

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 140/GT/2013

Coram:
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member

Date of Hearing: 12.9.2013
Date of Order: 31.12.2013

In the matter of

Revision of generation tariff for Bairasiul Hydroelectric Project (3 x 66 MW) for the period from 1.4.2009 to 31.3.2014 -Truing up of tariff determined by Commission's order dated 15.6.2011 in Petition No. 90/2010 and order dated 31.8.2012 in R. P. No. 19/2011.

And

In the matter of

NHPC Ltd
NHPC Office Complex,
Sector-33, Faridabad
Haryana-121003

.....Petitioner

Vs

1. Punjab State Power Corporation Ltd,
The Mall, Near Kali Badi Mandir,
Patiala-147001 (Punjab)
2. (a) Dakshin Haryana Bijili Vitaran Nigam Ltd,
(b) Uttar Haryana Bijili Vitaran Nigam Ltd
Shakti Bhawan, Sector – 6
Panchkula – 134 109(Haryana)
3. BSES-Rajdhani Power Ltd
BSES Bhawan, Nehru Place,
New Delhi – 110019
4. BSES-Yamuna Power Ltd.,
Shakti Kiran Building,
Karkardooma, Delhi- 110072
5. Tata Power Delhi Distribution Ltd.,
Hudson Lane, Kingsway Camp,
Delhi-110009
6. Himachal Pradesh State Electricity Board,
Vidut Bhavan, Kumar House
Shimla-171004 (Himachal Pradesh)

.....Respondents



Parties present:

Shri Parag Saxena, NHPC
Shri S.K. Meena, NHPC
Shri J.K.Jha, NHPC
Ms. Gayatri Devi, NHPC
Shri Padamjit Singh, PSPCL
Shri R.B. Sharma, Advocate, BRPL

ORDER

This petition has been filed by the petitioner, NHPC, for revision of tariff of Bairasiul Hydroelectric Project (3 x 66 MW) (hereinafter referred to as "the generating station") for the period from 1.4.2009 to 31.3.2014 in terms of the proviso to Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. Petition No. 90/2010 was filed by the petitioner for determination of tariff of the generating station for the period from 1.4.2009 to 31.3.2014 and the Commission by its order dated 15.6.2011 had determined the annual fixed charges for the generating station for the said period. Subsequently, the annual fixed charges determined by order dated 15.6.2011 were revised by Commission's order dated 31.8.2012 in Review Petition No.19/2011. The annual fixed charges determined by order dated 31.8.2012 as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1386.79	1393.36	1406.95	1418.59	1429.99
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	745.29	763.00	803.34	844.63	894.78
Interest on Working Capital	346.87	364.67	384.08	404.52	426.24
O & M Expenses	6045.99	6391.82	6757.43	7143.96	7552.59
Total	8524.93	8912.85	9351.81	9811.71	10303.60

3. The first proviso to Regulation 6 of the 2009 Tariff Regulations provides as under:

"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 in this petition has claimed revision of tariff for the period 2009-14 based on the actual additional capital expenditure incurred during the period 2009-12 and revised projections for additional capital expenditure for the period 2012-14. Reply to the petition has been filed by the respondent BRPL and the petitioner has filed its rejoinder to the same.

5. The annual fixed charges claimed by the petitioner for the period 2009-14 are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1860.94	1841.74	1824.70	1417.58	1497.66
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	742.29	746.84	756.14	773.03	824.94
Interest on Working Capital	356.69	373.68	391.81	403.01	426.20
O & M Expenses	6045.99	6391.82	6757.43	7143.96	7552.59
Total	9005.91	9354.08	9730.07	9737.57	10301.39

Capital Cost

6. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011 provides as under:

“Provided also that in case of the existing projects, 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, shall form the basis for determination of tariff.”

7. The Commission had considered the closing capital cost of ₹18199.26 lakh as on 31.3.2009 in Petition No.198/2009 as the opening capital cost as on 1.4.2009 for the purpose of approval of tariff for the period 2009-14 in order dated 15.6.2011 in Petition No. 90/2010. Accordingly, this opening capital cost has been considered as on 1.4.2009 for the purpose of revision of tariff in this petition.

