

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 282/2009

**Coram: 1. Dr. Pramod Deo, Chairperson
2. Shri S. Jayaraman, Member
3. Shri M. Deena Dayalan, Member**

[Date of Hearing: 1.11.2011]

[Date of Order: 13.4. 2012]

IN THE MATTER OF

Approval of tariff of Kahalgaon Super Thermal Power Station Stage-II (3X500 MW) for the period 1.4.2009 to 31.3.2014

AND

IN THE MATTER OF

NTPC Ltd, New Delhi

.....**Petitioner**

Vs.

1. West Bengal State Electricity Board, Kolkata
2. Bihar State Electricity Board, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Ltd., Bhubaneswar
5. Power Department, Govt. of Sikkim, Gangtok
6. Madhya Pradesh Power Trading Ltd., Jabalpur
7. Maharashtra State Electricity Distribution Company Ltd., Mumbai
8. Gujarat Urja Vikas Nigam Limited, Baroda
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Power Development Department, Govt. of J&K, Srinagar
11. Power Department, Union Territory of Chandigarh, Chandigarh
12. Punjab State Electricity Board, Patiala
13. Himachal Pradesh State Electricity Board, Shimla
14. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
15. Ajmer Vidyut Vitaran Nigam Ltd, Ajmer
16. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
17. Chhattisgarh State Power Trading Company Ltd, Raipur
18. Haryana Power Purchase Centre, Haryana
19. BSES-Rajdhani Power Ltd, New Delhi
20. BSES-Yamuna Power Ltd, New Delhi
21. North Delhi Power Ltd, Delhi
22. Uttarakhand Power Corporation Ltd, Dehradun
23. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa
24. Electricity Department, Administration of Daman & Diu, Daman ..**Respondents**

Present:

1. Shri V.K Padha, NTPC
2. Shri D. Kar, NTPC
3. Shri A. Basu Roy, NTPC
4. Shri K.P.Satpathy, NTPC
5. Mrs. Alka Saigal, NTPC
6. Shri Ajay Dua, NTPC
7. Dr. Meenu Mishra, NTPC

8. Shri G. K. Dua, NTPC
9. Shri Manish Garg, UPPCL
10. Shri R.B. Sharma, Advocate, BSEB, JSEB and GRIDCO
11. Shri Dushyant Manocha, Advocate, BYPL
12. Shri V.P. Singh, BYPL
13. Shri Haridas Maity, BYPL
14. Shri Anurag Sharma, BYPL
15. Shri Sunil Kakkar, BYPL
16. Shri Abhishek Srivastava, BYPL

ORDER

This petition has been filed by the petitioner, NTPC, for approval of tariff for Kahalgaon Super Thermal Power Station Stage-II (3X500 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014, 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 1500 MW comprises of three units of 500 MW each. The dates of commercial operation of the different units of the generating station are as under:

	Date of commercial operation
Unit-I	1.8.2008
Unit-II	30.12.2008
Unit-III/Generating Station	20.3.2010

3. The provisional tariff of the generating station for the period from the date of commercial date of operation of Unit-1 to 31.3.2009 was approved by the Commission vide its order dated 18.12.2007 in Petition No.101/2007. Subsequently, vide order dated 5.7.2010 in Petition No.125/2009 (along with I.A No.63/2009), the Commission approved the final tariff for Unit-I (from 1.8.2008 to 29.12.2008) and Unit-I&II (combined) (from 30.12.2008 to 31.3.2009) of the generating station. However, by order dated 27.10.2010, the said tariff was further revised after correction of certain ministerial errors. Thereafter, the tariff was again revised by order of the Commission dated 29.11.2011 in Petition No.125/2009 in compliance with the directions contained in the judgment of the Appellate Tribunal for Electricity dated 31.5.2011 in Appeal No.169/2010, subject to the final outcome of the Civil Appeals (C.A. Nos.5434/2007 to 5452/2007 and 5622/2007 etc and C.A Nos. 4112-4113/2009 and C.A Nos. 6286 to 6288/2009

etc) pending before the Hon'ble Supreme Court. The annual fixed charges approved by order dated 29.11.2011 considering the capital cost of ₹331481.82 lakh as on 31.3.2009 is as under:

(₹ in lakh)

	2008-09	
	1.8.2008 to 29.12.2008	30.12.2008 to 31.3.2009
Depreciation	6831.88	12007.20
Interest on Loan	9255.63	16167.01
Return on Equity	7954.50	13922.24
Advance Against Depreciation	0.00	4870.44
Interest on Working Capital	2437.04	4259.69
O & M Expenses	5475.00	10950.00
Total	31954.05	62176.57

4. In terms of the directions contained in the Commission's order dated 29.6.2009 in Petition No.245/2009, the petitioner filed Interlocutory Application (I.A.No.33/ 2010) with a prayer to accept the amended Appendix-I in place of Appendix-I submitted along with the petition No.282/2009. The interlocutory application is allowed and the said amendment of Appendix-I is taken on record.

5. The capital cost claimed for the period 2009-14 is as under:

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	332467	332467	-	-	-	-
Capitalisation as on COD of Unit-III (on cash basis)	-	160881	-	-	-	-
Add: Notional IDC for Unit-III	-	1612	-	-	-	-
Add: FERV (Short term on contracts)	-	(-) 1819	-	-	-	-
Opening capital cost	332467	493141	494547	531131	555981	582445
Add: Projected additional capital expenditure (Projected)	0	1406	36584	24850	26464	1000
Closing capital cost	332467	493141	531131	555981	582445	583445

6. The annual fixed charges claimed for the period 2009-14 is as under:

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Depreciation	17155	25433	26411	27993	29314	30022
Interest on loan	14799	21353	21645	21924	22448	22465
Return on equity	23420	34788	36126	38290	40098	41065
Interest on working capital	6323	9594	9709	9876	10001	10108
O&M expenses	13000	18850	19923	21069	22272	23548
Secondary fuel oil cost	1452	3663	3663	3673	3663	3663
Compensation allowance	0	0	0	0	0	0
Special allowance	0	0	0	0	0	0
Total	76150	113682	117478	122825	127796	130871

7. Reply to the petition has been filed by the respondents namely, BSEB (respondent No. 2), JSEB (respondent No.3) GRIDCO (respondent No.4), MPPTCL (respondent No. 6), MSEDCL (respondent No.7), UPPCL (respondent No. 9), JVVNL,(respondent No.14), AVVNL (respondent No.15), BRPL (respondent No.19) and NDPL (respondent No. 21). The petitioner has filed its rejoinder to the said replies. During the hearing, the learned counsel for the respondents, BSEB, JSEB, BRPL and GRIDCO submitted that the reply filed on behalf of GRIDCO may be adopted for the other three respondents.

CAPITAL COST

8. 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;"*

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

"Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff."

10. Clause (2) of Regulation 3 of the 2009 Tariff Regulations define the term "expenditure incurred" as under:

"expenditure incurred means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released"

Date of Commercial operation of Unit-III

11. The petitioner, in its original petition had indicated the expected date of commercial operation of Unit-III of the generating station, as 1.12.2009. However, the actual date of commercial operation of Unit-III is 20.3.2010, which has been considered as the date of commercial operation of the generating station. Considering the period of 48 months from the date of the placement of order for main plant (i.e. 25.3.2004), the scheduled date of commercial

operation is worked out as 25.3.2008. As the date of commercial operation is 20.3.2010, there is a time overrun of about 2 years.

12. The respondent, GRIDCO in its submissions has submitted that the petitioner has not submitted the approved capital cost of Stage-II Units and the apportioned cost of Unit-III and in the absence of the information, cost overrun could not be determined. It has also submitted that in the absence of the approved capital cost, wherein the completion schedule is mentioned, the time overrun could not be ascertained. Thus, the respondent has prayed that the petitioner may be directed to file the information regarding the approved capital cost of Stage-II Units and the apportioned cost of Unit-III.

13. The petitioner has submitted the reasons for the time overrun as under:

- (a) The delayed supply of boiler, piping and turbine materials by M/S BHEL has been a major bottleneck in the progress of work and had resulted in the delay of critical milestones.
- (b) The delay in civil works by M/s HSCL has been a serious concern, as the agency could not meet the project schedule requirement, especially on the fabrication and erection of bunker structure.
- (c) There was failure of one Turbine Auxiliary Oil Pump (AOP). The replacement of AOP required the emptying of the main oil tank and then the refilling of the main oil tank and subsequent lube oil flushing to ensure purity of lube oil was a time consuming process. All the TG bearings were required to be inspected again before putting the machine on barring gear. Also, during the trial run of the unit, hunting was observed in the IP control valve (IPCV) & HP control valve (HPVC). As per advice of M/s BHEL, new components were brought from M/s BHEL, Hardwar and from other projects of the petitioner.
- (d) All the above factors seriously affected the progress of the project which had contributed to the delay in the commercial operation of the Unit.

