

FRL is still subjudice and present permission remains upto EL 260 M and the completion cost of R&R Works is anticipated to increase further.

- 18) The anticipated completion cost of R&R Works of ISPS was intimated as (+) Rs.1723 Cr. in Petition No. 33/2009. This is more by an amount of Rs. 563 Cr. as compared to the CCEA cap of Rs. 1160 Cr. An expenditure of (+) Rs. 1641.34 Cr. has already been incurred on R&R Works of ISPS upto March'2009, and the balance expenditure amounting to (+) Rs. 81.79 Cr is likely to be incurred during tariff period 2009-14.
- 19) As per CCEA (Go) Sanction for ISPS, the cap of Rs. 1160 Cr. was kept for the R&R Works. Any increase in cost beyond this cap of Rs. 1160 Cr., has to be borne equally by GoMP and the Project. Accordingly, as per terms of CCEA Clearance, 50% of increased R&R Cost i.e. (+) Rs. 281.50 Cr shall be borne by GoMP as 'Subvention'. The balance 50% of increased R&R cost, shall be borne by Project, which is being booked to the cost of Unit-I (Dam). The details of sharing of R&R Expenditure as per Clause 7.0 of CCEA Approval (Page 41 to 46) are given as below:

Table -2

(Rs. in Crores)

Date	Gross Expenditure on R&R works	Sharing of R&R Expenditure as per Clause 7.0 of CCEA Approval		Remarks
		Project's Share*	GoMP's Subvention (Accrued)	
31-03-08	1605.51	1382.75	222.76	Admitted by CERC in Petition No. 33/2009
31-03-09	1641.34	1400.67	240.67	As per Audited Balance Sheet and Claimed through separate Simultaneous Petition
31-03-10	1681.34	1420.67	260.67	As per Projections
31-03-11	1723.13	1441.56	281.57	As per Projections
31-03-12	1723.13	1441.56	281.57	No Additions Projected
31-03-13	1723.13	1441.56	281.57	No Additions Projected
31-03-14	1723.13	1441.56	281.57	No Additions Projected

Note * The NHDC's share, shall further be apportioned on SSP (17.63%) & Irrigation Component (16.75%) as per Para 7 of this Petition.

- 20) Based on the particulars of Cumulative Capital Cost and its apportionment amongst various components as on 31-03-2008 and as admitted by Hon'ble CERC in Para 28 of order dated 20-10-2009 in Petition No. 33/2009 and apportionment of Capital Cost as on 31-03-2009 claimed through separate simultaneous petition are as under:

Table -3

(Rs. in Crores)

Particulars	Amount (Cumulative)	
	As on 31-03-08	As on 31-03-09
Gross Expenditure		
Unit-I (Dam)	2973.53	3040.33
Unit-III (Power House)	1234.81	1238.94
Total	4208.34	4279.27
Power Component (i.e. Less SSP, Irrigation & R&R Subvention)		
Less : SSP Component	484.96	493.58
Less : Irrigation Component	379.53	386.27
Less : R&R Subvention	222.76	240.67
Total Power Component	3121.09	3158.75
Power Component for Tariff (i.e. Less Minor Assets & Undischarged Liability)		
Less: Minor Assets attributable to Power Component	0.55	0.90
Less: Undischarged Liability attributable to Power Component	61.92	62.04
Net Power Component for Tariff	3058.62	3095.81

- 21) NHDC has further to capitalize an estimated expenditure of Rs. 161.15 Cr. under different categories as per Clause 9 (2) of CERC Regulation '2009, projected to be incurred during respective years of tariff period 2009-14 as indicated in Table-4 and accordingly, the cumulative Capital Expenditure upto 31-03-2014 is projected to be Rs. 4440.41 Cr.

