CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 254/2009

Coram: Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V.S. Verma, Member
Shri M.Deena Dayalan, Member

Date of Hearing: 28.2.2011 **Date of Order: 2.8.2012**

In the matter of

Approval of Tariff for Rihand Super Thermal Power Station Stage-II (1000 MW) for the period from 1.4.2009 to 31.3.2014.

And

In the matter of

NTPC Ltd, New Delhi

……Petitioner

Vs

(1) Uttar Pradesh Power Corporation Ltd, Lucknow
(2) Jaipur Vidyut Vitaran Ltd, Jaipur
(3) Ajmer Vidyut Vitaran Ltd, Ajmer
(4) Jodhpur Vidyut Vitaran Ltd, Jodhpur
(5) Delhi Transco Ltd, New Delhi
(6) North Delhi Power Ltd, Delhi
(7) BSES-Rajdhani Power Ltd, New Delhi
(8) BSES Yamuna Power Ltd, Delhi
(9) Haryana Power Purchase Ltd, Panchkula
(10) Punjab State Electricity Board, Patiala
(11) Himachal Pradesh State Electricity Board, Shimla
(12) Power Development Department, Govt. of J&K, Srinagar
(13) Power Department, Union Territory of Chandigarh, Chandigarh
(14) Uttarakhand Power Corporation Ltd, Dehradun **.....Respondents**

Parties present:

1. Shri V.K.Padha, NTPC
2. Shri Ajay Dua, NTPC
3. Shri Navneet Goel, NTPC
4. Shri Rohit Chabra, NTPC
5. Shri Sameer Aggarwal, NTPC
6. Ms. Rakhi Dua, NTPC
7. Shri R.B.Sharma, Advocate, BRPL
8. Shri Sanjay Srivastav, BRPL
9. Shri Naveen Chandra, BRPL

ORDER

This petition has been filed by the petitioner, NTPC, for approval of tariff for Rihand Super Thermal Power Station, Stage-II (1000 MW) (hereinafter referred to as "the generating station") for the period 2009-14 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The generating station with a capacity of 1000 MW comprises of two units of 500 MW each. The dates of commercial operation of different units of the generating station are as under:

	Date of commercial operation (COD)
Unit-I	15.8.2005
Unit-II/ Generating station	1.4.2006

3. The tariff of the generating station for the period 15.8.2005 to 31.3.2009 was determined by Commission's order dated 15.10.2007 in Petition No.106/2006. Subsequently, the Commission *vide* its order dated 30.12.2009 in Petition No. 97/2008 revised the tariff of the generating station, after taking into account the additional capital expenditure incurred during the period from 15.8.2005 to 31.3.2008. Thereafter, the Commission by its order dated 20.4.2011 in Petition No.183/2009, revised the annual fixed charges of the generating station on account of additional capital expenditure incurred for the year 2008-09 based on the capital cost of `292314.59 lakh as on 31.3.2009 and after taking into consideration the directions contained in the judgment of the Appellate Tribunal for Electricity (the Tribunal) dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23 of 2007 and judgments dated 10.12.2008 and 16.3.2009 in Appeal Nos. 151 & 152/2007 and Appeal Nos.133,135 etc of 2008 respectively, subject to the final outcome of the Civil Appeals [C.A. Nos. 5434/2007 to

5452/2007 and 5622/2007, 4112-4113/2009 and 6286 to 6288/2009] filed by the Commission against the said judgments of the Tribunal and pending before the Hon'ble Supreme Court. The annual fixed charges determined by order dated 20.4.2011 in Petition No. 183/2009 was as under:

(` in lakh)

	2005-06 ***(15.8.2005 to 31.3.2006)***	**2006-07**	**2007-08**	**2008-09**
Interest on loan	8028.08	13728.46	12776.55	11852.85
Interest on Working Capital	1593.46	3045.03	3106.69	3134.24
Depreciation	5659.87	10180.49	10350.53	10491.85
Advance Against Depreciation	3553.57	5073.90	7068.01	7601.43
Return on Equity	6563.29	11838.27	12036.00	12200.34
O & M Expenses	4865.00	10120.00	10520.00	10950.00
Total	**30263.27**	**53986.15**	**55857.78**	**56230.72**

4. Thereafter, the petitioner, in terms of the directions contained in the order of the Commission dated 29.6.2010 in Petition No.245/2009, filed amended petition vide affidavit dated 18.7.2011 taking into consideration the revised figures as per order of the Commission dated 20.4.2011 in Petition No. 183/2009. Thus, the annual fixed charges claimed by the petitioner for the period 2009-14 are as under:

(` in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Depreciation	15079	15257	15418	15433	15433
Interest on Loan	10732	9820	9063	7885	6739
Return on Equity	20233	20471	20688	20708	20708
Interest on Working Capital	5085	5116	5162	5176	5201
O&M Expenses	13000	13740	14530	15360	16240
Cost of secondary fuel oil	1631	1631	1636	1631	1631
Compensation Allowance	0	0	0	0	0
Special Allowance	0	0	0	0	0
Total	**65761**	**66036**	**66497**	**66193**	**65952**

5. Reply to the petition has been filed by the respondents, namely, UPPCL (respondent no. 1), JVVN (respondent no. 2), AVVN (respondent no.3), JdVVN (respondent no.4), NDPL (respondent no. 6) and BRPL (respondent no. 7).

Capital cost

6. Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:

*"7. **Capital Cost.** (1) Capital cost for a project shall include: (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"*

7. The annual fixed charges claimed by the petitioner are based on the opening capital cost of `286651 lakh (admitted capital cost of `292315 lakh (vide order dated 20.4.2011 in Petition No. 183/2009) less the liabilities amounting to `5663 lakh as per Form-9A of the petition) as on 1.4.2009. However, the approved capital cost as on 31.3.2009 is `292314.59 lakh (inclusive of liabilities).

8. The petitioner vide its affidavit dated 9.6.2010 has furnished the value of capital cost and liabilities as on 1.4.2009 as per books of accounts in Form-9A. These details of liabilities and capital cost which have been reconciled with the records of the Commission are as under:

(`in lakh)

	As per Form-9A	**As per records of Commission**
Capital cost as on 1.4.2009, as per books	298532.72	298532.72
Liabilities included above	5663.10	5663.10

9. The total liabilities included in the gross block of `292314.59 lakh as on 1.4.2009 is `5663.10 lakh (pertaining to the period 15.8.2005 to 31.3.2009).

10. The last proviso of 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."

11. Accordingly, 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 of `5663.10 lakh, works out to `286651.49 lakh on cash basis. The discharge of un-discharged liabilities, if any, made by the petitioner would be included in the capital base, in the year of discharge.

12. The petitioner vide its affidavit dated 12.1.2012, has furnished the details of the liabilities discharged during 2009-11. Out of the un-discharged liabilities deducted as on 1.4.2009, the petitioner has discharged `120.44 lakh during the year 2009-10 (pertaining to assets/works capitalized during the period 2004-09) and `8.80 lakh during the year 2010-11 (`2.68 lakh pertains to assets/works capitalized during 2004-09 and `6.12 lakh for the year 2009-10). Further, the petitioner has reversed liabilities amounting to `112.32 lakh (pertaining to assets/works capitalized during the period 2004-09). The discharge of the above liabilities during 2009-11, has been allowed during the respective years as part of the additional capital expenditure allowed for the generating station.

Actual/ Projected Additional Capital Expenditure

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

> *"9. Additional Capitalization**.** (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
>
> *(i) Un-discharged liabilities;*
>
> *(ii) Works deferred for execution;*
>
> *(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;*
>
> *(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*

(v) Change in law:

Provided that the details of works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff. (2) The capital expenditure 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-materialization 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."

14. The petitioner has claimed the actual/projected additional capital expenditure for the period 2009-14 as under:

(` in lakh)

	2009-10 (actual)	2010-11 (actual)	2011-12	2012-13	2013-14	Total
Additional Capital Expenditure	1153.05	5597.12	560.58	0.00	0.00	**7310.75**

15. The cut-off date for the generating station has expired. Hence, the petitioner's claim for additional capital expenditure has to be examined in terms of Regulation 9 (2) of the 2009 Tariff Regulations. Accordingly, we examine the submissions made by the petitioner on the admissibility of the additional capital expenditure in the subsequent paragraphs.

Submissions of the petitioner

16. In its petition, the petitioner has submitted that the estimated capital expenditure claims are of the following nature:

(i) The additional capital expenditure (as per Regulation 9 (1) and 9 (2) of the Tariff Regulations, 2009) as per the original scope of work of the generating station which has been put to use;

(ii) The other additional capital expenditure in respect of the existing generating stations which have to be done on on-going basis.

17. The petitioner has also submitted the following in support of its claim in the petition and in its affidavit dated 29.3.2010.

(a) In addition to the capital expenditure covered by Regulation 9 (1) and 9 (2) and 19 (e) of the 2009 Tariff Regulations, there will be capital expenditure of different nature which would be necessary for the efficient operation of the generating station within its life time. No generating station can operate on a sustainable basis to achieve the level of performance parameters specified by the Commission without incurring capital expenditure from time to time. The expenditure on such capital assets to be incurred by generating stations are therefore necessary for proper and effective working and therefore beneficial to the respondents. Over a long period of 25 years of the life of the stations, many a times the Original Equipment Manufacturer (OEM) stop providing spares & service and this necessitates the replacement of obsolete equipment's with new items, to ensure support from

OEMs. Additional capital expenditure for this purpose had constantly been allowed by the Commission under the 2001 and 2004 tariff regulations. However, additional capital expenditure for successful and efficient operation of the generating station has not been included in Regulation 9 of 2009 Tariff Regulations. Accordingly, the petitioner has claimed additional capital expenditure on 'works considered necessary for the efficient operation of the generating stations' in addition to those specified under Regulation 9 (1) and (2) and 19 (e) of the 2009 Tariff Regulations.