14. Similar submissions were made by the petitioner in Petition No.125/2009 and the Commission while considering the question of Time and Cost overrun involved in the commercial operation of Unit-I & II of the generating station, had by its order dated 5.7.2010 observed as under:

“Time over-run

13. The generating station was scheduled to be commissioned within a period of 48 months from the placement of order for main plant and equipments as under:

- (i) Date of commercial operation of Unit-I: 45 months*
- (ii) Date of commercial operation of Unit-II: 48 months.*

14. The petitioner vide its affidavit dated 5.1.2010 has submitted that the date of award of main plant order was 18.7.2003 and the time over-run, if any, is as under:

Particulars Scheduled date of commercial operation

Actual date of commercial operation	Time over run (in months)
Unit-I 18.4.2007 1.8.2008	15
Unit-II 18.7.2007 30.12.2008	17

Reason for time over-run

15. The petitioner by its affidavit dated 29.9.2009 has submitted that the project has been delayed with respect to the scheduled date of commercial operation was on account of various adverse factors beyond the control of the petitioner, which are as under:

- (i) *Local Industrial Environment: The petitioner has submitted that due to frequent demonstrations and periodic interruption of work by the local people demanding direct supply of power from the generating station, there was stoppage of work, resulting in poor productivity and the momentum in the progress of the work was affected.*
- (ii) *Poor infrastructure in the project vicinity: The petitioner has submitted that poor road connectivity to the site of the project lead to longer transportation time which seriously affected the progress of the work.*
- (iii) *Delay in supply of boiler and piping components by M/s. BHEL: The justification submitted by the petitioner is as under: "Delayed supply of Boiler, piping and Turbine materials by BHEL has been a major bottleneck in progress and resulted in delay of critical milestones. Due to limited manufacturing capacity, BHEL could not meet the supply schedule of various concurrent projects under execution by NTPC as well as other state utilities. In order to expedite the supply, series of senior level review meetings at the level of CMD, NTPC and Secretary (Power), Govt. of India were held with CMD, BHEL, even at their manufacturing plants. Period 2002-07 witnessed spurring of industrial activities world over, especially in the infrastructure development. This triggered huge pressure applications in thermal power plants and led to wide gap in demand and supply. Further, BHEL had to depend on limited available vendors globally, who manufacture industrial castings, forging and piping materials for power plant equipments. Due to heavy order bookings, vendors of BHEL could not honour their commitments in supplying the critical raw materials to BHEL and this in turn severely affected the manufacturing and supply schedule. This has led to slippages in achieving critical milestones and resulted in abnormal delay in Unit commissioning".*
- (iv) *Delay in civil works by M/s HSCL: The justification submitted by the petitioner is as under: "The performance of main plant agency M/s HSCL has been another serious concern as the agency could not met project schedule requirement especially of fabrication and erection of Bunker structure. In spite of assurances given by CMD, HSCL in various meetings with the CMD, NTPC, M/s HSCL could not meet the commitments given at the highest level. Even though, sufficient time was given to the agency to recover the delays, there was no improvement. Ultimately, the fabrication and erection works were off-loaded from the agency and got executed through other agencies working at site. This has resulted in delay in readiness of Bunker structure and coal conveyors which in turn delayed coal firing of Units and ultimately the commercial operation of the units".*

16. The Commission directed the petitioner to furnish the details of the compensation received on account of the penalty levied, if any, on M/s BHEL and M/s HSCL, and the petitioner has submitted as under:

"provisional time extension has been given by NTPC reserving the right to levy LD on later date to complete the balance work. No compensation has been received nor has any penalty been levied from / on BHEL / HSCL on account of time over-run."

17. From the justification submitted by the petitioner, it is observed that time over-run of the project was for reasons attributable to the contractors M/s BHEL and M/s HSCL despite the efforts taken by the petitioner to avoid the delay. Hence, the petitioner cannot be faulted for the delay

on the part of the contractors and the consequential time over-run of the project. It is also observed that the petitioner has allowed time extension to both the contractors with the liberty to impose liquidated damages on a later date. Hence, it is directed that the petitioner should submit the details of the liquidated damages if any, imposed on the above contractors in terms of the contract, in its petition for determination of tariff of Unit-III of the generating station, subsequent to the declaration of commercial operation.

Cost Over-run

18. *As regards cost over-run, it is observed that the combined capital cost claimed by the petitioner as on the date of commercial operation of Unit-II of the generating station is within the approved capital cost. Hence, there is no cost over-run."*

15. Keeping in view the above observations and taking into consideration that the capital cost of ₹160881 (excluding IDC) for Unit-III is less than the approved capital cost (Board of Directors) of ₹186610 lakh, we are of the view that that there is no cost overrun involved in the project and the delay in the commercial operation of Unit-III is not attributable to the petitioner.

16. The petitioner vide its affidavit dated 22.11.2010 has claimed the annual fixed charges based on the capital cost of ₹332467 lakh as on 1.4.2009 (inclusive of audited capital cost of ₹331481.82 lakh as on 29.12.2008 and notional IDC of ₹985.00 lakh). Moreover, the claim for capital cost as on the date of commercial operation of Unit-III i.e. 20.3.2010 is ₹493141 lakh (inclusive of capital cost of ₹332467 lakh as on 1.4.2009, the difference in the audited capital cost of ₹508174.03 as on 19.3.2010 lakh and the audited capital cost of ₹331481.82 lakh, as on 30.12.2008, the notional IDC of ₹1612 lakh and the Short-term FERV on contracts for (-) ₹1819 lakh respectively, and excluding the un-discharged liability of ₹15812.26 lakh).

17. Before dealing with the admissibility of the capital cost as on 1.4.2009 and 20.3.2010 (COD of Unit-III) as above, it is to mention that the Commission vide its order dated 5.7.2010 had directed the petitioner to file the details of the liquidated damages if any, imposed on M/s BHEL/HSCL for causing delay in the commissioning of the project and the petitioner vide its affidavit dated 11.1.2011 has submitted as under:

"No liquidated damages have been imposed on M/s BHEL and M/s HSCL so far as the other balance works are in progress. It is further submitted that the liquidated damages amount can be finalized at the time of the contract closing"

18. The respondent, GRIDCO in its reply has submitted that the petitioner may confirm that the proposed additional capitalization during the tariff period may not include at least the approximate liquidated damages which can be determined at this stage by the petitioner.

19. Taking into consideration the above submissions, we consider the amounts payable to these contractors, which has been held back by the petitioner, as un-discharged liabilities and the same is deducted for the purpose of tariff, keeping in view the interests of the respondent beneficiaries. However, the petitioner is directed to furnish the details of the liquidated damages imposed on these contractors, at the time of truing up and the same shall be considered for adjustment in the capital cost for the purpose of tariff.

Capital cost as on 1.4.2009

20. As stated, the Commission vide its order dated 29.11.2011 in Petition No.125/2009 has approved the capital cost of ₹331481.82 lakh as on 31.3.2009, which is inclusive of un-discharged liabilities of ₹16808.00 lakh. In terms of the last proviso to Regulation 7 of the 2009 Tariff Regulations, amended on 21.6.2011 (*as quoted at para 9 above*), the capital cost as on 1.4.2009, works out to ₹314673.82 lakh, after removal of un-discharged liabilities of ₹16808.00 lakh.

Capital cost as on 20.3.2010

21. The capital cost (on cash basis) as claimed by the petitioner is ₹160881.00 lakh as on 20.3.2010 (COD of Unit-III). However, it is noticed from the books of the petitioner that the actual capitalisation (on accrual basis) between the dates of commercial operation of Unit-II and Unit-III works out to ₹176692.21 lakh. Further, as per revised Form-9A (filed in IA), the un-discharged liabilities as on the date of commercial operation of Unit-III is ₹32620.26 lakh (inclusive of un-discharged liability of ₹16808.00 lakh as on 1.4.2009). As such, the difference of ₹15812.26 lakh represents the amount of un-discharged liabilities in the capital expenditure of ₹176692.21 lakh. Accordingly, in line with the last proviso of Regulation 7 of the 2009 Tariff Regulations (*as quoted in para 9 above*), the actual capitalisation (on cash basis) between the dates of commercial operation of Unit-II and Unit-III works out to ₹160879.95 lakh. The

petitioner has also calculated IDC (on FIFO basis) between the dates of commercial operation of Unit-II and Unit-III and the same has been worked out on Average basis, as per methodology adopted by the Commission (and which has been upheld by the Tribunal in Appeal Nos. 151& 152/2007 dated 10.12.2008 subject to allowing interest on repayments considered during construction period wherever equity position exceeds 30%). Based on this working (the IDC on Average basis), it is observed that the IDC on FIFO basis as indicated in Form-14 of the petition exceeds the IDC worked out on Average basis by ₹1428.33 lakh. Hence, the said amount is deducted to arrive at the capital expenditure admissible, between the dates of commercial operation of Unit-II and Unit-III i.e ₹(160879.95-1428.33) lakh. Accordingly, the amount of ₹159451.61 lakh is allowed under this head after removal of the differential IDC as stated above, which is subject to truing-up.

