

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 254/GT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Date of Hearing: 11.09.2014

Date of Order: 07.08.2015

In the matter of

Revision of tariff of Feroze Gandhi Unchahar Thermal Power Station Stage-III (210 MW) for the period from 1.4.2009 to 31.3.2014. Truing-up of Commission's order dated 25.5.2012 in Petition No. 279/2009.

And in the matter of

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

...Petitioner

Vs

1. Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan,
14, Ashoka Road,
Lucknow – 226001

2. Jaipur Vidyut Vitran Nigam Ltd.
Vidyut Bhawan, Janpath,
Jaipur – 302005

3. Ajmer Vidyut Vitran Nigam Ltd.
Old Power House, Hathi Bhsata,
Jaipur Road, Ajmer

4. Jodhpur Vidyut Vitran Nigam Ltd.
New Power house, Industrial Area, Jodhpur

5. Tata Power Delhi Distribution Ltd.
33 kV Sub-station, Hudson Lines,
Kingsway Camp, Delhi – 110009

6. BSES Rajdhani Power Ltd.
2nd Floor, B Block, Nehru Place,
New Delhi 110019



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

8. Haryana Power Purchase Centre,
Shakti Bhawan, Sector VI,
Panchkula - 134019

9. Punjab State Power Corporation Ltd.
The Mall, Patiala – 147001

10. Himachal Pradesh State Electricity Board Ltd,
Vidyut Bhawan, Shimla – 171004

11. Power Development Department (J&K),
Government of J&K,
Mini Secretariat, Jammu

12. Power Department (Chandigarh)
Union Territory of Chandigarh
Addl. Office Building
Sector 9D, Chandigarh

13. Uttrakhand Power Corporation Ltd
Urja Bhawan, Kanwali Road,
Dehradun - 248001

...Respondents

Parties present:

Shri Ajay Dua, NTPC
Shri Bhupinder Kumar, NTPC
Shri Neeraj Kumar, NTPC
Shri Shankar Saran, NTPC
Ms. Rakhi Dua, NTPC
Shri R. B. Sharma, Advocate, BRPL
Shri Manish Garg, UPPCL

ORDER

This petition has been filed by NTPC Ltd for revision of the annual fixed charges for Feroze Gandhi Unchahar Thermal Power Station, Stage-III (210 MW) (the generating station) for the period from 1.4.2009 to 31.3.2014 in terms of the proviso to clause (1) of Regulation 6 of the Central Electricity Regulatory



Commission (Terms and Conditions of Tariff) Regulations, 2009 (the 2009 Tariff Regulations).

2. The Commission vide order dated 25.5.2012 in Petition No. 279/2009 had approved the tariff of the generating station for the period 1.4.2009 to 31.3.2014 taking into account the opening capital cost of ₹86399.48 lakh, after adjusting the un-discharged liabilities of ₹3742.22 lakh as on 1.4.2009 pertaining to the period prior to 1.4.2009, as shown hereunder:

	(₹ in lakh)
Capital cost	90141.71
Less: Un-discharged liabilities	3742.22
Admitted capital cost as on 31.3.2009	86399.48

3. The annual fixed charges approved by the said order dated 25.5.2012 are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4475.12	4494.39	4504.47	4515.11	4521.56
Interest on Loan	3982.66	3630.29	3279.72	2920.08	2556.40
Return on Equity	6104.47	6130.75	6144.51	6159.02	6167.82
Interest on Working Capital	1582.84	1588.74	1597.84	1601.78	1609.06
O&M Expenses	3822.00	4040.40	4271.40	4517.10	4775.40
Cost of Secondary Fuel Oil	323.22	323.22	324.11	323.22	323.22
Total	20290.32	20207.79	20122.05	20036.31	19953.46

4. The petitioner presently seeks revision of the annual fixed charges based on actual additional capital expenditure incurred for the years 2009-10, 2010-11 2011-12 and 2012-13 and the projected additional capital expenditure for the year 2013-14 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. Clause (1) of 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. Replies to the petition have been filed by Respondent No. 1, Uttar Pradesh Power Corporation Ltd (UPPCL), Respondent No 2, Jaipur Vidyut Vitran Nigam Ltd (JVVNL), Respondent No. 6, BSES Rajdhani Power Ltd. (BRPL) and Respondent No 7, BSES Yamuna Power Ltd. The petitioner has also filed additional information called for by the Commission.

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 annual fixed charges claimed in the petition is based on opening capital cost of ₹86399.48 lakh as determined by Commission vide its order dated 25.5.2012 in Petition No. 279/2009. The petitioner vide its affidavit dated 10.9.2013 has furnished the value of capital cost and liabilities as on 1.4.2009 as per books at Form-9A. The details of liabilities and capital cost have been reconciled with the information available with the records of the Commission as under:

	<i>(₹ in lakh)</i>	
	As per Form-9A	As per records of Commission
Capital cost as on 1.4.2009, as per books	91335.26	91335.26
Liabilities included above	3742.22	3742.22

8. It is evident from the above that there is no variation in the capital cost and liabilities position as on 1.4.2009. Further, entire un-discharged liability amounting to

₹3742.22 lakh included in the gross block as on 1.4.2009, form part of the approved capital cost of ₹90141.71 lakh, as on 1.4.2009.

9. Accordingly, the capital cost as on 1.4.2009, after removal of un-discharged liabilities amounting to ₹3742.22 lakh, works out to ₹86399.48 lakh, on cash basis. Further out of the un-discharged liabilities amounting to ₹3742.22 lakh as on 1.4.2009, the petitioner has discharged ₹310.56 lakh, ₹116.27 lakh and ₹23.52 lakh during the years 2009-10, 2010-11, 2011-12 and 2012-13 respectively and has also reversed amounts of ₹232.68 lakh, ₹36.53 lakh and ₹52.80 lakh during the years 2009-10, 2010-11 and 2011-12. The discharge of liabilities along with the discharges corresponding to assets admitted on cash basis, during the period 2009-14 has been allowed as additional capital expenditure during the respective years.

