CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 317/GT/2014

Coram:

Shri A.S. Bakshi, Member Dr. M. K. Iyer, Member

Date of Hearing: 20.5.2016 Date of Order : 29.7.2016

In the matter of

Revision of tariff of Rihand Super Thermal Power Station Stage-I (1000 MW) for the period from 1.4.2009 to 31.3.2014-Truing up of order dated 15.5.2014 in Petition No. 176/GT/2013

And in the matter of

NTPC Ltd NTPC Bhawan, Core-7, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003)

.....Petitioner

Vs

- Uttar Pradesh Power Corp. Ltd. (UPPCL)
 Shakti Bhawan
 Ashok Marg
 Lucknow 226 001.
- Jaipur Vidyut Vitran Nigam Ltd. (JVVN) Vidyut Bhawan, Janpath, Jaipur 302 005 Rajasthan
- 3. Ajmer Vidyut Vitran Nigam Ltd. (AVVN) Old Power House, Hathi Bhata, Jaipur Road, Ajmer-305001 Rajasthan
- 4. Jodhpur Vidyut Vitran Nigam Ltd. (JdVVN) New Power House, Industrial Area, Jodhpur, Rajasthan
- Tata Power Delhi Distribution Ltd.
 Grid Substation, Hudson Road
 Kingsway Camp



Delhi-110009.

BSES Rajdhani Power Ltd.,
 2nd floor, B-Block
 BSES Bhawan, Nehru Place
 New Delhi-110019.

7. BSES Yamuna Power Ltd., Shakti Kiran Building Karkardooma Delhi-110092

8. Haryana Power Purchase Centre (HPPC) Shakti Bhawan, Sector – VI, Panchkula Haryana – 134 109

9. Punjab State Power Corporation Ltd. (PSPCL) The Mall

Patiala - 147 001

Himachal Pradesh State Electricity Board Ltd. (HPSEB)
 Kumar Housing Complex Building-II
 Vidyut Bhawan
 Shimla – 171 004

Power Development Department (J&K)
 Govt. of J&K, Secretariat
 Srinagar

Electricity Department (Chandigarh)
 Union Territory of Chandigarh
 Addl. Office Building
 Sector-9 D, Chandigarh

13. Uttarakhand Power Corporation Ltd. (UPCL)Urja Bhawan, Kanwali RoadDehradun – 248 001Uttarakhand

...Respondents

Parties present:

For Petitioner: Shri Vivek Kumar, NTPC

Shri Nishant Gupta, NTPC Shri E.P. Rao, NTPC Shri Ajay Dua, NTPC

Shri Rajeev Chaudhary, NTPC

For Respondents: Smt. Smriti Mishra, TPDDL

Shri Manoj Kumar Sharma, Advocate, Rajsthan Discoms

Shri Manish Garg, BYPL and UPPCL Shri Sameer Singh, Advocate, BYPL Shri Nishant Grover, Advocate, BYPL Shri R.B. Sharma, Advocate, BRPL



ORDER

This petition has been filed by the petitioner, NTPC for revision of the annual fixed charges in respect of Rihand Super Thermal Power Station Stage-I (1000 MW) ('the generating station') for the period from 1.4.2009 to 31.3.2014 in terms of clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

- 2. The generating station with a capacity of 1000 MW comprises of two units of 500 MW each and the said units were declared under commercial operation on 1.1.1990 and 1.1.1991 respectively.
- 3. The Commission vide order dated 7.6.2012 in Petition No. 261/2009 has approved the annual fixed charges of the generating station considering the capital cost of ₹240456.49 lakh as on 1.4.2009, after deduction of un-discharged liabilities of ₹2660.77 lakh as on 1.4.2009. The petitioner filed Review Petition No. 22/2012 seeking review of the said order dated 7.6.2012 and the Commission by order dated 22.4.2013 has revised the annual fixed charges vide order dated 7.6.2012. Thereafter, in Petition No. 176/GT/2013 filed by the petitioner for revision of tariff based on truing-up in terms of the proviso to clause 6(1) of the 2009 Tariff Regulations, the Commission vide order dated 15.5.2014 revised the annual fixed charges of the generating station based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 and projected additional capital expenditure for the years 2012-13 and 2013-14 as based on the latest estimates and status of works. Aggrieved by the said order dated 15.5.2014, the petitioner filed Review Petition (RP. No. 21/RP/2014) and the same was allowed by order dated 1.10.2014 on the grounds of "consideration of depreciable value of leasehold land, adjustment of cumulative depreciation on account of de-capitalization of locos and wagons, and consideration of de-capitalization of spares in the year it was effected".

