

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 207/GT/2014

Coram:

Shri A.S. Bakshi, Member

Dr. M. K. Iyer, Member

Date of Hearing: 20.5.2016

Date of Order : 20.7.2016

In the matter of

Revision of tariff of Talcher Super Thermal Power Station Stage-I (1000 MW) for the period from 1.4.2009 to 31.3.2014-Truing up of order dated 21.12.2015 in Petition No. 243/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

1. West Bengal State Electricity Distribution Company Limited
Vidyut Bhawan, Block-DJ,
Sector-II, Salt Lake City
Kolkata – 700 091

2. Bihar State Power Holding Company Limited
(erstwhile Bihar State Electricity Board)
Vidyut Bhawan, Bailey Road
Patna – 800 001

3. Jharkhand State Electricity Board,
Engineering Building,
HEC, Dhurwa, Ranchi – 834004

4. GRIDCO Limited
24, Janpath,
Bhubaneswar – 751007

5. Damodar Valley Corporation
DVC Towers, VIP Road
Kolkata-700054



6. Power Department
Govt. of Sikkim, Kazi Road,
Gangtok, Sikkim-737101
7. Tamilnadu Generation and Distribution Company Limited
NPKRP Maaligail,
144, Anna Salai, Chennai – 600002
8. Electricity Department
Union Territory of Puducherry
Subhash Chandra Bose Salai
Puducherry-605001
9. Uttar Pradesh Power Corporation Limited
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226001
10. Power Development Department (J&K)
Govt. of J&K Secretariat,
Srinagar-190 009.
11. Power Department
Union Territory of Chandigarh
Addl. Office Building
Sector-9D, Chandigarh- 160 009
12. Madhya Pradesh Power Trading Corporation Limited
Shakti Bhawan, Vidyut Nagar
Jabalpur – 482008
13. Maharashtra State Electricity Distribution Company Limited
'Prakashgad', Bandra (East),
Mumbai-400051
14. Gujarat Urja Vikas Nigam Limited
Sardar Patel Vidyut Bhawan
Race Course, Baroda – 390007
15. Electricity Department
Administration of Daman & Diu(DD)
Daman-396 210
16. Electricity Department
Administration of Dadra and Nagar Haveli (DNH)
Silvassa, via VAPI-396 230
17. BSES Rajdhani Power Limited
BSES Bhawan, Nehru Place
New Delhi-110019
18. BSES Yamuna Power Limited
Shakti Kiran Bldg., Karkardooma
Delhi-110092



19. Tata Power Delhi Distribution Ltd
(erstwhile North Delhi Power Limited)
Grid Sub-station Hudson Road.
Hudson Road Kingsway Camp
New Delhi-110009

...Respondents

Parties present:

For Petitioner: Shri Bhupinder Kumar, NTPC
Shri Rajeev Chaudhary, NTPC
Shri T. Vinodh Kumar, NTPC
Shri Shailendra Singh, NTPC

For Respondents: Shri R. B. Sharma, Advocate, GRIDCO & BRPL
Shri S Vallinayagam, Advocate, TANGEDCO
Shri R.Jaya Prakash, TANGEDCO

ORDER

This petition has been filed by the petitioner, NTPC for revision of the annual fixed charges in respect of Talcher 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 1.1.1997 and 1.7.1997 respectively.

3. The Commission vide order dated 15.6.2012 in Petition No. 228/2009 had approved the tariff of the generating station for the period 2009-14 considering the opening capital cost of ₹251595.54 lakh as on 1.4.2009 (after removal of un-discharged liabilities of ₹1469.52 lakh as on 1.4.2009). Aggrieved by the said order dated 15.6.2012, the petitioner filed review petition (RP. No. 23/2012) and the same was allowed by order dated 15.4.2013 on the ground of "adjustment of un-discharged liabilities of freehold land



as on 31.3.2009 in cumulative depreciation recovered as on 1.4.2009” and accordingly the annual fixed charges of the generating station for 2009-14 were revised. Thereafter, in Petition No. 243/GT/2013 filed by the petitioner for truing-up of tariff in terms of the proviso to clause 6(1) of the 2009 Tariff Regulations, the Commission vide order dated 21.12.2015 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 and based on the latest estimates and status of works. The annual fixed charges allowed in order dated 21.12.2015 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	6202.04	6253.49	6302.73	6413.06	6525.99
Interest on Loan	543.82	134.48	0.00	0.00	0.00
Return on Equity	29526.24	29230.43	28948.82	29020.99	29778.91
Interest on Working Capital	4472.83	4500.85	4545.83	4590.27	4661.01
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Secondary fuel oil cost	1524.49	1524.49	1528.67	1524.49	1524.49
Compensation Allowance	150.00	150.00	150.00	250.00	350.00
Special allowance	0.00	0.00	0.00	0.00	0.00
Total	55419.42	55533.74	56006.04	57159.92	59079.40

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 has sought the 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:



	(₹ in lakh)	
	2012-13	2013-14
Opening Capital Cost	254484.70	257666.07
Add: Additional capital expenditure	3181.37	4478.18
Closing Capital Cost	257666.07	262144.25
Average Capital Cost	256075.38	259905.16

Annual Fixed Charges

	(₹ in lakh)	
	2012-13	2013-14
Depreciation	6532.65	6964.11
Interest on Loan	0.00	0.00
Return on Equity	29138.13	30089.91
Interest on Working Capital	4604.04	4688.02
O&M Expenses	15360.00	16240.00
Secondary fuel oil cost	1524.49	1524.49
Compensation Allowance	250.00	350.00
Special allowance	0.00	0.00
Total	57409.31	59856.53

6. In compliance with the directions of the Commission, the petitioner has filed additional information and has served copies on the respondents. The respondents, GRIDCO, BRPL and TANGEDCO have filed their replies in the matter and the petitioner has also filed its rejoinder. 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 ₹251595.53 lakh (cash basis) (as on 1.4.2009) and ₹254484.70 lakh (as on 1.4.2012) determined by the Commission’s order



dated 15.6.2012 in Petition No.228/2009. The Commission in its order dated 21.12.2015 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. Out of the total liabilities amounting to ₹1501.18 lakh included in the gross block as on 1.4.2009, the approved capital cost of ₹253065.06 lakh is inclusive of un-discharged liabilities of ₹1469.52 lakh. The un-discharged liabilities of ₹1469.52 lakh comprise of ₹365.45 lakh pertaining to the period prior to 1.4.2004 and the amount of ₹1104.07 lakh pertaining to period 2004-09 and the balance liabilities amounting to ₹31.66 lakh pertain to disallowed assets/works.

9. In terms of the last proviso to Regulation 7 of the 2009 Tariff Regulations, the capital cost as on 1.4.2009, after removal of un-discharged liabilities amounting to ₹1469.52 lakh, works out to ₹251595.54 lakh, on cash basis. Further, out of the un-discharged liabilities of ₹1469.52 lakh deducted as on 1.4.2009, the petitioner has discharged amounts of ₹354.49 lakh, ₹38.48 lakh and ₹25.66 lakh, ₹60.24 lakh and ₹327.60 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. The petitioner has also reversed amounts of ₹35.07 lakh and ₹719.98 lakh, ₹12.40 lakh, and ₹1.01 lakh during the years 2009-10, 2010-11, 2012-13 and 2013-14 respectively. The discharges 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 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 21.12.2015 in Petition No. 243/GT/2013 for the period 2009-14 are as under:



(₹ in lakh)