Actual/ Projected Additional Capital Expenditure

8. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, provides as under:

“9. Additional Capitalisation. (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) *Un-discharged 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;
- (iii) 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 the 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
- (v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, 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.

- (vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.

Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

- (vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.
- (viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.

(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility.”

9. The reconciliation of the actual additional capital expenditure claimed with respect to the additional capital expenditure as per books of accounts certified by auditor for the period 2009-12 is as under:

(₹ in lakh)			
	2009-10	2010-11	2011-12
Additions as per books (a)	(-) 24.89	134.82	921.43
Additions claimed (b)			
Additions against works already approved	14.53	9.53	58.56
Additions not projected earlier but incurred and claimed	14.01	28.24	802.61
Total (b)	28.54	37.77	861.18
Deletions (c)	(-) 4.06	0.00	0.00
Exclusions in additions (incurred, capitalized in books but not to be claimed for tariff purpose) (d1)	61.97	171.43	161.67
Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose) (d2)	(-)111.33	(-)74.37	(-)101.42
Net value of exclusions (d=d1+d2)	(-) 49.36	97.06	60.25
Total (e)=(b)+(c)+(d)	(-) 24.89	134.82	921.43
Net claim before un-discharged /discharged liabilities/assumed deletions (f)=(b)+(c)	24.47	37.77	861.18
Less: Un-discharged liabilities in the claimed additional capital expenditure	11.51	1.46	786.50
Less: Assumed deletions	0.00	4.06	0.00
Add: Liabilities discharged out of additional capital expenditure during 2009-12	0.00	11.18	0.00
Add: Liabilities discharged (related to un-discharged liability as on 31.3.2009)	8.97	0.00	0.00
Net Additional Capital Expenditure claimed	21.93	43.42	74.68

10. The petitioner has claimed expenditure on certain works which were not claimed /allowed in order dated 15.6.2011 in Petition No. 90/2010 and which have become necessary for operation of the generating station. The petitioner has submitted that these works have been undertaken now as per requirement. The respondent BRPL has contended that the expenditure incurred on minor assets may not be allowed and that the minor assets de-capitalized in books shall also be de-capitalized for the purpose of tariff.

11. 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 already approved

12. The year-wise actual additional capital expenditure claimed by the petitioner *vis-à-vis* the additional capital expenditure allowed by the Commission on projected basis in order dated 31.8.2012 in Review Petition No. 19/2011 is as under:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Additional capital expenditure allowed in order dated 15.6.2011 in Petition No. 90/2010	65.40	175.29	343.09
Actual additional capital expenditure claimed	14.53	9.53	58.56

13. 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 considering the documents on record and after prudence check, is summarized as under:

2009-10

(₹ in lakh)				
SI.No	Assets/works	Projected expenditure allowed by order dated 15.6.2011	Actual expenditure incurred/claimed	Justification for admissibility of expenditure
1.	Acoustic enclosure for DG room	12.00	11.18	Expenditure allowed for already approved works under the Regulation 9(2) (iv), instead of claim of the petitioner under Regulation 9(2) (ii).
2.	Automatic power factor correction panel	6.00	3.35	Expenditure allowed for already approved works under the Regulation 9(2) (iv), for power factor improvement.
	Total	18.00*	14.53	
	Total allowed		14.53	

*As against the projected expenditure of ₹65.40 lakh allowed for the year 2009-10, the petitioner has claimed assets/works against projections of ₹18.00 lakh during 2009-10. The remaining assets/works have been claimed/will be claimed in the ensuing years.