Actual/ Projected Additional Capital Expenditure

10. Clause (2) of Regulation 9 of the 2009 Tariff Regulations provides as under:

“9. Additional Capitalisation

(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. Details of the additional capital expenditure presently claimed are as under:

(₹ in lakh)							
Sl. No.	Particulars	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (Projected)	Total
1	Total additional capitalization	2130.97	813.06	1191.73	332.27	1705.00	6173.02
2	De-capitalization	0.00	0.00	0.00	3.97	0.00	3.97
3	Net Additional Capitalization Claimed (1-2)	2130.97	813.06	1191.73	328.30	1705.00	6169.05
4	Discharge of liability by way of payment before 1.4.2009	310.56	115.56	23.52	0.00	0.00	449.64
5	Discharge of Liability created after 1.4.2009	0.00	0.71	0.00	0.00	0.00	0.71
6	Total discharge of liabilities by way of payment (4+5)	310.56	116.27	23.52	0.00	0.00	450.35
	Total Additional Capital Expenditure Claim (3+6)	2441.52	929.33	1215.25	328.30	1705.00	6619.39



12. The break-up of the additional capital expenditure allowed by Commission's order dated 25.5.2012 in petition no. 279/2009 is as under:

(₹ in lakh)

Sl. No	Head of work/ Equipment	Actual/Projected Capital Expenditure					Total Allowed
		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Projected)	2012-13 (Projected)	2013-14 (Projected)	
A	Deferred liabilities under Regulation 9(2)(i)						
	Construction of D type quarters	0.00	0.00	100.00	250.00	0.00	350.00
	RCC paving & CLSM road	117.78	16.42	0.00	0.00	0.00	134.20
Total (A)		117.78	16.42	100.00	250.00	0.00	484.20
B	Ash Related Works under Regulation 9(2)(iii)						
i.	Ash Management complex gate	20.52	75.33	0.00	0.00	0.00	95.85
ii.	MPP-wet ash disposal system	61.25	18.31	0.00	0.00	0.00	79.56
ii.	Construction of ash corridor road alongside ash pipeline from SS canal	0.00	0.00	62.00	0.00	0.00	62.00
Total (B)		81.77	93.64	62.00	0.00	0.00	237.41
C	Balance payments under Regulation 9(2)(viii)						
i.	ERP implementation	3.91	0.00	0.00	0.00	0.00	3.91
ii.	Balance work in sewerage system	2.49	0.00	0.00	0.00	0.00	2.49
iii.	Green belt development township	0.01	0.00	0.00	0.00	0.00	0.01
iv.	Lighting system	0.00	0.00	0.00	0.00	0.00	0.00
v.	Off site building - structural work	1.14	0.00	0.00	0.00	0.00	1.14
vi.	MPP - Steam Generator supply	0.00	0.88	0.00	0.00	0.00	0.88
vii.	Association Bhawan	0.00	0.19	0.00	0.00	0.00	0.19
viii.	Garbage disposal pit	0.00	0.67	0.00	0.00	0.00	0.67
ix.	TG - supply	0.00	1.12	0.00	0.00	0.00	1.12
Total (C)		7.55	2.86	0.00	0.00	0.00	10.41
Sum Total (A+B+C)		207.10	112.92	162.00	250.00	0.00	732.02
De-capitalization		0.00	0.00	0.00	0.00	0.00	0.00
Net Additional Capitalization		207.10	112.92	162.00	250.00	0.00	732.02

13. The break-up of the additional capital expenditure claimed by the petitioner for 2009-14 is detailed as under:

(₹ in lakh)

Sl. No	Head of work/ Equipment	Actual/Projected Capital Expenditure					
		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (Projected)	Total Claimed
A.	Deferred liabilities under Regulation 9(2)(i)						
i.	Construction of D type quarters	0.00	0.00	168.56	0.00	130.00	298.56
ii.	RCC paving & CLSM road	111.00	16.42	0.00	0.00	0.00	127.42
Total (A)		111.00	16.42	168.56	0.00	130.00	425.98
B	Ash Related Works under Regulation 9(2)(iii)						
i.	Ash Management complex gate	20.52	74.63	0.00	0.00	0.00	95.15
ii.	MPP-wet ash disposal system	61.25	18.31	0.00	7.61	0.00	87.17
ii.	Construction of ash corridor road alongside ash pipeline from SS canal	0.00	0.00	51.58	0.00	0.00	51.58
Total (B)		81.77	92.94	51.58	7.61	0.00	233.90
C	Balance payments under Regulation 9(2)(viii)						
i.	ERP implementation	3.91	0.00	0.00	0.00	0.00	3.91
ii.	Bal work in sewerage system	2.49	0.00	0.00	0.00	0.00	2.49
iii.	Green belt development township	0.01	0.00	0.00	0.00	0.00	0.01
iv.	Lighting system	1.05	0.00	0.00	0.00	0.00	1.05
v.	Off site building - structural work	1.14	0.00	0.04	0.00	0.00	1.18
vi.	MPP - Steam Generator supply	0.00	0.88	0.00	0.00	0.00	0.88
vii.	Association Bhawan	0.00	0.19	0.00	0.00	0.00	0.19
viii.	Garbage disposal pit	0.00	0.67	0.00	0.00	0.00	0.67
ix.	TG - supply	0.00	1.12	0.00	0.00	0.00	1.12
Total (C)		8.60	2.86	0.04	0.00	0.00	11.50
D	New Items / Works						
i.	Making of settling pits in marshal yard CHP area under Regulation 9(2)(ii)	0.00	0.00	0.00	15.10	0.00	15.10
ii.	X-ray baggage inspection under Regulation 9(2)(ii)	0.00	0.00	28.62	0.00	0.00	28.62
iii.	Solar water heater	0.00	0.00	0.00	0.00	0.00	0.00
iv.	Ductable panel New Administrative Building under Regulation 9(2)(viii)	0.00	0.00	9.22	0.00	0.00	9.22
v.	Capital Spares under Regulation 9(2)(viii)	1929.59	700.84	933.70	309.56	0.00	3873.69



vi.	Implementation of 5 Km Scheme under Regulation 9(2)(ix)	0.00	0.00	0.00	0.00	1575.00	1575.00
Total (D)		1929.59	700.84	971.54	324.66	1575.00	5501.63
Sum Total E (A+B+C+D)		2130.96	813.06	1191.72	332.27	1705.00	6173.01
De-capitalization (F)		0.00	0.00	0.00	3.98	0.00	3.98
Net Additional Capitalization (E-F)		2130.96	813.06	1191.72	328.29	1705.00	6169.03

14. It is observed from the table above that the total claim of the petitioner is ₹6173.01 lakh as against the actual / projected additional capital expenditure of ₹732.02 lakh allowed in order dated 25.5.2012 in Petition No. 279/2009. Thus, there is increase of ₹5440.99 lakh which is mainly on account of new claims viz. (i) actual capitalization of ₹ 3873.69 lakh for capital spares during the period 2009-13 and projected additional capital expenditure of ₹1575.00 lakh for implementation of 5 km scheme around the central plants. However, the variation/ difference in the claim under the various heads is as under:

- (a) Less claim of ₹3.51 lakh under the head 'Ash handling system' and ₹58.22 lakh under the head 'Deferred liabilities';
- (b) Higher claim of ₹1.09 lakh under the head 'Balance payments';
- (c) New claims of ₹5501.63 lakh (₹3873.69 lakh for Capital spares, ₹1575.00 lakh for implementation of 5 km scheme around the central plants and ₹52.94 lakh for other assets viz. X-ray baggage inspection and settling pits etc.).