(b) Regulations 7(1), 8 and 9 of 2009 Tariff Regulations pertain to the capital cost of new generating station commissioned after 1.4.2009 and do not cover the existing projects commissioned prior to 1.4.2009. Moreover, the term 'additional capital expenditure' defined in Regulation 3 (3) refers to the additional capital expenditure incurred or projected to be incurred, after the date of commercial operation of the project and admitted by the Commission after prudence check, subject to Regulation 9. The scope and meaning of additional capitalization is not confined to Regulation 9 but subject to Regulation 9, which would mean that if additional capitalization is of the nature as referred to in Regulation 9, it would be read subject to the provisions of Regulation 9 and if the additional capitalization is not of the nature as referred to in Regulation 9, the provisions of Regulation 9 could not be applied. Regulation 9 has no application whatsoever to the existing projects and it does not limit the additional capitalisation in the case of existing projects.

(c) The last proviso to Regulation 7 is an independent provision dealing with the existing projects and additional capitalization for the existing projects is comprehensively covered by the said provision. In respect of the existing projects, the additional capital expenditure projected to be incurred from 1.4.2009 till 31.3.2014 and admitted by the Commission after prudence check would qualify to be capitalized, notwithstanding the fact that this expenditure is not covered under Regulation 9 (1) and (2).

(d) Regulation 19 (e) provides for a compensation allowance to meet the expenses of new assets of capital nature, including in the nature of minor assets and normative compensation allowance under Regulation 19 (e) has no relevance to the additional capitalization of a substantive nature incurred by the generating company from time to time. As the Regulations 9 (1) and (2) and 19 (e) do not exclude the additional capital expenditure of substantial nature in respect of the existing generating stations, the additional capital expenditure as projected by the petitioner, to be incurred during the tariff period 2009-14 for the existing generating stations, may be considered and allowed by the Commission.

(e) The additional capital expenditure claimed is necessary and expedient for efficient operation of the generating station and is not incurred on account of any failure or default or any other act of omission or commission on the part of the petitioner. This expenditure is such which has to be necessarily incurred in the ordinary course of running of a generating station and for operating machines for the life span of 25 years.

18. Similar submissions of the petitioner have been considered and disposed of by the Commission by its orders dated 20.4.2012, 7.5.2012, 23.5.2012, 25.5.2012, 14.6.2012 in Petition Nos. 239/2009, 256/2009, 332/2009, 279/2009 and 222/2009 respectively, pertaining to determination of tariff some of the generating stations of the petitioner for 2009-14 as under:

> *"16. We have considered the submissions of the petitioner. The following two issues arise for our consideration:*
>
> *(a) Whether additional capitalization projected to be incurred after the cut-off date during period 2009-14 is admissible under Regulation 9(2) of the 2009 Tariff Regulations.*
>
> *(b) Whether additional capital expenditure for successful and efficient operation of the thermal generating station including the gas power stations could be admissible under Regulation 9(2) of the 2009 Tariff Regulations.*
>
> *17. As regards the first issue, it is noticed that the last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that in case of existing projects, capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding the un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year and the tariff period*

2009-14, as may be admitted by the Commission, shall form the basis of determination of tariff. Thus, as per the last proviso projected additional capital expenditure to be incurred for the respective years of the tariff period 2009-14 shall be considered by the Commission while determining the tariff in respect of the existing project. The said proviso does not make any distinction between the additional capital expenditure projected to be incurred before the cut-off date and additional capital expenditure projected to be incurred after the cut-off date. It therefore follows that in case of existing projects, additional capital expenditure projected to be incurred after the cut-off date can be considered by the Commission for determination of tariff. Regulation 9 of the 2009 Tariff Regulations provides for the additional capital expenditure to be admissible during the year 2009-14. While Clause (1) of Regulation 9 deals with the expenditure incurred before the cut-off date, Clause (2) of the said regulation deals with the expenditure incurred after the cut-off date. However, Clause (2) of Regulation 9 provides that only expenditure incurred after the cut-off date shall be admissible. It thus emerges that while the additional capital expenditure can be claimed under last proviso to Regulation 7(2) on projection basis, the same is not admissible under Regulation 9(2), since the expenditure has not been incurred. It is a settled principle of law that the provisions of the Act or Regulations should be read harmoniously keeping in view the objective of the legislation. During the period 2004-09, the additional expenditure was being admitted after the same was incurred. However, the Commission decided to allow additional capital expenditure on projection basis during the period 2009-14. In this connection, reference is drawn to paragraphs 10.1.3 and 10.1.4 of the Statement of Reasons to the 2009 Tariff Regulations, wherein the concept of claiming additional capitalization on projection basis has been explained in the following terms:

"10.1.3 The Commission has carefully examined the issue again and is of the view that the generating companies/transmission licensees as well as the beneficiaries should appreciate the regulation in its proper perspective. Apart from meeting the intended objective of certainty of tariff and minimal retrospective adjustments, the procedure would have following additional advantages:

(a) From beneficiaries' perspective, they would be aware of the intended additional capitalization in advance and be able to voice their concern before the Commission about the reasonableness and necessity of additional capitalization before the actual expenditure is made by the generating companies/transmission licensees. As regards their concern about the expected expenditure being considered in capital base without putting assets to use, the Commission would like to clarify that anticipated expenditure would be considered only after it is found justified and reasonable with the expectation that asset would be put to use. In the absence of expenditure actually made, the same would be taken out from the capital cost at the time of truing up exercise with appropriate refund/adjustment with interest. Further, if the expenditure indeed materializes, the actual retrospective adjustment is expected to be bare minimum as a result of truing up exercise.

(b) From the prospective of the generating companies/transmission licensees, they would be assured of the expenditure to be admitted once accepted by the Commission in the capital cost before making the expenditure. Moreover, they would be more careful about the expenditure to be made as it would require to be justified before the Commission.

10.1.4 The Commission is of the view that the approach adopted with regard to consideration of the expenditure including additional capital expenditure projected to be incurred for the purpose of determination of capital cost is a win-win situation for all. The Commission has decided to retain the said provisions with regard to capital cost including projected additional capital expenditure in Regulations 7 and 9 of these regulations."

18. It thus emerges from the scheme of the 2009 Tariff Regulations that the additional capital expenditure projected to be incurred after the cut-off date can be admitted by the Commission after prudence check. Keeping in view the scheme of the 2009 Tariff Regulations and in order to remove the inconsistency between last proviso to Regulation 7(2) and Regulation 9(2), we have relaxed in our order dated 13.4.2012 in Petition No. 282 of 2009 the provisions of Regulation 9(2) of the 2009 Tariff Regulations in exercise of our power under Regulation 44 to allow additional capital expenditure projected to be incurred after the cut-off date. The said decision is applicable in the present case.

19. As regards the second issue, it is noticed that as per the scheme of the 2009 Tariff Regulations, additional capital expenditure incurred or projected to be incurred prior to the cut-off date and the additional capital expenditure incurred after the cut-off date is admissible under Regulation 9(1) and 9(2) of the 2009 Tariff Regulations. We have relaxed the provisions of the Regulation 9(2) to allow the expenditure on projected basis to be incurred after the cut-off date. Regulation 9(2) provides for the different provisions for admissibility of the additional capital expenditure. In respect of the hydro generating stations, Regulation 9(iv) provides for expenditure which has become necessary for successful and efficient operation of the hydro generating stations and similar provisions have been made under Regulation 9(v) in respect of the transmission systems. In case of the thermal generating stations, Regulation 19(e) provides for compensation allowance. Regulation 19(e) of 2009 Tariff Regulations is extracted as under:-

"(e) In case of coal-based or lignite-fired thermal generating station a separate compensation allowance unit-wise shall be admissible to meet expenses on new assets of capital nature including in the nature of minor assets, in the following manner from the year following the year of completion of 10, 15, or 20 years of useful life:

Years of operation	***Compensation Allowance*** ***(` in lakh/MW/year)***
0-10	*Nil*
11-15	*0.15*
16-20	*0.35*
21-25	*0.65*

20. It is evident from the provisions of Regulation 19(e) that the expenditure in case of coal based or lignite fired thermal generating stations is admissible to meet the expenses on new assets of capital nature including in the nature of minor assets. Correspondingly, no provision has been made to admit additional capital expenditure of capital nature for successful operation of the thermal generating station under Regulation 9(2) of the 2009 Tariff Regulations. On the other hand, clear provisions have been made for admitting the expenditure for efficient and successful operation of the hydro generating stations and transmission systems under certain conditions. The provisions of the Regulation 9(2) are clear and unambiguous in that the expenditure for successful and efficient operation of the thermal generating stations have not been provided since a normative compensation allowance has been provided under Regulation 19(e) of 2009 Tariff Regulations to meet the expenses on new assets of capital nature. In our view, last proviso to Regulation 7(2) cannot be considered as independent of Regulation 9 of 2009 Tariff Regulations. The "additional expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission" occurring in last proviso to Regulation 7(2) have to be considered and allowed in terms of provisions of Regulation 9(2) of 2009 Tariff Regulations. The Commission after taking into account the requirements of the gas based generating stations and coal based thermal generating stations has made specific provisions under Regulation 9(2)(vi) and (viii) through second amendment to the 2009 Tariff Regulations as under:

"(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-materialization of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station."

21. Thus, the Commission has consciously provided for the expenditure of specific nature under Regulation 9(2)(vi) and (vii) which are considered necessary for the successful and efficient operation of the coal based thermal generating station and gas based stations. In other words, *additional capital expenditure for successful and efficient operation of the generating stations for reasons other than those provided for under Regulation 9(2) of 2009 Tariff Regulations is not permissible.*

19. In line with the above decisions, we consider the additional capital expenditure claimed by the petitioner for 2009-14 in this petition, under the provisions of Regulation 9(2) of the 2009 Tariff Regulations as stated in the succeeding paragraphs.