2010-11

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

(₹ in lakh)

SI.No.	Assets/works	Projected expenditure allowed by order dated 15.6.2011	Actual expenditure incurred/claimed	Justification for admissibility of expenditure
1.	LT distribution control panels	15.0	7.32	Expenditure allowed for already approved works, under Regulation 9(2)(iv) of the 2009 Tariff Regulations

2.	Motor operated mechanism for 220 kV isolator	5.00	2.21	
	Total	20.00	9.53	
	Total allowed		9.53	

2011-12

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

(₹ in lakh)				
Sl.No	Assets/works	Projected expenditure allowed by order dated 12.7.2011	Actual expenditure incurred/claimed	Justification for admissibility of expenditure
1.	Barbed wire fencing along CISF barrack, Jaddu	7.0	5.89	Expenditure allowed for already approved works under the Regulation 9(2)(iv) for the purpose of security of the generating station
2	Watch tower at CISF barrack & office, Jaddu	12.0	1.74	
3	Automatic power factor corrective panel	6.00	3.96	Expenditure allowed for already approved works under Regulation 9(2)(iv) of the 2009 Tariff Regulations
4	Numeric generator protection relay	17.60	12.66	
5	LT distribution control panel	10.0	6.68	
6	Transformer –outdoor type	17.0	13.25	
7	Temperature scanner	15.0	9.16	
8	A channel field temp cal	5.0	5.22	
	Total	89.60	58.56	
	Total allowed		58.56	

14. The petitioner while pointing out that the additional capital expenditure allowed by Commission's order dated 15.6.2011 in Petition No. 90/2010 was on projection basis, has clarified that the actual expenditure incurred is less or is in excess on account of the competitive rates quoted by the bidders for the works undertaken in respect of the generating station.

Capital expenditure not projected but incurred and claimed

2009-10

(₹ in lakh)			
Sl.No.	Assets/works	Actual expenditure incurred/claimed	Justification for admissibility of expenditure
1.	ATM cabin for SBI- Surangani	0.72	Expenditure allowed under Regulation 9(2)(iv) keeping in view the benefit of employees working in the project in remote areas.

2.	Electrically operated wire rope hoist	0.98	As the asset is in nature of tools & tackles, capitalization of the same after the cut-off date, has not been allowed .
3.	Welding set	1.80	Expenditure has not been allowed as the asset is of a minor nature not be allowed under the Regulation 9(2)(iv), as the assets is of minor nature.
4.	Video surveillance camera	3.89	Expenditure allowed under Regulation 9(2)(iv) of the 2009 Tariff Regulations as per recommendations of IB in view the safety & security of vital installations
5.	Office 2007 English software	6.62	Expenditure has not been allowed as the assets is of minor nature.
	Total	14.01	
	Total allowed		4.61

2010-11

(₹ in lakh)			
Sl.No.	Assets/works	Actual expenditure incurred/ claimed	Justification for admissibility of expenditure
1.	Mahindra Bolero	4.67	Expenditure allowed for the purpose of security of the generating station against replacement, under Regulation 9(2)(iv).
2.	Mini Truck	6.41	Expenditure allowed for the purpose of deployment of asset for CISF security, against replacement, under Regulation 9(2)(iv).
3.	Floor jib crane	0.82	Since the asset is in the nature of tools & tackles, the capitalization after the cut-off date is not allowed .
4.	Single phase welding fume extractor	0.36	Expenditure not allowed as the assets is of a minor nature.
5.	Single phase welding fume extractor	1.39	
6.	Three phase welding fume extractor	1.78	
7.	Server and computer	9.84	
8.	Internet firewall proxy server	0.92	
9.	Window server	2.05	
	Total	28.24	
	Total allowed		11.08

15. The petitioner has claimed expenditure on some of the works under Regulation 9(2)(ii) i.e. works deferred for execution. However, the same has been considered under Regulation 9(2)(iv).

