out of the gross block as on 1.4.2004. As such, the capital cost as on 1.4.2004 to be considered for tariff purpose, is as given below:

(Rs. in lakh)

Particulars	Amount
Capital cost as on 31.3.2004	501786.89
Less: Undischarged liability as on 31.3.2004	12903.00
Capital cost as on 1.4.2004	**488883.89**

Capital cost as on 6.5.2004 (COD of Unit -2)

17. The petitioner has claimed capital expenditure of Rs.637089 lakh as on the date of commercial operation of Unit-2 i.e. 6.5.2004 as certified by the auditor after excluding undischarged liabilities of Rs.12903 lakh. This expenditure is less than the apportioned approved cost of Rs.682309.40 lakh for five units of the generating station as per RCE-III {Rs.818771 lakh x 5/6}.

18. The capital expenditure of Rs.637089 lakh also includes expenditure /adjustments of the following nature:

(a) Expenditure of Rs.19057 lakh incurred on various assets which were paid in cash and put to use but not capitalized.

(b) FERV amounting to Rs.435 lakh for the period 1.4.2004 to 5.5.2004.

(c) Interest /finance charges amounting to Rs.10256 lakh.

19. As noted at para 18 (a) above, the petitioner has claimed an expenditure of Rs.19057 lakh incurred on various assets which were paid in cash and put to use but has not been capitalised. In response to the directions of the Commission, the petitioner by affidavit dated 15.10.2008 has provided reasons for the delayed capitalisation /non-capitalisation of the assets as follows:

(a) Amount deposited in the High Court of Himachal Pradesh to defend the decision of the lower court pertaining to ownership of land has been capitalised during the year 2006-07 after an out of court settlement.

(b) Due to frequent interruption of power supply from the generating station, the contractor continued construction work by operation of their DG sets and in terms of the contract, payment was released. However, by a different interpretation of the provisions of the contract, the payments already released were adjusted during the year 2004-05. The matter is stated to be still under dispute.

(c) Amount paid to the contractor as overheads on Road Tax etc, was recovered by the petitioner during the year 2004-05 on a different interpretation of the provisions of the contract. This matter is still under adjudication before the High Court of Himachal Pradesh.

(d) Amount paid on behalf of contractor to DRB Members and subsequently recovered from the contractor.

(e) Amount capitalised during the year 2006-07 after receipt of utilisation certificate.

(f) Amount paid to the contractor on account of flash floods and subsequently adjusted during the year 2006-07.

20. From the reasons furnished by the petitioner as above, it could be observed that most of the cases are under dispute/adjudication and in some cases recoveries from the contractor are still pending. The expenditure on the above heads is not permissible under the 2004 regulations and accordingly cannot be allowed to be capitalised.

21. In respect of certain expenditure like diversion dam, hydraulic control valves(Gates & Hosts), building containing power house, plant and machinery in the generating station and residential building for employees of the project., which are important components of the hydro power stations, the petitioner has furnished the following reasons for capitalisation :

(a) advance payments made in terms of contractual obligations during 2004-05;

(b) payments released against running bill for work done and capitalised during 2004-05; and

(c) adhoc payments released due to change in geological conditions and unforeseen events and capitalised during 2004-05.

(d) Payment of Rs 1467 lakh to the contractor was adjusted during the year 2004-05 and 2005-06. However, against the claim of the contractor for additional cost on account of encountering EGO at Nathpa downstream during benching evacuation, recovery of Rs.21.24 lakh from the payments to be made to the contractor has been worked out.

22. The reasons furnished by the petitioner appear to be justified besides the fact that no disputes or recoveries are pending in respect of these assets. After carrying out prudence check, an amount of Rs 6500.46 lakh under the head “cost of assets in use, paid in cash and deemed to be capitalised” as on 6.5.2004 is allowed to be capitalised.

23. So far as para 18(b) is concerned, the 2004 regulations do not provide for capitalization of FERV and leave the question of FERV liability to be settled mutually by the generating company with the beneficiaries. Accordingly, the reduction of FERV amounting to Rs. 435 lakh as per para 18 (b) has been made.

24. In respect of para 18 (c) above, the petitioner by its affidavit dated 15.9.2008 has clarified that the amount of Rs.10256 lakh is on account of the interest/OFC charges proportionate to the capital cost deployed till the

date of commercial operation of four units of the generating station. This is found to be in order and is accordingly allowed**.**

25. It is, however, observed that the Commission by its order dated 21.3.2007 in Petition No. 87/2005 for the period 6.10.2003 to 31.3.2004 had allowed interest on loan amounting to Rs.4275.91 lakh against the claim for Rs.13054 lakh. The balance amount of Rs.8778.09 lakh has been considered as IDC for the said period. However, the petitioner has considered an amount of Rs. 4136.00 lakh only as against Rs 4275.91 lakh allowed by the Commission as interest on loan. Hence, an amount of Rs.139.91 lakh has been deducted from the interest/other financial charges claimed.

26. Based on the above, the capital expenditure incurred on account of the above assets as on the date of commercial operation of Unit - 2 of the generating station (6.5.2004) works out to Rs.6500.46 lakh, which has been allowed, as against the petitioner's claim of Rs.19057 lakh.

27. Based on the above, the capital cost as on date of commercial operation of the Unit-2 as on 6.5.2004 is as under:

(Rs in lakh)

Particulars	Amount
(i) Gross block as per balance sheet	621115.00
(ii) Less: capitalized un-discharged liabilities, not paid in cash, as per balance sheet	12903.00
(iii) Less: Advances paid to the Contractors,capitalised but not approved by GOI in RCE-III	0.00
(iv) Add: cost of assets in use, paid in cash but not capitalised	6500.46
(v) Less: FERV (To be claimed separately)	435.00
(vi) Add : interest /OFC	10256.00
(vii) Net Gross block for tariff purpose	624533.46
(vii) Less: Interest/OFC	140.00
Net gross block for the purpose of tariff	**624393.46**

Capital cost as on 18.5.2004 (COD of Unit-1)

28. The certified actual capital expenditure as on 17.5.2004 as claimed by the petitioner is Rs.760341.56 lakh after excluding undischarged liabilities of Rs.11983 lakh.