20. The petitioner has claimed actual /projected capital expenditure for the period 2009-14 as detailed under:

(`in lakh)

Sl. No.	**Head of work/ Equipment**	**Regulation**	**Actual/Projected Capital Expenditure**				
			2009-10 (actual)	**2010-11 (actual)**	**2011-12**	**2012-13**	**2013-14**
1.	Unit-III- Main Plant Civil package TG	9(2)(i)	0.00	26.35	0.00	0.00	0.00
	Change in law						
2.	Construction of gateman cabin along MGR	9(2)(ii)	3.67	0.00	0.00	0.00	0.00
3.	Air Quality Monitoring system		124.11	0.00	0.00	0.00	0.00
4.	On line energy meter		8.91	0.00	0.00	0.00	0.00
5.	Solar Water Heating System in Indradhanush (new building) & Solar power system at mayor bridge of MGR		8.30	0.00	0.00	0.00	0.00
	Ash handling related works						
6.	Road at Lagoon I&II area	9(2)(iii)	44.31	0.33	0.00	0.00	0.00
7.	Dry Fly Ash Extraction system		0.00	1714.97	0.00	0.00	0.00
8.	Augmentation of Railway siding	9(2)(viii)	0.00	3777.06	478.42	0.00	0.00
9.	11 kV overhead lines for MGR		0.71	1.14	0.00	0.00	0.00
10.	Supply & Erection of 11 kV overhead line		2.98	6.70	0.00	0.00	0.00
11.	Consultancy services for balance MGR work		0.00	55.94	0.00	0.00	0.00
12.	Construction of approach roads		6.70	4.29	0.00	0.00	0.00
13.	BHEL Main plant package		395.28	0.00	0.00	0.00	0.00
14.	Servo motor for FD & PA fan actuators		64.39	0.00	0.00	0.00	0.00
15.	Generator fan blades		27.72	0.00	0.00	0.00	0.00
	Other expenditure						
16.	Chassis for Aerial plate form	5,6 & 7	13.09	0.00	0.00	0.00	0.00
17.	Elevator in TG Hall & ESP control room		0.00	0.00	66.46	0.00	0.00
18.	Cable laying in township for expansion of telephone network		16.82	0.00	0.00	0.00	0.00
19.	Bunker modification work		86.79	0.00	15.70	0.00	0.00
20.	Portable X-Ray tube based analyzer system		14.04	0.00	0.00	0.00	0.00
21.	Pneumatically powered tube leveling machine		122.48	0.00	0.00	0.00	0.00
22.	Ion Chromatograph		17.92	0.00	0.00	0.00	0.00

23.	ERP Implementation		6.11	0.00	0.00	0.00	0.00
24.	ERP Implementation: Expansion of OFC network		50.19	0.00	0.00	0.00	0.00
25.	Hospital equipment: Mortuary chamber for two bodies model- YSI-177 External cardiac pacemaker synaphtophore multi channel ech machine A-Scan biometer-Biomedix model : ECHORULE2 X-Ray machine 500 MA		18.08	0.00	0.00	0.00	0.00
26.	Hospital Equipment Oxygen Concentrator system 4203 ECG machine BPL Cardiart 6108T Computerized Spirometer		0.00	1.55	0.00	0.00	0.00
Details of discharge of liabilities							
Liabilities discharged during 2010-11 in respect of items capitalized in Sl. Nos. 9 &10 above							
27	Item No.10 above: Supply & Erection of 11 kV over head line		0.00	3.79	0.00	0.00	0.00
28	Item No.6 above: On line Energy meters		0.00	2.33	0.00	0.00	0.00
Discharge of liabilities outstanding as on 31.3.2009							
29	Discharge of liabilities outstanding as on 31.3.2009		120.44	2.68	0.00	0.00	0.00
	Grand Total		**1153.05**	**5597.12**	**560.58**	**0.00**	**0.00**

Main Plant Civil Package TG-Unit-III-Regulation 9(2)(i)

21. The petitioner has claimed expenditure for `26.35 lakh during 2010-11 under Regulation 9(2)(i) of the 2009 Tariff Regulations, towards main plant civil package. In justification of the said expenditure, the petitioner has submitted as under:

> *"After the technical examination of the package awarded to M/S NBCC, the technical examiner of CVC passed an order stating that "Reconciliation statement of steel (Reinforcement / structure) be prepared as per clause 9.2.6.1 of Special Conditions of Contract (SCC) of package". Accordingly, NTPC reconciled with NBCC and the balance free of cost (FOC) steel of `2633776.00 was capitalized in the year 2010-11"*

It emerges from the submission of the petitioner that the liability for payment of `26.35 lakh has arisen during 2010-11 on account of the reconciliation with M/s NBCC in accordance with the order passed by the Technical Examiner of Central Vigilance Commission (CVC). However, the petitioner has not submitted any documentary proof of the order passed by the Technical Examiner in support of its claim. In view of this, the expenditure is not allowed. The petitioner is however granted liberty to claim the said expenditure based on documentary evidence at the time of truing up in terms of Regulation 6 of the 2009 Tariff Regulations, which would be considered in accordance with law.

Regulation 9(2)(ii)

Construction of Gateman cabin along MGR system

22. The petitioner has claimed expenditure of `3.67 lakh during 2009-10 towards construction of gateman cabin along Merry Go Round (MGR) system. The petitioner has submitted that said item/work is necessary to enhance safety and security of MGR system used for transportation of coal. In its affidavit dated 9.2.2010, the petitioner has submitted that the level crossing which was unmanned due to less road and rail tariff, had increased due to the existence of this generating station and the corresponding industrialization. It has also submitted that as per guidelines (Permanent Way Manual) of the Ministry of Railways, Government of India, which has been adopted for MGR systems, manning of these crossings was essential and a person was required to be deputed on 24 hour basis. Accordingly, it has been submitted that a gatemen cabin was required and the said item/asset was constructed. The respondent, BRPL has submitted that the claim under this head is permissible only if there is any change in law and the petitioner has not indicated any recent change in law justifying the expenditure. In response, the petitioner has reiterated its submissions made in the petition. The matter has been examined. The provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on minor assets. In view of this, the capitalization of the expenditure under this head has not been allowed.

Air Quality Monitoring System

23. The petitioner has claimed `124.11 lakh in 2009-10 towards Air Quality Monitoring System as a statutory requirement in compliance with the directions of the State Pollution Control Board. In view of this, the expenditure is allowed under Regulation 9(2) (ii) of the 2009 Tariff Regulations.

On line energy meter

24. The petitioner has claimed expenditure of `8.91 lakh during 2009-10 towards On-line energy meter system required for measurement of energy consumed by various HT & LT drives for proper energy audit and proper maintenance to optimize auxiliary consumption as per the CEA (Installation & Operation of Meters) Regulation, 2006. The respondent, BRPL has submitted that the claim under this head is permissible only if there is any change in law and the petitioner has not indicated any recent change in law justifying the expenditure. The respondent, NDPL has submitted that capitalization of the said asset does not contribute to the efficient and successful operation of the generating station. The matter has been examined. We are of the view that since the above Regulation of CEA mandates the installation of online energy meters, the submission of the petitioner is accepted and the expenditure is required to be allowed. Accordingly, the expenditure is allowed under Regulation 9(2) (ii) of the 2009 Tariff Regulations.

Solar Water Heating System in Indradhanush (New Building) & Solar Power System at Mayor Bridge of MGR

25. The petitioner has claimed expenditure of `8.30 lakh during 2009-10 towards the installation of Solar heating system to meet the requirement that all public buildings need to install energy saving devices and the Solar power system at mayor bridge of MGR is required to provide electricity for signaling panels. The respondent, BRPL has submitted that the claim under this head is permissible only if there is any change in law and the petitioner has not indicated any recent change in law justifying the expenditure. The respondent, NDPL has submitted that capitalization of the said asset does not contribute to the efficient and successful operation of the generating station and the benefits from installing this asset accrue to the petitioner only. The matter has been examined and we are of the view that the capitalization of Solar heating system and solar power system for this generating station do

not provide any direct benefits to the respondent beneficiaries. Hence, capitalization of the expenditure is not allowed.

Regulation 9(2)(iii)

Deferred works relating to ash handling system in the original scope of work

26. The petitioner has claimed expenditure of `44.31 lakh during 2009-10 towards construction of Road at Lagoon I & II area related to Ash dyke raising Central lagoon –I. The petitioner has submitted that this would facilitate to reach at different location of lagoon for maintenance purpose and for uniform distribution of ash throughout the lagoon. In addition, the petitioner has sought the capitalization of expenditure of `1714.97 lakh during 2010-11 towards Dry Ash Evacuation System (DAES) for ash utilization targeted to achieve 100% ash utilization by 2014 as per government objective. Regulation 9(2)(iii) provides for consideration of expenditure for deferred works related to Ash Pond/Ash handling system within the original scope of work. The respondent, NDPL has submitted that the proposed expenditure is liable to be rejected since no document has been furnished to show that the expenditure is part of the original scope of work and adequate amount is available to undertake the said work. In response, the petitioner has submitted that these works form part of the original scope of work and are continuous works required in the ash dyke from time to time, e.g construction of ash pond, raising of ash pond, installation of series pumps, laying of ash disposal pipes and other dyke related works. It has also submitted that DAES would be commissioned in order to achieve ash utilization as envisaged vide notification dated 3.11.2009 of the Ministry of Environment & Forests, Government of India. In view of the submissions of the petitioner that these works form part of original scope of work and considering the fact that these works are taken up in stages during the life of the generating station and also as per notification of the MoE&F, we allow the capitalization of the expenditure, as above, under this head.