Sl. No	Head of Works/ Equipment	2009-10	2010-11	2011-12	2012-13	2013-14	Total
		Actual			Projected		
A	Liabilities to meet award of Arbitration/Compliance of order						
	Additional compensation to land oustees as per Court Order	0.00	2.43	0.00	0.00	0.00	2.43
	Completion of Permanent Store building	0.00	0.79	0.00	0.00	0.00	0.79
	Total (A)	0.00	3.22	0.00	0.00	0.00	3.22
	Change in Law						
B	Payment to Govt. of Orissa for Mutation of Land	0.00	0.00	31.65	0.00	0.00	31.65
	Procurement, erection & commissioning of Intelligent controllers for ESP of St.-I and modification in Boiler ash evacuation system to achieve SPM level prescribed by SPCB in Consent	0.00	0.00	0.00	376.00	170.00	546.00
	Total (B)	0.00	0.00	31.65	376.00	170.00	577.65
C							
	Raising of Ash Dyke Lagoon/Associated ash slurry pipe works	615.85	715.78	1116.82	700.00	800.00	3948.45
	Construction of Earthen Bund of Ash Dyke	0.00	0.00	0.00	134.56	53.53	188.09
	Total (C)	615.85	715.78	1116.82	834.56	853.53	4136.54
D	Total Capitalization (A+B+C)	615.85	719.00	1148.47	1210.56	1023.53	4717.41
E							
	De- capitalization of Unserviceable vehicles	(-) 5.24	(-) 2.15	(-) 0.26	0.00	0.00	(-) 7.65
	De- capitalization of Construction Equipments	(-) 2.55	(-) 4.18	0.00	0.00	0.00	(-) 6.73
	Total (E)	(-) 7.79	(-) 6.34	(-) 0.26	0.00	0.00	(-) 208.60
F	Total additional capital expenditure (A to E)	608.06	712.66	1148.21	1210.56	1023.53	4508.81
G	Exclusions not allowed	(-) 336.12	(-) 86.17	(-) 287.55	0.00	0.00	(-) 695.18
H	Total additional capitalization allowed (F+G)	271.94	626.50	860.65	1210.56	1023.53	3813.63
	Add: Discharges of liabilities	354.49	38.48	25.66	0.00	0.00	418.63
	Total additional capital expenditure allowed	626.43	664.98	886.31	1210.56	1023.53	4411.81

12. There is no revision in the actual additional capital expenditure for the period 2009-12 allowed in order dated 21.12.2015 in Petition No. 243/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	Regulation	Actual Additional capital expenditure		Total claimed
		2012-13	2013-14	
Change in law				
Replacement of MS ash slurry pipe line with Cast Basalt pipes.	9(2)(ii)	1444.34	0.00	1444.34
De-capitalisation against Replacement of MS ash slurry pipe line with Cast Basalt pipes.		(-) 215.49	0.00	(-)215.49
Payment to Govt. of Orissa i.r.o Mutation of Land		2.82	0.00	2.82
Procurement, erection & commissioning of Intelligent controllers for ESP of Stage-I		384.65	0.91	385.56
De-capitalisation against ESP Intelligent Control System		(-)179.48	0.00	(-)179.48
Transfer of lease hold land to Freehold land.		0.00	1.05	1.05
De-capitalisation of Leasehold land		0.00	(-) 0.36	(-) 0.36
Total			1436.84	1.60
Ash Dyke Works and associated works for Ash Handling System				
Payment of additional compensation to the remaining land oustee.	9(2)(iii)	0.70	0.86	1.56
Raising of Ash Dyke Lagoon / Associated ash slurry pipe works.		887.90	1864.00	2751.90
Consolidated Ash filling works		236.33	0.00	236.33
Construction of Earthen Bund for Ash Dyke		134.56	53.53	188.09
Spreading of earth over dry ash to control fugitive ash emission at Stage-I		0.00	44.93	44.93
Installation of 4th slurry pumps in existing series.		0.00	0.00	0.00
Total			1259.49	1963.32
Capital works undertaken for technological up-gradation & reliability of operation				
Replacement of obsolete RH spray control valve.	9(2) with Power to relax under Regulation 44	18.92	34.29	53.21
De-capitalisation towards Replacement of obsolete RH spray control valve.		(-)10.60	(-)21.20	(-)31.80
Up-gradation of obsolete TDBFP Control System.		354.21	600.72	954.93
De-capitalisation against Up-gradation of obsolete TDBFP Control System.		(-)63.01	(-)63.01	(-)126.02
Replacement of obsolete pneumatic actuators.		53.49	76.41	129.90
De-capitalisation towards Replacement of obsolete pneumatic actuators.		(-)11.46	(-)11.46	(-)22.92



Head of Work/ Equipment	Regulation	Actual Additional capital expenditure		Total claimed
		2012-13	2013-14	
Modification of old HP BYPASS control valve.		54.01	58.15	112.16
De-capitalisation towards Modification of old HP BYPASS control valve.		(-)14.60	(-)14.60	(-)29.20
Up-gradation of Old LT Breaker.		11.37	7.93	19.30
De-capitalisation towards Up-gradation of old LT Breaker		(-)5.33	(-)12.32	(-)17.65
Replacement of old vibration monitoring system to online vibration monitoring system.		0.00	23.86	23.86
De-capitalisation towards replacement of old vibration monitoring system to online vibration monitoring system.		0.00	(-)12.34	(-)12.34
Up-gradation of PLC system of Ash handling & DM plant		0.00	60.29	60.29
De-capitalisation towards up-gradation of PLC system of ASH handling & DM plant		0.00	(-)18.89	(-)18.89
Replacement of boiler S Panel		0.00	112.81	112.81
De-capitalisation towards replacement of Boiler S panel		0.00	(-)16.59	(-)16.59
Up-gradation of PLCC systems of 400 KV lines		0.00	78.48	78.48
Total of Works undertaken for up-gradation		387.00	882.53	1269.53
Creation of infrastructure for supply of power within 5 km rural household radius	9(2)(ix)	53.35	1302.75	1356.10
Other De-capitalisation				
De-capitalisation of Unserviceable vehicles		(-)15.57	0.00	(-)15.57
De-capitalisation of Construction Equipments		-	0.00	0.00
Total		(-) 15.57	0.00	(-)15.57
Discharge of Liabilities				
Discharge of liabilities for already admitted works up to 1.4.2004.	9(2)(viii)	3.49	0.00	3.49
Discharge of liabilities for already admitted works for 2004-09		1.49	0.00	1.49
Discharge of liabilities admitted/claimed for works after 1.4.2009.		55.26	327.60	382.86
Total discharge of liabilities		60.24	327.60	387.84
Total additional capital expenditure		3181.37	4478.18	7659.55

13. The petitioner has claimed additional capital expenditure of ₹7659.55 lakh for the period 2012-14 as against the total estimated additional capital expenditure of ₹2234.09 lakh for 2012-14 allowed vide Commission's order dated 21.12.2015. Thus, there is an



increase of ₹5425.46 lakh in the petitioner's claim for additional capitalization. This increase is mainly on account of new claims of ₹1444.34 lakh in 2012-13 towards Replacement of MS Ash slurry pipe line with Cast Basalt pipes and ₹354.21 lakh and ₹600.72 lakh towards up-gradation of obsolete TDBFP Control System. In addition expenditure of ₹53.35 lakh in 2012-13 and ₹1302.75 lakh in 2013-14 has been incurred towards Implementation of the scheme for creation of infrastructure for supply of power within the radius of 5 km of the generating station. We now examine the claim of the petitioner and their admissibility, on prudence check, as stated in the subsequent paragraphs.