29. The capital expenditure of Rs.760341.56 lakh also includes the expenditure /adjustments of the following nature:

(a) Expenditure of Rs. 13983.44 lakh on account of “advances paid to contractors" which have been capitalised in the Books of Accounts but not approved by the Central Government in the RCE-III.

(b) Expenditure of Rs.20700 lakh on assets paid in cash and put to use but not capitalised.

(c) FERV amounting to Rs 1021 lakh for the period 6.5.2004 to 17.5.2004.

30. As already noted, the petitioner is at liberty to claim in accordance with law the amount of Rs 13983.44 lakh as additional capital expenditure as and when the said expenditure is approved by the Central Government as part of the project capital cost. As regards expenditure of Rs 20700 lakh towards assets paid in cash but not capitalised, it is found that a number of cases are pending for adjudication and in few cases recoveries are also to be made. On prudence check an amount of Rs 8142.79 lakh as against the claim of Rs.20700 lakh is allowed to be capitalised. As regards FERV, capitalisation of an amount of Rs.1021 lakh is not allowed to be capitalised in terms of the provisions of the 2004 regulations and the petitioner is directed to mutually settle the matter with the beneficiaries. The capital cost as on 18.5.2004 works out as under:

(Rs in lakh)

Particulars	Amount
(i) Gross block as per balance sheet	756243.00
(ii) Less: capitalized un-discharged liabilities, not paid in cash, as per balance sheet	11983.00
(iii) Less: Advances paid to the contractors, capitalised but not approved by GOI in RCE-III	13983.44
(iv) Add: cost of assets in use, paid in cash but not capitalised	8142.79
(v) Less: ERV to be claimed separately	1021.00
(vi) Add: interest /OFC as per RSVPN	10386.00
(vii) Net Gross block for tariff purpose	747784.35
Less: Interest /OFC	140.00
Net gross block for the purpose of tariff	**747644.35**

Capital cost for the purpose of tariff as on 1.4.2005, 1.4.2006 and 1.4.2007

31. The petitioner has claimed an additional capital expenditure of Rs. 36866.16 lakh (including FERV adjustment, expenditure on paid up non-

capitalised assets and interest adjustment of Rs.10386 lakh) for the period 18.5.2004 to 31.3.2005 which pertains to the balance works like hydro electric machinery, initial capital spares, balance civil works, reinforced concrete pipelines, tanks, building, transformers, switchgear, batteries, etc which could not be capitalized because of non-completion, the same have been capitalized after the completion and may be allowed by the Commission. The petitioner has certified that the additional capital expenditure claimed has been arrived at after excluding the undischarged liabilities. As most of the cases are either in dispute or recovery is pending from the contractor, the expenditure has not been capitalised. The petitioner is at liberty to claim additional capitalization for these assets as and when capitalized. The 'negative' additional expenditure amounting to Rs. 5451.55 lakh during the period 1.4.2005 to 31.3.2006 on account of reversal of depreciation charged in IEDC during construction period has been allowed. The additional capital expenditure of Rs.9240.76 lakh claimed during 1.4.2006 to 31.3.2007 pertaining to the balance works which could not be capitalized earlier pending completion has been capitalised in the year 2006-07 after completion of works and is accordingly allowed to be capitalised.

32. Accordingly, the capital cost arrived at as on 1.4.2005, 1.4.2006 and 1.4.2007 is as under:

(Rs in lakh)

Particulars	As on 1.4.2005	As on 1.4.2006	As on 1.4.2007
(i) Gross block as per balance sheet	797904.00	796970.00	815271.00
(ii) Less: capitalized un-discharged liabilities, not paid in cash, as per balance sheet	9857.00	11675.00	17239.00
(iii) Less: Advances paid to the contractors, capitalised but not approved by GOI in RCE-III	12359.00	11346.16	11338.60
(iv) Add: cost of assets in use, paid in cash but not capitalised	8142.79	8142.79	8142.79
(v) Less: ERV to be claimed separately	2415.00	3982.00	6002.00
(vi) Add. interest /OFC	10386.00	10386.00	10386.00
(vii) Net Gross block for tariff purpose	791801.79	788495.63	799220.19
Less: Interest/OFC	140.00	140.00	140.00
Net gross block for the purpose of tariff	**791661.79**	**788355.63**	**799080.19**

Extra Rupee Liability

33. Regulations 9 and 10 of the 2004 regulations provide as under:

> **"**9**.** *Extra Rupee Liability: (1) Extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign debt or actual foreign debt, as the case may be, in the relevant year shall be permissible provided it directly arises out of Foreign Exchange Rate Variation and is not attributable to the generating company or the transmission licensee or its suppliers or contractors. Every generating company and the transmission licensee shall recover Foreign Exchange Rate Variation on a year to year basis as income or expense in the period in which it arises and Foreign Exchange Rate Variation shall be adjusted on a year to year basis.*
>
> 10**.** *Recovery of Income-tax and Foreign Exchange Rate Variation: Recovery of Income-tax and Foreign Exchange Rate Variation shall be done directly by the generating company or the transmission licensee, as the case may be, from the beneficiaries without making any application before the Commission.*
>
> *Provided that in case of any objections by the beneficiaries to the amounts claimed on account of income-tax or Foreign Exchange Rate Variation, the generating company or the transmission licensee, as the case may be, may make an appropriate application before the Commission for its decision."*

34. As the FERV has to be directly recovered from the beneficiaries, expenditure on this account has not been considered for the purpose of tariff, as already discussed.