Regulation 9(2)(viii)

Augmentation of Railway Siding/11 kV overhead lines/Supply & Erection of 11kV overhead lines / Consultancy Services for balance MGR works

27. The petitioner has claimed expenditures of `3777.06 lakh during 2010-11 and `478.42 lakh during 2011-12 towards Augmentation of Railway siding, `0.71 lakh during 2009-10 and `1.14 lakh during 2010-11 towards the installation of 11 kv overhead lines for MGR system, `2.98 lakh during 2009-10 and `6.70 lakh during 2010-11 towards the Supply and Erection of 11 kv Overhead lines and `55.94 lakh during 2010-11 towards consultancy services for balance MGR works. The petitioner has submitted that these are part of original scope of work and LOA was issued to RITES on 2.12.2004. It has also submitted that the delay in execution was due to the delay in handing over of land by NCL, settlement of R&R issues and other issues like shifting of 11 kV lines, cutting of trees etc. The respondent, BRPL has submitted that un-discharged liabilities towards final payments/withheld payments for works executed within the cut-off date, are allowed under this head. Since in all the above cases, works are still going on, additional capital expenditure as proposed by the petitioner is liable to be rejected. From the documents available on record, it is observed that the main reason for the delay in execution of the work was due to delay in acquiring of land from NCL, which in our view was beyond the control of the petitioner. Further, it is also noticed that the augmentation of Railway siding is necessary to bring coal from non-linked mines, on account of acute shortage of coal. With the reasons for delay in execution of these works having been explained by the petitioner, we notice that these expenditure claimed are un-discharged liabilities, in respect of orders which were placed on 2.12.2004 i.e. prior to the date of commercial operation of the generating station, the capitalization of which was delayed for reasons beyond the control of the petitioner. Accordingly, we allow the capitalization of the expenditure claimed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

Regulation 5, 6 & 7

Chasis for aerial platform

28. The petitioner has claimed expenditure of `13.09 lakh during 2009-10 for providing chasis for aerial platform required to carry out safely maintenance works for switchyard CT & breaker at different elevation which in turn improve functioning of swtichyard stability. The respondent, BRPL has submitted that most of these claims under Regulation 5, 6& 7 of the 2009 Tariff Regulations are in the nature of tools and tackles and the additional capital expenditure claimed is not permissible. In response, the petitioner has submitted that these expenditures are of capital nature resulting into asset creation of long time service of the station and the beneficiaries ultimately and are not of routine O&M nature. We agree with the contentions of the respondent, BRPL and are of the view that the expenditure is of minor nature. The provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on minor assets. In view of this, the expenditure claimed under this head has not been allowed.

Elevator in TG Hall & ESP Control room Elevator in TG Hall & ESP Control room

29. The petitioner has claimed expenditure of `66.46 lakh during 2011-12 for this asset on the ground that the elevators are required for efficient and safe movement. It has also been submitted that the said asset has not been included in the main plant package. From the submissions of the petitioner, it is noticed that no proper justification has been given for the delay in installation of Elevators. Moreover, the provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of the said asset. Hence, the expenditure claimed has not been allowed for capitalization.

Cable laying in township for expansion of telephone network

30. The petitioner has claimed expenditure of `16.82 lakh during 2009-10 for cable laying in township for expansion of telephone network and has submitted that the said works is required for reliable communication during emergencies and for efficient operation of the generating station. The expenditure claimed is in the nature of minor assets. Since the provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on minor assets, the expenditure claimed under this head has not been allowed.

Construction of approach roads

31. The petitioner has claimed expenditure of `6.70 lakh during 2009-10 and `4.29 lakh during 2010-11 in respect of the said work. The petitioner has submitted that the capitalization is towards the balance portion of work in the township, approach roads across trimmed nallahs at different places. Since the petitioner has not properly explained the reasons for the delay in execution of the work, the additional capital expenditure claimed has not been allowed.

Bunker modification work

32. The petitioner has claimed expenditure of `86.79 lakh during 2009-10 and `15.70 lakh during 2011-12 in respect of the said work. The petitioner has submitted that deformation and bulging was seen at conical portion of the coal bunkers. After investigation, the coal bunkers required stiffening at the lower conical zone for increasing the availability of both units of the generating station. The respondent, NDPL has submitted that the said expenditure is in the nature of O&M expenses and is liable to be rejected. We are of the view that the said expenditure is in the nature of O&M expenses and is required to be borne by petitioner from the normative O&M expenses allowed to the generating station. In view of this, the expenditure claimed is not allowed to be capitalized.

BHEL Main Plant Package/Servo motor for FD & PA fan actuators/Generator fan blades

33. The petitioner has claimed expenditure of `395.28 lakh during 2009-10 towards BHEL Main Plant Package, `64.39 lakh during 2009-10 for Servo Motor for FD & PA fan actuators and `27.72 lakh during 2009-10 for generator fan blades. The petitioner has submitted that these items for part of the original scope of work and the delay in supplying the mandatory spares by M/s BHEL under main plant package awarded during the year 2001. The petitioner vide its affidavits dated 9.2.2010 and 30.9.2011 has submitted that these spares have high lead time in India due to huge demand and supply gap prevailing in the power sector and accordingly most of these spares were ordered in 2001. The petitioner has also submitted that in the case of the generating station, the Commission has so far allowed initial spares worth `4648.00 lakh as per order dated 15.10.2007 in Petition No.106/2006 and 30.12.2009 in Petition No. 97/2008 out of the total initial spares worth `7308 lakh, constituting 2.5% of the original project cost as on the cut-off date, as per the 2004 Tariff Regulations. The petitioner has added that out of the balance initial spares of `2660 lakh, it has claimed spares worth `395.28 lakh during 2009-10. The respondent, NDPL has submitted that the claims under this head are admissible only in case the works are completed within the cut-off date. Since, the Commission by its order dated 20.4.2011 Petition No.183/2009 had already relaxed the cut-off date for the generating station upto 31.3.2009, further relaxation of cut-off date is not justified. In response, the petitioner has submitted that these spares were earlier utilized by M/s BHEL elsewhere to bring more capacity to generation keeping in view the power deficit scenario of the country. Accordingly, the material was supplied late to the petitioner and was capitalized during 2009-10. The petitioner has also submitted that the cost of `395.28 lakh for

mandatory spares has not been included in the capital cost of the generating station. The petitioner has also further clarified that the penalty as per LD Clause would be imposed on the closure of the contract. We have considered the submissions of the parties. The generating station was commissioned on 1.4.2006 and the cut-off date is 31.3.2008 as per the 2004 Tariff Regulations. Under Regulation 17 of the 2004 Tariff Regulations, initial spares subject to a ceiling limit of 2.5% of the original cost of the project as on the cut-off date shall be included in the capital cost of the generating station. Since the spares need lead time for procurement considering the huge gap in demand and supply of spares in the power sector, the petitioner had ordered most of the spares during the year 2001. The Commission had allowed the capitalization of these spares procured before the cut-off date in its orders dated 15.10.2007 and 30.12.2009. Since part of spares for which orders were placed before the cut-off date, were supplied by the OEM after the cut-off date, the Commission as a special case had relaxed the cut-off date to 31.3.2009 and had allowed the capitalization of these spares in its order dated 20.4.2011 in Petition No.183/2009 in exercise of its 'power to relax' under Regulation 13 of the 2004 Tariff Regulations. It was expected of the petitioner to ensure that the spares for which orders were placed on BHEL during 2001 materializes within the cut-off date or latest within the extended cut-off date. Capitalization of spares on piece meal basis in deviation of the provisions of the Tariff Regulations defeats the very purpose of specifying the cut-off date, which is aimed at ensuring that the original capital cost of the project is firmed up at the earliest, in order to ensure regulatory certainty. The petitioner has submitted that in view of late supply of materials by BHEL, the spares was capitalized only during 2009-10. We are of the view that the petitioner having full knowledge that there is huge demand and supply gap for these spares, should have taken adequate steps to capitalize the spares, amounting to 2.5% of the original capital cost, within the extended cut-off date allowed to the generating station. Having not done so, there is no reason for us to allow capitalization of these spares for this generating station during 2009-10, under this head, by further extending the cut-off date.

Portable X-Ray tube based analyzer system

34. The petitioner has claimed expenditure of `14.04 lakh during 2009-10 for this asset to provide quick on-site chemical analysis of metals in all plant areas. The petitioner has submitted that this is being used for detecting metal mix up on welded joints, which help in the predictive maintenance of pressure parts and would improve boiler availability. The expenditure claimed is in the nature of minor assets. Since the provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on minor assets, the expenditure claimed under this head has not been allowed.

Pneumatically powered tube beveling machine

35. The petitioner has claimed expenditure for `122.48 lakh during 2009-10 for this asset on the ground that the same helps in cutting and preparing the edges of boiler tubes to complete the rewelding in a very short time in case of boiler tube leakages. Since, the provisions of Regulation 9(2) do not provide for capitalization of such expenditure, the same is not allowed.

Ion Chromatograph

36. The petitioner has claimed expenditure of `17.92 lakh during 2009-10 for this asset on the ground that the said asset is used for analysis of metal ions (Na, Cl, Fe, Ph etc in steam and water cycle and the condensate system. Analysation of water and steam are required to increase healthiness of boiler and in preventive maintenance. We are of the view that the asset is in the nature of tools and tackles. Since the provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on this count, the same has not been allowed.