Notional IDC (from the date of commercial operation of Unit-II to Unit-III)

22. The petitioner has claimed ₹1612.00 lakh as notional IDC, which has been calculated considering repayments made on FIFO basis, as notional loan. Accordingly, in terms of Regulation 7(1) (a) of the 2009 Tariff Regulations, (*as quoted in para 8 above*), to calculate the amount of interest to be allowed over and above the actual IDC (up to the date of commercial operation of Unit-III), the quarter-wise details of actual capital expenditure and funds deployed was required to be furnished by the petitioner in Form-14A. However, the petitioner in Form-14A (in the I.A) has stated that the details would be submitted at the time of truing up. In view of this, the claim of the petitioner for Notional IDC is not in line with the provisions of regulations as stated above. In addition to this, the petitioner has undertaken to furnish the funding pattern at the time of truing up, despite its claim for capital cost as on 20.3.2010 based on auditor's certificate.

23. In view of the discussions, the claim of the petitioner for Notional IDC has not been considered in this order. However, the interest to be allowed over and above the actual IDC would be dealt with in terms of the above said regulation, at the time of truing-up, subject to the

petitioner furnishing the details of the actual capital expenditure and the funds deployed, in Form-14A.

Short-term FERV on contracts

24. The petitioner has claimed (-) ₹1819 lakh, which corresponds to the short term exchange rate variation charged to Profit and Loss account as per AS-11. Since, capitalisation of FERV up to date of commercial operation of the generating station is admissible, the petitioners claim is allowed under this head.

25. Based on the above discussions, the capital cost as on 20.3.2010 (the date of commercial operation of Unit-III/generating station) is ₹472306.43 lakh and the same is allowed.

Projected Additional Capital Expenditure

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

*“9. **Additional Capitalisation.** (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

(i) Un-discharged liabilities;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;

(iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in law:

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

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of

switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.

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

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

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc."

27. The actual/projected additional capital expenditure claimed by the petitioner is as under:

(₹ in lakh)						
	Regulations	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Work deferred for execution	9(1) (ii) & (iii)	1406	27876	17764	20555	0
Ash-dyke/ Ash handling system	9(1) (ii) & 9(2)(iii)	0	2633	1730	1528	1000
Discharge of Liabilities		0	6075	5356	4381	0
Total		1406	36584	24850	26464	1000

28. As stated, the date of commercial operation of the generating station is 20.3.2010. In terms of Regulation 3(11) of the 2009 Tariff Regulations, the cut-off date of the generating station is 31.3.2013. Hence, the petitioner's claim for projected additional capital expenditure is required to be considered in terms of Regulation 9(1) of the 2009 Tariff Regulations. In this connection, we examine the admissibility of the additional capital expenditure claim by the petitioner in the subsequent paragraphs.

Works deferred for execution and capitalization of initial spares—Regulations 9(1)(ii) and (iii)

29. The petitioner has claimed actual expenditure of ₹1406.00 lakh during the year 20.3.2010 to 31.3.2010 and projected expenditure of ₹27876.00 lakh for 2010-11, ₹17764.00 lakh for 2011-12 and ₹20555.00 lakh for 2012-13 in respect of works deferred for execution under the original scope of work and for capitalization of initial spares. It has also submitted by affidavit dated 11.1.2011 that the cost of initial spares projected in the capital cost as on the date of commercial operation till the cut-off date of the generating station is ₹3518 lakh on 20.3.2010, ₹5377 lakh on 31.3.2010, 8776 lakh on 31.3.2011, ₹12201 lakh on 31.3.2012 and ₹14671 lakh on 31.3.2013.

30. The respondent, GRIDCO in its reply dated 8.9.2011 has submitted that the total expenditure of ₹44543 lakh towards the cost of initial spares claimed by the petitioner as above, is beyond the limit of 2.5% of the original project cost and has prayed that the same may be restricted within the norms specified by the Commission. In its response dated 3.10.2011, the petitioner has clarified that the cost of initial spares indicated in the affidavit dated 11.1.2011 are the total actual/projected capitalization against capital spares as on the indicated dates and not capitalization of spares during the interim period. Accordingly, it has been submitted that the projected capitalization against initial spares as on 31.3.2013 is ₹14671 lakh and the same is within the limit of 2.5% allowed as per norms specified by the Commission under Regulation 8 of the 2009 Tariff Regulations. In view of the above submissions, the claim of the petitioner for capitalization of the said amount under this head is allowed.

31. The petitioner has claimed projected capital expenditure of ₹2633 lakh, ₹1730 lakh, ₹1528 lakh, and ₹1000 lakh during the years 2010-11, 2011-12, 2012-13 and 2013-14 respectively, towards Ash Dyke/Ash handling system, under Regulation 9(1)(ii) and 9(2)(iii). These works include works like main plant superstructure, chimney, steam generator, coal handling system switchyard etc, which have been deferred for execution and are within the original scope of work. As stated, the cut-off date of the generating station is 31.3.2013 and hence the projected capital expenditure till the cut-off date have been considered under “Works deferred for

execution” in terms of Regulation 9(1)(ii) of the 2009 Tariff Regulations and the said amounts are allowed.

32. The petitioner has claimed projected expenditure of ₹1000 lakh for 2013-14 towards Ash-handling/Ash-dyke works after the cut-off date. The respondent, GRIDCO has objected to the above claim and has submitted that the said expenditure is permissible only when the expenditure is incurred at the discretion of the Commission. Since, the petitioner has not incurred the said expenditure the claim for capitalization may be rejected. In response to this, the petitioner has submitted that the claim of the petitioner is in terms of the Regulation 7(1) (a) and the last proviso to Regulation 7(2) of the 2009 Tariff Regulations. According to the petitioner, since, the last proviso provides for capital expenditure to be projected to be incurred as may be admitted by the Commission, the same is admissible.

33. We have considered the submissions of the petitioner and GRIDCO. Since the generating station has achieved the commercial operation on 20.3.2010, it is not covered under the last proviso to Regulation 7(2) of the 2009 Tariff Regulations. Moreover, the additional capital expenditure is not covered under Regulation 7(1)(a) of the 2009 Tariff Regulations. The additional capital expenditure of the generating station shall be considered as per Regulation 9 of the 2009 Tariff Regulations. Under Regulation 9(2), additional capital expenditure incurred after the cut-off date can be admitted after it is incurred. The petitioner has claimed projected additional capital expenditure of ₹1000 lakh for the ash dyke/ ash handling system during the year 2013-14. This is in continuation of the work on ash dyke/ash handling system starting from 2010-11. The question is whether the projected additional capital expenditure of Rs. 1000 lakh can be allowed under 2009 Tariff Regulations. 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."

34. 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, we relax 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. Accordingly, the projected capital expenditure of ₹1000 lakh for the year 2013-14 towards ash handling/ash dyke is allowed to be capitalized.

Discharge of Liabilities

35. The petitioner vide its affidavit dated 27.9.2011 has furnished the details of item wise liabilities existing as on 31.03.2009 and COD of Unit-III along with discharges during the period 2010-11, whereby it has revised the discharges position for the year 2010-11 from ₹6075.00 lakh (as claimed in the petition) to ₹8205.00 lakh, which may be considered. The summary of these liabilities and discharges made during 2010-11 are as under:

(₹ in lakh)

	Liability	Discharges of liabilities existing as on 31.3.2009	Discharges of liabilities added after 31.3.2009	Combined discharges out of liabilities existing as on 31.3.2009 and out of liabilities added after 31.3.2009	Total discharges during 2010-11
Liability as on 31.3.2009	16808.00	1352.00	0.00	4601.00	
Liability addition as on COD of Unit-III	15812.26	0.00	2252.00		
Total	32620.26	1352.00	2252.00	4601.00	8205.00

36. Accordingly, the discharges out of un-discharged liabilities which have been deducted to arrive at the admissible capital cost have been allowed as projected additional capital expenditure. In view of above, the projected additional capital expenditure allowed for the purpose of tariff, is as under:

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Projected additional capital expenditure corresponding to assets/works	0	1406	30509	19494	22083	1000
Discharges of un-discharged liabilities (actual for the year 2010-11 & projected for the period 2011-13)	0	0	8205	5356	4381	0
Total	0	1406	38714	24850	26464	1000

Capital Cost for 2009-14

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

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	314673.82	472306.43	473712.43	512426.43	537276.43	563740.43
Projected Additional capital expenditure allowed	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing Capital cost	314673.82	473712.43	512426.43	537276.43	563740.43	564740.43
Average Capital cost	314673.82	473009.43	493069.43	524851.43	550508.43	564240.43

38. The capital cost allowed above is subject to truing-up in terms of the provisions contained in Regulation 6 of the 2009 Tariff Regulations

Debt- Equity Ratio

39. Regulation 12 of the 2009 Tariff Regulations provides as under:

“(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 utilized 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

40. The gross loan and equity amounting to ₹232037.27 lakh and ₹99444.55 lakh, respectively, as on 31.3.2009 approved vide order dated 29.11.2011 in Petition No.125/2009, has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities of ₹16808.00 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 liabilities pertaining to the period 2004-09. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹220271.67 lakh and ₹94402.15 lakh, respectively. Further, the petitioner has considered the debt-equity ratio of 70:30 as on the COD of Unit-III / generating station. Since, the petitioner has undertaken to furnish Form-14A at the time of truing-up, the actual debt-equity ratio could be worked out only at that time. Hence, the debt-equity ratio as claimed by the petitioner is allowed. Changes, if any, to the debt equity ratio on actual basis, based on the details that would be furnished at the time of truing-up, would be dealt with as per the provisions of the above quoted regulations. Further, the projected additional expenditure admitted as above has been allocated in the debt-equity ratio of 70:30. The same is subject to truing-up in terms of the provisions contained in Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

41. Regulation 15 of the 2009 Tariff Regulations provides as under:

(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 Charge 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 the 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."