35. Capital cost for the period 2004-09 has been worked out as under:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
Opening capital cost as on 1st April of the financial year	488883.89	624393.46	747644.35	791661.79	788355.63	799080.19	799080.19
Add: Capital cost / Additional capitalisation.	135509.57	122330.89	41891.44	(1488.16)	16288.56	-	-
Less: Increase/ (decrease) in un-discharged liability as on 31st March of the financial year	0.00	(920.00)	(2126.00)	1818.00	5564.00	-	-
Capital cost as on 31st March of the financial year	**624393.46**	**747644.35**	**791661.79**	**788355.63**	**799080.19**	**799080.19**	**799080.19**

Debt-Equity Ratio

36. Regulation 36 of the 2004 regulations provide 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.

37. The petitioner has submitted that all units of the generating station were synchronised with the grid on or before 31.3.2004. Four units were put under commercial operation before 31.3.2004 and the balance two units were synchronised with the grid on 9.3.2004 and 31.3.2004 and were declared commercially operative on 6.5.2004 and 18.5.2004 as the operation of all the six machines was not possible due to less discharge in the river Satluj. Thus, the petitioner has submitted, the generating station was fully ready for commercial operation as on 31.3.2004 but could not be commissioned till 18.5.2004 due to non-availability of adequate water. Further, the petitioner has stated that the investments made as equity to the extent of 50% of the project cost are in the larger interest of the general public. The petitioner has prayed that debt-equity

ratio of 50:50 may be considered as per Regulation 36 of the 2004 regulations.

38 The Commission allowed debt-equity ratio of 1:1 for calculation of tariff for the period ending 31.3.2004 in its order dated 21.3.2007 in Petition No. 87/2005. In the said order the Commission had observed as under:

> *"18. …. Since the financing and deployment of the funds took place prior to 31.3.2004, the provisions of regulation 34 of the tariff regulations, 2004 are not applicable and the apportionment of capital cost between debt and equity will be in the ratio of 50:50 as approved by the Central Government in the financing plan, in April, 1989."*

39. It is noted that the petitioner in Form No. 6 has shown the capital expenditure, debt and equity as below:

	As approved		As on date of commercial operation	
	Rs.in lakh	%age	Rs.in lakh	%age
Debt	408264	49.86%	386240	48.84%
Equity	410507	50.14%	404551	51.16%
Total Funding	818771	100.00%	790791	100.00%

40. In line with the decision in order dated 21.3.2007, debt-equity ratio of 1:1 has been considered. However, for the additional capitalization for the period 2004-09, even though the petitioner has stated that the total funding has been done from internal accruals, debt-equity ratio of 70:30 has been considered for the purpose of tariff, in accordance with the Regulation 36 of 2004 regulations.

Return on Equity

41. Clause (iii) of Regulation 38 of the 2004 regulations provide as under:

> *"Return on equity shall be computed on the equity base determined in accordance with regulation 36 and shall be @ 14% per annum.*
> *Provided that equity invested in any foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.*
> ***Explanation***
> *The premium raised by the generating company while issuing share capital and investment of internal resources created out of free reserve of the existing generating station, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station and forms part of the approved financial package."*

42. The petitioner has claimed return on equity @ 14% on the basis of debt-equity ratio of 50:50 as under:-

(Rs in lakh)

	1.4.2004 to 5.5.2004	6.5.2004 to 17. 5.2004	18.5.2004 to 31.3.2005	2004-05	2005-06	2006-07	2007-08	2008-09
	5 Units	6 Units	6 Units	6 Units	6 Units	6 Units	6 Units	6 Units
Return on Equity	3822	1624	48347	53794	56593	56725	57319	57714

43. Return on equity has been computed based on the admitted capital cost and the additional capitalisation allowed for the period 2004-05 and 2005-06 and is worked out as under:

(Rs in lakh)

	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
	5 Units	6 Units	6 Units	6 Units	6 Units	6 Units	6 Units
Opening Balance	244442	312197	373822	395831	394178	399540	399540
Additions	0	0	13205	-992	3217	0	0
Closing Balance	244442	312197	387027	394839	397395	399540	399540
Average Equity	244442	312197	380425	395335	395786	399540	399540
Rate of Return on Equity	14%	14%	14%	14%	14%	14%	14%
Return on Equity	**3282**	**1437**	**46401**	**55347**	**55410**	**55936**	**55936**

Interest on loan

44. As per clause (i) of Regulation 38 of the 2004 regulations, interest on loan capital shall be computed as under:

> *"(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in Regulation 36;*
>
> *(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 36 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis;*
>
> *(c) The generating company shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries;*
>
> *(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries;*
>
> *(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the generating company during pendency of any dispute relating to re-financing of loan;*
>
> *(f) In case any moratorium period is availed of by the generating company, 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;*
>
> *(g) The generating company shall not make any profit on account of re-financing of loan and interest on loan;*
>
> *(h) The generating company may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice-versa, at its own cost, and gains or losses as a result of such swapping shall accrue to the generating company:*

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest."

45. The interest on loan allowed in tariff has been computed as under:

(a) Interest on loan capital has been computed on the loans arrived at in the manner indicated in Regulation 36.

(b) The loan outstanding as on 1.4.2004 has been worked out as the gross loan in accordance with Regulation 36 minus cumulative repayment as admitted by the Commission up to 31.3.2004.

(c) As the date of commercial operation of the station is 18.5.2004, repayment of the loan up to 17.5.2004 has been considered as 'nil'.

(d) The effect of refinancing of IBRD loan with other loans and of Canara Bank loan with PNB loan has been considered while arriving at the actual weighted average rate of interest as it is beneficial to the respondents.

(e) The GOI guarantee fees in case of all foreign loans @1.20%, as claimed, has been considered in calculation of weighted average rate of interest.

(f) On the basis of actual rate of interest on actual loans, the weighted rate of interest on average loan has been worked out and the same has been applied on the normative average loan during the year to arrive at the interest on loan.