However, the Commission in the said order, observed that the above errors would be rectified at the time of revision of tariff based on truing up as per Regulation 6(1) of 2009 Tariff Regulations.. The annual fixed charges allowed in order dated 15.5.2014 is as under:-

(₹in lakh) 2009-10 2010-11 2011-12 2012-13 2013-14 Depreciation 4652.73 4607.88 4631.29 4835.39 5070.98 Interest on Loan 28.56 0.00 0.00 0.00 0.00 Return on Equity 28077.74 27825.11 27577.19 27633.41 27691.97 Interest on Working Capital 4708.36 4751.73 4807.38 4618.72 4656.70 **O&M Expenses** 13000.00 13740.00 14530.00 15360.00 16240.00 Secondary fuel oil cost 1603.37 1603.37 1607.76 1603.37 1603.37 Compensation Allowance 350.00 500.00 650.00 650.00 650.00 Special allowance 0.00 0.00 0.00 0.00 0.00 Total 52331.12 52933.05 53704.60 54833.91 56063.70

- 4. 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."

5. The petitioner, vide petition dated 14.8.2014, sought revision of the annual fixed charges based on the actual additional capital expenditure incurred for the years 2012-13 and 2013-14 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. The capital cost and the annual fixed charges claimed by the petitioner for the said years are as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	240456.49	240377.72	242507.80	242439.96	242476.64
Add: Additional capital expenditure	-78.78	2130.08	-67.84	36.69	769.28
Closing Capital Cost	240377.72	242507.80	242439.96	242476.64	243245.92
Average Capital Cost	240417.11	241442.76	242473.88	242458.30	242861.28

Annual Fixed Charges

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4913.43	5074.13	5020.96	5068.28	5170.70
Interest on Loan	28.56	0.00	0.00	0.00	0.00
Return on Equity	28077.74	27825.11	27577.19	27576.12	28249.92
Interest on Working Capital	4624.16	4666.42	4716.49	4755.40	4821.10
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Secondary fuel oil cost	1603.37	1603.37	1607.76	1603.37	1603.37
Compensation Allowance	350.00	500.00	650.00	650.00	650.00
Special allowance	0.00	0.00	0.00	0.00	0.00
	52597.26	53409.03	54102.40	55013.17	56735.08

6. In compliance with the directions of the Commission, the petitioner has filed additional information and has served copies on the respondents. The respondents, Rajasthan Discoms, BRPL and UPPCL have filed replies in the matter and the petitioner has also filed its rejoinder for the same reply. We now proceed to examine the claim of the petitioner based on the submissions of the parties and the documents available on record, as discussed in the subsequent paragraphs.

Capital Cost

7. 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."

8. The petitioner has claimed annual fixed charges for the years 2012-13 and 2013-14 based on the admitted opening capital cost of ₹240456.49 lakh (cash basis) (as on 1.4.2009) and ₹242439.96 lakh (as on 1.4.2012) determined by the Commission's order dated 15.5.2014 in Petition No.176/GT/2013. The Commission in its order dated 15.5.2014 had approved the opening capital cost as on 1.4.2009 after reconciliation of the liabilities and capital cost. There is no variation in the capital cost and liabilities position as on 1.4.2009. The total liabilities amounting to ₹2660.76 lakh included in the gross block as

on 1.4.2009, the approved capital cost of ₹243117.25 lakh is inclusive of un-discharged liabilities of ₹2660.76 lakh. The total un-discharged liabilities of ₹2663.09 lakh include an amount of ₹2660.76 lakh pertaining to period 2004-09 and the balance liabilities for ₹2.33 lakh pertain to disallowed assets/works.

9. Out of the un-discharged liabilities deducted as on 1.4.2009, the petitioner has discharged an amount of ₹29.16 lakh, ₹2593.38 lakh, ₹38.21 lakh during the years 2009-10, 2010-11 and 2012-13 respectively (all liabilities pertaining to period 2004-09). In addition to above discharges, the petitioner has also discharged amount of ₹0.55 lakh, ₹1.06 lakh, ₹1.95 lakh, ₹25.26 lakh during the years 2010-11, 2011-12, 2012-13 and 2013-14 respectively, corresponding to assets admitted during the period 2009-14.

Actual Additional Capital Expenditure

- 10. Clause (2) of Regulation 9 of the 2009 Tariff Regulations provides as under:
 - "9. (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."
- 11. The break-up details of the actual/ projected additional capital expenditure allowed by Commission's order dated 15.5.2014 in Petition No. 176/GT/2013 for the period 2009-14 are as under:

(₹in lakh)

	Head of Works/	2009-10	2010-11	2011-12	2012-13	2013-14	Total
S.N	Equipment		Actual			ected	
Α	Ash Handling System						
	Central Ash Dyke Raising work	1.75	0.00	0.00	0.00	0.00	1.75
	1st raising of Mathini Ash Dyke Lagoon-1	0.00	0.00	0.00	789.91	0.00	789.91
	1st raising of Central Ash Dyke Lagoon-2	0.00	0.00	0.00	911.55	0.00	911.55
	Total- Ash Handling System (A)	1.75	0.00	0.00	1701.46	0.00	1703.21
В	Environmental System						
	Phasing out of Halon fire fighting System with Alternate Inert Gas	0.00	0.00	170.15	0.00	0.00	170.15
	Sub-Total- Environmental System (B)	0.00	0.00	170.15	0.00	0.00	170.15