15. The respondent UPPCL, in its reply vide affidavit dated 14.10.2013 has submitted that the petitioner may be directed to submit the additional capital expenditure actually incurred duly audited and certified by the auditors. In response the petitioner in its rejoinder affidavit dated 14.11.2013 has submitted that the auditor certificate for the additional capital expenditure has been submitted vide affidavit dated 11.11.2013. Accordingly, based on the submissions of the parties and the documents available on record, we proceed to examine the petitioner's claim for additional capitalization expenditure, on prudence check as under.

A. Deferred liabilities

Construction of 'D' type quarters

16. The petitioner has claimed additional capital expenditure of ₹298.56 lakh (₹168.56 lakh in 2011-12 (on actuals) and ₹130.00 lakh (on projection) in 2013-14) as against the projected capital expenditure of ₹350.00 lakh (₹100.00 lakh in 2011-12 and ₹250 lakh in 2012-13) allowed in order dated 25.5.2012 in Petition No. 279/2009 for Construction of 'D' type quarters. The petitioner has submitted that the projected additional capital expenditure indicated was based on the latest estimates and status of works. Since, the claim of the petitioner is less than the projected additional capital expenditure allowed vide order dated 25.5.2012, the actual additional capital expenditure of ₹168.56 lakh in 2011-12 and projected additional capital expenditure of ₹130.00 in 2013-14 is allowed under Regulation 9(2)(i) of the 2009 Tariff Regulations.

RCC paving & CLSM road

17. The petitioner has claimed actual additional capital expenditure of ₹127.42 lakh (₹111.00 lakh in 2009-10 and ₹16.42 lakh in 2010-11) as against the actual additional capital expenditure of ₹134.20 lakh allowed in order dated 25.5.2012 in Petition No. 279/2009 for RCC paving & CLSM road. The petitioner vide affidavit dated 15.1.2014 has submitted that the difference of (-)₹6.78 lakh in the claim is on account of (i) FERV of ₹1.25 lakh and (ii) liability of ₹5.53 lakh which was included earlier. In view of the justification furnished by the petitioner, the actual additional capital expenditure of ₹127.42 lakh (₹111.00 lakh in 2009-10 and ₹16.42 lakh in 2010-11) is allowed under Regulation 9(2)(i) of the 2009 Tariff Regulations.

B. Ash related works under the Regulation 9 (2) (iii)

Ash Management Complex Gate

18. The petitioner has claimed actual additional capital expenditure of ₹95.15 lakh (₹20.52 lakh in 2009-10 and ₹74.63 lakh during 2010-11) as against the actual capital expenditure of ₹95.85 lakh (₹20.52 lakh in 2009-10 and ₹75.33 lakh in 2010-11) allowed in order dated 25.5.2012 in Petition No. 279/2009 for the said item. The petitioner vide affidavit dated 17.2.2014 has submitted that the claim is on cash basis and therefore, the variation of ₹0.70 lakh in 2010-11 is on account of discharge of liability in 2010-11. In consideration of the submission of the petitioner, the additional capital expenditure of ₹95.15 lakh (₹20.52 lakh in 2009-10 and ₹74.63 lakh during 2010-11) is allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Wet Ash disposal system

19. The petitioner has claimed actual capital expenditure of ₹87.17 lakh (₹61.25 lakh in 2009-10, ₹18.31 lakh in 2010-11 and ₹7.61 lakh in 2012-13) as against allowed actual capital expenditure of ₹79.56 lakh (₹61.25 lakh in 2009-10 and ₹18.31 lakh in 2010-11) for Wet Ash disposal system. It is noticed that the claim of the petitioner for the period 2009-10 and 2010-11 is same as those allowed vide order dated 25.5.2012 in Petition No. 279/2009. The petitioner vide affidavit dated 15.1.2014 has submitted that the actual claim for additional capital expenditure of ₹7.61 lakh in 2012-13 is on account of balance payment which has been arrived at while working out the details towards closing of contract. In view of the submissions of the petitioner, the actual capital expenditure of ₹87.17 lakh (₹61.25 lakh in 2009-10, ₹18.31 lakh in 2010-11 and ₹7.61 lakh in 2012-13) is allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Construction of a corridor road along side ash pipeline from SS canal

20. The petitioner has claimed actual capital expenditure of ₹51.58 lakh as against the projected capital expenditure of ₹62.00 lakh in 2011-12 allowed vide order dated 25.5.2012 in Petition No. 279/2009 for the said work. Since the actual additional capital expenditure of ₹51.58 lakh claimed is less than the projected additional capital expenditure of ₹62.00 lakh allowed vide order dated 25.5.2012, the actual additional capital expenditure of ₹51.58 lakh for construction of ash corridor road along side pipeline from SS canal is allowed under Regulation 9(2) (iii) of the 2009 Tariff Regulations.

C. Balance Payments under Regulation 9(2)(viii)

21. The petitioner has claimed actual capital expenditure of ₹11.50 lakh (₹8.60 lakh in 2009-10, ₹2.86 lakh in 2010-11 & ₹0.04 lakh in 2011-12) as balance payments for assets such as ERP implementation, balance work in sewage system, lighting system off-site building and Association Bhawan etc. as against the additional capital expenditure of ₹10.41 lakh (₹7.55 lakh in 2009-10 and ₹2.86 lakh in 2010-11) allowed in order dated 25.5.2014 in Petition No. 279/2009. The petitioner vide affidavit dated 15.1.2014 has submitted that the difference of ₹1.05 lakh (₹8.60–₹7.55 lakh) is on account of balance payments against lighting system. In view of this, the actual additional capital expenditure of ₹11.50 lakh (₹8.60 lakh in 2009-10, ₹2.86 lakh and ₹0.04 lakh in 2011-12) is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

D. New items / works

Claim under Regulation 9(2) (ii) i.e. Change-in-law

22. The petitioner has claimed actual additional capital expenditure of ₹28.62 lakh in 2011-12 for X-Ray baggage inspection machine and ₹15.10 lakh in 2012-13 for



making of settling pits in marshal yard CHP area. The petitioner has submitted that settling pits / tanks were made to collect ash & water mixture in a marshalling yard in CHP area. The petitioner has further submitted that as per the Environment (Protection) Rules, 1986 and as per guidelines of the UP Pollution Control Board, no industry or process can discharge its sewage into a stream, well or land etc. in excess of standard norms of TSS (Total Suspended Solid) value above 100 PPM. As regards the actual additional capital expenditure of ₹28.62 lakh claimed for X-ray baggage inspection, the petitioner vide affidavit dated 15.1.2014 has submitted that due to increased threat / risk perception, inspection of the generating station was carried out by the CISF authorities, a Govt. agency who had advised for increase in the security cover of the generating station.