46. The necessary calculations in support of weighted average rate of interest are appended as **Annexure I** to this order. The computations of interest on loan for the period 1.4.2004 to 31.3.2009 by applying weighted average rate are as under:

(Rs in lakh)

Interest on Loan	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
Gross Loan Opening	244442	312197	373822	395831	394178	399540	399540
Cumulative repayment of deemed loan upto previous year	0	0	0	22112	75147	133804	193670
Opening Balance	244442	312197	373822	373719	319031	265736	205870
Additions	0	0	30812	-2314	7507	0	0
Repayments	0	0	22112	53035	58657	59865	49479
Closing Balance	244442	312197	382523	318370	267881	205870	156391
Average Loan	244442	312197	378172	346044	293456	235803	181131
Wt. Average Rate of Interest	9.18%	9.18%	9.23%	9.34%	9.49%	9.72%	10.01%
Interest on Loan	**2153**	**942**	**30413**	**32321**	**27847**	**22911**	**18134**

Depreciation

47. Sub-clause (a) of clause (ii) of Regulation 38 of the 2004 regulations provides as under:

> *" For the purpose of tariff, depreciation shall be computed 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 life 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."

48. The petitioner claimed depreciation, by adding FERV to the capital cost during 2004-09. As FERV arising during 2004-09 is a pass through and has to be mutually settled between the petitioner and the beneficiaries, FERV has not been capitalised for tariff and depreciation on FERV has not been allowed. Weighted average rate of depreciation has been calculated considering capital cost as on 31.3.2004 (DOCO of Unit-3), 6.5.2004 (DOCO of Unit-2) and 18.5.2004 (DOCO of Unit-1). The weighted average rates of depreciation of 2.49% as on 31.3.2004, 2.48% as on 6.5.2004 and 2.49% as on 18.5.2004 calculated as above have been considered for the period of 1.4.2004 to 5.5.2004, 6.5.2004 to 17.5.2004 and 18.5.2004 to 31.3.2009 respectively.

49. Accordingly, depreciation for the period 2004-09 in respect of the generating station works out as under:

(Rs in lakh)

	2004-05			2005-06	2006-07	2007-08	2008-09
	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005				
Opening Balance (A)	488884	624393	747644	791662	788356	799080	799080
Increase/ Decrease due to undischarged liability (B)	0	0	(-) 2126	1818	5564	0	0
Increase/Decrease due to Additional capitalisation (C)	0	0	41891	-1488	16289	0	0
Closing Balance	488884	624393	791662	788356	799080	799080	799080
Average capital cost	488884	624393	769653	790009	793718	799080	799080
Rate of Depreciation	2.49%	2.48%	2.49%	2.49%	2.49%	2.49%	2.49%
Depreciation	**1168**	**510**	**16725**	**19704**	**19797**	**19930**	**19930**

Advance Against Depreciation

50. Sub-clause (b) of clause (ii) of Regulation 38 of the 2004 regulations, in addition to allowable depreciation, the generating company shall be entitled to Advance Against Depreciation, computed in the manner given hereunder:

> *" AAD = Loan repayment amount as per regulation 38 (i) subject to a ceiling of 1/10th of loan amount as per regulation 36 minus depreciation as per schedule*
>
> *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;*
>
> *Provided further 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*."

51. Advance Against Depreciation has been calculated as under:

(Rs in lakh)

	2004-05			2005-06	2006-07	2007-08	2008-09
	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005				
1/10th of loan	24444	31220	37382	39583	39418	39954	39954
Scheduled Repayment of the loan	0	0	22112	53035	58657	59865	49479
Minimum of the above	0	0	22112	39583	39418	39954	39954
Depreciation during the year	1168	510	16725	19704	19797	19930	19930
(A) Difference	0	0	5387	19879	19621	20024	20024
Cumulative Repayment of the loan	0	0	22112	75147	133804	193670	243149
Cumulative Depreciation/ Advance against Depreciation	2308	3475	3985	26097	65680	105098	145052
(B) Difference	0	0	18126	49050	68124	88572	98097
Advance against Depreciation Minimum of (A) and (B)	**0**	**0**	**5387**	**19879**	**19621**	**20024**	**20024**

Operation & Maintenance Expenses

52. The petitioner has claimed the following O&M expenses at 1.5% of the proportionate capital cost as worked out by it:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
As claimed	1195.65	409.94	10863.34	12468.93	12885.92	13539.96	14223.92

53. Based on the capital cost worked out at para 35 above, the following O&M expenses are allowed as per the 2004 regulations at 1.5% of the such capital cost:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
As allowed	703.19	307.92	9770.59	12304.38	12796.55	13308.41	13840.75

Interest on working capital

(a) Maintenance Spares

54. Regulation 38(v) (a) (ii) of the 2004 regulations provides for Maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. Accordingly, maintenance spares are considered as under:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
As claimed	777.85	266.69	7067.36	8111.91	8544.11	9149.16	9775.32
As allowed	468.79	205.28	6513.72	8346.07	8846.83	9377.64	9940.30

55. The above cost of maintenance spares are allowed for calculation of interest on working capital.

(b) O & M Expenses

56. O & M expenses for working capital have been worked out for 1 month of O&M expenses considered in tariff. Receivables have been worked out on the basis 2 months' of Annual Fixed Charges.

(c) Rate of interest on Working Capital

57. Regulation 38(v) (b) of the 2004 regulations provides that the rate of interest on working capital shall be 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 generating unit/station is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

58. The SBI PLR rate as on 1.4.2004 was 10.25%. and the same has been considered for the purpose of tariff. The details of working capital and the interest on working capital allowed is summarised below:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	469	205	6514	8346	8847	9378	9940
O & M expenses	59	26	814	1025	1066	1109	1153
Receivables	1220	533	18500	23826	23143	22583	21874
Total Working Capital	1748	764	25828	33198	33056	33070	32968
Interest Rate	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	**17**	**3**	**2307**	**3403**	**3388**	**3390**	**3379**

Capacity Index

59. The normative value of capacity Index, in case of ROR with pondage type scheme is considered as 85% after the first year of commercial operation of the generating station. However, in case of the generating station, the Commission has treated it as purely ROR type scheme since the dam was not complete up to its full reservoir level and the generating station was not able to provide minimum three hours of peaking power as required under the 2004 regulations.