Accordingly, return on equity has been worked out @24.239% per annum on the normative equity after accounting for ACE (considering base rate of 15.50%, in line with 1st proviso to clause (2) of the regulation stated above and tax rate of 33.99%). The ROE computations are as shown below."

42. Accordingly, return on equity has been worked out @ **24.239%** per annum on the normative equity after accounting for the admitted additional capital expenditure (considering base rate of 15.50%, in line with the first proviso to clause (2) of the above regulation and tax rate of 33.99%). The Return on equity computations are as under:

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Notional Equity-Opening	94402.15	141691.93	142113.73	153727.93	161182.93	169122.13
Addition of Equity due to Additional capital expenditure	0.00	421.80	11614.20	7455.00	7939.20	300.00
Normative Equity-Closing	94402.15	142113.73	153727.93	161182.93	169122.13	169422.13
Average Normative Equity	94402.15	141902.83	147920.83	157455.43	165152.53	169272.13
Return on Equity @ 23.481%	22166.57	33320.20	34733.29	36972.11	38779.47	39746.79

Interest on loan

43. Regulation 16 of the 2009 Tariff Regulations provides as under:

(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."

44. Interest on loan has been worked out as mentioned below:

(a) As stated, the gross normative loan of ₹220271.67 lakh has been considered as on 1.4.2009. Further, the gross normative loan corresponding to 70% of admissible capital cost works out to ₹330614.50 lakh as on 20.3.2010.

(b) Cumulative repayment as on 31.3.2009 works out to ₹7080.43 lakh as per order dated 29.11.2011 in Petition No.125/2009. The same has been considered as cumulative repayment as on 1.4.2009. However, after taking in to account the proportionate adjustment to the cumulative repayment on account of un-discharged liabilities deducted from the capital cost as on 1.4.2009, the cumulative repayment as on 1.4.2009 is revised to ₹6721.41 lakh. Further, the cumulative repayment as on 20.3.2010 works out to ₹22367.89 lakh.

(c) Accordingly, the net normative opening loan as on 1.4.2009 and 20.3.2010 works out to ₹213550.26 lakh and ₹308246.62 lakh, respectively.

(d) Additions to the normative loan on account of the projected additional capital expenditure approved above, has been considered.

(e) Depreciation allowed has been considered as repayment of normative loan during the respective period/years of the tariff period 2009-14. Further, the proportionate adjustment has been made to the repayments corresponding to discharges of liabilities considered during the

respective years on account of cumulative repayment adjusted as on 1.4.2009. However, as the petitioner has not furnished the break-up of combined discharges/projected discharges i.e. whether they are pertaining to liability existing as on 1.4.2009 (which require adjustments to be made) or liability added after 1.4.2009 (which require no adjustments since additions allowed on or after 1.4.2009 are on cash basis), no adjustments are made for the same at present and the adjustments, if any, would be made at the time of truing up as and when detailed break up is furnished by the petitioner.

(f) Rate of interest as existing as on 1.4.2009 and 20.3.2010 (on annual rest basis as furnished in the IDC calculations) has been considered to calculate the Weighted Average Rate of Interest (WAROI) for the period from 1.4.2009 to 19.3.2010 and from 20.3.2010 to 31.3.2014, respectively. Further, the actual repayment has been calculated by applying the Average method (as upheld by the Tribunal) instead of the FIFO method (considered by the petitioner). Further, the actual loan portfolio drawn up to the date of commercial operation of the generating station, as submitted by petitioner, has been considered.

(g) The petitioner has considered surveillance fee of 0.03% in addition to the rate of interest attached to Bond XIX, Bond XXI, Bond XXIII, Bond XXVIII and Bond XXIV (from 1.4.2011 to 31.3.2014) to arrive at the WAROI. Accordingly, the interest rates for the aforementioned Bonds considered in actual loan portfolio have been arrived at after considering the surveillance fee of 0.03% as allowed by the Commission in its earlier orders.

(h) Average net loan is calculated as average of opening and closing.

45. The calculations for weighted average rate of interest for computing the interest on loan has been enclosed as Annexure-I to this order. The calculations for Interest on loan are as under:

	<i>(₹ in lakh)</i>					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Gross opening loan	220271.67	330614.50	331598.70	358698.50	376093.50	394618.30
Cumulative repayment of loan upto previous year	6721.41	22367.89	23167.06	48535.12	75507.60	103798.61
Net Loan Opening	213550.26	308246.62	308431.64	310163.38	300585.91	290819.70
Addition due to additional capitalisation	0.00	984.20	27099.80	17395.00	18524.80	700.00
Repayment of loan during the year	15646.47	799.18	25339.18	26972.48	28291.01	28996.71
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	0.00	0.00	28.88	0.00	0.00	0.00
Net Repayment	15646.47	799.18	25368.06	26972.48	28291.01	28996.71
Net Loan Closing	197903.79	308431.64	310163.38	300585.91	290819.70	262522.99
Average Loan	205727.02	308339.13	309297.51	305374.64	295702.80	276671.34
Weighted Average Rate of Interest on Loan	6.8110%	6.5498%	6.6307%	6.8812%	7.2364%	7.6566%
Interest on Loan	14011.99	20195.69	20508.67	21013.57	21398.35	21183.57

Depreciation

46. Regulation 17 of the 2009 Tariff Regulations provides as under:

“(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 longterm 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 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.”

47. The petitioner in Form-11 of the petition has calculated the weighted average rate of depreciation of 5.16% and 5.15% for the period from 1.4.2009 to 19.3.2010 and from 20.3.2010 onwards, respectively. However, considering the rates of depreciation as enclosed in the Appendix-III to the 2009 Tariff Regulations, the weighted average rate of depreciation works out to 5.1413% and 5.1391% for the period from 1.4.2009 to 19.3.2010 and from 20.3.2010 onwards, respectively. Accordingly, depreciation has been calculated by applying these rates. The cumulative depreciation as on 31.3.2009 as per order dated 29.11.2011 in Petition No.125/2009 works out to ₹7080.43 lakh. Further, the proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 01.04.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹6721.41 lakh. Further, proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. However, as the petitioner has not

furnished the break-up of combined discharges/projected discharges (as to whether the pertain to the liability existing as on 1.4.2009 (which require adjustment to be made) or liability added after 1.4.2009 (for which no adjustment is required to be made), no adjustment is presently made and the adjustment, if any, would be made at the time of truing-up as and when the petitioner furnish the detailed breakup. The necessary calculations in support of depreciation are as under:

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Opening capital cost	314673.82	472306.43	473712.43	512426.43	537276.43	563740.43
Projected Additional capital expenditure	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing capital cost	314673.82	473712.43	512426.43	537276.43	563740.43	564740.43
Average capital cost	314673.82	473009.43	493069.43	524851.43	550508.43	564240.43
Rate of depreciation	5.1413%	5.1391%	5.1391%	5.1391%	5.1391%	5.1391%
Depreciable value @ 90%	283206.44	425708.49	443762.49	472366.29	495457.59	507816.39
Balance depreciable value	276485.03	403340.60	420595.43	423831.17	419949.99	404017.78
Depreciation for the period	15646.47	799.18	25339.18	26972.48	28291.01	28996.71
Depreciation (annualized)	16178.37	24308.28	25339.18	26972.48	28291.01	28996.71
Cumulative depreciation at the end of the period	22367.89	23167.06	48506.24	75507.60	103798.61	132795.31
Add: Cumulative depreciation adjustment on account of discharges out of undischarged liabilities deducted as on 1.4.2009	0.00	0.00	28.88	0.00	0.00	0.00
Cumulative depreciation (at the end of the period)	22367.89	23167.06	48535.12	75507.60	103798.61	132795.31

O & M Expenses

48. Clause (a) of Regulation 19 of Regulation of the 2009 Tariff Regulations provide the following O&M expense norms for 500 MW Coal based and lignite fired generating stations as under:

	(₹ in lakh/MW)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses for 500 MW units	13.00	13.74	14.53	15.36	16.24

49. The petitioner has claimed the following O&M expenses for the generating station of 1500 MW (3 x 500 MW) for the period 2009-14:

(₹ in lakh)						
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
O&M expenses	13000	18850	19923	21069	22272	23548

50. Based on above norms, the operation & maintenance expense claimed by the petitioner is in order and has been allowed.

