

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 141/GT/2013

Coram:

Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Hearing: 12.9.2013

Date of Order: 13.2.2014

In the matter of

Revision of tariff for Dulhasti Hydroelectric Power Station (3 X 130 MW) for the period 2009-14-
Truing-up of tariff determined by order dated 30.5.2011 in Petition No. 60/2010.

And in the matter of

NHPC Ltd,
NHPC Office Complex, Sector 33,
Faridabad – 121003

.....Petitioner

Vs

1. Punjab State Power Corporation Ltd
The Mall, Secretariat Complex,
Patiala – 147 001

2. Haryana Power Purchase Centre,
Shakti Bhawan, Sector 6,
Panchkula – 134 109

3. BSES Rajdhani Power Ltd
BSES Bhawan, Nehru Place,
New Delhi – 110 019

4. Uttar Pradesh Power Corporation Ltd
Shakti Bhawan,
14, Ashok Road,
Lucknow – 226 001

5. BSES Yamuna Power Ltd
BSES Bhawan, Nehru Place,
New Delhi – 110 019

6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd
Vidyut Bhawan, Janpath,
Jyoti Nagar,
Jaipur – 302 205



7. Tata Power Delhi Distribution Ltd
33 KV Sub-station, Kingsway Camp
Delhi – 110 009

8. Jaipur Vidyut Vitran Nigam Ltd
Vidyut Bhawan, Janpath,
Jaipur – 302 205

9. Jodhpur Vidyut Vitran Nigam Ltd
New Power House, Industrial Area,
Jodhpur – 342 003

10. Uttranchal Power Corporation Ltd
Urja Bhawan, Kanwali Road,
Dehradun – 248 001

11. Ajmer Vidyut Vitran Nigam Ltd
Old Power House,
Hatthi Bhatta, Jaipur Road,
Ajmer – 305 001

12. Power Development Department,
Government of J&K,
New Secretariat
Jammu - 180001

13. Engineering Department,
Union Territory of Chandigarh,
1st Floor, UT Secretariat, Sector 9D,
Chandigarh – 160 009

....Respondents

Parties present

For Petitioner

Shri Parag Saxena, NHPC
Shri S.K.Meena, NHPC
Shri J.K.Jha, NHPC
Ms. Gayatri Devi, NHPC

For Respondents

Shri Padamjit Singh, PSPCL
Shri R.B.Sharma, Advocate, BRPL

ORDER

The petition has been filed by NHPC Ltd, a generating company owned and controlled by the Central Government, for revision of tariff in respect of Dulhasti Hydroelectric Station (3 X 130 MW) (the generating station), purely of run-of-river type, for the period 1.4.2009 to 31.3.2014, in



accordance with clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the Tariff Regulations, 2009) after accounting for additional capital expenditure.

2. The generating station located in the State of J&K, has been has been declared under commercial operation on 7.4.2007. The tariff for the generating station for the period 1.4.2009 to 31.3.2014 was approved by the Commission vide order dated 30.5.2011 in Petition No. 60/2010, based on capital cost of ₹511605.50 lakh as on 31.3.2009.

3. The present petition has been filed under second proviso to clause (1) of Regulation 6 of the Tariff Regulations, 2009, reproduced hereunder:

“6. Truing up of Capital Expenditure and Tariff

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up:

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff.”

4. The petitioner's claim for the revised annual fixed charges is summarized as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	46649.39	46111.00	45582.54	34729.27	34729.27
Interest on Loan	20852.08	18583.99	17143.05	14802.79	12761.28
Depreciation	26573.03	26649.60	26753.22	26815.19	26843.27
Interest on Working Capital	2702.25	2687.76	2693.72	2467.43	2475.59
O & M Expenses	14824.24	15672.19	16568.64	17516.36	18518.30
Total	111600.98	109704.54	108741.16	96331.05	95327.70

5. In its reply to the petition, the respondent Uttar Pradesh Power Corporation Ltd (UPPCL) has pleaded that usage charges claimed by the State Water Resources Development Authority under the Jammu and Kashmir Water Resources (Regulation and Management) Act, 2010 may not be levied on the beneficiaries till its admissibility is decided by High Court of Jammu and Kashmir before whom the matter is *sub judice*. UPPCL has further urged that the Registration fee, System

Operation Charges and Market Operation Charges paid to POSOCO/PGCIL by the petitioner may not be allowed to be recovered from the respondents/beneficiaries since onus of payment of RLDC fees and charges under the Commission's regulations is on generating companies, Transmission Licensees and the Beneficiaries. As regards expenditure incurred for payment of water usage charges and the recovery of fees and charges, the same would be governed by the provisions of Regulation 22(7a) and Regulation 42A of the Tariff Regulations, 2009, amended by notification dated 31.12.2012.

6. There is another preliminary issue raised by the representative of PSPCL (successor of respondent No.1) during the hearing on 12.9.2013. He submitted that certain assets such as Partial discharge measurement system, Portable dissolved gas analyzer etc. for whom capitalization has been claimed are generally used for one to three months during a year. He suggested that the petitioner should maintain a pool of such type of equipments/spares at one or two locations, which can be shared by different generating stations as per the requirement. It was argued that the arrangement suggested would save cost.

7. In compliance with the directions of the Commission, the petitioner by its affidavit dated 4.10.2013 has submitted that the equipments/spares claimed in the petition cannot be kept as a pool for utilization at different power stations. The petitioner has also submitted that the nearest power stations i.e. Salal HEP and Uri-I HEP located approximately at distance of 240 km and 380 km respectively from the generating station. The petitioner has explained that the road connecting the generating station passes through hilly areas, and is occasionally closed during winter season due to either landslide or heavy snowfall. The petitioner has further explained that maintenance of all power stations is done during lean season i.e. December to February and the requirement of these spares occurs during this period. There is every probability that a particular equipment/spare may be required at two generating stations at one particular time. The petitioner has further pointed out that any particular activity cannot be deferred because it may increase the

maintenance period, thereby decreasing the plant availability of the generating station. Therefore, according to the petitioner, it is not advisable to have common pool of equipments/spares.

8. We find force in the submissions of the petitioner. In any case, no directions for pooling of equipments/spares can be given in these proceedings as the issue needs detailed examination.

Capital Cost

9. In accordance with ninth proviso to clause (2) of Regulation 7 of the Tariff Regulations, 2009, in case of the existing projects, that is, the projects in existence on 1.4.2009 when these regulations came into force, the capital cost admitted by the Commission prior to 1.4.2009, duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, forms the basis for determination of the annual fixed charges. Accordingly, the capital cost of ₹511605.50 lakh, as on 31.3.2009, as considered by the Commission in its order dated 30.5.2011 has been considered for revision of the annual fixed charges.