ERP Implementation

37. The petitioner has claimed actual expenditure of `6.11 lakh during 2009-10 towards payment for balance work of ERP implementation scheme which was allowed by the Commission during the previous tariff period. Since these are balance payments of works already admitted by the Commission the same is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

ERP Implementation (Expansion of OFC Network)

38. The petitioner has claimed the actual expenditure of `50.19 lakh during 2009-10 for implementation of balance work of the approved ERP scheme. The petitioner has submitted that in order to implement ERP system, the various functions were required to be connected by LAN. The OFC network is required to strengthen the connectivity. The completion of work delayed due to late supply of materials from vendor. The justification submitted by the petitioner has been examined and the reason for delay attributed to the late supply of materials from the vendor cannot be acceptable. In view of this, we are not inclined to allow the expenditure on ERP, after the cut-off date for the reasons stated above. Therefore, the the expenditure on balance work is not admissible under this head.

Hospital Equipments

39. The petitioner has claimed the actual expenditure of `18.08 lakh during 2009-10 and `1.55 lakh during 2010-11 towards Hospital Equipments, like mortuary chamber, external cardiac peacemaker, multichannel ECG machine etc. The petitioner has submitted that keeping in view the remoteness of the project from the nearest city, these hospital equipments are safety and security devices and are necessarily required to provide basic requirements in a hospital for continuous monitoring the health of the employees and to deal with emergencies and provide adequate medical attention in time. We have examined the submissions and are of the view that the assets claimed are minor in nature. Since the

provisions under Regulation 9(2) of the 2009 Tariff Regulations do not permit the capitalization of expenditure on minor assets, the capitalization of the expenditure under this head has not been allowed.

40. Based on the above discussions, the additional capital expenditure allowed for the period 2009-14 is as under:

(` in lakh)

Sl. No.	Head of work/ Equipments	Actual/Projected Capitalization				
		2009-10 (Actual)	2010-11 (Actual)	2011-12	2012-13	2013-14
1	Road at Lagoon I&II area	44.31	0.33	0.00	0.00	0.00
2	Dry Fly Ash Extraction System	0.00	1714.97	0.00	0.00	0.00
3	Unit-III- Main Plant Civil Package TG	0.00	0.00	0.00	0.00	0.00
4	Construction of Gateman Cabin Along MGR	0.00	0.00	0.00	0.00	0.00
5	Air Quality Monitoring System	124.11	0.00	0.00	0.00	0.00
6	On line energy meter	8.91	0.00	0.00	0.00	0.00
7	Solar Water Heating System in Indradhanush (New Building) & Solar Power System at mayor bridge if MGR	0.00	0.00	0.00	0.00	0.00
8	Augmentation of Railway siding	0.00	3777.06	478.42	0.00	0.00
9	11 KV overhead Lines for MGR	0.71	1.14	0.00	0.00	0.00
10	Supply & Erection of 11 KV overhead Line	2.98	6.70	0.00	0.00	0.00
11	Consultancy services for Balance MGR work	0.00	55.94	0.00	0.00	0.00
12	Construction of approach roads	0.00	0.00	0.00	0.00	0.00
13	BHEL Main plant package	0.00	0.00	0.00	0.00	0.00
14	Servo motor for FD & PA fan actuators	0.00	0.00	0.00	0.00	0.00
15	Generator fan blades	0.00	0.00	0.00	0.00	0.00
16	Chasis for aerial plate form	0.00	0.00	0.00	0.00	0.00
17	Elevator in TG Hall & ESP Control room	0.00	0.00	0.00	0.00	0.00
18	Cable laying in township for expansion of telephone network	0.00	0.00	0.00	0.00	0.00
19	Bunker modification work	0.00	0.00	0.00	0.00	0.00
20	Portable X Ray Tube based analyzer system	0.00	0.00	0.00	0.00	0.00
21	Pneumatically powered tube beveling machine	0.00	0.00	0.00	0.00	0.00
22	Ion Chromatograph	0.00	0.00	0.00	0.00	0.00
23	ERP Implementation	6.11	0.00	0.00	0.00	0.00
24	ERP Implementation: Expansion of OFC Network	0.00	0.00	0.00	0.00	0.00
25	Hospital Equipments- Mortuary chamber for two bodies model- YSI-177 External cardiac pacemaker synaphtophore multi channel ech machine A-Scan biometer- Biomedix Model : ECHORULE2 X-Ray Machine 500 MA	0.00	0.00	0.00	0.00	0.00
26	Hospital Equipment as Below: Oxygen Concentrator System 4203 ECG machine BPL Cardiart 6108T Computerized Spirometer	0.00	0.00	0.00	0.00	0.00
	Total	**187.13**	**5556.14**	**478.42**	**0.00**	**0.00**

Details of discharge of liabilities						
Liabilities discharged during 2010-11 in respect of certain items capitalized as above						
2010-11						
27	Item 10 above: Supply & Erection of 11 KV overhead line	0.00	3.79	0.00	0.00	0.00
28	Item 6 above: On line Energy meters	0.00	2.33	0.00	0.00	0.00
Discharge of liabilities as on 31.3.2009						
29	Discharge of liabilities outstanding as on 31.3.2009	120.44	2.68	0.00	0.00	0.00

Reconciliation of actual additional capitalization for 2009-10 & 2010-11 with balance sheet

41. In the absence of balance sheet for the years 2009-10 and 2010-11 and the reconciliation of accounts amongst the various stages of the generating station, only the elements of additional capitalization have been examined on merit. The reconciliation of additional capital expenditure the said years with balance sheets shall be carried out at the time of truing up of the capital cost.

42. The additional capital expenditure allowed for the purpose of tariff for 2009-14, including liabilities discharged, is as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Additional capital expenditure allowed	187.13	5556.14	478.42	0.00	0.00	**6221.69**
Add: Liabilities discharged	120.44	8.80	0.00	0.00	0.00	**129.24**
Net Additional capital expenditure allowed	**307.57**	**5564.94**	**478.42**	**0.00**	**0.00**	**6350.93**

Capital Cost for 2009-14

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

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	286651.49	286959.06	292524.00	293002.42	293002.42
Additional capital expenditure	307.57	5564.94	478.42	0.00	0.00
Closing Capital cost	**286959.06**	**292524.00**	**293002.42**	**293002.42**	**293002.42**
Average Capital cost	**286805.27**	**289741.53**	**292763.21**	**293002.42**	**293002.42**

Debt-Equity ratio

44. Regulation 12 of the 2009 Tariff Regulations provides that:

"(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.

45. The gross loan and equity amounting to `204620.22 lakh and `87694.38 lakh, respectively, as on 31.3.2009, approved by order dated 20.4.2011 in Petition No.183/2009, has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting to `5663.10 lakh deducted from the capital cost as on 1.4.2009 has been adjusted to debt and equity in the ratio of 70:30 for all liabilities as the approved debt equity ratio for the generating station is 70:30 from the date of commercial operation. As such, the gross normative loan and equity as on 1.4.2009 is revised to `200656.04 lakh and `85995.45 lakh, respectively. Further, the additional expenditure admitted above is allocated in debt-equity ratio of 70:30, and the same is subject to truing up in terms of Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

46. Regulation 15 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides that:

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

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II.

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

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

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

Rate of pre-tax return on equity = Base rate / (1-t)

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

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

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

47. Accordingly, return on equity has been worked out @23.481% per annum on the normative equity after accounting for the additional capital expenditure.

(` in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Notional Equity- Opening	85995.45	86087.72	87757.20	87900.73	87900.73
Addition of Equity due to additional capital expenditure	92.27	1669.48	143.53	-	-
Normative Equity-Closing	86087.72	87757.20	87900.73	87900.73	87900.73
Average Normative Equity	86041.58	86922.46	87828.96	87900.73	87900.73
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for the year 2008-09	33.990%	33.990%	33.990%	33.990%	33.990%
Rate of Return on Equity (Pre Tax)	23.481%	23.481%	23.481%	23.481%	23.481%
Return on Equity (Pre Tax)-(annualised)	**20203.42**	**20410.26**	**20623.12**	**20639.97**	**20639.97**

Interest on loan

48. Regulation 16 of the 2009 Tariff Regulations provides that:

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

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

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

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

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

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

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

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

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

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

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

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

49. The interest on loan has been worked out as under:

(i) The gross normative loan of `200656.04 lakh as on 1.4.2009 has been considered.

(ii) Cumulative repayment of loan of `56528.48 lakh as on 31.3.2009 as considered in order dated 20.4.2011 in Petition No. 183/2009 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 during the tariff period 2004-09) 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 `55433.33 lakh.

(iii) Accordingly, the net normative opening loan as on 1.4.2009 works out to `145222.71 lakh.

(iv) Addition to normative loan on account of additional capital expenditure approved above has been considered on year to year basis.

(v) 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/reversal of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009.

(vi) Accordingly, in line with the provisions of the regulation 16 (5) stated above, weighted average rate of interest has been calculated considering the actual loan portfolio comprising of Bonds Series existing as on 1.4.2009.