60. Since the generating station has been operating as peaking station with minimum 3 hours of daily peaking w..e.f. January, 2007, the following normative values of capacity index have been allowed :

Year	Capacity Index
2006-07	87.5%
2007-08 & onwards	85%

Annual Fixed Charges

61. The annual fixed charges allowed for the period 2004-2009 based on the above capacity indices are summed up as under:

(Rs in lakh)

Particulars	1.4.2004 to 5.5.2004	6.5.2004 to 17.5.2004	18.5.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
Days	35	12	318	365	365	366	365
Interest on Loan	2153	942	30413	32321	27847	22911	18134
Interest on Working Capital	17	3	2307	3403	3388	3390	3379
Depreciation	1168	510	16725	19704	19797	19930	19930
Advance Against Depreciation	0	0	5387	19879	19621	20024	20024
Return on Equity	3282	1437	46401	55347	55410	55936	55936
O & M Expenses	703	308	9771	12304	12797	13308	13841
TOTAL	**7322**	**3200**	**111003**	**142958**	**138860**	**135499**	**131243**

Primary Energy Rate

62. As per Regulation 39 of the 2004 regulations, the primary energy charges shall be worked out on the basis of paise per kWh rate on ex-bus energy scheduled to be sent out from the hydro power generating station after adjusting for free power delivered to the home state. Rate of primary energy is to be equal to the lowest variable charges of the central sector thermal power generating stations of the concerned region of the previous year. The primary energy rate shall be calculated for each year accordingly and the primary energy charge shall be computed based on such primary energy rate and saleable energy of the generating station. In case of any disagreement between the petitioner and the respondents with regard to the computation of primary energy rate, either party is at liberty to approach the Commission for adjudication of dispute in accordance with law for a decision.

Design Energy

63. Month wise details of design energy, corresponding to FRL of 1495.5 M with dam top at EL 1498.5 M, as submitted by the petitioner, are as under

Month	Design energy (MU)
April	474.41
May	995.50
June	945.51
July	1060.20
August	1060.20
September	800.69
October	295.14
November	264.89
December	320.82
January	263.36
February	217.67
March	285.98
Total	6984.37

64. The petitioner has submitted that revision of the above design energy is under the consideration of CEA, based on the following factors:

(i) 90% dependable year hydrology as considered for TEC of downstream Rampur HEP;

(ii) Closure of project for 11 days due to high silt and 5 days closure due to dam flushing every year, and

(iii) 15% release of minimum discharge downstream for environmental purposes as per HP State notification.

65. Rampur Hydroelectric Project under execution by the petitioner is immediate downstream of the generating station and whole of water after generation would be utilized for generation at Rampur. We allow the

annual design energy of 6984.37 million units subject to final approval by CEA.

66. The petitioner has also sought reimbursement of filing fee of Rs.25 lakh paid. In this regard, the decision of the Commission in order dated 11.9.2008 in Petition No. 129/2005 *(suo motu)* pertaining to reimbursement of application fee shall be applicable.

67. In addition to the charges approved above, the petitioner is entitled to recover other charges like incentive, claim for reimbursement of Income-tax, other taxes, cess levied by statutory authority and other charges in accordance with the 2004 regulations.

68. The petitioner has billed the respondents on provisional basis in accordance with the interim orders of the Commission. The provisional billing of tariff shall be adjusted in light of the final tariff now approved by us.

69. This order disposes of Petition No. 20/2008.

Sd/- sd/-

(R KRISHNAMOORTHY) MEMBER **(BHANU BHUSHAN) MEMBER**

New Delhi, dated the 31st December, 2008

Annexure-I

		2004-05						
		1.4.2004 to 5.5.2004	**6.5.2004 to 17.5.2004**	**18.5.2004 to 31.3.2005**	**2005-06**	**2006-07**	**2007-08**	**2008-09**
	Days in the Year	365	365	365	365	365	366	365
	Period (days)	35	12	318	365	365	366	365
1	**PFC Loan 1**							
	Opening Balance	111800	111800	111800	109005	97825	86645	75465
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	2795	11180	11180	11180	11180
	Net Loan-Closing	111800	111800	109005	97825	86645	75465	64285
	Average loan	111800	111800	110403	103415	92235	81055	69875
	Rate of Interest	11.92%	11.92%	11.92%	11.92%	11.92%	11.92%	11.92%
	Interest	1278.30	438.27	11469.09	12331.03	10997.94	9664.86	8331.78
	Repayment Schedule	40 equal quarterly repayment instalments from 15.01.2005						
2	**PFC Loan 2**							
	Opening Balance	32000	32000	32000	31200	28000	24800	21600
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	800	3200	3200	3200	3200
	Net Loan-Closing	32000	32000	31200	28000	24800	21600	18400
	Average loan	32000	32000	31600	29600	26400	23200	20000
	Rate of Interest	10.16%	10.16%	10.16%	10.16%	10.16%	10.16%	10.16%
	Interest	311.65	106.85	2796.13	3006.26	2681.26	2356.26	2031.26
	Repayment Schedule	40 equal quarterly repayment instalments from 15.01.2005						
3	**NHPC Loan**							
	Opening Balance	0	0	0	0	0	0	0
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	0	0	0	0	0
	Net Loan-Closing	0	0	0	0	0	0	0
	Average loan	0	0	0	0	0	0	0
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0	0	0	0	0	0	0
	Repayment Schedule	Bullet payment on 30.06.2003						
4	**IBRD Loan Refinanced with Canara Bank (Finally Refinanced with PNB Loan)**							
	Opening Balance	10000	10000	10000	8750	6250	3750	1250
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	1250	2500	2500	2500	1250
	Net Loan-Closing	10000	10000	8750	6250	3750	1250	0
	Average loan	10000	10000	9375	7500	5000	2500	625
	Rate of Interest	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
	Interest	69.52	23.84	592.17	543.75	362.50	181.25	45.31
	Repayment Schedule	16 Quarterly repayment instalments from 17.12.2004						