Additional Capital Expenditure

10. Clause (1) of Regulation 9 of the Tariff Regulations, 2009 provides as under:-

“Additional Capitalization: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) Change in Law:*

Provided that the details of works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
- (ii) Change in law;*
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and
.....;*

Provided that in respect of sub-clauses (iv) & (v) above, any expenditure on acquiring the minor items or the assets like tools & tackles, furniture, air- conditioners, voltage stabilizers, refrigerators, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.”

11. Clause (11) of Regulation 3 of Tariff Regulations, 2009 defines “cut-off” date as under:

“cut-off date” means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

12. As already noted, the generating station has been in commercial operation since 7.4.2007. As per provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, in force up to 31.3.2009, the cut-off date for the generating station was 31.3.2009. However, the petitioner in Petition No. 60/2010 considered the cut-off date as 31.3.2010 in terms of the Tariff Regulations, 2009. The Commission in its order dated 30.5.2011, for the reasons recorded therein, considered the petitioner’s claim for additional capitalization beyond the cutoff date arrived at as above, under clause (2) of Regulation 9 of the Tariff Regulations, 2009. Therefore, the petitioner’s claim for approval of additional capital expenditure in

the present petition is being considered accordingly. The Commission's observations in regard to the cutoff date in the order dated 30.5.2011 are extracted hereunder:

“13. The submission of the parties has been examined. The petitioner, in its petition has considered the cut-off date of the generating station as 31.3.2010, in terms of the 2009 regulations. Since the date of commercial operation of the generating station is 7.4.2007, the cut-off date of the generating station should be reckoned as 31.3.2009, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. Hence, the proposed expenditure in respect of the works/assets (as stated above) is beyond the cut-off date of the generation station. However, keeping in view the security in the State of J&K, where the generating station is situated and the extreme weather conditions, these works/assets are considered necessary for the smooth and efficient operation of the generating station, and accordingly, the claims of the petitioner for additional capital expenditure have been considered under Regulation 9(2)(iv) of the 2009 regulations, instead of its claim under Regulation 9(1). After examining the asset-wise details and justification for additional capitalization claimed by the petitioner, the admissibility of additional capital expenditure for 2009-10 under Regulation 9(2)(iv) is discussed as under.”

13. The Commission in its order dated 30.5.2011 allowed capitalization of the following projected additional capital expenditure:

	(₹ In lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capitalization (Before adjustment on account of un-discharged liabilities)	1409.07	2968.47	1740.50	305.00	195.00
Add: Liabilities proposed to be discharged during the year (Related to un-discharged liabilities as on 31.3.2009)	1662.75	0.00	0.00	0.00	0.00
Additional Capital Expenditure allowed	3071.82	2968.47	1740.50	305.00	195.00

14. The petitioner has stated that revision of the annual fixed charges has become necessary as there is significant difference between additional capital expenditure allowed and actual capital expenditure incurred during the years 2009-10, 2010-11 and 2011-12, based on audited books of accounts for the respective year. It has been stated that certain works were not claimed / allowed earlier but have become necessary for efficient operation of the generating station. Capitalization of expenditure on these works has been claimed. The petitioner has sought capitalization of some of the projected additional capital expenditure allowed for the years 2009-10, 2010-11 and 2011-12, which the petitioner was not able to capitalize during the said period. The year-wise additional capital expenditure claimed by the petitioner is as under:

(₹ In lakh)

2009-10	2010-11	2011-12	2012-13	2013-14
517.18	2409.92	1572.88	886.75	195.00

15. The additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 is based on the audited books of accounts. The claim for the years 2012-13 and 2013-14, is based on projections. The additional capital expenditure claimed for the period 2009-12 is being considered first.

Audited Additional Capital Expenditure for 2009-12

16. The details of the expenditure sought to be capitalized during 2009-10, 2010-11 and 2011-12, are as under:

(₹ in lakh)

	2009-10	2010-11	2011-12
Additions as per Books of Accounts	(-) 255.08	1334.14	1480.70
Additions Claimed (a)			
Additions against works allowed to be capitalized by order dated 30.5.2011	327.45	958.11	499.54
Additions against works allowed to be capitalized by order dated 30.5.2011 in previous year but actually capitalized in subsequent years	0.00	144.14	841.18
Additions not projected earlier or allowed in order dated 30.5.2011 but incurred and claimed	20.36	793.48	266.85
Other additions (IUT transfer)	9.92	0.50	4.38
Total Additions (a)	357.73	1896.23	1611.95
Deletions claimed for tariff purpose (b)	(-) 13.08	(-) 203.47	(-) 89.58
Net Additions Claimed (c)=(a)+(b)	344.65	1692.76	1522.37
Exclusions in additions (incurred, capitalized in books but not to be claimed for tariff purpose) (d 1)	206.71	26.19	47.86
Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose) (d 2)	(-) 806.44	(-) 384.80	(-) 89.53
Net value of exclusions (d=d 1+ d 2)	(-) 599.73	(-) 358.62	(-) 41.67
Total as per books of accounts (e)=(c)+(d)	(-) 255.08	1334.14	1480.70
Net additional capital expenditure for tariff purpose before un-discharged liabilities, discharge of liabilities and assumed deletions (c)	344.65	1692.76	1522.37
Add: Assumed deletions (f)	0.00	0.00	-3.40
Add: liabilities discharged during the year out of Un-discharged liability which existed as on 31.3.2009	175.19	748.05	95.43
Add: Liabilities discharged during the year out of Additional capital expenditure during 2009-12	0.00	1.48	25.15
Less: Un-discharged liability in additional capital expenditure during 2009-14	2.66	32.37	66.67
Additional Capital Expenditure claimed	517.18	2409.92	1572.88



17. Based on the above reconciliation, the year-wise admissibility of the works, expenditure allowed by the Commission for these works, actual expenditure against these works along with admissibility of the actual expenditure in terms of the 2009 Tariff Regulations for 2009-10, 2010-11 and 2011-12 under various heads is discussed in the subsequent paragraphs:

Additions against Works approved in Order dated 30.5.2011

18. The additions claimed for the years 2009-10, 2010-11 and 2011-12 against works already allowed for capitalization in order dated 30.5.2011 after prudence check, are being considered for revision of tariff of the generating station as the claim has already passed through the Commission's scrutiny and the needs for the works stood established. The summary of the additional capitalization considered are given below:

(₹ in lakh)

	2009-10	2010-11	2011-12
Additional capital expenditure approved by the Commission on projected basis	3071.82	2968.47	1740.50
Additional capital expenditure claimed in present petition on actual basis against works/assets approved on projected basis in Petition No.60/2010	327.45	1102.25	1340.72

19. The details of works, the expenditure allowed by the Commission for the works, the actual expenditure against these works along with justification for admissibility of the actual expenditure in terms of the 2009 Tariff Regulations for 2009-10, 2010-11 and 2011-12 after prudence check, is summarized as under:

2009-10

(₹ in lakh)