50. The necessary calculation for interest on loan is as under:

(` in lakh)

	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Gross opening loan	200656.04	200871.34	204766.80	205101.69	205101.69
Cumulative repayment of loan up to previous year	55433.33	70535.95	85748.23	101118.63	116501.59
Net Loan Opening	145222.71	130335.39	119018.57	103983.06	88600.10
Addition due to Additional capitalisation	215.30	3,895.46	334.89	-	-
Repayment of loan during the year	15057.60	15211.76	15370.40	15382.96	15382.96
Less: Repayment adjustment on account of de-capitalization	-	-	-	-	-
Add: Repayment adjustment on account of discharges / reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	45.01	0.52	-	-	-
Net Repayment	15102.62	15212.28	15370.40	15382.96	15382.96
Net Loan Closing	130335.39	119018.57	103983.06	88600.10	73217.14
Average Loan	137779.05	124676.98	111500.82	96291.18	80908.62
Weighted Average Rate of	7.6157%	7.6681%	7.8887%	7.9125%	8.0017%

Interest on Loan					
Interest on Loan	**10492.83**	**9560.39**	**8795.93**	**7619.04**	**6474.04**

Depreciation

51. Regulation 17 of the 2009 Tariff Regulations provides that:

> *"(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*
>
> *(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*
>
> *Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.*
>
> *Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.*
>
> *(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*
>
> *(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system.*
>
> *Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.*
>
> *(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation] as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.*
>
> *(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."*

52. The cumulative depreciation as on 31.3.2009 as per order dated 20.4.2011 in Petition No.183/2009 is `56528.48 lakh and the same has been considered. However, proportionate adjustment has been made to this 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 `55433.33 lakh. Further, the value of freehold land as considered in the

said order as on 31.3.2009 is 'nil' and the same has been considered for the purpose of calculation of the depreciable value. Accordingly, the balance depreciable value (before providing depreciation) for 2009-10 works out to `202691.41 lakh. Since, as on 1.4.2009, the generating station is less than 12 years old from the effective date of commercial operation of 7.12.2005, the depreciation has been calculated taking weighted average rate of deprecation @5.2501%. 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	286651.49	286959.06	292524.00	293002.42	293002.42
Closing capital cost	286959.06	292524.00	293002.42	293002.42	293002.42
Average capital cost	286805.27	289741.53	292763.21	293002.42	293002.42
Depreciable value @ 90%	258124.75	260767.37	263486.89	263702.18	263702.18
Balance depreciable value	202691.41	190231.43	177738.66	162583.55	147200.59
Depreciation (annualized)	**15057.60**	**15211.76**	**15370.40**	**15382.96**	**15382.96**
Cumulative depreciation at the end	70490.94	85747.71	101118.63	116501.59	131884.55
Add: Cumulative depreciation adjustment on account of discharges	45.01	0.52			
Net Cumulative depreciation (at the end of the period)	70535.95	85748.23	101118.63	116501.59	131884.55

Operation & Maintenance expenses

53. Clause (c) of Regulation 19 of Regulation of the 2009 Tariff Regulations provide the following O&M expense norms for coal based generating stations as under:

(`in lakh/MW)

	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses norms for 500 MW units	13.00	13.74	14.53	15.36	16.24

54. The petitioner has claimed the following O&M expenses during 2009-14:

(`in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00

55. Based on above norms, the Operation & Maintenance expenses claimed by the petitioner is found to be in order and hence allowed.

Normative Annual Plant Availability Factor (NAPAF)

56. The NAPAF of the generating station is considered as 85% for the period 1.4.2009 to 31.3.2014.

Interest on Working Capital

57. In accordance with sub-clause (a) of clause(1) of Regulation 18 of the 2009 Tariff Regulations, working capital in case of Coal based/Lignite fired generating stations shall cover:

> *(i) Cost of coal or lignite and limestone, if applicable for one and half months for pit-head generating stations and two months for non pit-head 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 secondary 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 charges and energy charges for sale of electricity calculated on the normative annual plant availability factor, and*
>
> (v) *Operation and maintenance expenses for one month*.

58. 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*.

59. Working capital has been calculated considering the following elements:

Fuel components in working capital

60. The petitioner has claimed fuel component in working capital based on price and GCV of coal & oil for preceding three months of January, 2009 to March 2009 as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 1.5 months	11398	11398	11429	11398	11398
Cost of Secondary Fuel oil for 2 months	272	272	273	272	272

61. Based on then above norms, the cost of fuel component in working capital based on the price and GCV of coal and oil for the preceding three months of January, 2009 to March, 2009 works out as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 1.5 months	11398.20	11398.20	11429.43	11398.20	11398.20
Cost of Secondary Fuel oil for 2 months	271.88	271.88	272.63	271.88	271.88

Maintenance Spares

62. The petitioner has claimed the following maintenance spares in the working capital:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of maintenance spares	2600	2748	2906	3072	3248

63. The 2009 Tariff Regulations provide for maintenance spares @ 20% of the operation & maintenance expenses specified in Regulation 19. Accordingly, the maintenance spares as mentioned above are considered for the purpose of tariff.

Receivables

64. Receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as shown below:

(` in lakh)

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

Variable Charges-2 months	15197.60	15197.60	15239.24	15197.60	15197.60
Fixed Charges- 2 months	10910.70	10943.75	11018.26	10966.85	10926.96
Total	**26108.31**	**26141.36**	**26257.50**	**26164.46**	**26124.57**

O&M Expenses

65. O&M expenses for 1 month considered for the purpose of working capital is as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
O& M expenses for 1 month	1083.33	1145.00	1210.83	1280.00	1353.33

Cost of Secondary fuel oil

66. The petitioner has claimed secondary Fuel oil cost as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Secondary Fuel oil	1631	1631	1636	1631	1631

67. Based on 500 MW capacity, the secondary fuel oil cost works out as under and is considered for the purpose of tariff:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Secondary Fuel oil	1631.31	1631.31	1635.78	1631.31	1631.31

68. 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 given as under:

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.5 month	11398.20	11398.20	11429.43	11398.20	11398.20
Cost of secondary fuel oil- 2 months	271.88	271.88	272.63	271.88	271.88
O&M expenses – 1 month	1083.33	1145.00	1210.83	1280.00	1353.33
Maintenance Spares	2600.00	2748.00	2906.00	3072.00	3248.00
Receivables – 2 months	26108.31	26141.36	26257.50	26164.46	26124.57
Total working capital	**41461.73**	**41704.44**	**42076.40**	**42186.55**	**42395.99**
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	**5079.06**	**5108.79**	**5154.36**	**5167.85**	**5193.51**

Annual Fixed charges for 2009-14

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

(` in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	15057.60	15211.76	15370.40	15382.96	15382.96
Interest on Loan	10492.83	9560.39	8795.93	7619.04	6474.04
Return on Equity	20203.42	20410.26	20623.12	20639.97	20639.97
Interest on Working Capital	5079.06	5108.79	5154.36	5167.85	5193.51
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of Secondary fuel oil	1631.31	1631.31	1635.78	1631.31	1631.31
Total	**65464.23**	**65662.52**	**66109.58**	**65801.13**	**65561.78**

Note: (*1) All figures are on annualized basis.*
(2) All the figures under each head have been rounded. The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns.

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

Energy/Variable Charge

71. Sub-clause (a) of clause (6) of Regulation 21 of the 2009 Tariff Regulations provides that the Energy Charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the formulae as under:

(a) For coal based and lignite fired stations

ECR = {(GHR – SFC x CVSF) x LPPF / CVPF + LC x LPL} x 100 / (100 – AUX)
Where,
AUX = Normative auxiliary energy consumption in percentage.
CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.
CVSF = Calorific value of secondary fuel, in kCal per ml.
ECR = Energy charge rate, in Rupees per kWh sent out.
GHR = Gross station heat rate, in kCal per kWh.
LC = Normative limestone consumption in kg per kWh.
LPL = Weighted average landed price of limestone in Rupees per kg.
LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.
SFC = Specific fuel oil consumption, in ml per kWh.

72. Month to month Energy Charge Rate (ECR) on ex-power plant basis shall be calculated to three decimal places in accordance with the formula given in Regulation 21(6)(a) of the 2009 Tariff Regulations.

73. The learned counsel for the respondent, BRPL has submitted that information related to the calculation of ECR has not been provided to the beneficiaries and the same is required for

payment of monthly bills expeditiously and for the purpose of satisfying its auditors and /or State Regulatory Commission for approval of tariff. Thus, it has prayed that the petitioner may be directed to provide the relevant information, and directions may accordingly be issued to the petitioner to furnish the actual data used in calculation of ECR duly certified by statutory auditor. In response, the petitioner has submitted that tariff including energy charges /variable charges claimed by the petitioner from the beneficiaries are based on the 2009 Tariff Regulations and the tariff orders issued by the Commission. It has also submitted that the details for computation of ECR are given along with the bills as required under Regulation 21 of the 2009 Tariff Regulations and the same does not envisage any auditor certificate on this account. It is noticed that the respondent, NDPL by a separate petition (Petition No.212/2011) had raised similar issues and had sought appropriate directions from the Commission on some of the central generating stations including the petitioner herein, to provide the audited documents in support of variable cost/charges billed by them on monthly basis and the Commission had disposed of the same by order dated 22.3.2012. The relevant portion of the order is extracted a under:

"9. The tariff of the generating station of the respondents are determined by the Central Commission in exercise of its power under Section 79 (1)(a) of the Act read with Section 62(1)(a) of the Act for supply of power to the distribution licensees, based on the 2009 Tariff Regulations notified by it. Regulation 21 of the 2009 Regulations allows a generating company, the energy charges as pass through, with Fuel Price Adjustment (FPA) in the monthly bills raised on the distribution licensees like the petitioner. There exists no provision/clause which mandates the submission of auditor's certificate by a generating company in support of its claim for energy charges computed by it. It is noticed that the respondent No.1, in support of its claim for monthly FPA has submitted documents to the petitioner certifying that the FPA figures are as per quarterly audited accounts. This, according to us, constitutes sufficient compliance with the above regulations. We are of the view that the petitioner can comply with the directions of DERC by submitting certificate from its auditor, based on the authenticated quarterly bills provided by the respondent. Therefore, there is no requirement to issue any directions to the respondents to provide monthly bills duly certified by auditor as prayed for in the petition. Accordingly, the prayers of the petitioner stands rejected and the petition is dismissed as not maintainable."