Payment to Government of Orissa in respect of Mutation of land

14. The petitioner has claimed actual additional capital expenditure of ₹2.82 lakh in 2012-13 towards payment of Registration charges to the State Government of Orissa for mutation of land in favour of the petitioner. In justification of the same, the petitioner has submitted that the Stamp duty and Registration fee has been paid to the Revenue department for registration of the land acquired for Ash dyke. It has also submitted that the copy of the demand note dated 22.2.2012 raised by the District Sub-registrar (Angul) on Special LAO has already been submitted with the midterm true-up Petition No. 243/GT/2013 vide affidavit dated 5.7.2013. The respondent, TANGEDCO in its reply has submitted that the Commission had allowed the expenditure of ₹31.65 lakh in order dated 31.12.2015 towards Stamp duty and Registration fee for land acquired. It has also submitted that the petitioner has not furnished the details of the excess claim towards Stamp duty & Registration fee and that the claim does not fall under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

15. The matter has been examined. In order dated 21.12.2015, the Commission after considering the submissions of the petitioner and the documentary evidence namely, the demand note raised by the District Sub-Registrar, Angul vide its Proceedings No.87 dated



22.2.2012, had allowed the capitalisation of the expenditure incurred towards Stamp duty and Registration fees (including incidental fees and user charge) for the land acquired for ash dyke. The petitioner in its rejoinder to the reply of TANGEDCO has submitted that the claim of ₹2.82 lakh in 2012-13 is the balance payment towards the above claim and the same could not be projected earlier as the payment was made as per directive of the State Govt Revenue Department. In view of the submissions of the petitioner the actual additional capital expenditure of ₹2.82 lakh in 2012-13 is allowed under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

Procurement, Erection & Commissioning of Intelligent controllers for Electrostatic Precipitators (ESP) of Stage-I

16. The petitioner has claimed total additional capital expenditure of ₹385.56 lakh (₹384.65 lakh in 2012-13 and ₹0.91 lakh in 2013-14) towards the Procurement, Erection & Commissioning of Intelligent controllers for ESP of Stage-I under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that State Pollution Control Board directed (SPCB) vide Consent letter dated 13.1.2012 to bring down emission levels to prescribed standard of 100 mg/Nm³ and take steps to achieve emission standard of 50mg/Nm³ as per CEPI action plan for Talcher Station. It has submitted that in order to achieve the same, these works are required to be carried out. The petitioner has pointed out that the detailed reasoning for carrying out the up-gradation work of ESP Stage-I as submitted vide affidavit dated 22.7.2014 in Petition No.228/2009 along with SPCB consent letter dated 13.1.2012 has been enclosed and the Commission may allow the same.

17. The respondents, BRPL & GRIDCO have submitted that the Consent letter dated 13.1.2012 of the State Control Pollution Board Orissa is nothing but the consent to operate the plant within the permissible parameters for a specified period. It has also pointed out that the consent granted is for a specified period after ensuring that the



Pollution control systems have been duly maintained and it has not set any new parameters or a new set of norms for operation which needed fresh investment in capital to meet the requirement of change in law. Accordingly, the respondent has submitted that the above claim does not fall within the parameters of Change in law and has prayed that the claim may be rejected by the Commission. In its rejoinder, the petitioner while reiterating the submissions made in the petition, has clarified that the petitioner is carrying out additional capitalisation on ESP to meet the changed norms of emission, as per SPCB requirement, the details of which has been submitted in the affidavit dated 22.7.2014 in response to Commission's directions dated 1.7.2014. The respondent, TANGEDCO has submitted that the petitioner has not furnished the reasons for escalation in the claim made in the year 2012-13 and for not incurring the expenditure for the year 2013-14. It has also submitted that the petitioner has also not furnished the balance works to be completed in the next tariff block and the provision made towards liabilities for the works carried out in 2013-14. In the absence of this, the respondent has prayed that the Commission may reject the claim. In response, the petitioner has clarified that there is minor variation in actual capitalisation with respect to the projections based on change in the requirement of works to meet site/statutory requirements. It has also submitted that the capitalisation of ₹0.91 lakh in 2013-14 is due to some delay in the capitalisation of work projected earlier towards modification of Boiler Ash evacuation system to achieve lower Suspended Particulate Matter (SPM) level. The petitioner has submitted that the above work has been completed and capitalised in 2014-15 and the work has been claimed on projection basis in 2014-19 tariff period.

18. The matter has been examined. The Commission in its order dated 21.12.2015 in Petition No.243/GT/2013 had allowed the projected capitalisation of ₹546.00 lakh for this item/asset for the period 2012-14 and had observed as under:

"24. We have examined the matter. It is noticed that that the short term work of up-gradation of ESP controller of Stage-I was undertaken by the petitioner during 2012-14 in



order to comply with the CEPI action plan notified by SPCB Odisha in 2012 which mandates the bringing down the level of emissions 100/50 mg/Nm³ for all units and to take steps to achieve emission standard of 50 mg/Nm³ as per CEPI action plan. Based on the above submissions and since the expenditure incurred is on account of compliance with the statutory guidelines of the Pollution Control Board, we allow the additional capital expenditure for ₹546.00 lakh on this count under Regulation 9(2)(ii) of the 2009 Tariff Regulations. However, the capitalization of the expenditure towards long term plan for ESP, Stage-I up gradation and retrofitting which are expected to be capitalized in stages during the period 2015-18 as submitted by the petitioner vide affidavit dated 22.7.2014 shall be considered in terms of the provisions of the 2014 Tariff Regulations.”

19. It is noticed that the petitioner in its rejoinder dated 15.6.2016 has submitted that the works towards “modification of Boiler Ash evacuation system” have been completed and has been capitalised in 2014-15. However, the petitioner has claimed an expenditure of ₹0.91 lakh in 2013-14 due to some delay in the capitalisation of the said work projected earlier. However, from the Petition No. 281/GT/2014 filed by the petitioner on 13.8.2014 for determination of tariff for the period 2014-19 in respect of this generating station, it is observed that the petitioner has claimed the balance expenditure of ₹140.00 lakh in 2014-15 towards “modification of Boiler Ash evacuation system” as short term work of up-gradation of ESP controller of Stage-I. Since the actual expenditure of ₹0.91 lakh incurred by the petitioner in 2013-14 is part capitalisation in respect of the said work for compliance with the statutory guidelines of the State Pollution Control Board and is less than the projected expenditure allowed vide order dated 21.12.2015, the petitioner’s claim has been considered in terms of Regulation 9(2)(ii) of the 2009 Tariff Regulations. We order accordingly. Further, the petitioner has considered the de-capitalisation of ₹179.48 lakh towards ESP intelligent control system in 2012-13 and has also submitted the details of the depreciation recovered towards this asset. Accordingly, the actual additional capital expenditure of ₹385.56 lakh (384.65 + 0.91) along with the de-capitalisation of (-) ₹179.48 lakh has been allowed for the purpose of tariff.

20. The submission of the petitioner as regards the completion and capitalisation of the balance work towards modification in Boiler ash evacuation system in 2014-15 shall however be considered in terms of the provisions of the 2014 Tariff Regulations.



Replacement of MS Ash slurry pipe line with Cast Basalt pipes

21. The petitioner has claimed additional capital expenditure of ₹1444.34 lakh along with the de-capitalisation of (-) ₹215.49 lakh in 2012-13 towards the Replacement of MS ash slurry pipe line with Cast Basalt pipes under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification of the said claim, the petitioner has submitted that MS pipes of ash slurry lines were replaced with Cast basalt pipes for addressing environmental concerns as per the directives of State Control Pollution Board (SPCB) Orissa vide letter dated 28.7.2010 and as per directive No. 6, the ash slurry leakage from the pipes was to be prevented by replacing it by high quality and durable pipes. The petitioner has submitted the details of depreciation recovered towards MS pipe against de-capitalisation of the gross value of the old asset.

22. The respondents, BRPL & GRIDCO have submitted that the replacement of this asset shows improper/lack of upkeep of assets by the petitioner for which SPCB had asked petitioner to fix up responsibility for such lapses. It has also submitted that no document or notification as required under Regulation 3(9) of the 2009 Tariff Regulations, 2009 has been submitted by the petitioner indicating the occurrence of the event of change in law. Accordingly, it has submitted that the expenditure may be met from the O&M expenses. The respondent, TANGEDCO has also submitted that the expenditure claimed under this head may be met from the O&M expenses. In response, the petitioner in its rejoinder has clarified as under:

“ Initially MS pipes were used to carry Ash Slurry. The leakages in MS ash slurry pipe due to erosion of duct caused by ash flow are promptly attended. However, even though at the time of setting of the project, the land route of the pipe lines may have not been inhabited, with increasing pressures for new land, more land is being taken-up for inhabitation & associated activities like cultivation etc.

Subsequently, SPCB, Orissa vide letter dated 28.7.2010 directed the petitioner to replace MS pipelines with high quality durable pipelines, to reduce leakages of ash slurry. The petitioner, in order to comply with the directives of SPCB, Orissa, has replaced a MS pipelines with Cast Basalt pipelines in 2012-13 and de-capitalised the corresponding MS pipelines.