Sl. No.	Assets/works	Amount allowed by order dated 30.5.2011	Actual expenditure incurred/ claimed	Decision on admissibility
A	Works within original scope of works & deferred for execution			
1	Fork lifter- 5 MT	15.00	14.79	Allowed for already approved works under the Regulation 9(2) (iv).
2	Truck-TATA	11.20	10.82	
3	Fire tender	29.00	8.20	
4	Ambulance	8.30	7.98	
5	Portal at face of tunnel at	20.00	29.15	Allowed for already

	PH			approved works under the Regulation 9(2) (iv). The petitioner has clarified that the expenditure incurred is higher than approved due to increase of plinth area by 50% and additional work of interlocking tiles to increase the strength of structure.
6	Const. of building (addl. block) in Kendriya Vidyalaya	20.00	0.94	Part of the work is complete and balance work is in progress. Allowed for already approved works under the Regulation 9(2) (iv).
7	Construction of Canteen building at PH	2.50	12.42	The petitioner has claimed exp. of ₹12.42 lakh and has clarified that the work was deferred for execution as on COD for an amount of ₹14.00 lakh as per RCE-II, ₹2.50 lakh during 2009-10 were claimed on estimated basis. Allowed for already approved works under Regulation 9(2) (iv) in view of the expenditure being for the benefit of employees.
8	Construction of accommodation & security post for CISF	16.20	6.93	Part of the work is complete and the balance work is in progress. Allowed for already approved works under Regulation 9(2) (iv).
9	Fixing of steel gate to all adits at HRT.	5.00	5.25	Allowed for already approved works under the Regulation 9(2) (iv).
10	Balance grouting & instrumentation work in Dam.	50.00	12.13	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
11	Access road lighting & electrification (PH to surge shaft & Dam site)	62.00	46.96	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
12	Thermal image camera	13.70	13.79	Allowed for already approved works under the Regulation 9(2) (iv).
13	LAN phase-II	3.37	2.29	
Total claimed (A)			171.65	
Total allowed (A)				171.65
B	Works beyond original scope of works			
1	Crawler dozer	65.25	60.57	Allowed for already approved works under the Regulation 9(2) (iv).
2	Tipper	11.35	11.44	
3	Weigh bridge -40 ton	10.00	6.00	

4	Const. of cradle box on river Chenab	5.75	5.74	
5	Compensation of land	16.00	2.97	Allowed under Regulation 9(2) (i) due to decree of court
6	Online vibration monitoring system	35.00	35.77	Allowed for already approved works under the Regulation 9(2) (iv).
7	Transformers, 25 KVA DG set, cable, etc.	67.00	17.52	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
8	Water level measurement system for Dam	2.80	2.36	Allowed for already approved works under the Regulation 9(2) (iv).
9	Welding set	6.21	7.55	
10	Purchase of hardware for implementation of ERP work	25.00	3.34	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
11	LAN & IT security solutions for ERP	20.00	2.54	
Total claimed (B)			155.80	
Total allowed (B)				155.80
Total claimed (A+B)			327.45	
Total allowed (A+B)				327.45

20. Out of the Additional Capital Expenditure of ₹3071.82 lakh approved by the Commission for the year 2009-10 on projected basis, the petitioner has incurred actual expenses of ₹327.45 lakh against the assets/works for which projections of ₹520.63 lakh were allowed. The balance expenditure has been claimed/would be claimed in the ensuing years. The petitioner has clarified that the additional capital expenditure allowed by the Commission by its order dated 30.5.2011 was on projection basis, whereas the actual expenditure incurred is less or higher on account of the competitive rates quoted by the bidders.

2010-11

(₹ in lakh)				
Sl.No.	Assets/works	Amount allowed by order dated 30.5.2011	Actual expenditure incurred/ claimed	Decision on admissibility
A	Works within original scope of works & deferred for execution			
1	Security wall of PH area	35.00	50.42	Work was approved for total amount of Rs. 100 lakh for the period 2009-14. Allowed for completion of part work under the Regulation 9(2) (iv).

2	Balance grouting & instrumentation work in Dam.	60.00	135.32	Work was approved for total amount of ₹ 150.00 lakh. ₹12.13 lakh was capitalized in 2009-10. Capitalization of ₹135.32 lakh Allowed in 2010-11 for already approved works under the Regulation 9(2) (iv).
3	One set of Runner and its Labyrinths	887.27	760.33	Commission has allowed capitalization of one spare runner on projected basis. Accordingly, the actual amount of ₹760.33 lakh has been allowed towards the procurement of one spare runner under Regulation 9(2)(iv).
Total claimed (A)			946.07	
Total allowed (A)				946.07
B	Works beyond original scope of works			
1	Treatment of sinking zone at Dam	350.00	6.51	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
2	Const. of boundary wall of Semna colony	50.00	5.01	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work is complete, balance work is in progress.
3	Compensation of land	20.00	0.52	Allowed under Regulation 9(2) (i)
Total claimed (B)			12.04	
Total allowed (B)				12.04
Total claimed (A+B)			958.11	
Total allowed (A+B)				958.11

Works allowed in 2009-10 but capitalized in 2010-11

(₹ in lakh)

Sl.No.	Assets/works	Amount allowed by order dated 30.5.2011	Actual expenditure incurred/ claimed	Decision on admissibility
1.	Wheel loader	36.00	26.27	Allowed for already approved works, under Regulation 9(2)(iv).
2.	Portable air compressor	12.00	9.15	
3	PVC paneling, wall cladding, false ceiling, etc. in PH	14.87	53.67	Allowed for already approved works under the Regulation 9(2) (iv). The

				petitioner has claimed expenditure of ₹53.67 lakh and clarified that work was deferred for execution as on COD for an amount of ₹60.70 lakh as per RCE-II, and ₹14.87 lakh were kept on estimated basis in 2009-10 against discharge of liability.
4	Access road lighting	62.00	12.19	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work was completed in 2009-10.
5	Weigh bridge -40 ton	10.00	4.67	
6	Purchase of hardware for ERP implementation	25.00	20.49	
7	LAN & IT security solutions for ERP implementation	20.00	0.4	
8	Gates & Hydraulic barriers at Intake	8.00	9.33	
9	Purchase of High mast light	11.00	7.97	
Total claimed			144.14	
Total Allowed				144.14

2011-12

(₹ in lakh)				
SI.No.	Assets/works	Amount allowed by order dated 30.5.2011	Actual expenditure incurred/ claimed	Decision on admissibility
A	Works within original scope of works & deferred for execution			
1	Balance grouting & instrumentation work in Dam.	40.00	104.23	Work was approved for total amount of ₹ 150.00 lakh. Out of which total amount of ₹147.45 lakh has already been incurred, comprising ₹12.13 lakh in 2009-10 and ₹135.32 lakh in 2010-11. The petitioner has clarified that in view of high seepage through Gallery L-4 addl. grouting has been recommended by dam safety team and the same has been carried out. Keeping in view safety of dam, capitalization of