74. In terms of Regulation 21(5) of the 2009 Tariff Regulations, the Energy Charges covering the primary fuel cost and limestone consumption cost (where applicable) shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiaries during the calendar month on ex-power plant basis, at the energy charge of the

month (with fuel and limestone price adjustment). It is noticed that the petitioner, in support of its claim for monthly FPA has been submitting documents to the respondents certifying that the FPA figures are as per quarterly audited accounts. As regards the submission of the details of coal, including imported coal, the petitioner has submitted that the said details are being submitted to the respondents, in terms of the format agreed to in the ERPC forum. Taking note of the requirement to provide requisite details regarding use of fuel, the Commission by public notice dated 13.6.2012 has proposed amendments to Regulation 21 of the 2009 Tariff Regulations wherein, the generators have been enjoined to provide details of parameters of GCV and price of fuel (i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG or liquid fuel) and blending ratio of imported and domestic coal, proportion of e-auction coal etc. with details of the variation in energy charges billed to the beneficiaries along with each bill/ supplementary bills. This, according to us, would adequately address the grievances of the respondents / beneficiaries. The learned counsel for the respondent, BRPL has submitted that the power supply made by petitioner to its housing colonies is to be accounted for and accordingly adjusted, as the entire power belongs to the beneficiaries to the extent of their respective shares. He also submitted that the undue benefit derived by the petitioner on this count is unreasonable and without any basis. In response, the petitioner has submitted that in terms of the definition of 'generating station' under Section 2(30) of the Act, colony consumption constitutes part of Auxiliary consumption and no undue benefit is derived out of this by the petitioner. It has also submitted that all costs for generation of electricity including costs associated with housing colony of the operating staff are recovered through tariff determined by the Commission and no benefit is derived by the petitioner as alleged by the respondents. The matter has been examined. It is noticed from the Electricity (Removal of Difficulty) Fourth order, dated 8.6.2005 issued by the Central Government that the supply of electricity by a generating company to the housing colonies or township housing the operating staff of the generating station will be deemed to be an integral part of its activity of generating electricity and the generating company shall not be required to obtain license under the Act for supply of electricity. Thus, the supply of electricity to the housing colony or township housing the operating staff of the generating station being an integral part of generation of electricity, shall form part of the auxiliary consumption of the generating station. Since auxiliary consumption of electricity is allowed on normative basis as per the 2009 Tariff Regulations, the consumption of electricity by the housing colony within the said norms cannot be termed as undue benefits derived by the generating company.

Recovery of RLDC Fees and Charges

75. The claim of the petitioner towards recovery of RLDC fees & charges incurred by the petitioner is disposed of in terms of our order dated 6.2.2012 in Petition No. 140/MP/2011 (NTPC-v-POSOCO Ltd & ors).

Expenditure incurred for implementation of scheme for provision of supply of electricity in 5 km area around Central Power plants.

76. The petitioner has submitted that in terms of the notification dated 27.4.2010 of the Government of India of a scheme for provision of supply of electricity in 5 km area around Central Power plants, the petitioner is required to create infrastructure for supply of reliable power to the rural households of the villages within a radius of 5 km of existing and new power stations and as per the scheme, the Appropriate Commission shall consider the expenditure incurred for implementation of such scheme for the purpose of determining tariff of the generating station. The petitioner has submitted that DPR for implementation of the scheme is under preparation and it was not possible to estimate the projected expenditure at this stage. The petitioner has further submitted that it would approach the Commission for consideration of the cost incurred in implementation of this scheme for tariff purpose thereafter. The petitioner is at liberty to approach the Commission through an appropriate application, which would be considered in accordance with law.

Water Charges

77. In this petition, the petitioner has claimed additional water charges due to increase in water charges by the State Government and has proposed recovery of the same directly from the beneficiaries. It is noticed that the petitioner has filed separate application (Petition No.121/2011) under Regulation 44 of the 2009 regulations read with Regulation 111 and other related regulations of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for recovery of additional cost incurred due to abnormal increase in water charges for its various generating stations. This petition is pending for consideration of the Commission and the decision taken in the said petition would be applicable to this generating station.

Application fee and the publication expenses

78. The petitioner has sought approval for the reimbursement of fee of `20,00,000/- each for the years 2009-10, 2010-11 and 2011-12 paid by it for filing the petition and for the expenses incurred for publication of notices in connection with the petition. The petitioner by its affidavit dated 3.12.2009 has submitted the original copies of the publication of notice made in the newspapers. However, the amount incurred towards publication has not been submitted.

79. In terms of Regulation 42 of the 2009 Tariff Regulations and based on our decision in order dated 11.1.2010 in Petition No.109/2009 (pertaining to approval of tariff for SUGEN power plant for the period from DOCO to 31.3.2014) the filing fees in respect of main petitions for determination of tariff and the expenses on publication of notices are to be reimbursed. Accordingly, the expenses incurred by the petitioner on application filing fees for the years 2009-10, 2010-11 and 2011-12 and expenses towards publication of notices in connection with the present petition shall be directly recovered from the beneficiaries, on pro rata basis on production of documentary proof. The filing fees in respect of the balance years of the tariff

period would be recoverable as and when paid by the petitioner in terms of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012.

80. In addition to the above, the petitioner is entitled to recover other taxes etc. levied by statutory authorities in accordance with the 2009 Tariff Regulations, as applicable.

81. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 6.7.2011. The provisional billing of tariff shall be adjusted in accordance with the proviso to Regulation 5 (3) of the 2009 Tariff Regulations.

82. This order disposes of Petition No. 254/2009.

Sd/-	***Sd/-***	***Sd/-***	***Sd/-***
[M. DEENA DAYALAN]	[V.S. VERMA]	[S. JAYARAMAN]	[DR. PRAMOD DEO]
MEMBER	MEMBER	MEMBER	CHAIRPERSON

Annexure -I

Calculation of weighted average rate of interest on loan

(` in lakh)

Sl. no.	Name of loan		2009-10	2010-11	2011-12	2012-13	2013-14
1	SBP(TI,D5)	Net opening loan	1,666.67	833.33	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	833.33	833.33	-	-	-
		Net Closing Loan	833.33	-	-	-	-
		Average Loan	1,250.00	416.67	-	-	-
		Rate of Interest	7.3500%	7.3500%	7.3500%	7.3500%	7.3500%
		Interest	91.88	30.63	-	-	-
2	Federal Bank(T1,D2)	Net opening loan	5,142.86	3,857.14	2,571.43	1,285.71	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	1,285.71	1,285.71	1,285.71	1,285.71	-
		Net Closing Loan	3,857.14	2,571.43	1,285.71	-	-
		Average Loan	4,500.00	3,214.29	1,928.57	642.86	-
		Rate of Interest	7.3000%	7.3000%	7.3000%	7.3000%	7.3000%
		Interest	328.50	234.64	140.79	46.93	-
3	Allahabad (T1,D1)	Net opening loan	214.29	142.86	71.43	-	
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	71.43	71.43	71.43	-	-
		Net Closing Loan	142.86	71.43	-	-	-
		Average Loan	178.57	107.14	35.71	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	13.05	7.83	2.61	-	-
4	Allahabad (T1,D2)	Net opening loan	1,071.43	714.29	357.14	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	357.14	357.14	357.14	-	-
		Net Closing Loan	714.29	357.14	-	-	-
		Average Loan	892.86	535.71	178.57	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	65.27	39.16	13.05	-	-
5	Allahabad (T1,D3)	Net opening loan	642.86	428.57	214.29	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	214.29	214.29	214.29	-	-
		Net Closing Loan	428.57	214.29	-	-	-
		Average Loan	535.71	321.43	107.14	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	39.16	23.50	7.83	-	-
6	Allahabad (T1,D5)	Net opening loan	1,714.29	1,142.86	571.43	-	-
		Add: Addition during the period	-	-	-	-	-

		Less: Repayment during the period	571.43	571.43	571.43	-	-
		Net Closing Loan	1,142.86	571.43	-	-	-
		Average Loan	1,428.57	857.14	285.71	-	-
		Rate of Interest	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Interest	103.57	62.14	20.71	-	-
7	Canara Bank (T1,D2)	Net opening loan	1,714.29	1,285.71	857.14	428.57	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	428.57	428.57	428.57	428.57	-
		Net Closing Loan	1,285.71	857.14	428.57	-	-
		Average Loan	1,500.00	1,071.43	642.86	214.29	-
		Rate of Interest	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
		Interest	119.25	85.18	51.11	17.04	-
8	Canara Bank (T1,D6)	Net opening loan	3,428.57	2,571.43	1,714.29	857.14	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	857.14	857.14	857.14	857.14	-
		Net Closing Loan	2,571.43	1,714.29	857.14	-	-
		Average Loan	3,000.00	2,142.86	1,285.71	428.57	-
		Rate of Interest	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Interest	217.50	155.36	93.21	31.07	-
9	Corporation Bank (T1,D2)	Net opening loan	1,071.43	714.29	357.14		
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	357.14	357.14	357.14	-	-
		Net Closing Loan	714.29	357.14	-	-	-
		Average Loan	892.86	535.71	178.57	-	-
		Rate of Interest	8.9300%	8.9300%	8.9300%	8.9300%	8.9300%
		Interest	79.73	47.84	15.95	-	-
10	Indian Bank (T1,D2)	Net opening loan	142.86	71.43			
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	71.43	71.43	-	-	-
		Net Closing Loan	71.43	-	-	-	-
		Average Loan	107.14	35.71	-	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	7.83	2.61	-	-	-
11	J & K Bank (T1,D2)	Net opening loan	571.43	285.71	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	285.71	285.71	-	-	-
		Net Closing Loan	285.71	-	-	-	-
		Average Loan	428.57	142.86	-	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	31.33	10.44	-	-	-
12	PNB (T1,D3)	Net opening loan	714.29	357.14			
		Add: Addition during the period	-	-	-	-	-