It is submitted that the procedures regarding Operation and Maintenance of Ash Ponds/Ash Pipelines, and all recommendations of the OEMs are being strictly followed and hence it cannot be construed as laxity on the part of petitioner. It is further submitted that the claimed work was necessitated due to prevailing situation as per directives of SPCB and hence is claimed under Regulation 9(2)(ii)."

23. In response to the directions of the Commission, the petitioner has submitted that the expenditure for ₹1444.34 lakh has been incurred on account of capitalisation towards replacement of MS pipes as per directives of SPCB due to emergent needs for addressing environment concerns. It has also submitted that the scheme was not projected in Petition No.243/GT/2013 and hence was not part of the order dated 21.12.2015. In its rejoinder to the reply of TANGEDCO, the petitioner has clarified that Change in law includes change by any competent statutory authority, in any consent, approval or licence and therefore the directive No. 6 of the SPCB in consent order dated 28.7.2010 for controlling air and water pollution fall under change in law which needs to be complied for continuing the station operation. It has also submitted that the work of replacement of MS pipes with cast basalt pipes is not a regular maintenance work and involves capital expenditure as the capital asset of the station has been replaced. The petitioner has pointed out that the capitalisation of the expenditure on this asset has been allowed in respect of Talcher Stage-II for the year 2013-14 by Commission's order dated 26.8.2015 in Petition No. 320/GT/2013.

24. The matter has been examined. The petitioner has claimed the actual additional capital expenditure of ₹1444.34 lakh in terms of the directive of the SPCB vide consent letter dated 28.7.2010. From the letters of the SPCB referred above, it emerges that the directions issued by the OSPCB relate to the compliance to be made by the petitioner for prevention and control of Air and Water pollution under the respective Acts. It is further noticed that the Commission in its order dated 26.8.2015 had allowed the capitalisation of this asset in respect of Talcher Stage-II for the year 2013-14 under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In line with this decision and since the petitioner has undertaken the works in compliance with said directions of the SPCB for protection of



environment, we allow the capitalization of expenditure of ₹1444.34.00 lakh along with de-capitalisation of (-) ₹215.49 lakh during 2012-13 under Regulation 9(2) (ii) of the 2009 Tariff Regulations.

Transfer of lease hold land to Freehold land

25. The petitioner has claimed additional capital expenditure of ₹1.05 lakh towards Transfer of lease hold land to Freehold land along with the de-capitalisation of (-) ₹0.36 lakh towards leasehold land in 2013-14 under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that 2.48 acres of original Government land acquired was not transferred in the name of NTPC and was on lease as per advance possession given by the Government since 1988. It has also submitted that after the order of the Hon'ble High Court of Odisha dated 12.8.2013 in Case No. OJC 2945/96, the land is transferred as freehold to the petitioner after paying compensation as per the court order. The petitioner has enclosed the letter dated 29.8.2013 of the Collector of Angul Distt. and has prayed that the expenditure of ₹1.05 lakh is on account of compliance with the order of the High Court of Odisha and hence prayed to allow under Regulation 9(2) (ii) of the 2009 Tariff Regulations along with de-capitalisation of (-) ₹0.36 lakh in 2013-14. The respondent, TANGEDCO has objected to the capitalisation of this expenditure on the ground that the petitioner had failed to pay the compensation as per Court order and had now requested the Commission to permit such expenditure which is unreasonable. The matter has been examined. Considering the fact that the payment of ₹1.05 lakh is on account of the letter dated 29.8.2013 of the Collector, Angul distt giving effect to the order of the Hon'ble High Court, the actual expenditure incurred is allowed to be capitalised along with de-capitalisation of (-) ₹0.36 lakh in 2013-14 under Regulation 9(2)(ii) of the 2009 Tariff Regulations.



Ash Dyke works and associated works for Ash handling system

Payment of additional compensation to the remaining land oustees

26. The petitioner has claimed actual additional capital expenditure of ₹1.56 lakh (₹0.70 lakh in 2012-13 and ₹0.86 lakh in 2013-14) towards payment of additional compensation to the remaining land oustees. In justification of the same, the petitioner has submitted that the said payment of compensation is towards the balance cost of land for ash dyke. The petitioner has justified the payments by submitting the details in respect of the land oustees who had not vacated the land acquired for ash dyke.

27. The respondent, TANGEDCO has submitted that the petitioner has not furnished any order of the Court or any award of arbitration to qualify for the claim and hence may be rejected. In response, the petitioner in its rejoinder has submitted that full compensation was not received by some of the land oustees as they had not vacated the land for ash dyke and therefore on vacation of land, the balance amount or full compensation has been released to them. The petitioner has also stated that as this payment has been made towards ash dyke land acquired and capitalised earlier, the same is claimed under deferred works relating to ash pond in the original scope of work under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

28. We have considered the submissions. Since the payment of the balance amount of compensation is towards settlement made in respect of the ash dyke land which is within the original scope of work capitalised earlier, we allow the actual additional capital expenditure incurred on this count under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Raising of Ash Dyke Lagoon/Associated Ash slurry pipe works

29. Against the total projected additional capital expenditure of ₹1500.00 lakh (₹700.00 lakh in 2012-13 and ₹800.00 lakh in 2013-14) allowed in order dated 21.12.2015 in



Petition No. 243/GT/2013, the petitioner has claimed total actual additional capital expenditure of ₹2751.90 lakh (₹887.90 lakh in 2012-13 and ₹1864.00 lakh in 2013-14) for the said work. In justification of the same, the petitioner has submitted as under:

“The works was allowed by the Hon’ble Commission vide order dated 15.6.2012. The difference in projections and actual expenditure is due to the fact that the projections are generally cost Estimates based on budgetary offers from vendors, past data and experience available with NTPC, whereas the actual expenditure is actual cash flow showing expenditure incurred based on the letter of awards placed after tendering and negotiation process, actual progress of work at site and final adjustments.

Further there has been all round increase in cost of Civil works in the various components viz., material cost, labour cost etc. It is therefore, submitted that due to above reasons, the actual expenditure incurred is at variation from the projections.

Also there was considerable escalation in price of sand and other construction material during the period. This has been submitted to the Hon'ble Commission vide affidavit dated 6.5 2014 in Rejoinder to reply filed by GRIDCO.

Further there was settlement in the toe region of raising 1 & 2 of lagoon-1. The strengthening works were required to be carried for further raising to be carried out.”

30. The respondents, BRPL & GRIDCO has submitted that this work is being done right from 2009-10 and thus LOA for this work must have been issued much earlier. It has further submitted that the claim of the petitioner under Regulation 9(2) is within the discretionary powers of the Commission and accordingly, the expenditure may or may not be allowed by the Commission. In response, the petitioner in its rejoinder has clarified that the said claim includes an amount of ₹877.00 lakh towards ash dyke strengthening works in 2012-14 period, measures which were necessitated based on the recommendation of expert from Department of Civil Engineering, NIT Rourkela for further raising for safe and reliable operation of ash dyke. The petitioner has further submitted that the projections are generally cost estimates based on budgetary offers from vendors, past data and experience available with NTPC whereas, the actual expenditure is actual cash flow incurred. It has also submitted that the work for each raising is awarded as and when the same becomes necessary and these figures for 2009-14 were not available at the time of filing earlier petitions. The respondent, TANGEDCO has submitted that the claim made by the petitioner is 26.84% higher than the projections allowed vide order dated 21.12.2015



and since the petitioner has failed to restrict the cost within the budgetary estimate , the escalated cost may not be passed on to the beneficiaries. The petitioner in its rejoinder to the reply of TANGEDCO has clarified that besides material and labour cost increase, there has been considerable escalation in price of sand and other construction material during the period. It has further submitted that there was settlement in the toe region of raising 1 & 2 Lagoon -1 of ash dyke of the station.