5	**IBRD loan Refinanced with LIC loan**							
	Opening Balance	42100	42100	42100	42100	39469	34206	28944
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	0	2631	5263	5263	5263
	Net Loan-Closing	42100	42100	42100	39469	34206	28944	23681
	Average loan	42100	42100	42100	40784	36838	31575	26313
	Rate of Interest	9.3100%	9.3100%	9.3100%	9.3100%	9.3100%	9.3100%	9.3100%
	Interest	375.84	128.86	3414.81	3797.03	3429.57	2939.63	2449.69
	Repayment Schedule	32 Quarterly repayment instalments from 01.10.2005						
6	**IBRD loan Refinanced with REC loan**							
	Opening Balance	45690	45690	45690	45690	42834	37123	31412
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	0	2856	5711	5711	5711
	Net Loan-Closing	45690	45690	45690	42834	37123	31412	25701
	Average loan	45690	45690	45690	44262	39979	34268	28556
	Rate of Interest	9.0000%	9.0000%	9.0000%	9.0000%	9.0000%	9.0000%	9.0000%
	Interest	394.31	135.19	3582.60	3983.60	3598.09	3084.08	2570.06
	Repayment Schedule	32 Quarterly repayment instalments from 15.10.2005						
7	**IBRD loan Refinanced with Union Bank of India loan**							
	Opening Balance	10500	10500	10500	9188	6563	3938	1313
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	1313	2625	2625	2625	1313
	Net Loan-Closing	10500	10500	9188	6563	3938	1313	0
	Average loan	10500	10500	9844	7875	5250	2625	656
	Rate of Interest	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	70.68	24.23	602.02	552.80	368.53	184.27	46.07
	Repayment Schedule	16 Quarterly repayment instalments from 06.10.2004						
8	**IBRD loan Refinanced with United Bank of India - I loan**							
	Opening Balance	7000	7000	7000	7000	5688	3938	2188
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	0	1313	1750	1750	1750
	Net Loan-Closing	7000	7000	7000	5688	3938	2188	438
	Average loan	7000	7000	7000	6344	4813	3063	1313
	Rate of Interest	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	47.12	16.15	428.11	445.31	337.82	214.98	92.13
	Repayment Schedule	16 Quarterly repayment instalments from 29.09.2004						
9	**United Bank of India - II**							
	Opening Balance	1000	1000	1000	938	688	438	188
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	63	250	250	250	188
	Net Loan-Closing	1000	1000	938	688	438	188	0
	Average loan	1000	1000	969	813	563	313	94
	Rate of Interest	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	6.73	2.31	59.25	57.04	39.49	21.94	6.58
	Repayment Schedule	16 Quarterly repayment instalments from 31.03.2005						

10	**IBRD loan Refinanced with J&K Bank - I**							
	Opening Balance	7000	7000	7000	6125	4375	2625	875
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	875	1750	1750	1750	875
	Net Loan-Closing	7000	7000	6125	4375	2625	875	0
	Average loan	7000	7000	6563	5250	3500	1750	438
	Rate of Interest	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	47.12	16.15	401.35	368.53	245.69	122.84	30.71
	Repayment Schedule	16 Quarterly repayment instalments from 03.10.2004						
11	**J&K Bank - II**							
	Opening Balance	1000	2500	2500	2344	1719	1094	469
	Addition	1500	0	0	0	0	0	0
	Repayment	0	0	156	625	625	625	469
	Net Loan-Closing	2500	2500	2344	1719	1094	469	0
	Average loan	1750	2500	2422	2031	1406	781	234
	Rate of Interest (Floating)	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
	Interest	12.17	5.96	152.98	147.27	101.95	56.64	16.99
	Repayment Schedule	16 Quarterly repayment instalments from 31.03.2005						
12	**IBRD loan Refinanced with Oriental Bank of Commerce - I loan**							
	Opening Balance	7000	7000	7000	6125	4375	2625	875
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	875	1750	1750	1750	875
	Net Loan-Closing	7000	7000	6125	4375	2625	875	0
	Average loan	7000	7000	6563	5250	3500	1750	438
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	47.12	16.15	401.35	368.53	245.69	122.84	30.71
	Repayment Schedule	16 Quarterly repayment instaments from 07.10.2004						
13	**Oriental Bank of Commerce - II**							
	Opening Balance	3000	3000	3000	2813	2063	1313	563
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	188	750	750	750	563
	Net Loan-Closing	3000	3000	2813	2063	1313	563	0
	Average loan	3000	3000	2906	2438	1688	938	281
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	20.19	6.92	177.74	171.11	118.46	65.81	19.74
	Repayment Schedule	16 Quarterly repayment instalments from 14.01.2005						
14	**IBRD loan Refinanced with UCO Bank-I**							
	Opening Balance	7000	7000	7000	6125	4375	2625	875
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	875	1750	1750	1750	875
	Net Loan-Closing	7000	7000	6125	4375	2625	875	0
	Average loan	7000	7000	6563	5250	3500	1750	438
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%