Table -4

(Rs. in Crores)

Financial Years (Tariff Period 2009-14)		09-10	10-11	11-12	12-13	13-14
Opening Capitalized	Cumulative Expenditure projected at the beginning of respective FYs	4279.26	4322.64	4380.09	4385.02	4402.52
Projected Additions under various Categories as per Clause 9 (2) of CERC Regulation '2009						
(i)	Liabilities to meet award of arbitration or for compliance of the order or decree of a court	40.0	41.79	-	-	-
(ii)	Change in Law	-	-	-	-	-
(iii)	Deferred Works related to ash pond	-	-	-	-	-
(iv)	Additional work which has become necessary for successful and efficient plant operation	3.38	14.66	4.53	17.50	35.71
(v)	Additional Expenditure on items such as relay, control etc. which has become necessary for successful and efficient operation of transmission system	-	1.00	0.40	-	2.18
Capital Expenditure projected to be incurred during respective FYs		43.38	57.45	4.93	17.50	37.89
Closing Capitalized	Cumulative Expenditure projected at the end of respective FYs	4322.64	4380.09	4385.02	4402.52	4440.41

The Item-wise justification & categories against each additions has been recorded at Annexure to Form - 9 (Refer Details attached from Page No. 58 to 69).

- 22) Based on apportionment of cumulative Capitalized Cost as projected up to 31-03-2014 i.e. Rs. 4440.41 Cr. (Para 21) as per Para 7 of this Petition, the projected cost of Power Component works out to Rs. 3261.42 Cr. as detailed hereunder.

Table -5

(Rs. in Crores)

Period		Additional Cost Capitalized*		Capitalized Expenditure at the end of Period*		Remarks
From	To	Gross	Power Component	Gross	Power Component	
01-04-08	31-03-09	70.92	37.65	4279.26	3158.74	As per Audited Balance Sheet and claimed through separate simultaneous Petition
01-04-09	31-03-10	43.38	16.47	4322.64	3175.21	Projected
01-04-10	31-03-11	57.45	27.28	4380.09	3202.49	Projected
01-04-11	31-03-12	4.93	4.06	4385.02	3206.55	Projected
01-04-12	31-03-13	17.50	16.98	4402.52	3223.53	Projected
01-04-13	31-03-14	37.89	37.89	4440.41	3261.42	Projected

Note: * Inclusive of Undischarged Liabilities & Minor Assets.

It is worth-mentioning that the projected Power Component upto March '2014 i.e. **Rs. 3261.42 Cr.** shall be well within the CCEA approved cost for Power Component i.e. **Rs.3527.54 Cr.** at Price Level Sept.'2000 (Para 10).

- 23) The details of undischarged liabilities attributable to Power Component as on 31-03-2009 and the estimated un-discharged liabilities attributable to Power Component at the end of respective Financial Years of tariff period 2009-14 are given at Page 78. The Summary of the same is given as below:

Table -6

(Rs. in Crores)

Particulars	Actual as on 31-03-09*	Projected as on				
		31-03-10	31-03-11	31-03-12	31-03-13	31-03-14
Undischarged Liabilities attributable to Power Component	62.04	65.29	61.89	44.05	39.39	45.74

Note: * As per Separate Simultaneous Petition.

- 24) For the Computation of Tariff, the net power component has been worked out as on 31-03-2009 and at the end of respective Financial Year of tariff period 2009-14, after considering above un-discharged liabilities and deduction towards cost of minor assets as detailed below:

Table -7

(Rs. in Crores)

Particulars	FY 2008- 09*	Projected for FY (Tariff Period 2009-14)				
		2009-10	2010-11	2011-12	2012-13	2013-14
Net Power Component at the beginning of the FY	3058.62	3095.80	3109.02	3139.70	3161.60	3183.24
Additions to Power Component	37.65	16.47	27.28	4.06	16.98	37.89
Undischarged liabilities attributable to Power Component at beginning of FY	61.92	62.04	65.29	61.89	44.05	39.39
Undischarged liabilities attributable to Power Component at end of the FY	62.04	65.29	61.89	44.05	39.39	45.74
Undischarged Liabilities Discharged	(-) 0.12	(-) 3.25	(+) 3.40	(+) 17.84	(+) 4.66	(-) 6.35
Less Minor Assets attributable to Power Component	(-) 0.35	-	-	-	-	-
Net Power Component for Tariff at end of FY	3095.80	3109.02	3139.70	3161.60	3183.24	3214.78
Additions in Net Power Component	37.18	13.22	30.68	21.90	21.64	31.54

Note: **As per Separate Simultaneous Petition.

- 25) Working of tariff for the period from 01-04-2009 to 31-03-2014 as per CERC Regulation '2009 subject to truing-up.