23. The respondent, UPPCL has submitted that the claims made by the petitioner are under change-in-law. Hence, the question of considering the claimed for X-ray baggage inspection machine is to be disallowed. Similarly, the respondent has submitted that the claim for making of settling pits in marshal yard CHP area under the Environment Protection Rules, 1986 which were in existence when the project was envisaged cannot be permitted as the expenditure is not on account of Change-in-law. The respondent, BRPL has submitted that the claim for X-ray baggage inspection machine does not fall within the parameters satisfying the conditions of Change-in-law and hence, the claim may be rejected. The petitioner in its rejoinder has clarified that in view of the increased threat perception as per recommendations of the technical survey report of CISF, X-ray machine was installed and the machine is used in security screening operations. Accordingly, the petitioner has submitted that for safety and security of the plant it is necessary to install this machine. As regards, the capitalization of additional expenditure towards settling pit in marshal

yard CHP area, the petitioner has reiterated its submissions made earlier and has prayed for allowing the said expenditure.

24. We have examined the matter. Considering the recommendations of CISF for increase in security and since the expenditure is necessary for the safety and security of the plant, we allow the additional capital expenditure of ₹28.62 lakh towards X-ray baggage inspection machine for the year 2011-12 under Regulation 9(2) (ii) of the 2009 Tariff Regulations. Since the actual additional capital expenditure of ₹15.10 lakh has been incurred by the petitioner towards compliance with the guidelines of U.P. Pollution Control Board in terms of the Environment (Protection) Rules, 1986, the submissions of the petitioner is accepted and the expenditure incurred towards settling pit in marshal yard of CHP for the year 2012-13 under Regulation 9(2) (ii) of the 2009 Tariff Regulations is allowed.

25. It is observed that the petitioner has capitalized ₹24.80 lakh in the books for Solar Water Heater system during 2012-13 and has indicated the same as un-discharged liability. It is thus evident that the capitalization on cash basis for this asset is 'nil' during 2012-13. In justification of the said claim, the petitioner has submitted that while the work has been awarded and executed pending testing, the expenditure of ₹24.80 lakh has been shown as liability and will be discharged thereafter. The petitioner has further submitted that this system has been installed in the plant for reducing the emission of dangerous gasses like CO₂ and near zero operational cost. Though the petitioner has claimed the expenditure for this asset under Regulation 9(2)(ii) of the 2009 Tariff Regulations, no documentary evidence has been furnished in support of the claim. In the absence of documentary evidence, the additional capital expenditure of ₹24.80 lakh for installation of Solar Water Heater system is not allowed. Further, the benefit of any reduction in Auxiliary Energy



Consumption will be retained by the petitioner on account of installation of water heater system. In view of this the expenditure is not admissible. We therefore, are not inclined to allow the expenditure for this asset in case of discharge of liability on this count in future.

Claim under Regulation 9(2)(viii)

Ductable panel New Administrative Building Stage-III

26. The petitioner has claimed actual additional capital expenditure of ₹9.22 lakh for this item during 2011-12. In justification of the same the petitioner has submitted that the expenditure is towards payments made as final settlement against the scheme allowed by the Commission vide order dated 21.4.2011 in Petition No. 181/2009 for the period 2007-09. In view of this, the actual additional capital expenditure of ₹9.22 lakh towards final settlement during 2011-12 is allowed under the Regulation 9(2)(viii) of the 2009 Tariff Regulations.

Capital Spares

27. The petitioner has claimed actual capital expenditure of ₹3873.69 lakh (₹1929.59 lakh in 2009-10, ₹700.84 lakh in 2010-11, ₹933.70 lakh in 2011-12 and ₹309.56 lakh in 2012-13) for capitalization of capital spares. The respondent UPPCL vide affidavit dated 14.10.2013 and the respondent BYPL vide affidavit dated 25.11.2013 have submitted that the Regulation 9(2)(viii) is to meet the expenditure on un-discharged liability for works completed within cut-off date and thus the claim of the petitioner after the cut-off date is not justified. Similar objection has been made by the respondent, BRPL. It has also submitted that the claim of the petitioner over the ceiling limit of 2.5% may be disallowed. In response, the petitioner has submitted that the balance capitalization of spares upto the limit of 2.5% as agreed by the

respondent UPPCL may be allowed during the period 2009-14. It has also clarified that against 2.5% of spares allowed to be capitalized under the 2009 Tariff Regulations, Spares amounting to ₹9.61 crore which comprises of 1.19% of project cost could be capitalized up to 31.3.2009 and hence balance spares capitalization has been claimed during this period. It has further submitted that due to lead time, there is delay in procurement of these capital spares and delay in capitalization.

28. The matter has been examined. The date of commercial operation of the generating station is 1.1.2007. Accordingly, the cut-off date of the generating station is 31.3.2008 as per the 2004 Tariff Regulations. The cut-off date was further extended to 31.3.2009 by Commission's order dated 21.4.2011 in Petition No. 181/2009. Thus, the capital spares in the present case has been capitalized after the cut-off date. The provisions of the 2009 Tariff Regulations do not provide for capitalization of spares after the cut-off date. Moreover, the claims for capitalization of spares do not pertain to any un-discharged liability or balance payments. Accordingly, we find no merit in the submission of the petitioner for capitalization of spares under the Regulation 9(2)(viii) of the 2009 Tariff Regulations. In view of this, the additional capital expenditure for ₹3873.69 lakh (₹1929.59 lakh in 2009-10, ₹700.84 lakh in 2010-11, ₹933.70 lakh in 2011-12 and ₹309.56 lakh in 2012-13) claimed under Regulation 9 (2)(viii) of the 2009 Tariff Regulations is not allowed.