2011-12

(₹ in lakh)			
Sl.No	Assets/works	Actual expenditure incurred/ claimed	Justification for admissibility of expenditure
1.	Land	773.68	In respect of the demand raised by the Land Acquisition officer, Chamba, towards land acquisition compensation, a provision for Rs. 773.68 lakh was made by the petitioner during 2011-12. The petitioner has however, clarified that the said expenditure has not yet been incurred. Hence, expenditure has not been allowed .
2.	Hydro static lubrication system	2.07	Expenditure allowed under Regulation 9(2)(iv) in order to reduce the maintenance time.
3.	Electric torque wrench	7.92	Since the expenditure is in the nature of tools & tackles, the capitalization after the cut-off date has not been allowed ,
4.	Pump set 20 HP	0.82	Expenditure allowed under Regulation 9(2)(iv) towards uninterrupted water supply to the employees of the project.
5.	Multistage pump with motor	2.43	Expenditure allowed under Regulation 9(2)(iv) for the benefit of employees of the Power House.
6.	Boring machine	0.94	Since the expenditure is in the nature of tools & tackles, the capitalization after the cut-off date has not been allowed ,
7.	Door frame and metal detector (DFMD)	0.72	Expenditure allowed under Regulation 9(2)(iv) for the purpose of security of the generating station.
8.	Operation theater light, urine analyzer, automated hematology analyzer, clinical analyzer, cardiac monitor, IFT machine	14.03	These hospital equipment's have been allowed under Regulation 9(2)(iv) for the benefit of the employees working in remote project areas.
	Total	80.26	
	Total allowed		20.07

Deletions

16. The petitioner has de-capitalized asset (viz Tata sumo-10 seater) and the amount claimed towards de-capitalization on account of replacement of the said asset is as under.

(₹ in lakh)			
	2009-10	2010-11	2011-12
Deletions	(-) 4.06	0.00	0.00

17. As the corresponding asset do not render any useful service in the operation of the generating station, the de-capitalization of the above said expenditure as effected in the books of accounts has been allowed for the purpose of tariff.

Exclusions in additions (incurred, capitalized in books but not claimed for tariff)

18. The following year-wise expenditure has been incurred on replacement of minor assets, purchase of capital spares, purchase of miscellaneous assets, addition on account of inter-unit transfer etc.

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Exclusions in additions (incurred, capitalized in books but not claimed for tariff purpose)	61.97	171.43	161.67

19. As capitalization of expenditure on procurement /replacement of minor assets and procurement of capital spares after the cut-off date are not allowed for the purpose of tariff, the exclusions of the positive entries under the head is in order and is allowed.

Exclusions in deletions (de-capitalised in books but not to be considered for tariff)

20. The petitioner has de-capitalized following expenditure in books of accounts pertaining to capital spares and towards minor assets like computers, office equipment's, power supply system, furniture, fixed assets of minor value less than Rs 5000 etc., on the ground that these spares have become unserviceable/obsolete and also deletion on account of inter-unit transfer of minor assets.

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Exclusions in deletions pertaining to de-capitalization of minor assets	(-) 6.24	(-) 3.15	(-) 19.50
Exclusion in deletions pertaining to de-capitalization of capital spares on consumption	(-) 105.09	(-) 71.23	(-) 81.91
Total deletions claimed under exclusion	(-) 111.33	(-) 74.37	(-) 101.42

21. The petitioner has prayed that the negative entries as above may be ignored/excluded for the purpose of tariff as the corresponding positive entries for purchase of such assets are not being allowed for the purpose of tariff in terms of the provisions of the 2009 Tariff Regulations. In support of this prayer, the petitioner has referred to the observations of the Commission in its order dated 7.9.2010 in Petition No. 190/2009 pertaining to determination

of impact of additional capital expenditure for the years 2006-07, 2007-08 and 2008-09 in respect of this generating station as under:

"Replaced Minor assets

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"

22. The respondent BRPL in its reply has submitted that reliance made by the petitioner to the observations contained in the Commission's order dated 7.9.2010 is not acceptable as the said order was covered under the 2004 Tariff Regulations, whereas the instant case is governed by the provisions of the 2009 Tariff Regulations. Accordingly, the respondent has prayed that the de-capitalized minor assets shall be deleted from the capital cost as per proviso to Regulation 7(1)(c) of the 2009 Tariff Regulations. In response, the petitioner in its rejoinder has clarified as under:

*""Proviso Under Regulation 7(1)(c) is for the assets which are allowed by CERC under Regulation-7,8&9 of CERC Tariff Regulations,2009. This can be understood from the combined reading of Regulation 7,8 &9 which are reproduced below.
xxxxx*

Secondly, there are no separate regulations for capitalization and de-capitalization and what is applicable for capitalization is applicable for de-capitalization. The minor assets, tools and tackles, furniture & fixtures etc. are not allowed for the purpose of tariff under the proviso to Regulation 9(2) and therefore cannot be taken out from the capital cost for the purpose of tariff under provision of Regulation 7(1)."