31. The matter has been considered. It is evident from the submissions of the petitioner that the capitalization projected earlier was based on estimates considering the past awarded contracts for works of similar nature and was based on the same. It is observed that the capitalization value of Ash dyke raising work has however increased on account of the escalation in price of sand and other construction materials apart from the escalation in material and labour cost. In the light of the above submissions and since these works relating to raising of ash dyke are normal activities done in phases depending upon the requirement with passage of time and the said works forms part of the original scope of work, we allow the actual additional capital expenditure claimed during 2012-14 Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Ash Filing works and Spreading of earth over dry ash to control fugitive ash emission at Stage-I

32. The petitioner has claimed additional capital expenditure of ₹236.33 lakh in 2012-13 towards Consolidated Ash filing works and ₹44.93 lakh in 2013-14 towards Spreading of earth over dry ash to control fugitive ash emission at Stage-I. As regards ash filing works, the petitioner has submitted that the construction of dyke is of upstream method of raising and the dyke area reduces with every subsequent raising. It has also submitted that lagoon-1 being of smaller size, the time taken for raising of lagoon-2 is more than the filing time of lagoon-1 and therefore, this job was executed to create space for ash filling in Stage-I lagoons by evacuating ash from Stage-I lagoons and dumping in contingent



lagoon. As regards the expenditure towards spreading of earth over dry ash to control fugitive ash emission, the petitioner has submitted that as soon as the lagoon is filled up to the optimum level and ready for upcoming raising work, it is required to cover the ash in said lagoon with earth to stop any fugitive emission during the construction period for protecting the environment. It has also submitted that it is required to execute this work during the process of raising work of the lagoon i.e. to facilitate the further raising.

33. The respondents, BRPL and GRIDCO have submitted that the justification provided by the petitioner is a casual justification and it shows the lack of anticipation and supervision in dealing with important aspects. In response, the petitioner has submitted that the Consolidated Ash filling works carried out in 2012-13, were works required as an interim measure during the ash dyke raising work. The petitioner has also submitted that these jobs are of the nature which is unpredictable beforehand and are executed as and when on requirement basis, for safe and reliable management of ash dyke. As regards the work towards "Spreading of earth over dry ash to control fugitive ash emission at Stage-I", the petitioner has submitted that earth cover is provided after the filling of lagoon on the top cover before starting of new raising, to avoid fugitive emission during the interim period. It has further submitted that the requirement of this work is linked to the timing of filling of ash dyke and the time required for Ash dyke filling is related to quantity of ash generated which depends upon the operating PLF of units and ash content of coal. The petitioner has stated that it is very difficult to accurately predict these types of works for 5 year period at the start of tariff period. The respondent, TANGEDCO has submitted that the petitioner has not furnished details as to whether this work is within the original scope of work. It has submitted that the expenditure does not fall under Regulation 9(2)(iii) and may be met from the Compensation allowance granted to the generating station. In response, the petitioner has clarified that all works relating to maintaining of ash dyke in safe and reliable manner are part of the original scope of work. It has also submitted that the work of consolidated ash filing works was carried out to ascertain disposal of ash



without any interruption during the raising of ash dyke as the time taken for raising of Lagoon-2 is more than the filling time of Lagoon-1 which is of smaller size. It has further stated that uninterrupted discharge is a must for reliable and continuous operation of the generating station thereby benefitting all beneficiaries.

34. The matter has been examined. It is evident from the submissions of the petitioner that the activity for which the expenditure has been incurred relates to earth cover being provided after filling of lagoon on the top cover to avoid fugitive ash emission, filling of ash dyke wherein the time required for Ash dyke filling is related to quantity of ash generated which depends upon the operating PLF of units and ash content of coal. In this background and as the said works form part of the original scope of works, the actual additional capital expenditure of ₹236.33 lakh in 2012-13 towards Consolidated Ash filing works and ₹44.93 lakh in 2013-14 towards Spreading of earth over dry ash to control fugitive ash emission at Stage-I is justified is allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Construction of Earthen bund for Ash Dyke

35. The petitioner has claimed actual additional capital expenditure of ₹188.09 lakh towards Construction of Earthen Bund for Ash Dyke as against the projected additional capital expenditure allowed in order dated 21.12.2015 in Petition No. 243/2013. Since the expenditure incurred towards this work had already been approved in the said order, the actual capitalisation of the expenditure is allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Installation of 4th Slurry Pump

36. As against the expenditure of ₹800.00 lakh allowed vide Commission's order dated 15.6.2012, the petitioner has not claimed any additional capital expenditure in respect of the Installation of 4th slurry pump during 2009-14. The petitioner has submitted that the job was necessary to accommodate the increased pumping head required with multiple



raising of Ash dyke. The petitioner has submitted that the work included additional pump in existing series, with space creation for new pump in existing ash slurry pump house and relocation of pipelines. It has further submitted that the bidding process took time and now the contract has been awarded on 1.5.2013. It has added that the work has already started and is in progress and the same is expected to be capitalized in the year 2014-15. Accordingly, the petitioner has prayed that the said expenditure may be allowed upon capitalization during the period 2014-19. In view of the submissions of the petitioner, we grant liberty to the petitioner to claim the capitalization of this expenditure during the period 2014-19 and the same would be considered in terms of the 2014 Tariff Regulations.

Capital works undertaken for technological Up-gradation & Reliability of operation

37. The petitioner has claimed actual additional capital expenditure of ₹387.00 lakh in 2012-13 and ₹882.53 lakh in 2013-14 for various capital works undertaken for technological up-gradation & reliability of operation seeking relaxation of Regulation 9(2) by invoking the provisions of 'Power to Relax' in terms of Regulation 44 of the 2009 Tariff Regulations. The following are the activities undertaken under this head:

Head of Work/ Equipment	Actual Additional capital expenditure		Total claimed
	2012-13	2013-14	
<i>(₹ in lakh)</i>			
Capital works undertaken for technological up-gradation & reliability of operation.			
Replacement of obsolete RH spray control valve.	18.92	34.29	53.21
De-capitalisation towards Replacement of obsolete RH spray control valve.	(-)10.60	(-) 21.20	(-) 31.80
Up-gradation of obsolete TDBFP Control System.	354.21	600.72	954.93
De-capitalisation against Up-gradation of obsolete TDBFP Control System.	(-) 63.01	(-)63.01	(-) 126.02
Replacement of obsolete pneumatic actuators.	53.49	76.41	129.90
De-capitalisation towards Replacement of obsolete pneumatic actuators.	(-) 11.46	(-) 11.46	(-) 22.92
Modification of old HP BYPASS control valve.	54.01	58.15	112.16
De-capitalisation towards Modification of old HP BYPASS control valve.	(-) 14.60	(-) 14.60	(-) 29.20
Up-gradation of Old LT Breaker.	11.37	7.93	19.30
De-capitalisation towards Up-gradation of old LT Breaker	(-) 5.33	(-) 12.32	(-) 17.65
Replacement of old vibration monitoring system to	0.00	23.86	23.86



Head of Work/ Equipment	Actual Additional capital expenditure		Total claimed
	2012-13	2013-14	
online vibration monitoring system.			
De-capitalisation towards replacement of old vibration monitoring system to online vibration monitoring system.	0.00	(-) 12.34	(-) 12.34
Up-gradation of PLC system of ASH handling & DM plant	0.00	60.29	60.29
De-capitalisation towards up-gradation of PLC system of ASH handling & DM plant	0.00	(-) 18.89	(-) 18.89
Replacement of boiler S Panel	0.00	112.81	112.81
De-capitalisation towards replacement of Boiler S panel	0.00	(-) 16.59	(-) 16.59
Up-gradation of PLCC systems of 400 KV lines	0.00	78.48	78.48
Total	387.00	882.53	1269.53

38. The respondent, BRPL & GRIDCO have submitted that there exists no provision for additional capitalization of these items under Regulation 9(2) of the Tariff Regulations, 2009. It has also submitted that exercise of powers under Regulation 44 ultimately results in additional benefit to the petitioner and grant of benefit in the form of additional capitalisation would disturb the equilibrium and same would result in unreasonable benefit to the petitioner. Accordingly, the respondents have prayed that the petitioner's claim may not be allowed.

39. In response, the petitioner in its rejoinder has submitted that certain works of technological up-gradation including the up-gradation of PLCC systems of 400 KV lines, has been carried out based on recommendation of the Central Transmission Utility (CTU). It has also submitted that these works have been carried out by the petitioner in order to ensure safe & reliable operation of the generating station. The petitioner has further submitted that the up-gradation of PLCC system has been carried out in order to enhance grid security and reliable operation of the station and the passing of benefit of assets to the beneficiaries without commensurate servicing of the corresponding cost would not be fair and equitable. It has submitted that any technical procedural consideration will have its own associated commercial consideration. Accordingly, the petitioner has prayed that the claims may be considered.