С	Net item/ works						
	Land(Lease hold)	0.00	327.38	0.00	0.00	0.00	327.38
	Renovation of PLC	2.73	0.00	0.00	0.00	0.00	2.73
	MGR Coal TPT System	1.72	0.00	0.00	0.00	0.00	1.72
	Renovation of Breaker in 400kV System	0.19	0.00	0.00	0.00	0.00	0.19
	Total- Other Capital works (C)	4.64	327.38	0.00	0.00	0.00	332.02
D	Decapitalization						
	Decapitalization against Phasing out of Halon fire fighting System with Alternate Inert Gas	0.00	0.00	(-) 55.23	0.00	0.00	(-) 55.23
	Decapitalization- Renovation of PLC system	(-) 0.13	0.00	0.00	0.00	0.00	(-) 0.13
	Sub-total (D)	(-) 0.13	0.00	(-) 55.23	0.00	0.00	(-) 55.36
	Total(A+B+C)	6.39	327.38	170.15	1701.46	0.00	2205.38
1	Total (A+B+C+D)	6.26	327.38	114.92	1701.46	0.00	2150.02
2	Exclusions not allowed	(-)114.21	(-)791.23	(-)183.82	0.00	0.00	(-)1089.26
н	Total additional capitalization allowed (2-1)	(-)107.95	(-)463.85	(-)68.90	1701.46	0.00	1060.76
	Add: Discharges of liabilities	29.16	2593.93	1.06	0.00	0.00	2624.15
	Total additional capital expenditure allowed	(-) 78.79	2130.08	(-) 67.84	1701.46	0.00	3684.91

12. There is no revision in the actual additional capital expenditure for the period 2009-12 allowed in order dated 15.5.2014 in Petition No. 176/GT/2013. Hence, the actual additional capital expenditure incurred during the years 2012-13 and 2013-14 has only been considered in this order. The break-up details of the actual additional capital expenditure claimed for the years 2012-13 and 2013-14 are as under:

(₹in lakh)

	Head of Work/ Equipment	Regulations under which claimed	Actual Additional capital expenditure		Total claimed
			2012-13	2013-14	
Α	Ash Handling System				
	1st raising of Mithini Ash Dyke Lagoon-1	9 (2) (iii)	0.00	0.00	0.00
	1st raising of Central Ash Dyke Lagoon-2	9 (2) (iii)	0.00	751.71	751.71

	Total- Ash Handling System (A)		0.00	751.71	751.71
В	Environmental System				
	Phasing out of Halon fire fighting System with Alternate Inert Gas	9 (2) (ii)	0.00	0.00	0.00
	Sub-Total-Environmental System (B)		0.00	0.00	0.00
С	Net item/ works				
	Land(Freehold-Plant/Office)	9 (2) (viii)	0.00	0.68	0.68
	MGR Work	9 (2) (i)	20.98	0.00	20.98
	Total- Other Capital works (C)		20.98	0.68	21.66
D	Decapitalization				
	Decapitalization SAP license		(-)4.73	0.00	(-)4.73
	Sub total (D)		(-)4.73	0.00	(-)4.73
	Total additional capital expenditure (A+B+C+D+E)		16.25	752.39	768.64
F	Exclusions Disallowed		0.00	0.00	0.00
G	Discharge of liabilities				
	Discharge of liabilities by way of payment out of liabilities on allowed item before 1.4.2009	9 (2) (viii)	18.49	0.00	18.49
	Discharge of liabilities by way of payment out of liabilities on claimed item after 1.4.2009	9(2) (viii)	1.95	16.89	18.84
	Total discharge of liability		20.44	16.89	37.33
н	Total additional capital expenditure claimed		36.69	769.28	805.97

- 13. The respondents, Rajasthan Discoms and BRPL have submitted that the petitioner has not submitted the Auditor Certificates in support of the additional capital expenditure claimed in the petition. In its rejoinder, the petitioner has submitted that the Auditor Certificates have been submitted vide affidavit dated 29.9.2014.
- 14. The petitioner has claimed additional capital expenditure of ₹805.97 lakh for the period 2012-14 as against the total estimated additional capital expenditure of ₹1706.46 lakh for 2012-14 allowed vide Commission's order dated 15.5.2014. Thus, there is decrease in the petitioner's claim for additional capitalization, which is due to decrease in the actual additional capital expenditure for Ash Dyke Raising. We now examine the claim of the petitioner and their admissibility, on prudence check, as stated in the subsequent paragraphs.