Claim under Regulation 9(2)(ix)

Implementation of 5 Km scheme for provision of supply of electricity around central power plants

29. The petitioner has claimed projected additional capital expenditure of ₹1575.00 lakh during 2013-14 towards implementation of the scheme for supply of electricity within the radius of 5 Km from the generating station. The respondent,



BYPL has submitted that the expenditure may be disallowed as the said scheme has been withdrawn by the MoP, Gol vide notification dated 25.3.2013. The respondent, UPPCL has submitted that since the said scheme has been withdrawn by the MoP, Gol on 25.3.2013 and as the expenditure is proposed to be incurred in 2013-14 which is beyond the date of notification of withdrawal, the expenditure may be disallowed. The respondent, BRPL has submitted that the expenditure may be disallowed and if the petitioner wants to incur this expenditure, the same may be done under Corporate Social Responsibility (CSR) of the petitioner. In response, the petitioner has submitted that the work was awarded for execution on 17.1.2012 which is before the date of withdrawal of the scheme by Gol on 25.3.2013. It has also submitted that the work has been undertaken on the basis of the Gol scheme which provides consideration of expenditure for tariff purpose and not intended to be carried out under CSR. The petitioner vide affidavit dated 8.9.2014 has submitted that MoP, Gol vide letter dated 5.3.2014 has granted exemption from withdrawal of the scheme in respect of 8 generating stations including this generating station of the petitioner. Accordingly, the petitioner has prayed for allowing the expenditure claimed under this head.

30. We have examined the matter. Considering the fact that the MoP, Gol had granted exemption from withdrawal of the said scheme by notification dated 5.3.2014 and since the implementation of the scheme has been approved by the Govt. of U.P. vide letter dated 21.7.2011 we are inclined to allow the projected additional capital expenditure of ₹1575.00 lakh for the year 2013-14 towards the said scheme under Regulation 9(2)(ix) of the 2009 Tariff Regulations. However, the petitioner is directed to furnish certificates / documentary evidence containing details of the handing over and taking over the assets, on affidavit, at the time of revision of tariff of the

generating station based on truing up in terms of Regulation 6 of the 2009 Tariff Regulations.

De-Capitalization

31. As regard to de-capitalization of ₹3.97 lakh, the petitioner has clarified that this amount has de-capitalized in the books on account for SAP (ERP implementation) during 2012-13. The petitioner has further submitted that de-capitalization has been made against the work allowed by the Commission in orders dated 21.4.2011 and 25.5.2012 in Petition No. 181 of 2009 and Petition No. 279 of 2009 respectively. In view of this, the de-capitalization of (-)₹3.97 lakh being part of the capital cost is in order and is allowed.

32. The petitioner has claimed actual additional capital expenditure as per books of accounts for the years 2009-10, 2010-11, 2011-12 and 2012-13 as per details given below:

(₹ In lakh)					
Sl. No.		2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (actual)
1	Opening Gross Block as on 1 st April of year (A)	91335.26	93067.39	93941.97	96265.22
2	Closing Gross Block as on 31 st March of year (B) = (1-2)	93067.39	93941.97	96265.22	97329.68
3	Addition during the year C=(B-A) (as per books)	1732.13	874.58	2323.25	1064.46
4	Exclusions (D)	(-)463.49	61.33	1125.92	704.69
5	Un-discharged Liabilities (E)	64.66	0.19	5.61	31.48
6	Additional Capital Expenditure claimed on cash basis (C-D-E)	2130.96	813.06	1191.72	328.29

33. The actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts due to exclusions of certain expenditure and un-discharged liabilities for the purpose of tariff. Accordingly, the exclusions are dealt with as under.



Exclusions

34. The summary of exclusions from the books of accounts claimed for the years 2009-10, 2010-11, 2011-12 and 2012-13 under different heads and which have been allowed / dis-allowed for the purpose of tariff are discussed below:

	(₹ In lakh)			
	2009-10	2010-11	2011-12	2012-13
Items disallowed				
Union Bhawan	0.07	0.00	0.00	0.00
Emergency ward hospital	17.15	2.41	1.06	3.90
Polygreen house in PL/ Township	2.82	0.00	0.00	0.00
Extension of IT (centre building-III)	1.23	0.09	0.00	0.00
Roads - patrolling	0.00	4.07	0.00	0.00
Office Building	0.00	1.48	0.00	0.00
Multi-purpose hall	0.00	0.56	0.00	0.00
Sewage system plant	0.00	0.00	106.49	3.16
Total of items disallowed	21.27	8.61	107.55	7.06
De-capitalization of roads	0.00	0.00	(-)1.23	0.00
FERV	(-)905.43	(-)67.85	989.18	505.78
De- capitalization of spares part of capital cost	(-)56.93	(-)37.54	(-)9.21	(-)41.55
De- capitalization of spares not part of capital cost	0.00	(-)61.73	(-)29.85	(-)15.89
Capitalization of MBOA items	247.77	258.36	126.91	247.07
De-capitalization of MBOA items part of capital cost	(-)3.87	(-)0.67	(-)0.16	0.00
De-capitalization of MBOA not part of capital cost	0.00	(-)0.01	(-)4.08	0.00
Inter-unit transfer	466.38	(-)1.31	0.27	2.22
Liability reversal	(-)232.68	(-)36.53	(-)53.46	0.00
Total Exclusions claimed	(-)463.49	61.33	1125.92	704.69

Items disallowed

35. From the above table, it is observed that the petitioner has excluded amounts for ₹21.27 lakh (excluding liability of ₹2.94 lakh) during 2009-10, ₹8.61 lakh (excluding liability of ₹0.19 lakh) during 2010-11, ₹107.55 lakh (excluding liability of ₹5.61 lakh) during 2011-12 and ₹7.06 lakh during 2012-13 on account of items disallowed by the Commission. Since the items were not allowed to be capitalized they do not form part of the capital cost. Hence, the exclusion of ₹21.27 lakh during 2009-10, ₹8.61 lakh during 2010-11, ₹107.55 lakh during 2011-12 and ₹7.06 lakh during 2012-13 is in order and is allowed.

De-capitalization of Roads

36. The petitioner has excluded an amount of (-) ₹1.23 lakh during 2011-12 on account of de-capitalization of roads (patrolling road/ plant boundary area). In justification of the same the petitioner has submitted that since the corresponding additional capital expenditure was not allowed in Commission's order dated 25.5.2012 in Petition No. 279/2009, the de-capitalization may be allowed under exclusion. As the capitalization of expenditure on roads was not allowed in tariff by order dated 25.5.2012, they do not form part of capital cost. Hence, exclusion on account of de-capitalization of (-) ₹1.23 lakh is in order and allowed.

FERV

37. The petitioner has excluded an amount of (-) ₹905.43 lakh during 2009-10, (-) ₹67.85 lakh during 2010-11, ₹989.18 lakh during 2011-12 and ₹505.78 lakh during 2012-13 on account of impact of FERV. As the petitioner has billed the said amount directly on the beneficiaries in accordance with the 2004 Tariff Regulations, the exclusion of FERV of (-) ₹905.43 lakh during 2009-10, (-) ₹67.85 lakh during 2010-11, ₹989.18 lakh during 2011-12 and ₹505.78 in the year 2012-13 is in order and hence allowed.