23. We have considered the submissions of the parties. The provisions of both, the 2004 and the 2009 Tariff Regulations provide that the expenditure on minor items/assets, tools and tackles etc brought after the cut-off date shall not be considered for additional capitalization for determination of tariff. Considering the fact that new assets of minor nature are not considered for capitalization on account of implication of the regulations, the Commission in its order dated 7.9.2010 had concluded that 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. In our view, the generating station in this case, having been denied the capitalization of minor assets on account of the provisions of the regulations,

should not be debarred from servicing the cost of minor assets originally included in the capital cost of the project and replaced by new assets. Accordingly, in line with the decision contained in order dated 7.9.2010 and for the purpose of consistency, the submissions of the petitioner is accepted. Hence, the negative entries corresponding to the deletion of minor assets have been allowed to be excluded/ignored for the purpose of tariff, as prayed for by the petitioner.

24. As regards the prayer of the petitioner for exclusion of negative entries corresponding to de-capitalization of capital spares on consumption, it is to mention that the expenditure on minor assets and capital spares are not allowed to be capitalized after the cut-off date under the 2009 Tariff Regulations. While the recovery of expenditure on capital spares is allowed through O&M expenses on consumption, the recovery of additional expenditure on minor assets beyond the cut-off date is neither allowed to be capitalized nor permissible under O&M expenses. Hence, the observations of the Commission in order dated 7.9.2010 (as quoted above) cannot be made applicable in respect of de-capitalization of spares. Hence, the claim of the petitioner for exclusion of negative entries arising out of de-capitalization of capital spares is justifiable provided that the de-capitalized spares are the ones which were not considered in the capital base for the purpose of tariff.

25. Accordingly, in order to ascertain as to whether the capital spares de-capitalized in books during the period 2009-12 were part of the capital base or not, the petitioner was directed vide record of the proceedings held on 12.9.2013 to furnish the details of the de-capitalized spares along with the year of capitalization.

26. In response, the petitioner vide its affidavit dated 30.9.2013 has furnished the said details. On scrutiny of these details, it is observed that the de-capitalized spares were capitalized in books during the period 2007-11. It is also noticed that the Commission had not allowed capitalisation of spares for the period from 2001-02 onwards. On verification of the petition filed by the petitioner for the period 2004-09 and the submissions in the instant petition it is noticed that the de-capitalized spares, except motor operated mechanism for

220 kV isolator (de-capitalized amount of (-) Rs. 2.21 lakh during 2010-11), Numerical generator protection relay (de-capitalized amount of (-) Rs. 4.22 lakh during 2011-12) and Paperless Temperature scanner (de-capitalized amount of (-) Rs. 9.16 lakh during 2011-12), are the ones whose capitalization has not been allowed for the purpose of tariff i.e the positive entries at the time of capitalization were also excluded/ignored for the purpose of tariff. In view of the above, we conclude that these de-capitalized spares (except for those mentioned above) do not form part of the capital base for the purpose of tariff. Accordingly, negative entries in books arising out of de-capitalization of these spares have been allowed to be excluded/ignored for the purpose of tariff. As regarding the assets (motor operated mechanism for 220 kV isolator, Numerical generator protection relay and Paperless Temperature scanner as mentioned above), it is clarified that these assets have been allowed for the purpose of tariff during the respective years of their capitalisation and are in the capital base for the purpose of tariff. As such, their de-capitalization cannot be allowed to be excluded/ignored on their consumption. Accordingly, the following amounts have been allowed/disallowed under this head:

(₹ in lakh)

	2009-10	2010-11	2011-12
Exclusions in deletions allowed pertaining to de-capitalization of minor assets	(-) 6.24	(-)3.15	(-)19.50
Exclusions in deletions allowed pertaining to de-capitalization of capital spares on consumption	(-) 105.09	(-) 69.02	(-) 68.53
Exclusions in deletions not allowed pertaining to de-capitalization of capital spares on consumption	0.00	(-) 2.21	(-)13.38

Un-discharged liabilities

27. The details of the un-discharged liabilities included in the actual additional capital expenditure capitalized in books of accounts are as under:

(₹ in lakh)

	2009-10	2010-11	2011-12
Un-discharged liabilities	11.51	1.46	786.50

28. As stated, an expenditure of Rs.773.68 lakh during 2011-12 in terms of the demand raised by the Land Acquisition Officer, Chamba towards compensation for land acquisition, has been disallowed for the purpose of tariff. However, the petitioner has included the same

in the un-discharged liabilities for the year 2011-12, as the expenditure is yet to be incurred. Since the same has been disallowed, the said amount has been removed from un-discharged liabilities for 2011-12 in order to avoid double deduction.

29. Accordingly, the following amounts of un-discharged liabilities have been deducted from the additional capital expenditure allowed:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Less: Un-discharged liabilities in the Additional Capital Expenditure	11.51	1.46	12.82

Discharge of Liabilities

Liabilities discharged (Related to un-discharged liability as on 31.3.2009)

30. As per Commission's order dated 15.6.2011 in Petition No. 90/2010, un-discharged liabilities amounting to Rs. 9.87 lakh existed as on 31.3.2009 against assets allowed for the purpose of tariff. However, the petitioner has discharged liabilities amounting to Rs. 8.97 lakh during 2009-10. Accordingly, the amount of Rs. 8.97 lakh is allowed as additional capital expenditure for the purpose of tariff on account of discharge of liabilities, during 2009-10.

Liabilities discharged (Related to un-discharged liability during 2009-12)

31. The liabilities discharged by the petitioner during 2009-12 in terms of Regulation 9(2)(viii) of the 2009 Tariff Regulations and allowed for the purpose of tariff is as under:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Liabilities discharged	0.00	11.18	0.00

Assumed deletions

32. As per consistent methodology adopted by the Commission, expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that the capitalization of the said asset is followed by the de-capitalization of the value of the old asset. However, in certain cases where de-capitalization is proposed to be effected /affected

during the future years to the year of capitalization of new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as “Assumed deletion”.

33. It is observed that the petitioner has sold the asset (Tata sumo vehicle) and has accordingly de-capitalized an amount of (-) Rs. 4.06 lakh in 2009-10 in books of accounts. Against this, the petitioner has claimed additional capital expenditure of Rs. 4.68 lakh for purchase of Mahindra Bolero for security purpose during 2010-11 as replacement. Since the new vehicle against replacement has been purchased in 2010-11, the petitioner has shifted deletion of (-) Rs. 4.06 lakh from 2009-10 to 2010-11 under ‘assumed deletion’. However, considering the fact that de-capitalized asset does not render any useful service from the year 2009-10, its shifting from the year 2009-10 to 2010-11 has not been allowed. Accordingly, the de-capitalized amount of (-) Rs.4.06 lakh has been allowed to be deducted during 2009-10 under this head.

34. Based on the above discussions, the actual additional capital expenditure allowed for the period 2009-12 for the purpose of tariff is summarized as under:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Additions			
Additions against works already approved	14.53	9.53	58.56
Additions not projected earlier but incurred and claimed	4.61	11.08	20.07
Total additions allowed (a)	19.14	20.61	78.63
Deletions allowed (b)	(-) 4.06	0.00	0.00
Exclusions not allowed (c)	0.00	(-) 2.21	(-)13.38
Total additional capital expenditure allowed before un-discharged/assumed deletion/ discharged liabilities (c)=(a)+(b)+(c)	15.08	18.40	65.25
Less: Un-discharged liabilities in the allowed additional capital expenditure	11.51	1.46	12.82
Add: Liabilities discharged during the year (Related to un-discharged liability as on 31.03.2009)	8.97	0.00	0.00
Add: Liabilities discharged during the year out of additional capital expenditure	0.00	11.18	0.00
Add: assumed deletions	(-)4.06	0.00	0.00
Actual additional capital expenditure allowed	8.48	28.12	52.43