1st Raising of Central Ash Dyke Lagoon-II

- 15. The petitioner has claimed actual additional capital expenditure of ₹751.71 lakh in 2012-13 towards 1st Raising of Central Ash Dyke Lagoon-II under Regulation 9(2)(iii) of the 2009 Tariff Regulation. It is observed that there is a reduction in the expenditure towards Ash Dyke Work / Ash handling system claimed in this petition as against the expenditure approved by the Commission in order 15.5.2014 in Petition No. 176/GT/2013. The petitioner vide affidavit dated 14.8.2014 has submitted in Form 9 of the petition that the projection of ₹911.55 lakh towards the 1st Raising of Central Ash Dyke Lagoon-II was based on the awarded price. It has also submitted that the actual capital expenditure of ₹751.71 lakh is based on the actual execution of work. The petitioner has not claimed any expenditure towards the raising works approved for Lagoon-I. It has submitted that the works corresponding to Lagoon-I have been awarded and are likely to be completed in the tariff period 2014-19. The petitioner has prayed that since the petitioner has already spent an amount of ₹622.35 lakh till 31.3.2014, against the packages which have been reflected in CWIP in the books of account for the 2013-14, the same may be considered during the next tariff period. The respondent, BRPL has submitted that in the context of the fact that this power station will be completing 25 years in next tariff period and whether the attempt to raise the Ash Dyke is to set the generating station in perfect working condition before claiming Special Allowance under the 2014 Tariff Regulations. The petitioner in its rejoinder dated 16.6.2016 has stated that this submission of the respondent, BRPL is without basis and is an attempt to confuse the issue.
- 16. The matter has been considered. The petitioner has submitted that the works corresponding to Lagoon-I have been awarded and are likely to be completed in the 2014-19 period and the same will be considered during the 2014-19 tariff period. It is observed that the capitalization value of Ash dyke raising work in Lagoon-II has decreased from the

approved amount of ₹911.55 lakh to ₹751.71 lakh based on the actual execution of work. The reasons furnished by the petitioner for the variation in the projected cost for Ash dyke work is found justified and is in order. In the light of the above, we allow the actual additional capital expenditure of ₹751.17 lakh incurred in 2012-13 under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Freehold land Plant/Office

17. The petitioner has claimed additional capital expenditure ₹0.68 lakh in 2013-14 towards expenditure on Freehold land for plant/office under Regulation 9(2)(viii) of the 2009 Tariff Regulations. The petitioner has submitted that the payment of ₹0.68 lakh has been made on account of settlement of long pending issue with the land oustee on compensation of the damaged crop during construction of MGR line. The petitioner has enclosed the case letters dated 1.7.2012, 7.7.2012, 17.7.2012, 20.7.2012 of Lok Adalats of district Sonbhadra, and compromise letters dated 1.7.2012 with the concerned individuals for the compensation paid in support of the above expenditure. Accordingly, on prudence check, it is observed that the actual expenditure incurred is in order and justified. Hence, the expenditure of ₹0.68 lakh is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

MGR Work

18. The petitioner has claimed the additional capital expenditure ₹20.98 lakh during 2012-13 towards MGR work under Regulation 9(2)(i) of the 2009 Tariff Regulations. In justification of the same on the same, the petitioner has submitted that the original scope of work related to MGR was allowed as part of the capital cost. It has submitted that a part of this work was awarded to M/s IRCON on cost plus basis which has sub contracted some of it to a sub-contractor M/s J P Yadav. The petitioner has submitted that, thereafter the sub-contractors had gone for arbitration due to some dispute and the additional

payment made by M/s IRCON to its subcontractor based on Arbitration Award has been reimbursed by the petitioner to M/s IRCON. It has submitted that M/s IRCON has challenged the Arbitration Award in High Court against the Contractor and the same is pending. In response to the submission of BRPL, the petitioner vide its rejoinder affidavit dated 16.6.2016 has reiterated the same submission.

19. We have examined the matter. The petitioner vide affidavit dated 20.6.2016 has submitted that no payment has been received from M/s IRCON towards the arbitration award payment made to the contractor M/s J P Yadav and the matter is pending before Hon'ble High Court. It is also observed that the arbitration proceedings relate the dispute between the petitioner's contractor M/s IRCON and its sub-contractor M/s J P Yadav. We are of the considered view that since the award of arbitration is against IRCON and not the petitioner, there is no reason to consider the claim of the petitioner. Accordingly, the claim for additional capital expenditure ₹20.98 lakh in 2012-13 towards Arbitration award is disallowed.

De-capitalization

20. The petitioner has claimed de-capitalization of (-) ₹4.73 lakh on account of SAP license in 2012-13 and the same is in order and allowed.