40. The respondent, TANGEDCO has submitted that certain items are minor in nature and some of the items are for replacement due to worn out condition. It has also submitted that the petitioner has not furnished any test certificate to show that the existing items have served their useful life period and replacement is required for the same. Accordingly, it has submitted that the claim of the petitioner does not fall under Regulation 9(2) and the same may be incurred from the Compensation allowance granted to the generating station. In response, the petitioner has clarified that some of the equipments which are critical for successful and reliable operation of the station needs modification, replacement and up-gradation and the works involved are of capital nature.

41. The submission of the petitioner that the expenditure is necessary as some of the equipments are critical for successful and reliable operation of the generating station is not acceptable. In our view, the provisions of Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalisation of these equipments. It is noticed that the generating station has been allowed Compensation Allowance under Regulation 19(e) of the 2009 Tariff Regulations to meet the expenses on new assets of capital nature including minor nature of assets. Accordingly, we are of the considered view that the actual additional capital expenditure claimed by the petitioner shall be met from the Compensation Allowance already allowed to the generating station in order dated 21.12.2015. No case has been made out by the petitioner for relaxation of the provisions of Regulation 9(2) of the 2009 Tariff Regulations and thus the claim for additional capital expenditure on account of capital works undertaken for technological up-gradation & reliability has not been allowed. However, as the assets have become obsolete and are not in use, the de-capitalization of gross value of ₹275.41 lakh (₹105.00 lakh in 2012-13 and ₹170.41 lakh in 2013-14) lakh related to the assets already included in base rate considered for tariff has been adjusted in the capital cost.



Scheme for supply of Electricity within 5 km radius

42. The petitioner has claimed additional capital expenditure of ₹1356.10 lakh (₹53.35 lakh in 2012-13 and ₹1302.75 lakh in 2013-14) towards Implementation of the scheme for creating infrastructure for reliable supply of electricity within the 5 KM radius of the generating station under Regulation 9(2)(ix) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that as per order of the Commission dated 15.6.2012, actual capitalisation is to be considered at the time of truing-up. Accordingly, it has submitted that after completion of 5 km infrastructure work for the generating station, the same has been considered for capitalisation. The petitioner has also submitted that all the 57 villages infrastructure is completed and handed over to the State discoms. The petitioner has submitted that the MOP, GOI had allowed the implementation of the scheme in respect of 8 stations of the petitioner including this generating station and accordingly the expenditure may be allowed.

43. The respondents BRPL & GRIDCO have mainly submitted that the scheme has been withdrawn and that the claim of the said expenditure under Regulation 9(2) is within the discretionary powers of the Commission. They have also submitted that the funds may be met by the petitioner under CSR and accordingly the claim of the petitioner may be rejected. In response, the petitioner in its rejoinder has reiterated that the infrastructure work of the scheme has been completed for all the 57 villages and handed over to the State Discom and certificate regarding the same has been enclosed. The petitioner has stated that the scheme has been carried out in terms of the directions of the MOP, GOI and is in line with the provision of Regulation 9(2)(ix) of the 2009 tariff Regulations. Accordingly, it has prayed that the said expenditure may be allowed after prudence check.

44. The matter has been examined. The scheme for supply of electricity within 5 KM radius around Central Power Plants was withdrawn vide Ministry of Power, Government of India notification dated 25.3.2013. However, it is noticed that the Ministry of Power, GOI



by letter dated 8.3.2014 has granted exemption in respect of 8 ongoing projects around the generating stations of the petitioner, including this generating station, under the erstwhile scheme and has conveyed the approval for capitalization of expenditure for this generating station also as per provisions of the said scheme, subject to orders of this Commission. It is noticed that the petitioner had claimed projected expenditure of ₹1350.00 lakh in 2012-14 (₹50.00 lakh in 2012-13 and ₹1300.00 lakh in 2013-14) in Petition No. 243/GT/2013 and the Commission in its order dated 21.12.2015 had observed as under:

“21. Considering the fact that 90% of the work has been completed and the remaining work is to be completed, we grant liberty the petitioner to claim the actual expenditure incurred after completion of all the works along with documentary evidence indicating that the assets/infrastructure had been handed over to the discom of the State and the same will be considered at the time of truing up of tariff of the generating station for 2009-14 in terms of Regulation 6 (1) of the 2009 Tariff Regulations. In view of this, the expenditure claimed under this head has not been considered in this order.”

45. In terms of the liberty granted, the petitioner has claimed the actual additional capital expenditure of ₹53.35 lakh in 2012-13 and ₹1302.75 lakh in 2013-14 and has prayed that the same may be allowed. The petitioner has submitted that all the 57 villages infrastructure has been completed and handed over to the Central Electricity Supply Utility of Odisha (CESU), Talcher Electrical Division and the certificate evidencing the handing over of the assets have been furnished. Similar claim of the petitioner was considered by the Commission in Petition No. 315/GT/2014 (revision of tariff of Singrauli STPS (2000 MW) for 2009-14] and the Commission vide order dated 21.12.2015 had allowed the said claim observing as under:

“23. We are of the considered view that since the petitioner has incurred the expenditure for creation of the infrastructure, the same should be allowed. However, instead of servicing the same as part of the capital cost, we are of the view that the said expenditure should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly instalments beginning from April, 2016, along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under para 54 of this order. The reimbursement directed as above is in relaxation of Regulation 9 (2) (ix) of the 2009 Tariff Regulations and shall not be cited as precedent in future”



46. In line with the above decision of the Commission and since the expenditure has been incurred and capitalized by the petitioner for creation of the infrastructure, we are of the view that the said expenditure should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly instalments beginning from July, 2016, along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under Para 62 of this order, till the date of capitalization of asset. The reimbursement directed as above is in relaxation of Regulation 9 (2) (ix) of the 2009 Tariff Regulations and shall not be cited as precedent in future.

De-capitalization of unserviceable vehicles

47. The petitioner has de-capitalized unserviceable vehicles amounting to (-) ₹15.57 lakh in 2012-13. The de-capitalization of unserviceable vehicles is in order and is allowed.

48. 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:

		(₹ in lakh)	
		2012-13	2013-14
A	Opening balance of the period	796060.08	813858.38
B	Closing balance of the period	813858.38	827751.65
C	Additional capitalisation as per audited account (b -a)	17798.30	13893.27
d1	Less: additional capitalisation pertaining to Talcher STPS Stage- II	13148.26	2101.15
d2	Less: Additional capitalisation for Dulanga captive coal mine	1.90	402.01
d3	Less: Additional capitalisation for Talcher solar	0.00	6321.22
	Remaining Additional capitalisation (c -d1-d2-d3)	4648.13	5068.89
I	Additional capitalisation/de-capitalization claimed as per Form-9	3181.37	4478.18
li	Less: discharge of past liability claimed	60.24	327.60
lii	Additional capitalisation / De-capitalisation claimed cash basis (i-ii)	3121.12	4150.58
Iv	Add: Un-discharged liabilities in De-capitalisation	386.01	211.14
A	Total Additional capitalisation / de-capitalization claimed gross basis (iii+iv)	3507.14	4361.72
	Exclusion items		
	Capitalisation of spares	614.95	887.81
	De-capitalisation of spares	(-) 45.64	(-) 54.47
	De-capitalisation of MBOA items	(-) 80.82	(-) 6.66
	Inter unit transfer	0.00	0.00



		2012-13	2013-14
	De-capitalisation of wagons	(-) 379.93	(-)118.49
	Capitalisation of wagons	1049.27	0.00
	De-capitalization /cap other works	(-) 4.44	0.00
	Liability reversal	(-) 12.40	(-)1.02
B	Total Exclusions	1141.00	707.17
	Additional Capital Expenditure (A+B)	4648.13	5068.89

Exclusions

49. 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:

	<i>(₹ in lakh)</i>	
	2012-13	2013-14
Capitalisation of spares	614.95	887.81
De-capitalisation of spares	(-) 45.64	(-) 54.47
De-capitalisation of MBOA items	(-) 80.82	(-) 6.66
Inter-unit transfer	0.00	0.00
De-capitalisation of wagons	(-) 379.93	(-) 118.49
Capitalisation of wagons	1049.27	0.00
De-capitalisation / Capitalisation of other works	(-) 4.44	0.00
Liability reversal	(-) 12.40	(-) 1.02
Total exclusions	1141.00	707.17

Capitalization of Capital Spares

50. The petitioner has procured spares amounting to ₹614.95 lakh in 2012-13 and ₹887.81 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

51. The petitioner has de-capitalized in books of accounts capital spares amounting to (-) ₹45.64 lakh in 2012-13 and (-) ₹54.47 lakh in 2013-14 on account of consumption of these spares. The exclusion sought on de-capitalization of spares has been examined



and it is noticed that these spares form part of the capital cost of the generating station. Hence, exclusion of de-capitalization of these spares is not in order and is not allowed.