		Less: Repayment during the period	357.14	357.14	-	-	-
		Net Closing Loan	357.14	-	-	-	-
		Average Loan	535.71	178.57	-	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	39.16	13.05	-	-	-
13	SBI (T1,D8)	Net opening loan	2,428.57	-	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	2,428.57	-	-	-	-
		Net Closing Loan	-	-	-	-	-
		Average Loan	1,214.29	-	-	-	-
		Rate of Interest	11.2200%	11.1000%	11.1000%	11.1000%	11.1000%
		Interest	136.24	-	-	-	-
14	SBI-II (T1,D7&D8)	Net opening loan	4,285.71	2,857.14	1,428.57	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	1,428.57	1,428.57	1,428.57	-	-
		Net Closing Loan	2,857.14	1,428.57	-	-	-
		Average Loan	3,571.43	2,142.86	714.29	-	-
		Rate of Interest	8.6200%	8.5000%	8.5000%	8.5000%	8.5000%
		Interest	307.86	182.14	60.71	-	-
15	South Indian Bank (T1,D2)	Net opening loan	2,000.00	1,500.00	1,000.00	500.00	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	500.00	500.00	500.00	500.00	-
		Net Closing Loan	1,500.00	1,000.00	500.00	-	-
		Average Loan	1,750.00	1,250.00	750.00	250.00	-
		Rate of Interest	7.5000%	7.5000%	7.5000%	7.5000%	7.5000%
		Interest	131.25	93.75	56.25	18.75	-
16	SBBJ (T1,D3)	Net opening loan	857.14	428.57			
		Add: Addition during the period					
		Less: Repayment during the period	428.57	428.57			
		Net Closing Loan	428.57	-	-	-	-
		Average Loan	642.86	214.29	-	-	-
		Rate of Interest	7.3050%	7.3050%	7.3050%	7.3050%	7.3050%
		Interest	46.96	15.65	-	-	-
17	UBI (T1,D4)	Net opening loan	3,571.43	1,785.71	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	1,785.71	1,785.71	-	-	-
		Net Closing Loan	1,785.71	-	-	-	-
		Average Loan	2,678.57	892.86	-	-	-
		Rate of Interest	7.3000%	7.3000%	7.3000%	7.3000%	7.3000%
		Interest	195.54	65.18	-	-	-
18	Un.BI (T1,D3)	Net opening loan	714.29	357.14	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment	357.14	357.14	-	-	-

		during the period					
		Net Closing Loan	357.14	-	-	-	-
		Average Loan	535.71	178.57	-	-	-
		Rate of Interest	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Interest	39.16	13.05	-	-	-
19	UnBI (T1,D7/D8)	Net opening loan	1,230.77	615.38	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	615.38	615.38	-	-	-
		Net Closing Loan	615.38	-	-	-	-
		Average Loan	923.08	307.69	-	-	-
		Rate of Interest	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Interest	66.92	22.31	-	-	-
20	UnBI (T1,D9)	Net opening loan	833.33	416.67	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	416.67	416.67	-	-	-
		Net Closing Loan	416.67	-	-	-	-
		Average Loan	625.00	208.33	-	-	-
		Rate of Interest	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Interest	45.31	15.10	-	-	-
21	LIC-III (T3,D1)	Net opening loan	4,250.00	3,750.00	3,250.00	2,750.00	2,250.00
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	500.00	500.00	500.00	500.00	500.00
		Net Closing Loan	3,750.00	3,250.00	2,750.00	2,250.00	1,750.00
		Average Loan	4,000.00	3,500.00	3,000.00	2,500.00	2,000.00
		Rate of Interest	7.7320%	7.7320%	7.7320%	7.7320%	7.7320%
		Interest	309.28	270.62	231.96	193.30	154.64
22	Bond-XII Series	Net opening loan	6,000.00	4,000.00	2,000.00	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	2,000.00	2,000.00	2,000.00	-	-
		Net Closing Loan	4,000.00	2,000.00	-	-	-
		Average Loan	5,000.00	3,000.00	1,000.00	-	-
		Rate of Interest	10.0300%	10.0300%	10.0300%	10.0300%	10.0300%
		Interest	501.50	300.90	100.30	-	-
23	Bond-XVI Series	Net opening loan	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	-	-	-	-	-
		Net Closing Loan	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Average Loan	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Rate of Interest	8.0300%	8.0300%	8.0300%	8.0300%	8.0300%
		Interest	321.20	321.20	321.20	321.20	321.20
24	Bond-XVIII Series	Net opening loan	9,000.00	7,200.00	5,400.00	3,600.00	1,800.00
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00

		during the period					
		Net Closing Loan	7,200.00	5,400.00	3,600.00	1,800.00	-
		Average Loan	8,100.00	6,300.00	4,500.00	2,700.00	900.00
		Rate of Interest	5.9800%	5.9800%	5.9800%	5.9800%	5.9800%
		Interest	484.38	376.74	269.10	161.46	53.82
25	Bond-XXI Series	Net opening loan	25,000.00	25,000.00	22,500.00	20,000.00	17,500.00
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	-	2,500.00	2,500.00	2,500.00	2,500.00
		Net Closing Loan	25,000.00	22,500.00	20,000.00	17,500.00	15,000.00
		Average Loan	25,000.00	23,750.00	21,250.00	18,750.00	16,250.00
		Rate of Interest	7.7400%	7.7400%	7.7400%	7.7400%	7.7400%
		Interest	1,935.00	1,838.25	1,644.75	1,451.25	1,257.75
26	5.5% Euro Bond ($929.48@ Rs.44.95/$)	Net opening loan	41,780.00	41,780.00	-	-	-
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	-	41,780.00	-	-	-
		Net Closing Loan	41,780.00	-	-	-	-
		Average Loan	41,780.00	20,890.00	-	-	-
		Rate of Interest	6.9722%	6.9722%	6.9722%	6.9722%	6.9722%
		Interest	2,912.97	1,456.49	-	-	-
27	Aallahabad-II (T1, D2)	Net opening loan	3,714.29	3,142.86	2,571.43	2,000.00	1,428.57
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	571.43	571.43	571.43	571.43	571.43
		Net Closing Loan	3,142.86	2,571.43	2,000.00	1,428.57	857.14
		Average Loan	3,428.57	2,857.14	2,285.71	1,714.29	1,142.86
		Rate of Interest	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
		Interest	240.00	200.00	160.00	120.00	80.00
28	LIC-III (T4,D4)	Net opening loan	4,335.00	3,825.00	3,315.00	2,805.00	2,295.00
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	510.00	510.00	510.00	510.00	510.00
		Net Closing Loan	3,825.00	3,315.00	2,805.00	2,295.00	1,785.00
		Average Loan	4,080.00	3,570.00	3,060.00	2,550.00	2,040.00
		Rate of Interest	8.7281%	8.7281%	8.7281%	8.7281%	8.7281%
		Interest	356.11	311.59	267.08	222.57	178.05
29	SBI-IV (T1,D2)	Net opening loan	600.00	514.29	428.57	342.86	257.14
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	85.71	85.71	85.71	85.71	85.71
		Net Closing Loan	514.29	428.57	342.86	257.14	171.43
		Average Loan	557.14	471.43	385.71	300.00	214.29
		Rate of Interest	9.6200%	9.5000%	9.5000%	9.5000%	9.5000%
		Interest	53.60	44.79	36.64	28.50	20.36
30	SBI-IV (T1,D3)	Net opening loan	2,000.00	1,714.29	1,428.57	1,142.86	857.14
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	285.71	285.71	285.71	285.71	285.71

		Net Closing Loan	1,714.29	1,428.57	1,142.86	857.14	571.43
		Average Loan	1,857.14	1,571.43	1,285.71	1,000.00	714.29
		Rate of Interest	9.6200%	9.5000%	9.5000%	9.5000%	9.5000%
		Interest	178.66	149.29	122.14	95.00	67.86
31	SBI-IV (T1,D4)	Net opening loan	1,500.00	1,285.71	1,071.43	857.14	642.86
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	214.29	214.29	214.29	214.29	214.29
		Net Closing Loan	1,285.71	1,071.43	857.14	642.86	428.57
		Average Loan	1,392.86	1,178.57	964.29	750.00	535.71
		Rate of Interest	9.6200%	9.5000%	9.5000%	9.5000%	9.5000%
		Interest	133.99	111.96	91.61	71.25	50.89
32	SBI-IV (T1,D6)	Net opening loan	5,000.00	4,285.71	3,571.43	2,857.14	2,142.86
		Add: Addition during the period	-	-	-	-	-
		Less: Repayment during the period	714.29	714.29	714.29	714.29	714.29
		Net Closing Loan	4,285.71	3,571.43	2,857.14	2,142.86	1,428.57
		Average Loan	4,642.86	3,928.57	3,214.29	2,500.00	1,785.71
		Rate of Interest	9.6200%	9.5000%	9.5000%	9.5000%	9.5000%
		Interest	446.64	373.21	305.36	237.50	169.64
33	PFC	Net opening loan	-	-	1,500.00	1,500.00	1,500.00
		Add: Addition during the period	-	1,500.00	-	-	-
		Less: Repayment during the period	-	-	-	-	93.75
		Net Closing Loan	-	1,500.00	1,500.00	1,500.00	1,406.25
		Average Loan	-	750.00	1,500.00	1,500.00	1,453.13
		Rate of Interest		8.8900%	8.8900%	8.8900%	8.8900%
		Interest	-	66.68	133.35	133.35	129.18
34	**Gross Total**	Net opening loan	141,195.77	120,863.24	60,179.29	44,926.43	34,673.57
		Add: Addition during the period	-	1,500.00	-	-	-
		Less: Repayment during the period	20,332.53	62,183.96	15,252.86	10,252.86	7,275.18
		Net Closing Loan	120,863.24	60,179.29	44,926.43	34,673.57	27,398.39
		Average Loan	131,029.51	90,521.26	52,552.86	39,800.00	31,035.98
		Rate of Interest	**7.6157%**	**7.6681%**	**7.8887%**	**7.9125%**	**8.0017%**
		Interest	9,978.81	6,941.29	4,145.72	3,149.16	2,483.40