Target Availability

51. The petitioner has sought relaxation of norms of NAPAF in Petition No.189/2010 for the period 2009-14 based on actuals for 2009-10 and 80% for the period 2010-14 on account of coal shortage. The petition is pending for consideration by the Commission. Hence, the Target Availability of the generating station is considered as 85% for the period 1.4.2009 to 31.3.2014.

Interest on Working Capital

52. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:

- (i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;
- (ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.
- (iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and
- (v) O&M expenses for one month.

53. 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.

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

Fuel Components in working capital

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

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Cost of coal for 1.5 months	14905.26	22744.92	22744.92	22807.23	22744.92	22744.92
Cost of secondary fuel oil 2 months	241.95	610.52	610.52	612.19	610.52	610.52

56. The claim of the petitioner for cost of coal and secondary fuel oil is found to be in order.

Maintenance Spares in working capital

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

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Cost of maintenance spares	2600	3770	3985	4214	4454	4710

58. The 2009 Tariff Regulations provide for maintenance spares @ 20% of the operation and maintenance expenses as specified in Regulation 19. Accordingly, the maintenance spares allowed for the purpose of tariff is worked out as under:

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Cost of maintenance spares	2600	3770	3984.6	4213.7	4454.4	4709.6

Receivables

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

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Variable Charges -2 months	19873.68	30326.56	30326.56	30409.64	30326.56	30326.56
Fixed Charges - 2 months	12173.53	18301.59	18959.56	19910.70	20715.10	21187.84
Total	32047.21	48628.15	49286.12	50320.34	51041.66	51514.40

O&M Expenses

60. O & M expenses for 1 month claimed by the petitioner for the purpose of working capital are as under:

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	1083	1571	1660	1756	1856	1962

61. The petitioner has claimed O & M expenses for working capital by including one month expenditure of compensatory allowance. Regulation 19 (e) provides that "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". Therefore, the above claim of petitioner is not admissible. However, O&M expenses for one month considered for working capital based as per provisions of the 2009 Tariff Regulations is as under:

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	1083.33	1570.83	1660.25	1755.708	1856.00	1962.333

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

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Cost of coal –1.1/2 months	14905.26	22744.92	22744.92	22807.23	22744.92	22744.92
Cost of secondary fuel oil – 2 month	241.95	610.52	610.52	612.19	610.52	610.52
O&M expenses – 1 month	2600.00	3770.00	3984.60	4213.70	4454.40	4709.60
Maintenance Spares	32047.21	48628.15	49286.12	50320.34	51041.66	51514.40
Receivables – 2 months	1083.33	1570.83	1660.25	1755.71	1856.00	1962.33
Total working capital	50877.75	77324.42	78286.41	79709.18	80707.50	81541.77
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%

Interest on working capital	6232.52	9472.24	9590.08	9764.37	9886.67	9988.87
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Cost of secondary fuel oil

63. Clause (1) of Regulation 20 of the 2009 Tariff Regulations provides as under:

“20. Expenses on secondary fuel oil consumption for coal-based and lignite-fired generating station. (1) Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause (iii) of regulation 26, in accordance with the following formula:

SFC – Normative Specific Fuel Oil consumption in ml/kWh

= SFC x LPSFi x NAPAF x 24 x NDY x IC x 10

Where,

LPSFi – Weighted Average Landed Price of Secondary Fuel in ₹/ml considered initially.

NAPAF – Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW.

64. The petitioner has claimed secondary fuel oil cost as under:

	<i>(₹ in lakh)</i>					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Secondary Fuel Oil	1452	3663	3663	3673	3663	3663

65. The cost of secondary fuel oil has been calculated on the normative specific fuel oil consumption, the weighted average landed price of secondary fuel price adopted and NAPF of 85%. Accordingly, the cost of secondary fuel allowed is as under:

	<i>(₹ in lakh)</i>					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Cost of secondary fuel oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13

66. The cost of secondary fuel oil arrived at as above shall be subject to fuel price adjustment at the end of each year of tariff period in terms of the proviso to Regulation 20(2) as per the following formula:

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi)

Where,

LPSFy = The weighted average landed price of secondary fuel oil for the year in `/ml

Annual Fixed charges for 2009-14

67. A statement showing summary of the capital cost and other related details of the generating station is annexed as Annexure-II to this order. The annual fixed charges for the period 2009-14 in respect of the generating station are summarized as under:

	(₹ in lakh)					
	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Return on Equity	22166.57	33320.20	34733.29	36972.11	38779.47	39746.79
Interest on Loan	14011.99	20195.69	20508.67	21013.57	21398.35	21183.57
Depreciation	16178.37	24308.28	25339.18	26972.48	28291.01	28996.71
Interest on Working Capital	6232.52	9472.24	9590.08	9764.37	9886.67	9988.87
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of secondary fuel oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	73041.17	109809.55	113757.36	119464.20	124290.63	127127.07

Note: (i) All figures are on annualized basis. (ii) All the figures under each head have been rounded. (iii) 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.

68. The recovery of the annual fixed charges shall be subject to truing up, in terms of Regulation 6 of the 2009 Tariff Regulations.

Energy Charge Rate (ECR)

69. Sub-clause (b) of clause (6) of Regulation 21 of the 2009 Tariff Regulations provides as under:

“Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

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.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

70. The petitioner has claimed an Energy Charge Rate (ECR) of 172.38 ps/kwh for the period from 1.4.2009 to 19.3.2011 and 175.39 Paise/kWh for the year 19.3.2010 to 31.3.2010 and for the period 2010-14, based on the weighted average price, GCV of fuel

procured and burnt for the preceding three months of January, 2009 to March, 2009 and for the period from January, 2010, February, 2010 and December 2010 respectively. The calculation for ECR are based on the price & GCV of coal and oil for the preceding three months i.e. January, 2009 to March, 2009 and January, 2010, February, 2010 and December 2010 respectively which is considered and the Energy Charge Rate (ECR) works out to 171.275 paise/kwh and 174.24 paise/kWh. The difference in ECR is mainly due to ignoring the quantitative coal adjustments as indicated in Form-15 of the petition/IA, to work out the weighted average price of coal. Hence, the ECR of 171.275 paise/kwh and 174.24 paise/kwh is considered for the purpose of tariff. The relevant calculations are as under:

Description	Unit	2009-10 (1.4.2009 to 19.3.2010)	2009-10 (20.3.2010 to 31.3.2014)
Capacity	MW	2x500	3x500
Gross Station Heat Rate	Kcal/kWh	2425	2425
Aux. Energy Consumption	%	6.50	6.50
Weighted average GCV of oil	Kcal/l	9957	9908
Weighted average GCV of coal	Kcal/kg	3003.33	2889.33
Weighted average price of oil	₹/KI	19496.68	32797.32
Weighted average price of coal	₹/MT	1991.52	1949.05
Rate of energy charge ex-bus	Paise/kWh	171.275	174.24

71. The petitioner shall be entitled to compute and recover the annual fixed charges and energy charges in accordance with Regulation 21 of the 2009 Tariff Regulations.

72. During the hearing, the learned counsel for the respondent, GRIDCO submitted that the petitioner has claimed ₹383.24 crore towards Fuel Price Adjustment for the period from December, 2008 to March, 2011 owing to import of coal. He also submitted that import of coal being a normal feature, the Commission may consider framing guidelines on this count to protect the interest of the beneficiaries. The learned counsel also prayed that the petitioner may be directed to share information with the beneficiaries as regards the import of coal, price, GCV of coal etc. In response, the petitioner has submitted that the petitioner was required to import coal to maximize generation at its stations and the same was at times recommended by the beneficiaries including the respondent, GRIDCO. The petitioner also submitted that the issue of import of coal was discussed in various forums which included the respondent GRIDCO. and the petitioner has been providing the details of coal with break-up of domestic coal, e-auction

and imported coal to the beneficiaries in the format agreed to in the ERC forum. The petitioner further submitted that Section 128 (2) deals with investigation in case of failure to comply with any provisions of the Act and therefore not relevant to this case. The issues raised by the respondent GRIDCO as regards framing of guidelines and investigation under Section 128 of the Act cannot be considered in this petition pertaining to determination of tariff under the 2009 Tariff Regulations. However, if separate application is filed the same would be considered in accordance with law. As regards the submission of details of coal the petitioner has submitted on affidavit that the said details are being submitted in terms of the format agreed to in the ERPC forum which includes the respondent GRIDCO. Hence, submission of the petitioner is accepted and the prayer of the respondent is thus rejected.