				₹104.13 lakh claimed in 2011-12 has been allowed under the Regulation 9(2) (iv).
Total claimed (A)			104.23	
Total allowed (A)				104.23
B	Works beyond original scope of works			
1	Treatment of sinking zone at Dam & regarding of approach road to dam	300.00	288.72	Allowed for already approved works under the Regulation 9(2) (iv).
2	Extension of waterway from silt flushing tunnel outlet to Chenab river	30.00	26.99	Allowed for already approved works under the Regulation 9(2) (iv).
3	Construction of sewage treatment plant at project colonies	75.00	2.50	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work completed, balance work in progress.
4	Construction of boundary wall of Semma colony	100.00	77.10	Allowed for already approved works under the Regulation 9(2) (iv). Part of the work was completed, balance work to be completed by 31.3.2014
Total Claimed (B)			395.31	
Total Allowed (B)				395.31
Total Claimed (A+B)			499.54	
Total Allowed (A+B)				499.54

Works allowed in 2009-10/ 2010-11 but capitalized in 2011-12

(₹ in lakh)				
Sl.No.	Assets/works	Amount allowed by order dated 30.5.2011	Actual expenditure incurred/ claimed	Decision on admissibility
1.	Fire tender	29.00	17.73	Allowed for already approved works under the Regulation 9(2)(iv), for security purposes.
2	Furnace for burning swept material	6.00	21.36	Allowed for already approved works under Regulation 9(2)(iv). The petitioner has clarified that cost of work is based on competitive bidding.
3	Providing automatic security barrier at PH	2.00	2.31	Allowed against already approved works under Regulation 9(2) (iv).
4	Establishment of training centre for in house training in PH	16.71	12.20	

5	Excitation and controller spares	133.06 (2009) + 785.02 (2010-11)	402.37	Allowed against already approved works under Regulation 9(2) (iv).
6	Jack hammer with accessories	1.50	1.45	
7	Const. of pump house	7.00	7.84	
8	Purchase of transformers, 25 KVA DG set & cables	67.00	26.10	
9	Water level measuring system for Dam	2.80	0.44	
10	Hardware for ERP implementation	25.00	10.56	Approved additional capital expenditure is ₹25.00 lakh, against which total amount capitalized during 2009-12 is ₹34.39 lakh. To meet the additional requirement of computers for ERP, petitioner has de-capitalized 19 old computers for ₹1.36 lakh. Capitalization of ₹10.56 lakh has been allowed in 2011-12.
11	LAN & IT security solutions for ERP implementation	20.00	21.74	Allowed against already approved works under Regulation 9(2) (iv).
12	Invert concreting in drainage gallery etc.	40.00	17.25	
13	Const. of barrack for security personnel	10.00	3.03	
14	Mini bus TATA 16 seater- 3 nos.	36.00	24.81	
15	Const. of new road to surge escape gallery	40.00	39.99	
15	Laying of GI pipe to augment water supply in project colonies	70.00	214.28	Work approved at cost of ₹70.00 lakh in 2010-11. Petitioner has that the actual works/assets comprise of G.I. pipes, installation of Pumps, Motors,, Electrical panels and, Transformers. These works/assets were procured and fixed in view of water usage to augment the shortage of water in Semna and Shalimar colony Kishtwar. Actual expenditure of ₹214.28 lakh may be allowed under Regulation 9(2)(iv) as water supply to the employees is considered necessary.
16	Distribution transformers, etc.	22.00	17.72	Allowed against already approved works under Regulation 9(2) (iv).
Total claimed			841.18	
Total allowed				841.18

Additions against Works not Projected/Allowed in Order dated 30.5.2011

21. The petitioner has further claimed capitalization of certain expenditure incurred during 2009-10, 2010-11 and 2011-12 which was either not claimed in Petition No. 60/2010 or was disallowed on the plea that the expenditure became necessary for efficient functioning of the generating station. UPPCL in its reply has objected to capitalization of expenditure of ₹760.32 lakh on one set of underwater parts, runner and its Labyrinths claimed during 2010-11 as it was rejected in order dated 30.5.2011. Similarly, BSES Rajdhani Power Ltd (BRPL) in its reply has objected to capitalization of certain other expenditure that was disallowed earlier. We find merit in the submission of the respondents. Once an item of expenditure has been disallowed after due scrutiny, it cannot be normally reconsidered unless there are certain circumstances which escaped the attention of the Commission earlier, since otherwise it amounts to reviewing the order without proper justification. Therefore, capitalization of the expenditure on works disallowed in the order dated 30.5.2011 is not being considered in the present petition. Similarly, the expenditure on assets of minor nature is not being allowed for capitalization in view of proviso to sub-clause (v) to clause (2) of Regulation 9. The year-wise expenditure claimed on this count is tabulated below and the decision on admissibility of the claim considered under sub-clause (v) of clause (2) of Regulation 9 of the Tariff Regulations 2009 has been indicated against each item.

2009-10

<i>(₹ in lakh)</i>			
SI No.	Assets/works	Expenditure incurred/ claimed	Decision on admissibility
1.	Electromechanical store in PH	2.65	Allowed. Handling cost of stores gets reduced.
2.	Construction of new approach road for dispensary	6.19	Allowed. The expenditure benefits the employees residing in remote project area.
3.	Construction of two watch towers in Dam area	2.95	Allowed. Considered as security requirement.
4.	Physiotherapy related Hospital equipment & ECG machine	5.78	Allowed. The expenditure benefits the employees residing in remote project area.

5.	Light weight folding aluminum ladder	0.09	Not allowed. The asset is of the minor nature.
6.	Heavy duty folding ladder	0.093	
7.	Aluminum ladder extn type	0.13	
8.	Aluminum table tower telescopic ladder	1.14	
9.	Breaker TE-706	1.34	
Total Expenditure incurred/ claimed		20.28	
Total Expenditure allowed			17.57

2010-11

(₹ in lakh)

Sl. No.	Assets/works	Expenditure incurred/ claimed	Decision on admissibility
1.	One set of underwater parts, runner and its Labyrinths	760.32	Not allowed. Against the original claim of 2 sets of runner and its Labyrinths the Commission in order dated 30.5.2011 has allowed only one complete set. There is no ground for review of the earlier decision.
2.	Supply of steel working platform for dam gate	4.37	Not allowed. The asset is of the minor nature.
3.	Electrostatic liquid cleaning machine	2.36	Not allowed. The asset is of the minor nature.
4.	Low vacuum dehydration unit	3.50	Not allowed. The asset is of the minor nature.
5.	Development of surface of kachha road to employees quarters at Shalimar colony	6.62	Allowed. The expenditure benefits the employees residing in remote project area.
6.	New road at S-type quarters, staff club	14.06	Allowed. The expenditure benefits the employees residing in remote project area.
7.	Hospital equipment (nerve simulator, Led box, ultrasonic therapy unit, urine analyzer, oxygen concentrator)	2.25	Allowed. The expenditure benefits the employees residing in remote project area.
Total Expenditure Incurred/ claimed		793.49	
Total Expenditure allowed			22.93