Projected Additional Capital Expenditure for 2012-14

35. As against the additional capital expenditure allowed on projected basis by order dated 30.8.2012 in Petition No.19/2011, the petitioner has not revised the additional capital expenditure claim. However, out of the un-discharged liabilities deducted for the purpose of tariff, the petitioner has proposed to discharge expenditures of Rs.12.08 lakh and Rs.3.40 lakh during the years 2012-13 and 2013-14 respectively. The same has been allowed as additional capital expenditure along with projected expenditure of Rs. 100.91 lakh and Rs. 333.67 lakh, for the years 2012-13 and 2013-14 allowed vide order dated 15.6.2011 in Petition No. 90/2010.

Additional capital expenditure allowed for 2009-14

36. In the above background, the revised additional capital expenditure allowed for the purpose of tariff for 2009-14 is as summarized as under:

		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
		Actual			Projected	
Addition						
1	Addition against work already approved	14.53	9.53	58.56	108.00	411.00
2	Addition not projected earlier but incurred and claimed	4.61	11.08	20.07	0.00	0.00
3	Total Addition (1+2)	19.14	20.61	78.63	108.00	411.00
Deletion						
4	Deletion allowed	(-) 4.06	0.00	0.00	(-) 4.09	(-) 77.33
5	Exclusion in deletion (not allowed)	0.00	(-) 2.21	(-) 13.38	0.00	0.00
6	Assumed Deletion	(-) 4.06	0.00	0.00	(-) 3.00	0.00
7	Total Deletion (4+5+6)	(-) 8.12	(-) 2.21	(-) 13.38	(-) 7.09	(-) 77.33
8	Total additional capital expenditure allowed before adjustment of discharge/un-discharge of liabilities (3-7)	11.02	18.40	65.25	100.91	333.67
9	Less: Un-discharged liabilities in the admitted Additional capital expenditure	11.51	1.46	12.82	0.00	0.00
10	Add: Liabilities discharged during the year out of additional capital expenditure	0.00	11.18	0.00	12.08	3.40
11	Add: Liabilities discharged during the year (Related to un-discharged liabilities as on 31-3-2009)	8.97	0.00	0.00	0.00	0.00
12	Additional Capital Expenditure allowed (8-9+10+11)	8.48	28.12	52.43	112.99	337.07

Capital Cost for 2009-14

37. Accordingly, capital cost of the generating station for the period 2009-14 considered for the purpose of tariff is as under:



	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	18199.26	18207.74	18235.86	18288.29	18401.28
Additional Capitalization allowed	8.48	28.12	52.43	112.99	337.07
Capital Cost as on 31 March of the financial year	18207.74	18235.86	18288.29	18401.28	18738.35

Return on Equity

38. The petitioner has considered rate of Return on Equity (ROE) as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Base Rate	15.5%	15.5%	15.5%	15.5%/16.5%	16.5%
Effective Tax Rate	33.990%	33.218%	32.445%	11.330%	11.330%
Tax Rate	30%	30%	30%	10%	10%
Surcharge	10%	7.50%	5%	10%	10%
Education cess	3%	3%	3%	3%	3%
Rate of ROE (pre-tax)	23.481%	23.210%	22.944%	17.762%	18.608%

Note: - Base Rate has been changed from 15.5% to 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Third Amendment) Regulations, 2012, w.e.f. 31.12.2012. The rate of ROE (pre-tax) for the year 2012-13 (17.762%) is the composite rate calculated for the year.