73. One more issue for consideration is the submission of the learned counsel for the respondent, GRIDCO is that the Auxiliary Energy Consumption does not include the power supply made by petitioner to its housing colonies and hence, the supply of power to the housing colonies or township from the generating station is to be accounted for and accordingly adjusted. The undue benefit derived by the petitioner on this count is not in consonance with the provisions of Section 61(d) of the Act. 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 is also 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 of, or township housing the operating staff of its 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 having deemed to form an integral part of the generating company by the said order, the submissions of the respondent GRIDCO stands rejected.

74. The petitioner has also prayed for the following reliefs, which are disposed of as under:

- (a) **Recovery of RLDC Fees and Charges:** The claim of the petitioner towards recovery of RLDC fees & charges incurred by the petitioner pursuant to the notification of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2009, has not been considered at this stage and the same would be dealt with separately in accordance with law.
- (b) **Expenditure incurred for implementation of scheme for provision of supply of electricity in 5 km area around Central Power plants:** 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.

Application fee and the publication expenses

75. The petitioner has sought approval for the reimbursement of fees deposited for the years 2009-10, 2010-11 and 2011-12 towards filing the petition and for towards expenses incurred for publication of notices in connection with the petition. The petitioner by its affidavit dated 11.12.2009 has submitted original copies of the notices published in the newspapers, in terms of the regulations of the Commission.

76. In line with Regulation 42 of the 2009 Tariff Regulations and based on our decision contained in order dated 11.1.2010 in Petition No.109/2009, the expenses towards filing of tariff petition amounting to ₹22,91, 510/- for 2009-10, ₹27,01,370/- for 2010-11 and ₹30.00 lakh for 2011-12 and the expenses incurred on publication of notices are to be reimbursed. Accordingly, the expenses incurred by the petitioner for petition filing fees for the years 2009-10, 2010-11 and 2011-12 as above and for 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 would be recoverable as and when paid by the petitioner in terms of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2008 and /or its amendments thereof.

77. 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.

78. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 12.8.2011. The provisional billing of tariff shall be adjusted in terms of the proviso to Regulation 5(3) of the 2009 Tariff Regulations amended on 21.6.2011.

79. This order disposes of Petition No.282/2009.

Sd/-

**[M.DEENA DAYALAN]
MEMBER**

Sd/-

**[S.JAYARAMAN]
MEMBER**

Sd/-

**[DR.PRAMOD DEO]
CHAIRPERSON**

Annexure-I

Calculation of weighted Average Rate of Interest

(₹ in lakh)

Sl. No.	Loan Drawn	Particulars	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
			1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
1	SBP Syndicate (T-1, D-4)							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	1,071.43	1,428.57	1,785.71	2,500.00	3,214.29	3,928.57
		Net Loan - Opening	3,928.57	3,571.43	3,214.29	2,500.00	1,785.71	1,071.43
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	357.14	357.14	714.29	714.29	714.29	714.29
		Net Loan - Closing	3,571.43	3,214.29	2,500.00	1,785.71	1,071.43	357.14
		Rate of Int on Loan	9.2500%	8.7530%	8.7530%	8.7530%	8.7530%	8.7530%
		Average Loan	3,750.00	3,392.86	2,857	2,143	1,429	714
		Interest	346.88	296.98	250.09	187.56	125.04	62.52
2	Karur Vysya-II							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	-	357.14	714.29	1,428.57	2,142.86	2,857.14
		Net Loan - Opening	5,000.00	4,642.86	4,285.71	3,571.43	2,857.14	2,142.86
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	357.14	357.14	714.29	714.29	714.29	714.29
		Net Loan - Closing	4,642.86	4,285.71	3,571.43	2,857.14	2,142.86	1,428.57
		Rate of Int on Loan	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
		Average Loan	4,821.43	4,464.29	3,929	3,214	2,500	1,786
		Interest	337.50	312.50	275.00	225.00	175.00	125.00
3	Canara							
		Gross Loan - Opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Cumulative repayment	1,714.29	2,285.71	2,285.71	2,857.14	3,428.57	4,000.00
		Net Loan - Opening	2,285.71	1,714.29	1,714.29	1,142.86	571.43	-
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	571.43	-	571.43	571.43	571.43	-
		Net Loan - Closing	1,714.29	1,714.29	1,142.86	571.43	-	-
		Rate of Int on Loan	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Average Loan	2,000.00	1,714.29	1,429	857	286	-
		Interest	145.00	124.29	103.57	62.14	20.71	-
4	CBI-II							

		Gross Loan - Opening	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
		Cumulative repayment	-	428.57	857.14	1,714.29	2,571.43	3,428.57
		Net Loan - Opening	6,000.00	5,571.43	5,142.86	4,285.71	3,428.57	2,571.43
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	428.57	428.57	857.14	857.14	857.14	857.14
		Net Loan - Closing	5,571.43	5,142.86	4,285.71	3,428.57	2,571.43	1,714.29
		Rate of Int on Loan	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
		Average Loan	5,785.71	5,357.14	4,714	3,857	3,000	2,143
		Interest	405.00	375.00	330.00	270.00	210.00	150.00
5	Citi Bank-I							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	1,785.71	2,500.00	2,500.00	3,214.29	3,928.57	4,642.86
		Net Loan - Opening	3,214.29	2,500.00	2,500.00	1,785.71	1,071.43	357.14
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	714.29	-	714.29	714.29	714.29	357.14
		Net Loan - Closing	2,500.00	2,500.00	1,785.71	1,071.43	357.14	-
		Rate of Int on Loan	5.7070%	5.7070%	5.7070%	5.7070%	5.7070%	5.7070%
		Average Loan	2,857.14	2,500.00	2,143	1,429	714	179
		Interest	163.06	142.68	122.29	81.53	40.76	10.19
6	Citi Bank-II							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	-	714.29	714.29	1,428.57	2,142.86	2,857.14
		Net Loan - Opening	5,000.00	4,285.71	4,285.71	3,571.43	2,857.14	2,142.86
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	714.29	-	714.29	714.29	714.29	714.29
		Net Loan - Closing	4,285.71	4,285.71	3,571.43	2,857.14	2,142.86	1,428.57
		Rate of Int on Loan	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
		Average Loan	4,642.86	4,285.71	3,929	3,214	2,500	1,786
		Interest	325.00	300.00	275.00	225.00	175.00	125.00
7	IDBI-I							
		Gross Loan - Opening	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00
		Cumulative repayment	3,750.00	6,250.00	6,250.00	8,750.00	11,250.00	13,750.00
		Net Loan - Opening	13,750.00	11,250.00	11,250.00	8,750.00	6,250.00	3,750.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	2,500.00	-	2,500.00	2,500.00	2,500.00	2,500.00
		Net Loan -	11,250.00					

		Closing		11,250.00	8,750.00	6,250.00	3,750.00	1,250.00
		Rate of Int on Loan	7.5625%	7.5625%	7.5625%	7.5625%	7.5625%	7.5625%
		Average Loan	12,500.00	11,250.00	10,000	7,500	5,000	2,500
		Interest	945.31	850.78	756.25	567.19	378.13	189.06
8	LIC-III (T-I, D-I)							
		Gross Loan - Opening	8,500.00	8,500.00	8,500.00	8,500.00	8,500.00	8,500.00
		Cumulative repayment	283.33	850.00	850.00	1,416.67	1,983.33	2,550.00
		Net Loan - Opening	8,216.67	7,650.00	7,650.00	7,083.33	6,516.67	5,950.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	566.67	-	566.67	566.67	566.67	566.67
		Net Loan - Closing	7,650.00	7,650.00	7,083.33	6,516.67	5,950.00	5,383.33
		Rate of Int on Loan	6.5710%	6.5710%	6.5710%	6.5710%	6.5710%	6.5710%
		Average Loan	7,933.33	7,650.00	7,367	6,800	6,233	5,667
		Interest	521.30	502.68	484.06	446.83	409.59	372.36
9	LIC-III (T-2, D-1)							
		Gross Loan - Opening	11,500.00	11,500.00	11,500.00	11,500.00	11,500.00	11,500.00
		Cumulative repayment	1,725.00	2,875.00	2,875.00	4,025.00	5,175.00	6,325.00
		Net Loan - Opening	9,775.00	8,625.00	8,625.00	7,475.00	6,325.00	5,175.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	1,150.00	-	1,150.00	1,150.00	1,150.00	1,150.00
		Net Loan - Closing	8,625.00	8,625.00	7,475.00	6,325.00	5,175.00	4,025.00
		Rate of Int on Loan	7.6190%	7.6190%	7.6190%	7.6190%	7.6190%	7.6190%
		Average Loan	9,200.00	8,625.00	8,050	6,900	5,750	4,600
		Interest	700.95	657.14	613.33	525.71	438.09	350.47
10	LIC-III (T-3, D-1)							
		Gross Loan - Opening	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00
		Cumulative repayment	2,850.00	4,750.00	4,750.00	6,650.00	8,550.00	10,450.00
		Net Loan - Opening	16,150.00	14,250.00	14,250.00	12,350.00	10,450.00	8,550.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	1,900.00	-	1,900.00	1,900.00	1,900.00	1,900.00
		Net Loan - Closing	14,250.00	14,250.00	12,350.00	10,450.00	8,550.00	6,650.00
		Rate of Int on Loan	7.7320%	7.7320%	7.7320%	7.7320%	7.7320%	7.7320%
		Average Loan	15,200.00	14,250.00	13,300	11,400	9,500	7,600
		Interest	1,175.26	1,101.81	1,028.36	881.45	734.54	587.63
11A	LIC-III (T4, D4)							