2011-12

(₹ in lakh)

I. No.	Assets/works	Expenditure incurred/ claimed	Decision on admissibility
1.	Underground water tank (2000 ltrs) at Kendriya Vidyalaya , Kishtwar	1.96	Allowed. The expenditure is considered necessary for safety of students and teaching staff of Kendriya

			Vidyalaya from fire related risks.
2.	Contour drain & walls at DPS , Kishtwar	9.20	Allowed. The expenditure seeks to address the problem of subsidence and to keep the only available road to dam, functional at all times.
3.	Collector for electrostatic liquid cleaner	3.80	Not allowed. The asset is of minor nature.
4.	Particle counter	3.80	Not allowed. The asset is of minor nature.
5.	Numerical Generator Protection Relay	17.45	Not allowed. Capitalization was disallowed in order dated 30.5.2011.
6.	Transformer Oil tanker mounted on trolley, Capacity 8KL (2 Nos)	16.16	Allowed. The asset facilitates the maintenance of transformers and hence considered necessary for efficient operation of the plant.
7.	Screw Pump, Allweiler	12.35	Allowed. Replacement of defective pump, being de-capitalized under "Assumed Deletion"
8.	Electric Nonclog Sludge submersible pump set, motor rated 6 H.P. with 10 MTR. Cable and 10 MTR. Hos (3 Nos)	3.03	Allowed. Considered necessary for dewatering of different pits of power house.
9.	Submersible pump 50 HP, 37 KW	14.36	
10.	Electric non-clog sludge submersible pump set, Motor rating 1.5 H.P, Max. Head 16 mtr.	3.41	
11.	SPC module for TSLG governor, part no. NEYPRIC TSLG-SPC	14.20	Not allowed. The asset is being claimed as spare.
12.	Ultimate sampling system complete-Domino USS for moisture in oil measurement	4.07	Not allowed. Capitalization was disallowed in order dated 30.5.2011.
13.	Partial discharge measurement system complete with all sensors, software	15.45	Not allowed. Capitalization was disallowed in order dated 30.5.2011.
14.	Fully automated capacitance and tan delta kit MIDAS 2881	24.48	Not allowed. Capitalization was disallowed in order dated 30.5.2011.
15.	Portable dissolved gas analyser complete with standard accessories	34.40	Not allowed. Capitalization was disallowed in order dated 30.5.2011.
16.	Protection work for water supply in front of old HRT D/S at Hasti for stage-1	7.28	Not allowed. The work is of O&M nature.
17.	Const. of pump House (3 nos) for 2 nd stage water supply scheme	23.23	Allowed. The expenditure benefits the employees residing in remote project area.

18.	Const. of 3 nos. 50000 Gallan capacity reservoir for 2 nd stage water supply scheme	35.42	Allowed. The expenditure benefits the employees residing in remote project area.
19.	Automated hematology analyzer	4.45	Allowed. The expenditure benefits the employees residing in remote project area.
20.	Empty Oxygen Cylinder Cap. 7 cum (75 nos)	9.17	Not allowed. The asset is of minor nature.
21.	Empty industrial dissolved acetylene (DA) Gas cylinder 6.3 cum capacity (25 nos)	2.78	Not allowed. The asset is of minor nature.
22.	Energy conserver, 15KVA, 3 phase, 4 wire, 50 HZ (Streetlight controller)	1.06	Not allowed. The asset is of minor nature.
23.	Supply, erection, testing, Commissioning of GPS based time synchronization equipment complete with ACCE	2.07	Allowed. Replacement of non-functioning asset with new asset is considered necessary for efficient operation of the plant. Gross value of old asset is being de-capitalized under "Assumed Deletions".
24.	Auto transformer single phase, oil filled, 200A	1.13	Not allowed. The asset is of minor nature.
25.	Radar Based Water Level Measurement, Sensor And Remote Display	2.14	Allowed. The asset is considered necessary as replacement of the original contact type sensor based water level measurement system with the radar based measurement system (non-contact type) as the original system was encountering problems like loss of sensors during flood conditions. The old asset is being de-capitalized under "Assumed Deletions".
Total Expenditure Incurred/ claimed		266.85	
Total Expenditure allowed			127.78

Inter-unit Transfers

22. The petitioner has claimed following Additional Capital Expenditure on account of inter unit transfers:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Other additions (IUT)	9.92	0.50	4.38

23. On scrutiny of the details of inter-units transfers, it is observed that these include assets such as double bed, sofa set, software, etc transferred from other stations/offices. These are minor assets capitalization of which is not allowed after the cut-off date in terms of proviso to the Regulation 9(2)(iv) and as such the claim of the petitioner is rejected.

Deletions

24. The petitioner has claimed following amounts towards de-capitalization on replacement of assets, deletion of assets on account of sale/writing off, rectification entries, shortages found on physical verification, consumption of capital spares part of capital base and deletions due to inter unit transfer (out) of minor assets etc.

	(₹ In lakh)		
	2009-10	2010-11	2011-12
Deletions claimed	(-) 13.08	(-) 203.47	(-) 89.58
Deletions due to IUT (out) of minor assets included in above	(-) 2.98	(-) 8.86	0.00

25. The de-capitalized assets include DG sets, JCB, dumper, dozer, air compressors, truck, Maruti Gypsy, buses, water tanker, telephones, fans, tables, ambulance, mini trucks, pumps, generator, fire extinguisher, computers, printers, capital spares consumed, and furniture transferred out. De-capitalization of the above amounts (except for IUT of minor assets) as affected in books of accounts has been allowed for the purpose of tariff also as they are not rendering any useful service in the operation of the plant. As regards deletions due to IUT (out) of minor assets the Commission in the order dated 7.9.2010 in Petition No. 190/2009 has decided to ignore such transfers for the purpose of tariff, which reads as follows:

“20. After careful consideration, we are of the view that the cost of minor assets originally included in the capital cost of the projects and replaced by new assets should not be reduced from the gross block, if the cost of the new assets is not considered on account of implication of the regulations. In other words, the value of the old assets would continue to form part of the gross block and at the same time the cost of new assets would not be taken into account. The generating station should not be debarred from servicing the capital originally deployed on account of procurement of minor assets, if the services of those assets are being rendered by similar assets which do not form part of the gross block.”