	Interest	47.12	16.15	401.35	368.53	245.69	122.84	30.71
	Repayment Schedule	16 Quarterly repayment instalments from 08.10.2004						
15	**UCO Bank-II**							
	Opening Balance	1500	1500	1500	1406	1031	656	281
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	94	375	375	375	281
	Net Loan-Closing	1500	1500	1406	1031	656	281	0
	Average loan	1500	1500	1453	1219	844	469	141
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	10.10	3.46	88.87	85.55	59.23	32.90	9.87
	Repayment Schedule	16 Quarterly repayment instalments from 29.03.2005						
16	**IBRD loan Refinanced with Bank of India loan**							
	Opening Balance	10500	10500	10500	9188	6563	3938	1313
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	1313	2625	2625	2625	1313
	Net Loan-Closing	10500	10500	9188	6563	3938	1313	0
	Average loan	10500	10500	9844	7875	5250	2625	656
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	70.68	24.23	602.02	552.80	368.53	184.27	46.07
	Repayment Schedule	16 Quarterly repayment instalments from 09.10.2004						
17	**IBRD loan Refinanced with Bank of Maharashtra - I loan**							
	Opening Balance	7000	7000	7000	6125	4375	2625	875
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	875	1750	1750	1750	875
	Net Loan-Closing	7000	7000	6125	4375	2625	875	0
	Average loan	7000	7000	6563	5250	3500	1750	438
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	47.12	16.15	401.35	368.53	245.69	122.84	30.71
	Repayment Schedule	16 Quarterly repayment instalments from 10.10.2004						
18	**Bank of Maharashtra - II**							
	Opening Balance	1000	2000	2000	1875	1375	875	375
	Addition	1000	0	0	0	0	0	0
	Repayment	0	0	125	500	500	500	375
	Net Loan-Closing	2000	2000	1875	1375	875	375	0
	Average loan	1500	2000	1938	1625	1125	625	188
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	10.10	4.62	118.49	114.07	78.97	43.87	13.16
	Repayment Schedule	16 Quarterly repayment instalments from 31.03.2005						
19	**Dena Bank - I**							
	Opening Balance	5500	5500	5500	4813	3438	2063	688
	Addition	0	0	0	0	0	0	0

	Repayment	0	0	688	1375	1375	1375	688
	Net Loan-Closing	5500	5500	4813	3438	2063	688	0
	Average loan	5500	5500	5156	4125	2750	1375	344
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	37.02	12.69	315.35	289.56	193.04	96.52	24.13
	Repayment Schedule	16 Quarterly repayment instalments from 14.10.2004						
20	**Dena Bank - II**							
	Opening Balance	4500	4500	4500	4219	3094	1969	844
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	281	1125	1125	1125	844
	Net Loan-Closing	4500	4500	4219	3094	1969	844	0
	Average loan	4500	4500	4359	3656	2531	1406	422
	Rate of Interest (Floating)	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%	7.0197%
	Interest	30.29	10.39	266.61	256.66	177.69	98.71	29.61
	Repayment Schedule	16 Quarterly repayment instalments from 14.01.2005						
21	**State Bank of Mysore**							
	Opening Balance	5000	5000	5000	4375	3125	1875	625
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	625	1250	1250	1250	625
	Net Loan-Closing	5000	5000	4375	3125	1875	625	0
	Average loan	5000	5000	4688	3750	2500	1250	313
	Rate of Interest (Floating)	7.5000%	7.5000%	7.5000%	7.5000%	7.5000%	7.5000%	7.5000%
	Interest	35.96	12.33	306.29	281.25	187.50	93.75	23.44
	Repayment Schedule	16 Quarterly repayment instalments from 06.11.2004						
22	**Syndicate Bank**							
	Opening Balance	1000	1000	1000	938	688	438	188
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	63	250	250	250	188
	Net Loan-Closing	1000	1000	938	688	438	188	0
	Average loan	1000	1000	969	813	563	313	94
	Rate of Interest (Floating)	7.0197%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
	Interest	6.73	2.38	61.19	58.91	40.78	22.66	6.80
	Repayment Schedule	16 Quarterly repayment instalments from 31.03.2005						
23	**Indian Overseas Bank**							
	Opening Balance	2000	2000	2000	1875	1375	875	375
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	125	500	500	500	375
	Net Loan-Closing	2000	2000	1875	1375	875	375	0
	Average loan	2000	2000	1938	1625	1125	625	188
	Rate of Interest (Floating)	7.0197%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%

	Interest	13.46	4.77	122.38	117.81	81.56	45.31	13.59
	Repayment Schedule	16 Quarterly repayment instalments from 31.03.2005						
24	**Andhra Bank**							
	Opening Balance	1500	1500	1500	1406	1031	656	281
	Addition	0	0	0	0	0	0	0
	Repayment	0	0	94	375	375	375	281
	Net Loan-Closing	1500	1500	1406	1031	656	281	0
	Average loan	1500	1500	1453	1219	844	469	141
	Rate of Interest (Floating)	7.0197%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
	Interest	10.10	3.58	91.79	88.36	61.17	33.98	10.20
	Repayment Schedule	16 Quarterly repayment instalments from 29.03.2005						
	Total - Indian Loans							
	Net Loan-Opening	324590	327090	327090	313620	270316	221087	171858
	Additions	2500	0	0	0	0	0	0
	Repayments	0	0	13470	43304	49229	49229	39354
	Net Loan-Closing	327090	327090	313620	270316	221087	171858	132504
	Average Loan	325840	327090	320355	291968	245701	196473	152181
	Wt.Average Rate of Interest	0.92%	0.32%	8.38%	9.71%	9.88%	10.14%	10.45%
	Interest	2999	1032	26853	28354	24267	19913	15909
	Foreign Loans							
1	**KFW Germany (F-2402)(DEM)(Export Credit)**							
	Opening Balance	16101.09	16101.09	16101.09	13386.42	10671.76	7957.09	5242.43
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	2714.67	2714.67	2714.67	2714.67	2714.67
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	16101.09	16101.09	13386.42	10671.76	7957.09	5242.43	2527.76
	Average loan	16101.09	16101.09	14743.76	12029.09	9314.42	6599.76	3885.09
	Rate of Interest	7.835%	7.835%	7.835%	7.835%	7.835%	7.835%	7.835%
	Interest	120.97	41.47	1006.42	942.48	729.79	517.09	304.40
	Repayment Schedule	24 semi-annual instalments from 31.01.2000						
2	**KFW Germany (F-2403)(DEM)(Fin. Credit)**							
	Opening Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Rate of Interest (Floating)	9.8801%	9.8801%	9.8801%	9.8801%	9.8801%	9.8801%	9.8801%
	Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment Schedule	10 semi-annual instalments from 31.01.2000						
3	**UBS AG (Export Credit)(CHF)**							
	Opening Balance	8503.88	8503.88	8503.88	7086.56	5669.25	4251.94	2834.63