De-capitalization of MBOA items

52. The petitioner has de-capitalized MBOA items in books of accounts amounting to (-) ₹80.82 lakh in 2012-13, (-) ₹6.66 lakh in 2013-14 on account of these items becoming unserviceable. The exclusions sought on de-capitalization of MBOA has been examined and it is noticed that out of (-) ₹80.82 lakh in 2012-13 MBOA amounting to ₹63.18 lakh forms part of the capital cost and MBOA amounting to (-) ₹17.63 lakh do not form part of capital cost. The MBOA to the tune of (-) ₹6.66 lakh claimed during 2013-14 forms part of capital cost as per the books of accounts and thus the same is not being allowed under exclusion. Hence, exclusion of de-capitalization of assets amounting to (-) ₹17.63 lakh in 2012-13 which does not form part of capital cost has been considered for the purpose of tariff.

Capitalization of wagons

53. The petitioner has excluded an amount of ₹1049.27 lakh in 2012-13 on account of capitalization of wagons, as the same is not allowed by the Commission. It is observed from the order dated 15.6.2012 that the estimated claim of ₹1091.00 lakh towards procurement of 24 nos. of new wagons was disallowed. Hence, exclusion of ₹1049.27 lakh in 2012-13 towards Wagons has been considered for the purpose of tariff.

De-capitalization of wagons

54. The petitioner has excluded amounts for (-) ₹379.93 lakh in 2012-13 and (-) ₹118.49 lakh in 2013-14 on account of de-capitalization of un-serviceable wagons. Out of the amount of ₹379.93 lakh in 2012-13, an amount of ₹221.94 lakh pertain to Wagons which form part of the capital cost and ₹157.99 lakh pertain to wagons which are not part of capital cost. Further, an amount of ₹118.49 lakh in 2013-14 pertain to Wagons which are



not part of capital cost. Hence, the exclusion for ₹157.99 lakh in 2012-13 and ₹118.49 lakh in 2013-14 towards Wagons which do not form part of capital cost is in order and is allowed.

De-capitalization other works

55. The petitioner has excluded an amount of (-) ₹4.44 lakh in 2012-13 on account of de-capitalization of other works. It is observed from the books of accounts that the said amount is towards Ambassador Car, which do not form part of the capital cost. Hence, the exclusion for ₹4.44 lakh in 2012-13 which do not form part of capital cost is in order and is allowed.

Reversal of liability

56. The petitioner has sought the exclusion of ₹12.40 lakh in 2012-13 and ₹1.02 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.

57. Based on the above, the summary of exclusions allowed and disallowed for the period 2012-14 is as under:

	<i>(₹ in lakh)</i>	
	2012-13	2013-14
Exclusion claimed	1141.00	707.17
Exclusion allowed	1471.76	768.30
Exclusion not allowed	(-) 330.77	(-) 61.13

58. Accordingly, the actual additional capital expenditure allowed for the period 2012-14 is summarised as under:



Head of Work/ Equipment	Actual Additional capital expenditure		Total allowed
	2012-13	2013-14	
(₹ in lakh)			
Change of law			
Replacement of MS ash slurry pipe line with Cast Basalt pipes.	1444.34	0.00	1444.34
Payment to Govt. of Orissa i.r.o Mutation of Land	2.82	0.00	2.82
Procurement, erection & commissioning of Intelligent controllers for ESP	384.65	0.91	385.56
Transfer of lease hold land to Freehold land.	0.00	1.05	1.05
Total (A)	1831.81	1.96	1833.77
Payment of additional compensation to the remaining land oustees.	0.70	0.86	1.56
Raising of Ash Dyke Lagoon / Associated ash slurry pipe works.	887.90	1864.38	2752.28
Consolidated Ash filling works	236.33	0.00	236.33
Construction of Earthen Bund for Ash Dyke	134.56	53.53	188.09
Spreading of earth over dry ash to control fugitive ash emission at Stage-I	0.00	44.93	44.93
Total (B)	1259.49	1963.69	3223.18
Total additional Capitalisation (A+B)	3091.30	1965.65	5056.95
De-capitalisation			
De-capitalisation against replacement of MS ash slurry pipe line with Cast Basalt pipes.	(-) 215.49	0.00	(-) 215.49
De-capitalisation against ESP Intelligent Control System	(-) 179.48	0.00	(-) 179.48
De-capitalisation of Leasehold land	0.00	(-) 0.36	(-) 0.36
De-cap against works undertaken for up-gradation	(-)105.00	(-)170.41	(-) 275.41
De-cap of Unserviceable vehicles	(-)15.57	0.00	(-) 15.57
Total (C)	(-) 515.54	(-)170.77	(-) 686.31
Net Additional capital expenditure (E=A+B+C)	2575.76	1794.88	4370.64
Exclusions not allowed (F)	(-) 330.77	(-) 61.13	(-) 391.90
Total Additional capitalisation allowed (F+E)	2244.99	1733.75	3978.74

59. Considering the discharges of liabilities during the period 2012-14, the net additional capital expenditure allowed is as under:

	(₹ in lakh)	
	2012-13	2013-14
Admitted additional capital expenditure allowed	2244.99	1733.75
Add: Discharges of liabilities	60.24	103.90*
Total additional capital expenditure allowed	2305.23	1837.66

*Discharged liabilities claimed corresponding to disallowed works have been disallowed

60. 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	251595.54	252221.97	252886.95	253773.26	256078.49
Add: Additional capital expenditure	626.43	664.98	886.31	2305.23	1837.66
Closing Capital Cost	252221.97	252886.95	253773.26	256078.49	257916.15
Average Capital Cost	251908.76	252554.46	253330.11	254925.88	256997.32

Debt-Equity Ratio

61. The gross loan and equity of ₹126899.83 lakh and ₹126165.24 lakh respectively as allowed in order dated 21.12.2015 in Petition No. 243/GT/2013 has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting to ₹1469.52 lakh is deducted from the capital cost as on 1.4.2009 and has been adjusted to debt and equity in the ratio of 50:50 for assets/works capitalized prior to 2004 and in the debt-equity ratio of 70:30. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹125944.26 lakh and ₹125651.28 lakh respectively. Further, the admitted additional expenditure has been allocated in the debt and equity ratio of 70:30.