Exclusions

21. The reconciliation of the actual additional capital expenditure for the period 2012-14 with books of accounts as submitted by the petitioner is as under:

		1	(₹in lakh)
S.No.	Particular	2012-13	2013-14
1	Closing Gross Block as per Audited Balance Sheet as on previous year	246863.93	249093.68
2	Less: Asset held for disposal	20.69	0.00
3	Opening Gross Block	246843.24	249093.68
4	Closing Gross Block	249093.68	253485.40
5	Addition During the Year (4-3)	2250.44	4391.72
7	Total Additional capital expenditure claimed	36.69	769.27

S.No.	Particular	2012-13	2013-14
	on cash basis during the year (as per form 9)		
8	Liabilities discharged during the year	20.44	16.89
9	Net Additional capital expenditure claimed during the period on cash basis (7-8)	16.25	752.38
10	Add: Undischarged Liabilities	0.00	188.94
Α	Total Additional capitalisation / de- capitalization claimed gross basis (9+10)		
	Exclusion during the period		
	Items disallowed	518.45	531.21
	De-capitalisation	-152.51	-153.15
	FERV	198.29	223.55
	Capital Spares	1839.52	3478.62
	De-capitalisation of spares not part of capital cost	-139.80	-59.55
	De-capitalisation of spares part of capital cost	0.00	-442.31
	De-capitalisation of MBOA	-9.13	0.00
	De-capitalisation of Wagons	0.00	-119.59
	Liability reversal	-20.62	-8.38
В	Total exclusions	2234.19	3450.40
	Additional Capital Expenditure (A+B)	2250.44	4391.72

22. It is noticed from the above that the actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts. This is on account of exclusion of certain expenditure and un-discharged liabilities for the purpose of tariff. The summary of exclusions claimed as per books of accounts is examined as under:

		(₹in lakh)
	2012-13	2013-14
Items disallowed	518.45	531.21
De-capitalisation	(-) 152.51	(-) 153.15
FERV	198.29	223.55
Capital Spares	1839.52	3478.62
De-capitalisation of spares not	(-) 139.80	(-) 59.55
part of capital cost	. ,	. ,
De-capitalisation of spares part of capital cost	0.00	(-) 442.31
De-capitalisation of MBOA	(-) 9.13	0.00
De-capitalisation of Wagons	0.00	(-) 119.59
Liability reversal	(-) 20.62	(-) 8.38
Total exclusions	2234.19	3450.40

Items Disallowed

23. The petitioner has sought the exclusion of ₹518.45 lakh in 2012-13 and ₹531.21 lakh in 2013-14 against the capitalization of item disallowed by Commission. Since the

items are not part of capital cost, the aforesaid claim for exclusion is in order and is allowed.

De-Capitalization of item Disallowed

24. The petitioner has de-capitalized in books of accounts (-) ₹152.51 lakh in 2012-13 and (-) ₹153.15 lakh in 2013-14 against the de-capitalization of item disallowed by Commission. We have examined and noticed the de-capitalized items are part of capital cost. Hence, the aforesaid claim for exclusion is not allowed.

FERV

25. The petitioner has excluded an amount of ₹198.29 lakh during 2012-13 and ₹223.55 lakh during 2013-14 on account of impact of FERV. As the petitioner has billed the said amount directly to the beneficiaries in accordance with the Tariff Regulations, 2004, the exclusion of FERV is in order and has been allowed.

Capitalization of Capital Spares

26. The petitioner has procured spares amounting to ₹1839.52 lakh in 2012-13 and ₹3478.62 lakh in 2013-14 for maintaining stock of necessary spares. Since capitalization of spares over and above initial spares procured after the cut-off date are not allowed for the purpose of tariff as they form part of the O&M expenses, the aforesaid claim for exclusion is in order and is allowed.

De- capitalization of Capital Spares

27. The petitioner has de-capitalized in books of accounts capital spares amounting to (-) ₹139.80 lakh in 2012-13 to (-) ₹501.86 lakh in 2013-14 on account of consumption of these spares. The exclusion sought on de-capitalization of spares has been examined. It is noticed that the spares of (-) ₹139.80 lakh claimed in 2012-13 are not part of the capital cost of the generating station and thus are allowed under exclusion. Further, for 2013-14,

out of the claim of (-) ₹501.86 lakh, spares amounting to ₹59.55 lakh do not form part of the capital cost, while the de-capitalized capital spares amounting to (-) ₹442.31 lakh are part of capital cost. Accordingly, spares for (-) ₹442.31 lakh during 2013-14 are not allowed for exclusion.

De-capitalization of MBOA items

28. The petitioner has de-capitalized MBOA items in books of accounts amounting to (-) ₹9.13 lakh in 2012-13. The exclusions sought on de-capitalization of MBOA has been examined and it is noticed that MBOA item are part of capital cost. Hence, exclusion of de-capitalization of assets amounting to (-) ₹9.13 lakh in 2012-13 has not been allowed.

De-capitalization of wagons

29. The petitioner has excluded an amount of (-) ₹119.59 lakh in 2012-13 on account of de-capitalization of wagons. It is observed that Wagons are part of capital cost. Hence, exclusion of (-) ₹119.59 lakh in 2013-14 towards Wagons has not been considered for the purpose of tariff.