	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	1417.31	1417.31	1417.31	1417.31	1417.31
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	8503.88	8503.88	7086.56	5669.25	4251.94	2834.63	1417.31
	Average loan	8503.88	8503.88	7795.22	6377.91	4960.60	3543.28	2125.97
	Rate of Interest (Floating)	5.70205%	5.70205%	5.70205%	5.70205%	5.70205%	5.70205%	5.70205%
	Interest	46.50	15.94	387.25	363.67	282.86	202.04	121.22
	Repayment Schedule	20 half yearly instalments from 31.05.2000						
4	**Eksportfinans (NOK)**							
	Opening Balance	8369.57	8369.57	8369.57	7323.38	6277.18	5230.98	4184.79
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	1046.20	1046.20	1046.20	1046.20	1046.20
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	8369.57	8369.57	7323.38	6277.18	5230.98	4184.79	3138.59
	Average loan	8369.57	8369.57	7846.48	6800.28	5754.08	4707.89	3661.69
	Rate of Interest	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%
	Interest	57.38	19.67	488.78	486.22	411.42	336.61	261.81
	Repayment Schedule	24 semi-annual instalments from 31.07.2000						
5	**Eksportfinans (USD)**							
	Opening Balance	1111.58	1111.58	1111.58	972.64	833.69	694.74	555.79
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	138.95	138.95	138.95	138.95	138.95
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	1111.58	1111.58	972.64	833.69	694.74	555.79	416.84
	Average loan	1111.58	1111.58	1042.11	903.16	764.21	625.27	486.32
	Rate of Interest	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%	7.1500%
	Interest	7.62	2.61	64.92	64.58	54.64	44.71	34.77
	Repayment Schedule	24 semi-annual instalments from 31.07.2000						
6	**NIB (USD)**							
	Opening Balance	5753.68	5492.15	5492.15	5230.62	4707.56	4184.50	3661.44
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	261.53	0.00	261.53	523.06	523.06	523.06	523.06
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	5492.15	5492.15	5230.62	4707.56	4184.50	3661.44	3138.37
	Average loan	5622.92	5492.15	5361.39	4969.09	4446.03	3922.97	3399.90
	Rate of Interest (Floating)	3.07625%	3.07625%	3.07625%	3.07625%	3.07625%	3.07625%	3.07625%
	Interest	16.59	5.55	143.69	152.86	136.77	120.68	104.59
	Repayment Schedule	25 Semi-annual repayment instalments from 28.10.2002						
7	**BNP (Export Credit)(FRF)**							
	Opening Balance	14815.80	14815.80	14815.80	12963.83	11111.85	9259.88	7407.90
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	1851.98	1851.98	1851.98	1851.98	1851.98
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	14815.80	14815.80	12963.83	11111.85	9259.88	7407.90	5555.93
	Average loan	14815.80	14815.80	13889.82	12037.84	10185.86	8333.89	6481.91

	Rate of Interest (Floating)	7.8000%	7.8000%	7.8000%	7.8000%	7.8000%	7.8000%	7.8000%
	Interest	110.81	37.99	943.90	938.95	794.50	650.04	505.59
	Repayment Schedule	20 Semi-annual repayment instalments from 27.09.2002						
8	**BNP (Finance Credit)(FRF)**							
	Opening Balance	1374.38	1374.38	1374.38	0.00	0.00	0.00	0.00
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	1374.38	0.00	0.00	0.00	0.00
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	1374.38	1374.38	0.00	0.00	0.00	0.00	0.00
	Average loan	1374.38	1374.38	687.19	0.00	0.00	0.00	0.00
	Rate of Interest (Floating)	4.43200%	4.43200%	4.43200%	4.43200%	4.43200%	4.43200%	4.43200%
	Interest	5.84	2.00	26.53	0.00	0.00	0.00	0.00
	Repayment Schedule	6 Semi-annual installments from 27.09.2002						
9	**BAR (Finance Credit)(USD)**							
	Opening Balance	610.89	610.89	610.89	203.63	0.00	0.00	0.00
	Addition	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayment	0.00	0.00	407.26	203.63	0.00	0.00	0.00
	ERV	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	610.89	610.89	203.63	0.00	0.00	0.00	0.00
	Average loan	610.89	610.89	407.26	101.82	0.00	0.00	0.00
	Rate of Interest (Floating)	3.3200%	3.3200%	3.3200%	3.3200%	3.3200%	3.3200%	3.3200%
	Interest	1.94	0.67	11.78	3.38	0.00	0.00	0.00
	Repayment Schedule	10 semi-annual installments from 21.12.2001						
	Total - Foreign Loan							
	Net Loan-Opening	56641	56379	56379	47167	39271	31579	23887
	Additions	0	0	0	0	0	0	0
	Repayments	262	0	9212	7896	7692	7692	7692
	Net Loan-Closing	56379	56379	47167	39271	31579	23887	16195
	Average Loan	56510	56379	51773	43219	35425	27733	20041
	Wt.Average Rate of Interest	0.65%	0.22%	5.94%	6.83%	6.80%	6.75%	6.65%
	Interest	368	126	3073	2952	2410	1871	1332
		6.78%	6.79%	6.81%	6.83%	6.80%	6.75%	6.65%
	Total Loan							
	Net Loan-Opening	381230.89	383469.36	383469.36	360787.08	309586.92	252666.00	195745.09
	Additions	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
	Repayments	261.53	0.00	22682.27	51200.17	56920.91	56920.91	47045.91
	Net Loan-Closing	383469.36	383469.36	360787.08	309586.92	252666.00	195745.09	148699.18
	Average Loan	382350.12	383469.36	372128.22	335187.00	281126.46	224205.55	172222.14
	Wt.Average Rate of Interest	0.881%	0.302%	8.042%	9.340%	9.489%	9.716%	10.011%
	Interest	3367.07	1157.57	29926.55	31306.43	26676.82	21784.25	17241.72
	Annualised weighted Average rate of interest	**9.18%**	**9.18%**	**9.23%**	**9.34%**	**9.49%**	**9.72%**	**10.01%**