As indicated in Para 6 above, the petitioner has filed a separate simultaneous petition for the admission of Cumulative Cost capitalized upto 31-03-2009. Based on this Capitalized Cost upto 31-03-2009 to be admitted by Hon'ble CERC and estimated additional Capital Expenditure to be incurred during the respective years of tariff period 2009-14, the tariff has been worked out after considering the following parameters:

i) Debt: Equity Ratio -

Considering the Debt: Equity Ratio of 70:30 for estimated additions in Capital Cost during 2009-14 and based on cumulative Capitalized Cost upto 31-03-2009, the Average Normative Equity and Average Normative Loan of net Power Component have been worked out for respective years of tariff period 2009-14 as per the details given below:

[a] Normative Equity:

Table -8

(Rs. in Crores)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	1169.14	1173.11	1182.32	1188.89	1195.38
Estimated Addition during the year	3.97	9.20	6.57	6.49	9.47
Closing Equity	1173.11	1182.32	1188.89	1195.38	1204.84
Average Equity	1171.13	1177.72	1185.60	1192.13	1200.11

[b] Normative Loan:

Table -9

(Rs. in Crores)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Net Opening Loan	1526.82	1405.99	1296.71	1180.34	1062.85
Repayment during the year	130.08	130.75	131.70	132.64	133.88
Estimated Addition during the year	9.26	21.48	15.33	15.14	22.09
Closing Loan	1405.99	1296.71	1180.34	1062.85	951.05
Average Loan	1466.40	1351.35	1238.53	1121.60	1006.95

ii) Return on Equity (RoE) (Regulation 15):

Grossed –up rate of RoE @ 17.48 % (i.e. [15.50 / (1- 0.1133)]) has been considered for working out Return on Equity for the period 2009-14. The summary of the same is as below:

Table –10 (Rs. in Crores)

Period	2009-10	2010-11	2011-12	2012-13	2013-14
Average Normative Equity	1171.13	1177.72	1185.60	1192.13	1200.11
Rate of RoE	17.481 %	17.481 %	17.481 %	17.481 %	17.481 %
RoE (Rs. in Cr.)	204.73	205.88	207.26	208.40	209.79

iii) Interest on Loan:

NHDC had entered into Long Term Loan Agreements during 2003-04 with Consortium of Banks, with Bank of India as the Lead Banker. As per the terms & conditions of these Loan Agreements (Details were submitted by the Petitioner at Page 231 of Petition No. 119/2005), the parties were free to exercise put / call option after the period of 60 months from the date of first disbursement from the respective Banks. This fact was also brought to the kind notice of Hon'ble CERC in Para 29 of Petition No. 33/2009 and it was informed that consequent effect of such Put / Call Option by the Parties, if any, shall be taken care-off in subsequent tariff Petitions to be filed by the Petitioner.

It is hereby brought to the kind notice of Hon'ble CERC that the respective Bank of Consortium of Banks have opted the Call Option after the lapse of prescribed period of 60 Months from the date of their first disbursement. NHDC has thus met the requirement of fund against 'Call Options' of different Banks of Consortium through Short Term Loans for intermediate periods and finally taking-over of outstanding Loan Liability by new Consortium of HDFC Bank, Bank of India, Central Bank of India & United Bank of India and accordingly, NHDC has entered into Long Term Loan Agreement with New Lenders. The copies of Loan Agreements now entered with the Consortium of New Lenders are attached with this Petition (Page 249 to 350).

As per Regulation 16(5) of CERC Regulation '2009, the Weighted Average Rate of Interest has been worked out on the basis of actual Loan Portfolio at the beginning of each year during respective years of



tariff period 2009-14 and the same have has been indicated in Form-13 (Page 98 to 112). The summary of the same is as follows:

Table –11 (Rs. in Crores)

Period	2009-10	2010-11	2011-12	2012-13	2013-14
Average Normative Loan	1466.40	1351.35	1238.53	1121.60	1006.95
Weighted Average Rate of Interest (% p.a.) (as per Form-13)	9.02	9.15	9.15	9.15	9.15
Interest on Loan (Rs. in Cr.)	132.27	123.65	113.33	102.63	92.14

iv) Depreciation:

The depreciation has been worked out based on opening Capital Cost as on 31-03-2009 and estimated additions in Net Power Component during 2009-14. The Weighted Average Rate of Depreciation for the respective years of tariff period 2009-14 as per the Depreciation Schedule provided in Appendix-III to CERC Regulation '2009, has been worked out in Form –11 (Page 82-96). The details of estimated opening capital cost of net Power Component, average gross block, the rate of depreciation (as per Form-11) and remaining depreciable value for the respective years of tariff period 2009-14 are given as below:

Table –12 (Rs. in Crores)

Period	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost of net Power Component	3095.80	3109.02	3139.71	3161.60	3183.24
Additions in net Power Component	13.23	30.68	21.90	21.64	31.55
Closing Capital Cost of net Power Component	3109.02	3139.71	3161.60	3183.24	3214.79
Average Capital Cost of net Power Component	3102.41	3124.37	3150.66	3172.42	3199.01
Weighted Average Rate of Depreciation (% p.a.)	4.193%	4.185%	4.180%	4.181%	4.185%
Depreciation	130.08	130.75	131.70	132.64	133.88
Depreciable Value (90%)	2792.17	2811.93	2835.59	2855.18	2879.11
Cumulative Depreciation /AAD	399.84	529.92	660.68	792.37	925.01
Remaining Depreciable Value of net Power	2392.33	2282.01	2174.91	2062.80	1954.10

v) O&M Expenses:

The Clause 19 (f) (iv) of CERC Regulation '2009 stipulates that, "In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the 'Original Project Cost' (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08 and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period."

As per Clause 3(29) of CERC Regulation '2009, the 'Original Project Cost' means the capitalized expenditure within the Original Scope of the Project upto the 'Cut – Off date as admitted by the Commission. The 'Cut-Off' Date of ISPS has been admitted as 31-03-2007 in Petition No. 33/2009.

The Gross Capitalized Cost admitted by Hon'ble CERC as on Cut-Off Date i.e. 31-03-2007 was Rs. 4052.71 Cr., including an amount of Rs. 1803.91 Cr. towards the Cost of R&R Works (including Railway Diversion). As such, after apportionment of *Capital Cost (excluding R&R Cost)* amongst Power, SSP & Irrigation Components, the Power Component (Excluding Cost of R&R Works) works out to Rs. 1928.86 Cr. as per working sheet enclosed at Appendix to Form –15A (Page 118).

Further, Hon'ble CERC has issued Addendum vide Notification No. L-7/145(160)/2008-CERC dated 10-06-2009 and accordingly, the following shall be added at the end of Clause 19 (f) (iv) of CERC Regulation '2009:

"The impact of pay revision on employee cost for arriving at the Operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation".

Pursuant to above Regulation and the addendum issued subsequently by Hon'ble CERC, the O&M Expenses for the respective years of tariff



period 2009-14 have been worked out in Form – 15 A (Page 117). The Summary of the same are as follows:

Table -13

Period	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses (Rs. in Cr.)	52.91	55.94	59.14	62.52	66.09

(vi) Interest on Working Capital:

The Clause 18 (c) (iv) of CERC Regulation '2009 stipulates that, the Working Capital shall be comprised of following components in case of hydro generating station:

- (i) Receivables equivalent to two months of fixed cost.
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in Regulation 19.
- (iii) Operation and Maintenance expenses for one month.

Further, as per Clause 18 (3) of CERC Regulation '2009, * Rate of interest on working capital shall be on normative basis has been adopted as 12.25% which is equal to the short-term Prime Lending Rate of State Bank of India as applicable on 01-04-2009 (Page 35).

Pursuant to above Regulations, the Interest on Working Capital for the respective years of tariff period 2009-14 has been worked out in Form – 13B (Page 114). The Summary of the same are as below:

Table -14

Period	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Working Capital (Rs. in Crores)	12.38	12.39	12.38	12.37	12.39

- 26) After considering different components of AFC as per CERC Regulation 2009 and as evaluated in different Forms for the respective years of tariff period 2009-14, the Summary of Annual Fixed Charges has been brought in Form –1 (Page 29) as indicated below:

Table -15

Period	2009-10	2010-11	2011-12	2012-13	2013-14
AFC (Rs. in Crores)	532.37	528.61	523.80	518.55	514.29