Reversal of liability

- 30. The petitioner has sought the exclusion of (-) ₹20.62 lakh in 2012-13 and (-) ₹8.38 lakh in 2013-14. The net additional capitalization during the years 2012-13 and 2013-14 is "nil" against the reversal of liability. In view of the submission of the petitioner that capital cost for the purpose of tariff is to be worked out by considering expenditure on cash basis, the reversal of liability is allowed under exclusion.
- 31. Based on the above, the summary of exclusions allowed and disallowed for the period 2012-14 is as under:

		(₹in lakh)
	2012-13	2013-14
Exclusion claimed	2234.19	3450.40
Exclusion allowed	2395.83	4165.45
Exclusion not allowed	(-)161.64	(-)715.05

32. Accordingly, the actual additional capital expenditure allowed for the period 2012-

14 is summarised as under:

(₹in lakh)

	Head of Work/ Equipment	Actual Ac		Total
		2012-13	2013-14	allowed
Α	Ash Handling System			
	1 st raising of Mithini Ash Dyke Lagoon-1	0.00	0.00	0.00
	1 st raising of Mithini Ash Dyke Lagoon-2	0.00	751.71	751.71
	Total- Ash Handling System (A)	0.00	751.71	751.71
В	Environmental System			
	Phasing out of Halon fire fighting System with Alternate Inert Gas	0.00	0.00	0.00
	Sub-Total-Environmental System (B)	0.00	0.00	0.00
C	Net item/ works			
	Land(Leasehold)	0.00	0.00	0.00
	Land(Freehold-Plant/Office)	0.00	0.68	0.68
	Total- Other Capital works (C)	0.00	0.68	0.68
D	De-capitalization			
	De-capitalization SAP licence	-4.73	0.00	-4.73
	Sub total (D)	-4.73	0.00	-4.73
	Total Add-cap (A+B+C+D+E)	-4.73	752.39	747.66
F	Exclusions Disallowed	-161.64	-715.05	-876.69
G	Discharge of liabilities*			
	Discharge of liabilities by way of payment out of liabilities on allowed item before 1.4.2009	18.49	0.00	18.49
	Discharge of liabilities by way of payment out of liabilities on claimed item after 1.4.2009	1.95	16.89	18.84
	Total discharge of liability	20.44	16.89	37.33
Н	Toal Additional capital expenditure allowed	-145.93	54.23	-91.70

^{*}Discharged liabilities claimed corresponding to disallowed works have been disallowed

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

(₹in lakh)

	As per previous order			As approved		
	2009-10	2010-11	2011-12	2012-13	2013-14	
Opening Capital Cost	240456.49	240377.70	242507.78	242439.94	242294.01	
Add: Additional capital expenditure	(-) 78.79	2130.08	(-) 67.84	(-)145.93	54.23	
Closing Capital Cost	240377.70	242507.78	242439.94	242294.01	242348.24	
Average Capital Cost	240417.10	241442.74	242473.86	242366.98	242321.13	



Debt-Equity Ratio

34. The gross loan and equity of ₹120868.24 lakh and ₹119588.26 lakh respectively as allowed in order dated 15.05.2014 in Petition No. 176/GT/2013 has been considered as gross loan and equity as on 1.4.2009 after adjustment of un-discharged liabilities amounting to ₹2660.76 lakh. Further, the admitted additional expenditure has been allocated in the debt and equity ratio of 70:30.

Return on Equity

35. The petitioner has considered pre tax ROE of 22.944% during 2012-13. The respondent, BRPL has submitted that the petitioner may be directed to furnish the actual tax rate paid against the generating station duly audited and certified by auditors as per requirements of Regulation 6(3) of the Tariff Regulations, 2009. In response, the petitioner submitted that RoE claim of petitioner is strictly as per Regulation 15(3) of the 2009 Tariff Regulations. In view of the fact that pre-tax ROE works out to 23.481%, considering the actual tax rate for 2013-14, the same has been considered. Accordingly, return on equity is worked out as under:

(₹in	lakh,
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Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	119588.25	119564.62	120203.64	120183.29	120139.51
Addition of Equity due to additional capital expenditure	(-)23.64	639.02	(-)20.35	(-) 43.78	16.27
Normative Equity-Closing	119564.62	120203.64	120183.29	120139.51	120155.78
Average Normative Equity	119576.43	119884.13	120193.46	120161.40	120147.64
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
Tax Rate for the year	33.990	33.218	32.445	32.445	33.990
Rate of Return on Equity (Pre Tax)	23.481	23.210	22.944	22.944	23.481
Return on Equity(Pre Tax) annualised	28077.74	27825.11	27577.19	27569.83	28211.87

Interest on loan

- 36. Interest on loan has been worked out as under:
 - (a) Gross normative loan amounting to ₹122256.67 lakh as on 1.4.2012 as considered in the order dated 15.5.2014 in Petition No. 176/GT/2013 worked out

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based on capital cost of ₹240456.49 lakh as on 1.4.2009 has been considered for the purpose tariff.