Capital Spares de-capitalized

38. The petitioner has de-capitalized capital spares in books of accounts amounting to (-) ₹56.93 lakh during 2009-10, (-) ₹99.27 lakh during 2010-11, (-) ₹39.06 lakh during 2011-12 and (-) ₹57.44 lakh during 2012-13 on these spares becoming unserviceable. On scrutiny of the details of de-capitalization of spares furnished vide affidavit dated 10.9.2013, it is observed that spares amounting to (-) ₹56.93 lakh in 2009-10 (out of (-) ₹99.27 lakh), (-) ₹37.54 lakh in 2010-11 (out of

(-)₹39.06 lakh), (-) ₹9.21 lakh in 2011-12 (out of (-) ₹57.44 lakh), (-) ₹41.55 lakh (out of (-)₹57.44 lakh) in 2012-13 were allowed in tariff as part of the capital cost. Balance spares amounting to (-) ₹61.73 lakh in 2010-11, (-) ₹29.85 lakh in 2011-12 and (-) ₹15.89 lakh in 2012-13 were not allowed in tariff and hence do not form part of the capital cost. Hence, the de-capitalization of spares for (-) ₹56.93 lakh in 2009-10, (-) ₹37.54 lakh in 2010-11, (-) ₹9.21 lakh in 2011-12 and (-) ₹41.55 lakh (out of (-) ₹57.44 lakhs) in 2012-13 which were allowed in tariff has not been allowed under exclusion and the de-capitalization of spares for (-) ₹61.73 lakh in 2010-11, (-) ₹29.85 lakh in 2011-12 and (-) ₹15.89 lakh in 2012-13 which were not allowed in tariff and thereby not forming part of the capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

Capitalization of MBOA items

39. The petitioner has capitalized MBOA items in books of accounts amounting to ₹247.77 lakh in 2009-10, ₹258.36 lakh in 2010-11, ₹126.91 lakh in 2011-12 and ₹247.07 lakh in 2012-13. Since the capitalization of MBOA items after the cut-off date are not allowed for the purpose of tariff, the exclusion of ₹247.77 lakh in 2009-10, ₹258.36 lakh in 2010-11, ₹126.91 lakh in 2011-12 and ₹247.07 lakh in 2012-13 is in order and has been allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) items

40. The petitioner has de-capitalized MBOA items in books of account amounting to (-)₹3.87 lakh in 2009-10, (-)₹0.68 lakh in 2010-11 and (-)₹4.24 lakh in 2011-12 on these items becoming unserviceable. From the details of de-capitalization of MBOA items furnished vide affidavit dated 10.9.2013, it is observed that MBOA items amounting to (-)₹3.87 lakh in 2009-10, (-) ₹0.67 lakh in 2010-11 (out of (-)₹0.68 lakh), (-) ₹0.16 lakh in 2011-12 (out of (-)₹4.24 lakh) were allowed in tariff as part of the



capital cost and balance MBOA items amounting to (-) ₹0.01 lakh in 2010-11 and (-) ₹4.08 lakh in 2011-12 were not allowed in tariff and do not form part of the capital cost. Accordingly, the de-capitalization of MBOA items for (-) ₹3.87 lakh in 2009-10, (-) ₹0.67 lakh in 2010-11 and (-) ₹0.16 lakh in 2011-12 which were allowed in tariff has not been allowed under exclusion and the de-capitalization of spares for (-) ₹0.01 lakh in 2010-11 and (-) ₹4.08 lakh in 2011-12 which were not allowed and thereby not forming part of capital cost of the generating station for the purpose of tariff, has been allowed under exclusion. No MBOA items have been de-capitalized by the petitioner during 2012-13.

Inter-Unit Transfers

41. The petitioner has excluded an amount of ₹466.38 lakh on account of inter-unit transfer of 210 MW Generator Stator from Singrauli to Unchahar generating station of the petitioner during 2009-10. Also an amount of (-) ₹1.31 lakh on account of inter-unit transfer of Furniture & IT equipments from Unchahar to Ramagundam generating station of the petitioner during 2010-11, ₹0.27 lakh on account of inter-unit transfer of Furniture from Unchahar to Southern Region Headquarter and RGCCP generating station of the petitioner, Furniture from Farakka to Unchahar generating station & IT Equipment from Noida to Unchahar generating station respectively during 2011-12 and ₹2.22 lakh on account of inter-unit transfer of IT Equipment from Corporate Centre, Vindhyachal, Tanda & CC-Consultancy to Unchahar generating station during 2012-13 has been excluded by the petitioner. In justification of the same, the petitioner has submitted that the above said Inter-Unit transfers are temporary in nature. It is observed that the Commission in some of its tariff orders relating to the additional capital expenditure in respect of other generating stations of the petitioner had decided that both positive and negative

entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In line with the said decisions, the exclusion of ₹466.38 lakh in 2009-10, (-) ₹1.31 lakh in 2010-10, ₹0.27 lakh in 2011-12 and ₹2.22 lakh in 2012-13 on account of inter-unit transfers of temporary nature, is allowed.

Liability Reversal

42. The petitioner has excluded reversal of liability (-) ₹232.68 lakh in 2009-10, (-) ₹36.53 lakh in 2010-11 and (-) ₹53.46 lakh in 2011-12 and the same has been allowed. There is no reversal of liability during 2012-13. The details of exclusions claimed *vis-à-vis* allowed on cash basis is as under:

	(₹ in lakh)			
	2009-10	2010-11	2011-12	2012-13
Exclusions claimed (A)	(-)463.49	61.33	1125.92	704.69
Exclusions allowed (B)	(-)402.69	99.54	1135.29	746.24
Exclusions not allowed (A-B)	(-)60.80	(-)38.21	(-)9.37	(-)41.55

43. Based on above, the actual additional capital expenditure for the period 2009-13 and projected additional capital expenditure for 2013-14 is allowed as detailed under:

Sl. No	Head of work/ Equipment	(₹ In lakh)				
		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (Projected)
A	Deferred liabilities – Regulation 9(2)(i)					
i.	Construction of D type quarters	0.00	0.00	168.56	0.00	130.00
ii.	RCC paving & CLSM road	111.00	16.42	0.00	0.00	0.00
	Total (A)	111.00	16.42	168.56	0.00	130.00
B	Ash Related Works – Regulation 9(2)(ii)					
i.	Ash Management complex gate	20.52	74.63	0.00	0.00	0.00
ii.	MPP-Wet Ash disposal system	61.25	18.31	0.00	7.61	0.00
iii.	Construction of ash corridor road alongside ash pipeline from SS canal	0.00	0.00	51.58	0.00	0.00
	Total (B)	81.77	92.94	51.58	7.61	0.00
C	Balance payments 9(2)(viii)					
i.	ERP implementation	3.91	0.00	0.00	0.00	0.00
ii.	Bal work in sewerage system	2.49	0.00	0.00	0.00	0.00

iii.	Green belt development township	0.01	0.00	0.00	0.00	0.00
iv.	Lighting system	1.05	0.00	0.00	0.00	0.00
v.	Off site building - structural work	1.14	0.00	0.04	0.00	0.00
vi.	MPP - Steam Generator supply	0.00	0.88	0.00	0.00	0.00
vii.	Association Bhawan	0.00	0.19	0.00	0.00	0.00
viii.	Garbage disposal pit	0.00	0.67	0.00	0.00	0.00
ix.	TG - supply	0.00	1.12	0.00	0.00	0.00
	Total (C)	8.60	2.86	0.04	0.00	0.00
D	New Items / Works					
i.	Making of settling pits in marshal yard CHP area under Regulation 9(2)(ii)	0.00	0.00	0.00	15.10	0.00
ii.	X-ray baggage inspection under Regulation 9(2)(ii)	0.00	0.00	28.62	0.00	0.00
iii.	Solar water heater	0.00	0.00	0.00	0.00	0.00
iv.	Ductable panel New Adm. Building under Regulation 9(2)(viii)	0.00	0.00	9.22	0.00	0.00
v.	Capital Spares under Regulation 9(2)(viii)	0.00	0.00	0.00	0.00	0.00
vi.	Implementation of 5 Km scheme under Regulation 9(2)(ix)	0.00	0.00	0.00	0.00	1575.00
	Total (D)	0.00	0.00	37.84	15.10	1575.00
	Sum Total (A+B+C+D)	201.37	112.22	258.02	22.71	1705.00
	De-capitalization	0.00	0.00	0.00	3.98	0.00
	Additional Capital Expenditure allowed (E)	201.37	112.22	258.02	18.73	1705.00
	Exclusions not allowed (F)	(-)60.80	(-)38.21	(-)9.37	(-)41.55	0.00
	Net Additional Capital Expenditure allowed (E+F)	140.58	74.00	248.64	(-)22.81	1705.00

44. Considering the discharges of liabilities during the period 2009-14, the net additional capital expenditure allowed is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital expenditure (excluding discharges)	140.58	74.00	248.64	(-) 22.81	1705.00
Add: Discharges of liabilities (against allowed assets / works)	310.56	116.27	23.52	0.00	0.00
Net additional capital expenditure allowed	451.14	190.27	272.16	(-) 22.81	1705.00

45. Based on the above, the capital cost considered for the purpose of tariff for 2009-14 is as under:

(₹ in lakh)

	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2019-14 (Projected)
Opening capital cost	86399.49	86850.62	87040.90	87313.05	87290.25
Additional capital expenditure	451.14	190.27	272.16	(-)22.81	1705.00
Closing Capital Cost	86850.62	87040.90	87313.05	87290.25	88995.25
Average Capital Cost	86625.05	86945.76	87176.98	87301.65	88142.75

Debt-Equity Ratio

46. In terms of the Regulation 12 of the 2009 Tariff Regulations, the gross loan and equity of ₹63099.20 lakh and ₹27042.51 lakh respectively as allowed in order dated 21.4.2011 have been considered as on 1.4.2009. However, the un-discharged liability amounting to ₹3742.22 lakh deducted from the capital cost as on 1.4.2009 and has been adjusted to debt and equity in the ratio of 70:30 for all liabilities. The gross normative loan and equity as on 1.4.2009 is revised to ₹60479.64 lakh and ₹25919.85 lakh respectively. Further, the additional expenditure has been allocated between debt and equity in the ratio of 70:30.

Return on Equity

47. The petitioner has considered pre tax Return On Equity (ROE) of @ 22.944%, However, considering the actual tax rate for 2013-14, the pre tax ROE works out to 23.481% which has been considered. Accordingly, the return on equity worked out is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	25919.85	26055.19	26112.27	26193.92	26187.07
Addition of Equity due to additional capital expenditure	135.34	57.08	81.65	(-)6.84	511.50
Normative Equity-Closing	26055.19	26112.27	26193.92	26187.07	26698.57
Average Normative Equity	25987.52	26083.73	26153.09	26190.49	26442.82
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	6102.13	6054.03	6000.57	6009.15	6209.04



Interest on loan

48. In terms of Regulation 16 of the 2009 Tariff Regulations, the interest on loan has been worked out in accordance with the methodology given below:

- (a) Gross normative loan amounting to ₹60479.64 lakh has been considered as on 1.4.2009.
- (b) Cumulative repayment of ₹9728.94 lakh as on 31.3.2009 as considered in order dated 21.4.2011 in Petition No.181/2009 has been considered as cumulative repayment as on 1.4.2009. However, after taking in to account proportionate adjustment 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 ₹9325.04 lakh.
- (c) Net normative opening loan as on 1.4.2009 is ₹51154.60 lakh.
- (d) Addition to normative loan on account of additional capital expenditure approved above has been considered.
- (e) 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 and reversals of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009.
- (f) Weighted average rate of interest has been calculated after adjusting appropriate accounting adjustment for interest capitalized and by considering the actual loan portfolio existing as on 1.4.2009 along with subsequent additions during 2009-14 for the generating station. In case of loans carrying floating rate of interest, the rate of interest as provided by the petitioner has

been considered for the purpose of tariff. However, it is observed in case of LIC-III (T3, D1), (T4, D1&4) that petitioner has claimed additional interest of 0.0221% towards upfront fee. It is noticed that these loans has been allocated to various other generating stations namely, Barh, Unchahhar-I, Koldam HPS, Kahalgaon TPS-II, Rihand TPS-II, Sipat TPS-I&II, Vindhyachal TPS-I&III, Farakka TPS-I&II, Ramagundam TPS-I,II&III, Singrauli TPS, Talcher TPS, Anta GPS, Badarpur TPS, Korba TPS-I&II & TandaTPS wherein no additional interest has been claimed by the petitioner. It is also noticed that the petitioner has not claimed such upfront fees towards the aforementioned LIC-III loans in the respect of other generating stations like Sipat TPS-II, Vindhyachal STPS I-I&III, Kahalgaon TPS-II, Ramagundam TPS-III, Anta GPS, Korba TPS-I&II. The claim of the petitioner towards upfront fees had been disallowed by the Commission while working out the weighted average rate of interest on loan in respect of Badarpur TPS vide tariff order dated 15.5.2014 in Petition No. 304/2009. In line with this decision and for the purpose of consistency, the claim of the petitioner towards upfront fees for this generating station has not been allowed. This is however subject to the final decision of the Appellate Tribunal for Electricity in the Appeals filed by the petitioner in respect of other generating stations on this count.