		Gross Loan - Opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
		Cumulative repayment	150.00	250.00	250.00	350.00	450.00	550.00
		Net Loan - Opening	850.00	750.00	750.00	650.00	550.00	450.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	100.00	-	100.00	100.00	100.00	100.00
		Net Loan - Closing	750.00	750.00	650.00	550.00	450.00	350.00
		Rate of Int on Loan	8.7281%	8.7281%	8.7281%	8.7281%	8.7281%	8.7281%
		Average Loan	800.00	750.00	700	600	500	400
		Interest	69.82	65.46	61.10	52.37	43.64	34.91
11B	LIC-III (T4, D5)							
		Gross Loan - Opening	26,500.00	26,500.00	26,500.00	26,500.00	26,500.00	26,500.00
		Cumulative repayment	3,975.00	6,625.00	6,625.00	9,275.00	11,925.00	14,575.00
		Net Loan - Opening	22,525.00	19,875.00	19,875.00	17,225.00	14,575.00	11,925.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	2,650.00	-	2,650.00	2,650.00	2,650.00	2,650.00
		Net Loan - Closing	19,875.00	19,875.00	17,225.00	14,575.00	11,925.00	9,275.00
		Rate of Int on Loan	8.7576%	8.7576%	8.7576%	8.7576%	8.7576%	8.7576%
		Average Loan	21,200.00	19,875.00	18,550	15,900	13,250	10,600
		Interest	1,856.61	1,740.57	1,624.53	1,392.46	1,160.38	928.31
12A	LIC-IV (T1, D1)							
		Gross Loan - Opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
		Cumulative repayment	-	-	-	-	-	429.00
		Net Loan - Opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	2,571.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	429.00	429.00
		Net Loan - Closing	3,000.00	3,000.00	3,000.00	3,000.00	2,571.00	2,142.00
		Rate of Int on Loan	9.6400%	9.6400%	9.6400%	9.6400%	9.6400%	9.6400%
		Average Loan	3,000.00	3,000.00	3,000	3,000	2,786	2,357
		Interest	289.20	289.20	289.20	289.20	268.52	227.17
12B	LIC-IV (T1, D2)							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	-	-	-	-	-	715.00
		Net Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	4,285.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	715.00	715.00

		Net Loan - Closing	5,000.00	5,000.00	5,000.00	5,000.00	4,285.00	3,570.00
		Rate of Int on Loan	9.7700%	9.7700%	9.7700%	9.7700%	9.7700%	9.7700%
		Average Loan	5,000.00	5,000.00	5,000	5,000	4,643	3,928
		Interest	488.50	488.50	488.50	488.50	453.57	383.72
13A	SBI-III (T1,D2&6)							
		Gross Loan - Opening	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00
		Cumulative repayment	6,250.00	7,500.00	8,750.00	11,250.00	13,750.00	16,250.00
		Net Loan - Opening	11,250.00	10,000.00	8,750.00	6,250.00	3,750.00	1,250.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	1,250.00	1,250.00	2,500.00	2,500.00	2,500.00	1,250.00
		Net Loan - Closing	10,000.00	8,750.00	6,250.00	3,750.00	1,250.00	-
		Rate of Int on Loan	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%
		Average Loan	10,625.00	9,375.00	7,500	5,000	2,500	625
		Interest	1,062.50	937.50	750.00	500.00	250.00	62.50
13B	SBI-III (T1,D8)							
		Gross Loan - Opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Cumulative repayment	1,428.57	1,714.29	2,000.00	2,571.43	3,142.86	3,714.29
		Net Loan - Opening	2,571.43	2,285.71	2,000.00	1,428.57	857.14	285.71
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	285.71	285.71	571.43	571.43	571.43	285.71
		Net Loan - Closing	2,285.71	2,000.00	1,428.57	857.14	285.71	-
		Rate of Int on Loan	11.0000%	11.0000%	11.0000%	11.0000%	11.0000%	11.0000%
		Average Loan	2,428.57	2,142.86	1,714	1,143	571	143
		Interest	267.14	235.71	188.57	125.71	62.86	15.71
14	SBI-IV (T1, D5&6)							
		Gross Loan - Opening	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00
		Cumulative repayment	-	2,714.29	2,714.29	5,428.57	8,142.86	10,857.14
		Net Loan - Opening	19,000.00	16,285.71	16,285.71	13,571.43	10,857.14	8,142.86
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	2,714.29	-	2,714.29	2,714.29	2,714.29	2,714.29
		Net Loan - Closing	16,285.71	16,285.71	13,571.43	10,857.14	8,142.86	5,428.57
		Rate of Int on Loan	10.0000%	9.5000%	9.5000%	9.5000%	9.5000%	9.5000%
		Average Loan	17,642.86	16,285.71	14,929	12,214	9,500	6,786
		Interest	1,764.29	1,547.14	1,418.21	1,160.36	902.50	644.64
15	J&K (T1,D4)							

		Gross Loan - Opening	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
		Cumulative repayment	1,071.43	1,285.71	1,285.71	1,500.00	1,500.00	1,500.00
		Net Loan - Opening	428.57	214.29	214.29	-	-	-
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	214.29	-	214.29	-	-	-
		Net Loan - Closing	214.29	214.29	-	-	-	-
		Rate of Int on Loan	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%	7.3100%
		Average Loan	321.43	214.29	107	-	-	-
		Interest	23.50	15.66	7.83	-	-	-
16	Syndicate Bank (T1, D4)							
		Gross Loan - Opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
		Cumulative repayment	357.14	714.29	714.29	1,071.43	1,428.57	1,785.71
		Net Loan - Opening	2,142.86	1,785.71	1,785.71	1,428.57	1,071.43	714.29
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	357.14	-	357.14	357.14	357.14	357.14
		Net Loan - Closing	1,785.71	1,785.71	1,428.57	1,071.43	714.29	357.14
		Rate of Int on Loan	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%	7.2500%
		Average Loan	1,964.29	1,785.71	1,607	1,250	893	536
		Interest	142.41	129.46	116.52	90.63	64.73	38.84
17	Allahabad-II (T1, D2)							
		Gross Loan - Opening	6,500.00	6,500.00	6,500.00	6,500.00	6,500.00	6,500.00
		Cumulative repayment	464.29	928.57	1,392.86	2,321.43	3,250.00	4,178.57
		Net Loan - Opening	6,035.71	5,571.43	5,107.14	4,178.57	3,250.00	2,321.43
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	464.29	464.29	928.57	928.57	928.57	928.57
		Net Loan - Closing	5,571.43	5,107.14	4,178.57	3,250.00	2,321.43	1,392.86
		Rate of Int on Loan	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
		Average Loan	5,803.57	5,339.29	4,643	3,714	2,786	1,857
		Interest	406.25	373.75	325.00	260.00	195.00	130.00
18	Corporation-II (T1, D2)							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	357.14	1,071.43	1,071.43	1,785.71	2,500.00	3,214.29
		Net Loan - Opening	4,642.86	3,928.57	3,928.57	3,214.29	2,500.00	1,785.71
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	714.29	-	714.29	714.29	714.29	714.29

		Net Loan - Closing	3,928.57	3,928.57	3,214.29	2,500.00	1,785.71	1,071.43
		Rate of Int on Loan	7.2000%	7.2000%	7.2000%	7.2000%	7.2000%	7.2000%
		Average Loan	4,285.71	3,928.57	3,571	2,857	2,143	1,429
		Interest	308.57	282.86	257.14	205.71	154.29	102.86
19	United-II (T1, D3)							
		Gross Loan - Opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
		Cumulative repayment	-	-	-	-	357.14	714.29
		Net Loan - Opening	2,500.00	2,500.00	2,500.00	2,500.00	2,142.86	1,785.71
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	357.14	357.14	357.14
		Net Loan - Closing	2,500.00	2,500.00	2,500.00	2,142.86	1,785.71	1,428.57
		Rate of Int on Loan	9.2500%	9.2500%	9.2500%	9.2500%	9.2500%	9.2500%
		Average Loan	2,500.00	2,500.00	2,500	2,321	1,964	1,607
		Interest	231.25	231.25	231.25	214.73	181.70	148.66
20	Bond XVIII							
		Gross Loan - Opening	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
		Cumulative repayment	-	1,600.00	1,600.00	3,200.00	4,800.00	6,400.00
		Net Loan - Opening	8,000.00	6,400.00	6,400.00	4,800.00	3,200.00	1,600.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	1,600.00	-	1,600.00	1,600.00	1,600.00	1,600.00
		Net Loan - Closing	6,400.00	6,400.00	4,800.00	3,200.00	1,600.00	-
		Rate of Int on Loan	5.9500%	5.9500%	5.9500%	5.9500%	5.9500%	5.9500%
		Average Loan	7,200.00	6,400.00	5,600	4,000	2,400	800
		Interest	428.40	380.80	333.20	238.00	142.80	47.60
21	Bond XIX							
		Gross Loan - Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
		Cumulative repayment	-	-	-	-	-	-
		Net Loan - Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	-	-
		Net Loan - Closing	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
		Rate of Int on Loan	7.5300%	7.5300%	7.5300%	7.5300%	7.5300%	7.5300%
		Average Loan	2,000.00	2,000.00	2,000	2,000	2,000	2,000
		Interest	150.60	150.60	150.60	150.60	150.60	150.60
22	Bond XXI							
		Gross Loan - Opening	18,500.00	18,500.00	18,500.00	18,500.00	18,500.00	18,500.00