- (b) Cumulative repayment amounting to ₹117608.71 lakh as on 31.3.2009 as considered in order dated 15.5.2014 in Petition No. 176/GT/2013 has been considered as cumulative repayment as on 1.4.2009. However, after taking into account the proportionate adjustment (duly taking into account the liability and debt position as on 1.4.2004 along with additions during the tariff period 2004-09, if any) to the cumulative repayment on account of un-discharged liabilities deducted from the capital cost as on 1.4.2009, the cumulative repayment as on 1.4.2009 is revised to ₹118071.58 lakh. The net normative opening loan as on 1.4.2009 works out to ₹2796.66 lakh. Apart from above, addition of loan on account of admitted additional capital expenditure has been considered.
- (c) Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further, proportionate adjustment has been made to the repayments corresponding to discharges of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009.
- 37. The necessary calculations for interest on loan are given as under:

(₹ in lakh)	(₹	in	lakh)	١
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Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	120868.24	120813.09	122304.14	122256.66	122154.50
Cumulative repayment of loan upto previous year	118071.58	120813.09	122304.14	122256.66	122154.50
Net Loan Opening	2796.66	0.00	0.00	0.00	0.00
Addition due to additional capital expenditure	(-)55.15	1491.06	(-)47.49	(-)102.15	37.96
Repayment of loan during the year	2647.54	1543.11	55.43	134.10	1039.03
Less: Repayment adjustment on account of decapitalization	(-)99.04	(-)399.10	102.92	229.61	1001.07
Add: Repayment adjustment on account of discharges liabilities deducted as on 1.4.2009	(-)5.07	(-)451.15	0.00	-6.65	0.00
Net Repayment	2741.51	1491.06	(-)47.49	(-)102.15	37.96
Net Loan Closing	0.00	0.00	0.00	0.00	0.00
Average Loan	1398.33	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest of Ioan (%)	2.042	1.238	2.343	3.6563	3.8907
Interest on Loan	28.56	0.00	0.00	0.00	0.00

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Depreciation

38. The cumulative depreciation as on 31.3.2009 as per order dated 15.5.2014 in Petition No. 176/GT/2013 works out to ₹179923.96 lakh. Proportionate adjustment has been made to this cumulative depreciation on account of the un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹179863.28 lakh. The value of freehold land considered in order dated 15.5.2014 in Petition No. 176/GT/2013 and subsequent discharges/reversal and the same has been considered for the purpose of calculating the depreciable value. Further, in accordance with the order dated 1.10.2014 in Petition No. 21/RP/2014, the amount of ₹327.38 lakh which was inadvertently considered on account of freehold land has been corrected and has been considered as leasehold land. The cumulative depreciation has been adjusted for de-capitalization, if any, considered during the period 2009-14. Necessary calculations in support of depreciation are as under:-

(₹in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	240456.50	240377.73	242507.81	242439.97	242294.01
Add: Additional Capital Expenditure	-78.79	2130.08	-67.84	-145.93	54.23
Closing Capital Cost	240377.73	242507.81	242439.97	242294.01	242348.24
Average Capital Cost	240417.12	241442.77	242473.89	242366.99	242321.13
Rate of Depreciation	1.9353%	1.9182%	1.9082%	1.9411%	1.9551%
Depreciable value (excluding land)@ 90%	213595.58	213357.37	212829.41	213027.86	212985.03
Balance depreciable Value	33732.28	28946.60	24290.68	19994.66	15396.94
Depreciation (annualized)	4652.73	4631.46	4626.80	4704.63	4737.52
Cumulative depreciation at the end of the year	179863.28	184410.77	188538.73	193033.20	197588.09
Less: Cumulative Depreciation adjustment on account of un-discharged liabilities	22.10	9.63	0.00	0.00	0.00
Less: Cumulative Depreciation reduction due to de-capitalization	127.34	513.13	132.32	149.73	643.55
Cumulative depreciation (at the end of the period)	184410.77	188538.73	193033.20	197588.09	201682.07

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O&M Expenses

39. O&M expenses as considered in order dated 15.5.2014 in Petition No. 176/GT/2013 has been allowed as under:

	(₹in lakh)
2012-13	2013-14
15360.00	16240.00

Normative Annual Plant Availability Factor (NAPAF)

40. The NAPAF of 85% as considered in order dated 15.5.2014 in Petition No. 176/GT/2013 has been considered for the purpose of tariff.

Interest on Working Capital

- 41. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:
 - (i) Cost of coal for 1.5 months for pit-head generating stations and two months for nonpithead generating stations, for generation corresponding to the normative annual plant availability factor;
 - (ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;
 - (iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.
 - (iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and
 - (v) O&M expenses for one month.
- 42. Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended on 21.6.2011 provides as under:

"Rate of interest on working capital shall be on normative basis and shall be considered as follows:

- (i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.
- (ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.



Fuel Component in working capital

43. Fuel component in the working capital as considered in order dated 15.5.2014 in Petition No. 176/GT/2013 has been considered as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Coal – 1.50 months	10727.79	10727.79	10757.18	10727.79	10727.79
Cost of secondary fuel oil – two months	267.23	267.23	267.96	267.23	267.23

Maintenance spares

44. Maintenance spares as allowed in order dated 15.5.2014 in Petition No. 176/GT/2013 as stated below, has been considered.