26. In view of above, the following deletions have been considered:

(₹ In lakh)

	2009-10	2010-11	2011-12
Deletions allowed	(-) 10.10	(-) 194.61	(-) 89.58

Exclusions in additions

27. The petitioner has prayed that the following positive entries effected in books of accounts on account of replacement of minor assets, purchase of capital spares, purchase of miscellaneous assets, inter-head adjustments and assets transferred to obsolete head may be excluded/ ignored for the purpose of tariff:

(₹ in lakh)

	2009-10	2010-11	2011-12
Expenditure on replacement of minor assets, purchase of capital spares etc. (incurred, capitalized in books but not to be claimed for tariff purpose)	188.54	22.09	47.86
Inter- head adjustments.	2.16	0.00	0.00
Transfer to obsolete	16.01	4.09	0.00
Total	206.71	26.19	47.86

28. The expenditure incurred on procurement/replacement of minor assets and procurement of capital spares is not allowed for the purpose of tariff after the cut-off date under Tariff Regulations, 2009. Accordingly, the petitioner itself has put these additions under exclusion category. As such, the above exclusions of the positive entries have been accepted for the purpose of tariff. Further, the exclusion of positive entries arising due to inter head adjustments and assets transferred to obsolete head is allowable provided the corresponding negative entries are also put under the exclusion category. In the instant case the petitioner has also excluded the negative entries. Accordingly, the exclusion of positive entries corresponding to inter head adjustments and assets transferred to obsolete head may be allowed for the purpose of tariff.

Exclusions in deletions

29. The petitioner has prayed that following negative entries as effected in the books of accounts pertaining to FERV loss, de-capitalized minor assets such as computers, office equipment,

furniture, fixed assets of minor value less than ₹5000 etc., de-capitalization of capital spares not in capital base for the purpose of tariff, inter-head adjustments etc., may be excluded/ignored for the purpose of tariff:

(₹ In lakh)

	2009-10	2010-11	2011-12
De-capitalization on account of ERV	(-) 788.02	(-) 380.38	0.00
De-capitalization of capital spares not in capital base	0.00	0.00	(-) 89.11
De-capitalization of minor assets, tools and tackles	(-) 0.25	(-) 0.33	(-) 0.42
inter head adjustments etc.	(-) 2.16	0.00	0.00
Transfer to obsolete	(-) 16.01	(-) 4.09	0.00
Total Exclusions	(-) 806.44	(-) 384.80	(-) 89.53

30. The negative entries arising due to ERV loss are allowed to be excluded/ ignored for the purpose of tariff as ERV gain/loss is being billed directly to the beneficiaries as per the Tariff Regulations 2009. The petitioner vide its affidavit dated 03.10.2013 has provided the details of the de-capitalized spares for ₹.89.11 lakh in the year 2011-12. It is observed that these spares were procured in the year 2009-10 and the positive entry corresponding to their purchase has also been excluded /ignored for the purpose of tariff. The de-capitalized spares are not included in the capital base. As such, exclusion of ₹.89.11 lakh has been allowed to be excluded/ignored for the purpose of tariff.

31. The petitioner has prayed that the negative entries arising out of de-capitalization of minor assets may be excluded/ ignored for the purpose of tariff as the corresponding positive entries for purchase of such minor assets are not being allowed to be capitalized. The prayer of the petitioner is in order and has been allowed.

32. The exclusion of negative entries arising due to inter-head adjustments is also allowed as the positive adjustments have also been excluded/ ignored. Similarly, exclusion of negative entries arising due to transfer of assets to obsolete head are allowed as the whole treatment after de-

capitalization of assets, that is, transferring to obsolete head and sale of asset etc. are not considered for the purpose of tariff.

33. Accordingly, all exclusions in deletion claimed by the petitioner are allowed.

Assumed Deletions

34. The petitioner has indicated an amount of ₹3.40 lakh under this head towards gross value of the following old assets replaced during the year 2011-12, worked out on the basis of 10% of the gross value of the new asset:

Name of the asset	Gross value (₹ in lakh)
Generator Protection Relay	1.745
Screw Pump	1.235
GPS based synchronization system	0.207
Measurement system for water level monitoring	0.214
Total	3.401

35. In view of the fact that the capitalization of generator Protection Relay (S.No.1) has not been allowed, the corresponding de-capitalization amount has been ignored for tariff purpose. As regards other assets noted above, it is to mention that capitalization of new assets has been allowed. Accordingly, the gross value of the old assets is required to be de-capitalized for the purpose of tariff. However, this generating station commissioned in 2007 is just six years old and accordingly, assumed deletion considered @ 10% of the gross value of new assets is inadequate. In our consideration, Assumed Deletion has been worked out based on de-escalation factor of 5% per annum in line with the petitioner's own submission in the petition filed for revision of tariff for Chamara-I Hydroelectric Project. Based on this methodology, the gross value of old assets to be deducted for the purpose of tariff works out to 80% of the gross value of new assets. Accordingly, the following amounts have been allowed under the head Assumed Deletions, to be deducted from the capital cost during the year 2011-12:

Name of the asset	Gross Value (₹ In lakh)
Screw oil Pump	9.88
GPS based synchronization system	1.66
Measurement system for water level monitoring	1.71
Total	13.25

Un-discharged liabilities and discharge of liabilities

36. The certified un-discharged liabilities included in the actual additional capital expenditure for the period 2009-12 as indicated by the petitioner are as follows-

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Un-discharged liabilities in additional capital expenditure for 2009-12	2.66	32.37	66.67

37. As per the Tariff Regulations 2009, un-discharged liabilities (capitalized but not paid) are required to be deducted for the purpose of tariff. However, un-discharged liabilities corresponding to disallowed assets shall not be reduced to avoid double deduction. Accordingly, from the asset-wise details of un-discharged liabilities, it is observed that an amount ₹16.23 lakh, as per break up given below, pertains to the assets disallowed during the year 2011-12:

	(₹ in lakh)	
Assets disallowed	Capitalisation amount disallowed	Un-discharged liabilities included
SPC module for TSLG governor, part no. NEYPRIC TSLG-SPC	14.20	14.20
Partial discharge measurement system complete with all sensors, software	15.45	1.55
Energy conserver, 15KVA, 3 phase, 4 wire, 50 HZ (Streetlight controller)	1.06	0.48
Total	30.71	16.23

38. In view of the above, the un-discharged liabilities to be deducted for the purpose of tariff work out as follows:

	(₹ In lakh)		
	2009-10	2010-11	2011-12
Un-discharged liabilities	2.66	32.37	50.44

39. Further, the following certified year-wise discharge of liabilities as indicated by the petitioner is allowed as additional capital expenditure for the purpose of tariff:

	(₹ In lakh)		
	2009-10	2010-11	2011-12
Liabilities discharged against the un-discharged liabilities as on 31.3.2009	175.19	748.05	95.43
Liabilities discharged against additional capital expenditure allowed during 2009-12	0.00	1.48	25.15