39. The above rates have been considered in the tariff. Accordingly, the Return on Equity has been computed as follows:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	7922.03	7924.58	7933.01	7948.74	7982.64
Addition due to additional capital expenditure	2.54	8.44	15.73	33.90	101.12
Closing Equity	7924.58	7933.01	7948.74	7982.64	8083.76
Average Equity	7923.30	7928.79	7940.88	7965.69	8033.20
Return on Equity	1860.47	1840.27	1821.95	1414.87	1494.82

Interest on loan

40. The normative loan in respect of the project has already been repaid. The normative loan on account of the admitted additional capital expenditure during the respective years of the entire tariff period have been considered as fully paid, as the admitted depreciation is more than the amount of normative loan in these years. As such, the Interest on loan during the period 2009-14 is 'Nil'.

Depreciation

41. The date of commercial operation of the generating station is 1.4.1982. Since the generating station has completed 12 years of operation as on 1.4.1994, the remaining depreciable value has been spread over the balance useful life of the assets. Assets

amounting ₹8.12 lakh, ₹2.21 lakh, ₹13.38 lakh, ₹7.09 lakh and ₹77.33 lakh have been de-capitalized during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. As per methodology adopted, the amount of cumulative depreciation allowed in tariff against those de-capitalized assets has been calculated on pro-rata basis. Further, proportionate adjustment has been made to the cumulative depreciation on account of de-capitalization of assets considered for the purpose of tariff. The necessary calculations in support of depreciation are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block as on 31.3.2009	18199.26	18207.74	18235.86	18288.29	18401.28
Additional capital expenditure	8.48	28.12	52.43	112.99	337.07
Closing gross block	18207.74	18235.86	18288.29	18401.28	18738.35
Average gross block	18203.50	18221.80	18262.08	18344.79	18569.82
Depreciable Value	16249.75	16266.22	16302.47	16376.91	16579.44
Balance useful life of the asset	8.0	7.0	6.0	5.0	4.0
Remaining Depreciable Value	5932.25	5212.12	4505.21	3837.95	3278.01
Depreciation	741.53	744.59	750.87	767.59	819.50

O&M Expenses

42. The O&M expenses allowed by Commission's order dated 31.8.2012 in Review Petition No. 19/2011 has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses	6045.99	6391.82	6757.43	7143.96	7552.59

Interest on Working Capital

43. In accordance with sub-clause (c) of clause (1) of Regulation 18 of the 2009 regulations, working capital in case of hydro generating stations shall cover:

- (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.*

44. Clauses (3) and (4) of Regulation 18 of the 2009 Tariff Regulations, the rate of interest on working capital 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. Interest on working capital shall be

payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

45. Accordingly, Interest on Working capital has been calculated as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	906.90	958.77	1013.61	1071.59	1132.89
O & M expenses	503.83	532.65	563.12	595.33	629.38
Receivables	1500.78	1558.38	1620.32	1621.54	1715.49
Total	2,911.51	3,049.81	3,197.05	3,288.47	3,477.76
Interest on Working Capital @12.25%	356.66	373.60	391.64	402.84	426.03

Annual Fixed Charges

46. The annual fixed charges for the period 2009-14 allowed in respect of the generating station are summarized as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity	1860.47	1840.27	1821.95	1414.87	1494.82
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	741.53	744.59	750.87	767.59	819.50
Interest on Working Capital	356.66	373.60	391.64	402.84	426.03
O & M Expenses	6045.99	6391.82	6757.43	7143.96	7552.59
Total	9004.65	9350.28	9721.89	9729.25	10292.94

47. The annual fixed charges allowed as above are subject to truing up in terms of Regulation 6 of the 2009 Tariff Regulations.

48. The difference in the annual fixed charges determined by order dated 15.6.2011/31.8.2012 and those determined by this order shall be adjusted in accordance with the relevant provisions of Regulation 6 (6) of the 2009 Tariff Regulations.

49. Petition No. 140/GT/2013 is disposed of in terms of the above.

Sd/-
[M.Deena Dayalan]
Member

Sd/-
[V. S. Verma]
Member