				(₹in lakh)
2009-10	2010-11	2011-12	2012-13	2013-14
2600.00	2748.00	2906.00	3072.00	3248.00

Receivables

45. Receivables have been worked out on the basis of two months of fixed and energy charges as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Energy Charges (two months)	14303.72	14303.72	14342.91	14303.72	14303.72
Capacity Charges (two months)	8721.85	8826.19	8950.00	9105.92	9375.67
Total	23025.57	23129.91	23292.91	23409.64	23679.39

O&M Expenses

46. O&M expenses for 1 month as allowed in order dated 15.5.2014 in Petition No. 176/GT/2013 has been allowed as under:

 2009-10
 2010-11
 2011-12
 2012-13
 2013-14

 1083.33
 1145.00
 1210.83
 1280.00
 1353.33

47. SBI PLR of 12.25% has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital are as under:



(₹in lakh) 2009-10 2010-11 2011-12 2012-13 2013-14 Coal Stock- 1-1/2 months 10727.79 10727.79 10757.18 10727.79 10727.79 267.23 267.23 267.23 267.23 Oil stock-2 Months 267.96 O & M expenses- 1 Month 1083.33 1145.00 1210.83 1280.00 1353.33 2748.00 Maintenance Spares 2600.00 2906.00 3072.00 3248.00 Receivables- 2 months 23129.91 23292.91 23409.64 23679.39 23025.57 Total Working Capital 38017.92 38434.88 38756.65 39275.74 37703.92 Rate of Interest 12.25 12.25 12.25 12.25 12.25 **Interest on Working Capital** 4618.73 4657.20 4708.27 4747.69 4811.28

Compensation Allowance

48. Compensation Allowance as allowed vide order dated 15.5.2014 in Petition No. 176/GT/2013 has been considered as under.

	(₹in lakh)
2012-13	2013-14
650	650

Annual Fixed Charges

49. Accordingly, the revised annual fixed charges worked out and allowed for the period 2009-14 are summarized as under:

					(₹in lakh
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4652.73	4631.46	4626.80	4704.63	4737.52
Interest on Loan	28.56	0.00	0.00	0.00	0.00
Return on Equity	28077.74	27825.11	27577.19	27569.83	28211.87
Interest on Working Capital	4618.73	4657.20	4708.27	4747.69	4811.28
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of Secondary fuel oil	1603.37	1603.37	1607.76	1603.37	1603.37
Compensation Allowance	350.00	500.00	650.00	650.00	650.00
Annual Fixed Charges	52331.13	52957.12	53700.02	54635.51	56254.03

- 50. The difference in the annual fixed charges determined by order dated 15.5.2014 and those determined by this order shall be adjusted in accordance with the provisions of Regulation 6 (6) of the 2009 Tariff Regulations.
- 51. Petition No. 317/GT/2014 is disposed of in terms of the above.

Sd/-(Dr. M.K.lyer) Member

Sd/-

(A. S. Bakshi) Member

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

(₹ in lakh)

Particulars		Interest Rate					Addition s during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
IBRD main	3.2594%	2.7080%	2.8440%	2.6055%	2.3400%	140.64	0.00	140.64
KFW Dr 2	1.8728%	1.0964%	1.1677%	1.3327%	1.0889%	478.23	0.00	478.23
KFW Dr 3	1.8728%	1.0964%	1.1677%	1.3327%	1.0889%	372.56	0.00	372.56
KFW Dr 4	1.8728%	1.0964%	1.1677%	1.3327%	1.0889%	406.91	0.00	406.91
KFW Dr 5	1.8728%	1.0964%	1.1677%	1.3327%	1.0889%	306.01	0.00	306.01
KFW Dr 6	1.8728%	1.0964%	1.1677%	1.3327%	1.0889%	591.93	0.00	591.93
Vijaya bank	7.3000%	7.3000%	7.3000%	7.3000%	7.3000%	142.86	0.00	142.86
State bank of Patiala	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%	14.29	0.00	14.29
KFW Dr 8	0.9248%	1.0964%	1.1677%	1.3327%	1.0889%	0.00	274.86	274.86
KFW Dr 9	1.0625%	1.0964%	1.1677%	1.3327%	1.0889%	0.00	524.85	524.85
PFC V D-32	10.0300 %	10.0300 %	10.0300%	10.0300%	10.0300%	0.00	700.00	700.00
Total						2453.43	1499.71	3953.14

WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14 TARIFF PERIOD

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Net loan – Opening	2453.43	3149.79	2622.37	2871.41	2418.47
Additions	799.71	0.00	700.00	0.00	0.00
Repayments of Loans during the					
year	103.34	527.42	450.87	453.04	495.66
Net loan - Closing	3149.80	2622.37	2871.50	2418.37	1922.81
Average Net Loan	2801.62	2886.08	2746.94	2644.89	2170.64
Rate of Interest on Loan with	2.0422	1.2381	2.3426	3.6563	3.8907
monthly rests	%	%	%	%	%
Interest on loan	57.22	35.73	64.35	96.70	84.45

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