- (g) In case of Bonds, the petitioner has added surveillance fees of 0.03% in all bonds interest rate, in this regard the petitioner is directed to provide documentary evidence related to surveillance fees at the time of final truing up.

- (h) Weighted average rate of interest has been computed after providing appropriate accounting adjustments for interest capitalized corresponding to assets allowed for the purpose of tariff.

49. The necessary calculations for interest on loan are given as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	* 60479.64	60795.44	60928.63	61119.14	61103.17
Cumulative repayment of loan upto previous year	9325.04	13816.02	18309.56	22832.21	27326.85
Net Loan Opening	51154.60	46979.41	42619.07	38286.93	33776.32
Addition due to additional capital expenditure	315.80	133.19	190.51	(-)15.97	1193.50
Repayment of loan during the year	4474.90	4503.86	4520.98	4526.51	4578.46
Less: Repayment adjustment on account of de-capitalization	42.56	26.75	6.56	31.86	-
Add: Repayment adjustment on account of discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	58.63	16.42	8.24	-	-
Net Repayment	4490.98	4493.53	4522.65	4494.64	4578.46
Net Loan Closing	46979.41	42619.07	38286.93	33776.32	30391.36
Average Loan	49067.00	44799.24	40453.00	36031.62	32083.84
Weighted Average Rate of Interest on Loan	8.0989%	8.1269%	8.3807%	8.2732%	8.1494%
Interest on Loan	3973.89	3640.79	3390.23	2980.98	2614.65

*After adjustments in respect of un-discharged liabilities deducted as 1.4.2011

Depreciation

50. In terms of Regulation 17 of the 2009 Tariff Regulations, the cumulative depreciation as on 31.3.2009 as per order dated 21.4.2011 in Petition No. 181/2009 works out to ₹9728.94 lakh. Proportionate adjustment has been made to the cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹9325.04 lakh. The value of freehold land earlier considered in order dated 21.4.2011 is "nil". Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to ₹68637.50 lakh. Depreciation has

been calculated @ 5.1658% (weighted average rate of depreciation) for the period 2009-14. The necessary calculations in support of depreciation are as shown below:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	86399.49	86850.62	87040.90	87313.05	87290.25
Add: Additional Capital Expenditure	451.14	190.27	272.16	(-)22.81	1705.00
Closing Capital Cost	86850.62	87040.90	87313.05	87290.25	88995.25
Average Capital Cost	86625.05	86945.76	87176.98	87301.65	88142.75
Rate of Depreciation	5.1658%	5.1801%	5.1860%	5.1849%	5.1944%
Depreciable value (excluding land) @ 90%	77962.55	78251.18	78459.28	78571.48	79328.47
Balance depreciable value	68637.50	64396.58	60087.60	55671.79	51905.74
Depreciation (annualized)	4474.90	4503.86	4520.98	4526.51	4578.46
Cumulative depreciation at the end	13799.95	18358.47	22892.66	27426.20	32001.19
Less: Cumulative Depreciation adjustment on account of un-discharged liabilities	(-)58.63	(-)16.42	(-)8.24	-	-
Less: Cumulative Depreciation reduction due to decapitalization	3.98	3.20	1.20	3.48	-
Cumulative depreciation (at the end of the period)	13854.60	18371.68	22899.70	27422.73	32001.19

Normative Annual Plant Availability Factor (NAPAF)

51. The NAPAF of 85% as considered in order dated 25.5.2012 in Petition No. 279/2009 has been considered for the purpose of tariff.

O&M Expenses

52. O&M expenses as considered in order dated 25.5.2012 in Petition No.279/2009 as stated below has been considered

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses	3822.00	4040.40	4271.40	4517.10	4775.00

Interest on Working Capital

53. 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 2 months for non-pithead 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.*

54. Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended on 21.6.2011

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.

55. Working capital has been calculated considering the following elements as under:

(a) Cost of Coal and Secondary Fuel Oil for two months

56. The fuel component in the working capital as considered in order dated 25.5.2012 as under has been considered:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 2 months	4201.34	4201.34	4212.85	4201.34	4201.34
Cost of secondary fuel oil 2 months	53.87	53.87	54.02	53.87	53.87

(b) Maintenance Spares

57. The maintenance spares as considered in order dated 25.5.2012 as stated under has been considered:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of maintenance spares	764.40	808.08	854.28	903.42	955.08

(c) Receivables

58. The receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges - for two months	4201.34	4201.34	4212.85	4201.34	4201.34
Fixed Charges – for two months	3379.79	3358.31	3350.80	3326.19	3352.18
Total	7581.13	7559.65	7563.64	7527.52	7553.52

(d) O&M Expenses

59. O & M expenses for 1 month as considered in order dated 25.5.2012 as stated under has been considered:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	318.50	336.70	355.95	376.43	397.95

60. Accordingly, SBI PLR of 12.25% has been considered for the purpose of calculating interest on working capital. The 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- 2 months	4201.34	4201.34	4212.85	4201.34	4201.34
Oil stock-2 Months	53.87	53.87	54.02	53.87	53.87
O&M expenses - 1 Month	318.50	336.70	355.95	376.43	397.95
Spares	764.40	808.08	854.28	903.42	955.08
Receivables- 2 Months	7581.13	7559.65	7563.64	7527.52	7553.52
Total Working Capital	12919.23	12959.63	13040.74	13062.57	13161.75
Rate of Interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Total Interest on Working capital	1582.61	1587.56	1597.49	1600.17	1612.31

Annual Fixed Charges

61. The annual fixed charges for the period 2009-14 are summarized as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4474.90	4503.86	4520.98	4526.51	4578.46
Interest on Loan	3973.89	3640.79	3390.23	2980.98	2614.65
Return on Equity	6102.13	6054.03	6000.57	6009.15	6209.04
Interest on Working Capital	1582.61	1587.56	1597.49	1600.17	1612.31
O&M Expenses	3822.00	4040.40	4271.40	4517.10	4775.40
Cost of Secondary Fuel Oil	323.22	323.22	324.11	323.22	323.22
Total	20278.75	20149.87	20104.77	19957.12	20113.09

Note: (1) All figures are on annualised basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column

62. The petitioner has recovered annual fixed charges on the basis of Commission's order dated 25.5.2012 in Petition No. 279/2009. Accordingly, the annual fixed charges recovered shall be adjusted in accordance with Clause (6) of Regulation 6 of the 2009 Tariff Regulations.

63. Petition No. 254/GT/2013 is disposed of as above.

-Sd/-
(A.S.Bakshi)
Member

-Sd/-
(A. K. Singhal)
Member

-Sd/-
(Gireesh B. Pradhan)
Chairperson