Return on Equity

62. The petitioner has considered pre tax ROE of 22.944% during 2012-13 and 2013-14. 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)

	2012-13	2013-14
Notional Equity- Opening	126304.60	126996.17
Addition of Equity due to additional capital expenditure	691.57	551.30
Normative Equity-Closing	126996.17	127547.46



	2012-13	2013-14
Average Normative Equity	126650.38	127271.82
Return on Equity (Base Rate)	15.500	15.500
Tax Rate for the year	32.445	33.990
Rate of Return on Equity (Pre Tax)	22.944	23.481
Return on Equity(Pre Tax) annualised	29058.66	29884.69

Interest on loan

63. Interest on loan has been worked out as under:

- (a) Gross normative loan amounting to ₹127468.66 lakh as on 1.4.2012 as considered in the order dated 21.12.2015 in Petition No. 243/GT/2013 worked out based on capital cost of ₹251595.54 lakh as on 1.4.2009 has been considered for the purpose tariff.
- (b) Cumulative repayment amounting to ₹118184.98 lakh as on 31.3.2009 as considered in order dated 21.12.2015 in Petition No. 243/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 ₹117398.65 lakh. The net normative opening loan as on 1.4.2009 works out to ₹8545.61 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 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.
- (d) The weighted average rate of interest on loan has been worked out based on actual loan portfolio. The calculations are enclosed at Annexure-I to this order

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



	(₹ in lakh)	
	2012-13	2013-14
Gross opening loan	127468.66	129082.33
Cumulative repayment of loan up to previous year	127468.66	129082.33
Net Loan Opening	0.00	0.00
Addition due to additional capital expenditure	1613.67	1286.36
Repayment of loan during the year	2197.84	1448.12
Less: Repayment adjustment on account of de-capitalization	592.42	162.33
Add: Repayment adjustment on account of discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	8.24	0.57
Net Repayment	1613.67	1286.36
Net Loan Closing	0.00	0.00
Average Loan	0.00	0.00
Weighted Average Rate of Interest of loan	9.600%	9.333%
Interest on Loan	0.00	0.00

Depreciation

65. The cumulative depreciation as on 31.3.2009 as per order dated 21.12.2015 in Petition No. 243/GT/2013 works out to ₹144080.15 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 ₹143814.42 lakh. The value of freehold land considered in order dated 21.12.2015 in Petition No. 243/GT/2013 and order dated 15.4.2013 in Petition No. 23/RP/2012 in Petition No. 228/2009 is ₹3457.99 lakh (inclusive of liabilities of freehold land amounting to ₹1009.17 lakh) and subsequent discharges/reversal and the same has been considered for the purpose of calculating the depreciable value. 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)	
	2012-13	2013-14
Opening Capital Cost	253773.26	256078.50
Add: Additional Capital Expenditure	2305.24	1837.65
Closing Capital Cost	256078.50	257916.15
Average Capital Cost	254925.88	256997.33
Balance useful life	9.99	8.99
Depreciable value (excluding land)@ 90%	226907.26	228749.68



	2012-13	2013-14
Balance depreciable Value	64548.72	60681.43
Depreciation (annualized)	6461.33	6749.88
Cumulative depreciation at the end	162358.54	168068.25
Less: Cumulative Depreciation adjustment on account of un-discharged liabilities	10.03	0.59
Less: Cumulative Depreciation reduction due to de-capitalization	761.66	208.70
Cumulative depreciation (at the end of the period)	168068.25	174610.01

66. The petitioner has submitted the details of unrecovered depreciation on account of disincentive as on 31.3.2014. Based on the directions of the Tribunal in judgement dated 13.6.2007 in Appeal No.155/2006, no adjustment is being made to cumulative depreciation in this order. However, the unrecovered depreciation will be considered in tariff after the designated useful life of the generating station, in terms of the directions contained in the said judgment of the Tribunal.

O&M Expenses

67. O&M expenses as considered in order dated 21.12.2015 in Petition No. 243/GT/2013 and order dated 15.6.2012 in Petition No.228/2009 has been allowed as under:

	<i>(₹ in lakh)</i>	
	2012-13	2013-14
O & M Expenses	15360.00	16240.00

Normative Annual Plant Availability Factor (NAPAF)

68. The NAPAF of 85% as considered in order dated 21.12.2015 in Petition No. 243/GT/2013 has been considered for the purpose of tariff.

Interest on Working Capital

69. 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 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.

70. 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

71. Fuel component in the working capital as considered in order dated 21.12.2015 in Petition No. 243/GT/2013 has been considered as under:

	<i>(₹ in lakh)</i>	
	2012-13	2013-14
Cost of Coal – 1-1/2 months	10002.41	10002.41
Cost of secondary fuel oil – two months	254.08	254.08

Maintenance spares

72. Maintenance spares as allowed in order dated 21.12.2015 in Petition No. 243/GT/2013 as stated below, has been considered.



	(₹ in lakh)	
	2012-13	2013-14
Maintenance spares	3072.00	3248.00

Receivables

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

	(₹ in lakh)	
	2012-13	2013-14
Energy Charges (two months)	13336.55	13336.55
Capacity Charges (two months)	9541.09	9902.66
Total	22877.64	23239.21

O&M Expenses

74. O&M expenses for 1 month as allowed in order dated 21.12.2015 in Petition No. 243/GT/2013 has been allowed as under:

	(₹ in lakh)	
	2012-13	2013-14
O&M Expenses	1280.00	1353.33

75. 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)	
	2012-13	2013-14
Coal Stock- 1-1/2 months	10002.41	10002.41
Oil stock-2 months	254.08	254.08
O&M expenses - 1 month	1280.00	1353.33
Spares	3072.00	3248.00
Receivables- 2 months	22877.64	23239.21
Total Working Capital	37486.13	38097.04
Rate of Interest	12.25	12.25
Total Interest on working capital	4592.05	4666.89

Compensation Allowance

76. Compensation Allowance as allowed vide order dated 21.12.2015 in Petition No. 243/GT/ 2013 has been considered as under.



	(₹ in lakh)	
	2012-13	2013-14
Compensation Allowance	250.00	350.00

Annual Fixed Charges

77. Accordingly, the revised annual fixed charges allowed for the period 2012-14 are summarized as under:

	(₹ in lakh)	
	2012-13	2013-14
Depreciation	6461.33	6749.88
Interest on Loan	0.00	0.00
Return on Equity	29058.66	29884.69
Interest on Working Capital	4592.05	4666.89
O&M Expenses	15360.00	16240.00
Cost of Secondary fuel oil	1524.49	1524.49
Compensation Allowance	250.00	350.00
Annual Fixed Charges	57246.54	59415.95

78. The difference in the annual fixed charges determined by order dated 21.12.2015 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

79. Petition No. 207/GT/2014 is disposed of in terms of the above.

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

Sd/-
(A. S. Bakshi)
Member



Annexure – 1

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

(₹ in lakh)

	Interest Rate					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
GOI Loan	9.5800	9.5800	9.5800	9.5800	9.5800	1251.00	0.00	1251.00
GOI Loan	9.5800	9.5800	9.5800	9.5800	9.5800	863.00	0.00	863.00
GOI Loan	9.5800	9.5800	9.5800	9.5800	9.5800	23598.00	0.00	23598.00
GOI Loan	9.5800	9.5800	9.5800	9.5800	9.5800	16093.00	0.00	16093.00
SBI-VII-T1D7	0.0000	0.0000	0.0000	10.1778	10.0826	0.00	1000.00	1000.00
SBI-VII-T1D8	0.0000	0.0000	0.0000	9.9500	10.0826	0.00	1000.00	1000.00
SBI-VII-T1D12	0.0000	0.0000	0.0000	0.0000	10.1413	0.00	1000.00	1000.00
KFW ESP D1	0.0000	0.0000	0.0000	0.0000	3.1900	0.00	1007.71	1007.71
KFW ESP D2	0.0000	0.0000	0.0000	0.0000	3.1900	0.00	1125.68	1125.68
Total						41805.00	5133.39	46938.39

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross loan - Opening	41805.00	41805.00	41805.00	41805.00	43805.00
Cumulative repayments of Loans upto previous year	4180.50	8361.00	12541.50	16722.00	20902.50
Net loan - Opening	37624.50	33444.00	29263.50	25083.00	22902.50
Increase/ Decrease due to FERV	0.00	0.00	0.00	0.00	0.00
Increase/ Decrease due to ACE	0.00	0.00	0.00	2000.00	3133.39
Total	0.00	0.00	0.00	0.00	0.00
Less: Repayment (s) of Loans during the year	4180.50	4180.50	4180.50	4180.50	4180.50
Net loan - Closing	33444.00	29263.50	25083.00	22902.50	21855.39
Average Net Loan	35534.25	31353.75	27173.25	23992.75	22378.95
Rate of Interest on Loan	9.5800%	9.5800%	9.5800%	9.6002%	9.3329%
Interest on loan	3404.18	3003.69	2603.20	2303.34	2088.60