Summary of Actual additional capital expenditure allowed during 2009-12

40. In view of above deliberations, following actual Additional Capital Expenditure for period 2009-12 may be allowed for the purpose of revision of tariff:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Additions allowed (a)			
Additions against works approved by Commission	327.45	958.11	499.54
Capitalization against works allowed in previous year but actually incurred in subsequent years	0.00	144.14	841.18
Additions not projected earlier but incurred and claimed	17.56	22.93	127.78
Other additions (IUT transfer)	0.00	0.00	0.00
Total (a)	345.02	1125.18	1468.50
Deletions (b)	(-) 10.10	(-) 194.61	(-) 89.58
Net Additional capitalization allowed for tariff purpose before assumed deletions, discharge of liabilities and un-discharged liabilities (c)= (a)+(b)	334.92	930.57	1378.92
less: Assumed deletions	0.00	0.00	13.25
Add: liabilities discharged during the year out of Un-discharged liability which existed as on 31.3.2009	175.19	748.05	95.43
Less: Un-discharged liability in additional capital expenditure for the period 2009-12	2.66	32.37	50.44
Add: Liabilities discharged during the year out of Additional Capital Expenditure during 2009-12	0.00	1.48	25.15
Additional Capital Expenditure allowed for the purpose of revision of tariff	507.45	1647.73	1435.81

Projected Additional Capital Expenditure during 2012-13 and 2013-14

41. The petitioner has not made any revision in the projected additional capital expenditure of ₹305 lakh and ₹ 195 lakh for the years 2012-13 and 2013-14, allowed by the Commission vide order dated 30.5.2011. Further, out of the un-discharged liabilities deducted for the purpose of tariff, petitioner has proposed to discharge balance amount of un-discharged liabilities of ₹581.75

lakh as on 31.3.2012 during the year 2012-13. However, in view of the fact that un-discharged liabilities to the tune of ₹16.23 lakh pertaining to disallowed assets in the year 2011-12 has not been reduced to avoid the double deduction, the balance un-discharged liabilities as on 31.3.2012, deducted for the purpose of tariff work out to ₹ 565.52 lakh, which is allowed as liability to be discharged during the year 2012-13 on projected basis along with the already approved projections of ₹ 305 lakh and ₹ 195 lakh, for the years 2012-13 and 2013-14.

Total Additional Capital Expenditure

42. The expenditure allowed to be capitalized during the tariff period 2009-14 is summarized as under:

		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
		ACTUAL			PROJECTED	
Additions						
1	Addition against works approved by order dated 30.5.2011	327.45	958.11	499.54	305.00	195.00
2	Capitalization against works allowed in previous year but actually incurred in subsequent years	0.00	144.14	841.18	0.00	0.00
3	Addition not projected earlier but incurred and claimed	17.56	22.93	127.78	0.00	0.00
4	Total Addition (1+2+3)	345.02	1125.18	1468.50	305.00	195.00
Deletion						
5	Deletion allowed	10.10	194.61	89.58	0.00	0.00
6	Exclusion in deletion (not allowed)	0.00	0.00	0.00	0.00	0.00
7	Assumed Deletion	0.00	0.00	13.25	0.00	0.00
8	Total Deletion (5+6+7)	10.10	194.61	102.83	0.00	0.00
9	Total additional capital expenditure allowed before adjustment of discharge/un-discharge of liabilities (4-8)	334.92	930.57	1365.67	305.00	195.00
10	Less: Un-discharged liabilities in the allowed Additional Capital Expenditure	2.66	32.37	50.44	0.00	0.00
11	Add: Liabilities discharged during the year out of Additional Capital Expenditure during 2009-12	0.00	1.48	25.15	565.52	0.00
12	Add: Liabilities discharged during the year (Related to un-discharged liabilities as on 31-3-2009)	175.19	748.05	95.43	0.00	0.00
13	Additional Capital Expenditure allowed (9-10+11+12)	507.45	1647.73	1435.81	870.52	195.00

Capital Cost

43. The capital cost allowed for the purpose of the annual fixed charges is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	511605.50	512112.94	513760.67	515196.48	516067.00
Additional Capitalization	507.45	1647.73	1435.81	870.52	195.00
Closing Capital Cost	512112.94	513760.67	515196.48	516067.00	516262.00

Debt-Equity Ratio

44. In accordance with clause (2) of Regulation 12 of the Tariff Regulations 2009, in case of the generating stations declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 is considered.

45. In its order dated 9.3.2010 in Petition No. 204/2009 pertaining to revision of tariff based on additional capital expenditure for the period 2007-09, had observed as under::

“24. The petitioner has stated that the additional capital expenditure has been financed through internal resources. As per the approved revised cost estimate (RCE-II) of the Govt. of India letter dated 22.8.2008, corresponding to an approved capital cost of Rs. 522849.00 lakh, the equity was frozen at Rs. 198668.67 lakh. The Commission in its order dated 30.11.2009 in Petition No. 72/2009 had allowed the equity of Rs. 198668.67 lakh on the date of commercial operation for the purpose of tariff. Accordingly, any additional capital expenditure incurred after the date of commercial operation, till the admitted capital cost becomes Rs. 522849.00 lakh, is to be considered as debt. After consideration of the admitted additional capital expenditure of Rs. 3188.55 lakh and Rs. 567.58 lakh during the year 2007-08 and 2008- 09 respectively, the admitted capital cost for works out to Rs. 511037.92 lakh and Rs. 511605.50 lakh for the year 2007-08 and 2008-09 respectively, which is below the admitted capital cost of Rs. 522849.00 lakh. Accordingly, the admitted additional capital expenditure has been considered as debt for the purpose of tariff.”

46. In line with the above decision, the entire additional capital expenditure has been considered as debt, since the total estimated cost of completion is less than the approved Revised Cost Estimate of ₹522849.00 lakh.

Return on Equity

47. Regulation 15 of the Tariff Regulations, 2009 provides as under:

“15. **Return on Equity.** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on Equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation: Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.

Illustration.-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1-0.1133) = 17.481\%$$

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1-0.3399) = 23.481\%”$$

48. While claiming the Revised Fixed Charges, the petitioner has considered the Base Rate of 15.5%. For the purpose of grossing up, the petitioner has further considered the applicable tax rate of 33.99% for the years 2009-10, 2010-11 and 2011-12 and tax rate of 11.33% for the years 2012-13 and 2013-14.

49. BRPL has objected to the petitioner's claim for grossing up at the rate of 33.99% on the ground that in the order dated 30.5.2011 the tax rate of 11.33% was considered. The petitioner has clarified that tax rate 33.99% has been considered based on applicable tax rate for the generating company during the relevant years. In our view, the claim of the petitioner is in order. In accordance with Regulation 15 *ibid*, grossing up of RoE is permitted as per applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961. The petitioner has clarified that for the financial year 2009-10, 2010-11 and 2011-12, the tax liability computed under normal corporate tax provision exceeded the tax liability computed under the provisions of Minimum Alternate Tax (MAT). Thus the petitioner came under normal tax for 2009-10 to 2011-12. Therefore, grossing up based on normal tax rate as claimed by the petitioner vide Regulation 15 *ibid* for the year 2009-10, 2010-11 and 2011-12 is in order. BRPL has further pointed out that since the tariff is determined unit-wise, stage-wise or station-wise, the petitioner should claim the tax rate applicable to the generating station and not the generating company as a whole. We do not find any substance in the submission of BRPL. In accordance with clause (3) of Regulation 15 *ibid*, grossing up is permitted based on tax rate applicable to "the concerned generating company". For the same reason, the submission of BRPL for calling for details of tax holiday under Section 80 IA of the Income Tax Act in respect of the generating station is irrelevant.

50. In revising the annual fixed charges, we have considered the Base Rate of 15.5% and the tax rates for grossing up as considered by the petitioner. The petitioner is entitled to RoE as shown below:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	198668.67	198668.67	198668.67	198668.67	198668.67
Addition due to Additional Capital Expenditure	0.00	0.00	0.00	0.00	0.00
Closing Equity	198668.67	198668.67	198668.67	198668.67	198668.67
Average Equity	198668.67	198668.67	198668.67	198668.67	198668.67
Base Rate of Return on Equity	15.500%	15.500%	15.500%	15.500%	15.500%

Applicable Tax rate	33.990%	33.218%	32.445%	11.330%	11.330%
Rate of Return on Equity	23.481%	23.210%	22.944%	17.481%	17.481%
Return on Equity	46649.39	46111.00	45582.54	34729.27	34729.27

Interest on Loan

51. Regulation 16 of the Tariff Regulations provides as under:

*“16. **Interest on loan capital.** (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.*

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

52. UPPCL has pointed out that in the order dated 30.5.2011, the rate of interest on loan during 2011-12 was considered at 7.99% whereas, the petitioner has now claimed the interest at the rate of 8.13% and has sought clarification from the petitioner for claiming higher rate of interest. We may point out that interest is being allowed on the weighted average rate of interest computed by us, irrespective of the petitioner's claim. We find that the rate of interest of 8.13% claimed by the petitioner is in order.

53. The petitioner's entitlement to interest on loan has been worked out in accordance with Regulation 16 *ibid*. The salient features of computation of interest on loan allowed in tariff are summarized below:

- (i) The opening gross normative loan as on the date of commercial operation of each unit has been arrived at in accordance with Regulation 16.
- (ii) The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project.
- (iii) The repayment for the year of the tariff period 2009-14 has been considered equal to the depreciation allowed for that year.
- (iv) The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

54. The calculations in support of Interest on loan are as under:

	(₹ In lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	312936.83	313444.27	315092.00	316527.81	317398.33
Cumulative Repayment up to Previous Year	39200.07	65772.85	92402.16	119111.75	145879.35
Net Loan-Opening	273736.75	247671.43	222689.84	197416.07	171518.99
Repayment during the year	26572.78	26629.31	26709.59	26767.60	26795.26
Addition due to Additional Capitalization(2009-14)	507.45	1647.73	1435.81	870.52	195.00
Net Loan-Closing	247671.43	222689.84	197416.07	171518.99	144918.73
Average Loan	260704.09	235180.64	210052.96	184467.53	158218.86

Weighted Average Rate of Interest on Loan	8.00%	7.89%	8.13%	7.99%	8.03%
Interest	20851.70	18553.98	17078.16	14736.57	12697.92

Depreciation

55. The provisions relating to charging of depreciation are contained in Regulation 17 of the Tariff Regulations 2009, which is extracted hereunder:

*“17. **Depreciation.** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

*(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-III** to these regulations for the assets of the generating station and transmission system:*

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation] as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

56. The weighted average rate of depreciation calculated in accordance with Regulation 17 has been considered for the calculation of depreciation component of tariff. The petitioner’s entitlement to depreciation has been worked out as under:

	(₹ In lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31-3-2009	511605.50	512112.94	513760.67	515196.48	516067.00
Additional capital expenditure during 2009-14	507.45	1647.73	1435.81	870.52	195.00

Closing gross block	512112.94	513760.67	515196.48	516067.00	516262.00
Average gross block	511859.22	512936.81	514478.58	515631.74	516164.50
Rate of Depreciation	5.191%	5.192%	5.192%	5.191%	5.191%
Depreciable Value	460673.30	461643.13	463030.72	464068.57	464548.05
Balance Useful life of the asset	33.0	32.0	31.0	30.0	29.0
Remaining Depreciable Value	421474.22	395871.27	370629.56	344957.82	318669.70
Depreciation	26572.78	26629.31	26709.59	26767.60	26795.26

O & M Charges

57. The following O & M expenses considered in the order dated 30.5.2011 *ibid* have been considered for revision of tariff:

(₹ In lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
14824.24	15672.19	16568.64	17516.36	18518.30

Interest on Working Capital

58. The petitioner is entitled to claim interest on working capital as per Regulation 18 of the Tariff Regulations 2009. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder.

(i) Receivables

As per Regulation 18(1) (c) (i) of the Tariff Regulations 2009, receivables as a component of working capital are equivalent to two months' of fixed cost. In the tariff being allowed, receivables have been worked out on the basis of 2 months' fixed cost.

(ii) Maintenance spares

Regulation 18 (1) (c) (ii) of the Tariff Regulations 2009 provides for maintenance spares @ 15% per annum of the O & M expenses as part of the working capital. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses

Regulation 18(1) (c) (iii) of the Tariff Regulations 2009 provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner

has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of interest on working capital

In accordance with clause (3) of Regulation 18 of the tariff regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later. In the instant case, SBI PLR of 12.25% as on 1.4.2009 has been considered in for working out Interest on Working Capital.

59. Necessary computations in support of interest on working capital are appended hereunder:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	2223.64	2350.83	2485.30	2627.45	2777.74
O & M Expenses	1235.35	1306.02	1380.72	1459.70	1543.19
Receivables	18600.06	18275.53	18105.06	16035.81	15869.00
Total	22059.05	21932.38	21971.08	20122.96	20189.94
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	2702.23	2686.72	2691.46	2465.06	2473.27

Annual Fixed Charges

60. The Annual Fixed Charges approved for the generating station are consolidated in the table below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	46649.39	46111.00	45582.54	34729.27	34729.27
Interest on Loan	20851.70	18553.98	17078.16	14736.57	12697.92
Depreciation	26572.78	26629.31	26709.59	26767.60	26795.26
Interest on Working Capital	2702.23	2686.72	2691.46	2465.06	2473.27
O & M Expenses	14824.24	15672.19	16568.64	17516.36	18518.30
Total	111600.34	109653.19	108630.38	96214.86	95214.01

61. The recovery of the Annual Fixed Charges shall be subject to truing up in terms of Regulation 6 of the Tariff Regulations 2009. In all other respects, the order dated 30.5.2011 shall continue to apply.

62. The difference between the Annual Fixed Charges already recovered by the petitioner and the Annual Fixed Charges determined under this order shall be adjusted in terms of the proviso to clause (6) of Regulation 6 of the Tariff Regulations 2009.

63. Petition No. 141/GT/2013 stands disposed of in terms of the above.

Sd/-
(M Deena Dayalan)
Member

Sd/-
(V S Verma)
Member