		Cumulative repayment	-	-	-	1,850.00	3,700.00	5,550.00
		Net Loan - Opening	18,500.00	18,500.00	18,500.00	16,650.00	14,800.00	12,950.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	1,850.00	1,850.00	1,850.00	1,850.00
		Net Loan - Closing	18,500.00	18,500.00	16,650.00	14,800.00	12,950.00	11,100.00
		Rate of Int on Loan	7.7425%	7.7425%	7.7425%	7.7425%	7.7425%	7.7425%
		Average Loan	18,500.00	18,500.00	17,575	15,725	13,875	12,025
		Interest	1,432.36	1,432.36	1,360.74	1,217.51	1,074.27	931.04
23	Bond XXIII							
		Gross Loan - Opening	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
		Cumulative repayment	-	-	-	-	180.00	360.00
		Net Loan - Opening	1,800.00	1,800.00	1,800.00	1,800.00	1,620.00	1,440.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	180.00	180.00	180.00
		Net Loan - Closing	1,800.00	1,800.00	1,800.00	1,620.00	1,440.00	1,260.00
		Rate of Int on Loan	8.4096%	8.4096%	8.4096%	8.4096%	8.4096%	8.4096%
		Average Loan	1,800.00	1,800.00	1,800	1,710	1,530	1,350
		Interest	151.37	151.37	151.37	143.80	128.67	113.53
24	Bond XXIV							
		Gross Loan - Opening	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
		Cumulative repayment	-	-	-	-	-	-
		Net Loan - Opening	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	-	-
		Net Loan - Closing	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
		Rate of Int on Loan	8.6077%	8.6077%	8.6077%	8.6377%	8.6377%	8.6377%
		Average Loan	6,000.00	6,000.00	6,000	6,000	6,000	6,000
		Interest	516.46	516.46	516.46	518.26	518.26	518.26
25	Bond XXVIII							
		Gross Loan - Opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
		Cumulative repayment	-	-	-	-	-	-
		Net Loan - Opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	-	-
		Net Loan - Closing	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
		Rate of Int on Loan	11.0300%	11.0300%	11.0300%	11.0300%	11.0300%	11.0300%
		Average Loan	3,000.00	3,000.00	3,000	3,000	3,000	3,000

		Interest	330.90	330.90	330.90	330.90	330.90	330.90
26	CBI-III (T1, D2)							
		Gross Loan - Opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
		Cumulative repayment	-	-	-	-	178.57	535.71
		Net Loan - Opening	2,500.00	2,500.00	2,500.00	2,500.00	2,321.43	1,964.29
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	178.57	357.14	357.14
		Net Loan - Closing	2,500.00	2,500.00	2,500.00	2,321.43	1,964.29	1,607.14
		Rate of Int on Loan	8.5000%	8.5000%	8.5000%	8.5000%	8.5000%	8.5000%
		Average Loan	2,500.00	2,500.00	2,500	2,411	2,143	1,786
		Interest	212.50	212.50	212.50	204.91	182.14	151.79
27	PFC-V							
		Gross Loan - Opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Cumulative repayment	-	-	-	-	-	-
		Net Loan - Opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	-	-	250.00
		Net Loan - Closing	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	3,750.00
		Rate of Int on Loan	10.3000%	10.3000%	10.3000%	10.3000%	10.3000%	10.3000%
		Average Loan	4,000.00	4,000.00	4,000	4,000	4,000	3,875
		Interest	412.00	412.00	412.00	412.00	412.00	399.13
28	SBI-V (T1, D1)							
		Gross Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
		Cumulative repayment	-	-	-	-	714.29	1,428.57
		Net Loan - Opening	5,000.00	5,000.00	5,000.00	5,000.00	4,285.71	3,571.43
		Add: Drawl du the period	-	-	-	-	-	-
		Less: Repayment	-	-	-	714.29	714.29	714.29
		Net Loan - Closing	5,000.00	5,000.00	5,000.00	4,285.71	3,571.43	2,857.14
		Rate of Int on Loan	10.0000%	9.5000%	9.5000%	9.5000%	9.5000%	9.5000%
		Average Loan	5,000.00	5,000.00	5,000	4,643	3,929	3,214
		Interest	500.00	475.00	475.00	441.07	373.21	305.36
29	SBI-VI (T1, D2)							
		Gross Loan - Opening	-	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00
		Cumulative repayment	-	-	-	-	-	-
		Net Loan - Opening	-	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00
		Add: Drawl du the period	13,000.00	-	-	-	-	-
		Less: Repayment	-	-	-	-	-	1,857.14
		Net Loan - Closing	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00	11,142.86

		Rate of Int on Loan	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%
		Average Loan	6,500.00	13,000.00	13,000	13,000	13,000	12,071
		Interest	650.00	1,300.00	1,300.00	1,300.00	1,300.00	1,207.14
30	5.50% Eurobonds							
		Gross Loan - Opening	10,976.71	10,976.71	10,271.27	10,271.27	10,271.27	10,271.27
		Cumulative repayment		-	-	10,271.27	10,271.27	10,271.27
		FERV		(705.44)				
		Net Loan - Opening	10,976.71	10,271.27	10,271.27	-	-	-
		Add: Drawl du the period						
		Less: Repayment			10,271.27			
		Net Loan - Closing	10,976.71	10,271.27	-	-	-	-
		Rate of Int on Loan	7.0690%	7.0690%	7.0690%	7.0884%	7.0690%	7.0690%
		Average Loan	10,976.71	10,271.27	5,136	-	-	-
		Interest	775.94	726.08	363.04	-	-	-
31	5.875% Eurobonds							
		Gross Loan - Opening	24,221.14	24,221.14	22,664.53	22,664.53	22,664.53	22,664.53
		Cumulative repayment		-	-	-	-	-
		FERV		(1,556.62)				
		Net Loan - Opening	24,221.14	22,664.53	22,664.53	22,664.53	22,664.53	22,664.53
		Add: Drawl du the period						
		Less: Repayment						
		Net Loan - Closing	24,221.14	22,664.53	22,664.53	22,664.53	22,664.53	22,664.53
		Rate of Int on Loan	7.5510%	7.5510%	7.5510%	7.5717%	7.5510%	7.5510%
		Average Loan	24,221.14	22,664.53	22,665	22,665	22,665	22,665
		Interest	1,828.94	1,711.40	1,711.40	1,716.08	1,711.40	1,711.40
32	ADB Tranche A							
		Gross Loan - Opening	11,449.58	11,449.58	10,713.75	10,713.75	10,713.75	10,713.75
		Cumulative repayment		-	-	-	-	-
		FERV		(735.83)				
		Net Loan - Opening	11,449.58	10,713.75	10,713.75	10,713.75	10,713.75	10,713.75
		Add: Drawl du the period						
		Less: Repayment						2,380.60
		Net Loan - Closing	11,449.58	10,713.75	10,713.75	10,713.75	10,713.75	8,333.16
		Rate of Int on Loan	2.3640%	1.0180%	1.0180%	1.0180%	1.0180%	1.0180%
		Average Loan	11,449.58	10,713.75	10,714	10,714	10,714	9,523
		Interest	270.67	109.07	109.07	109.07	109.07	96.95

33	ADB Tranche B							
		Gross Loan - Opening	60,559.25	60,559.25	56,667.30	56,667.30	56,667.30	56,667.30
		Cumulative repayment FERV		-	-	16,190.98	32,381.96	48,572.94
				(3,891.95)				
		Net Loan - Opening	60,559.25	56,667.30	56,667.30	40,476.32	24,285.34	8,094.36
		Add: Drawl du the period						
		Less: Repayment			16,190.98	16,190.98	16,190.98	8,094.36
		Net Loan - Closing	60,559.25	56,667.30	40,476.32	24,285.34	8,094.36	-
		Rate of Int on Loan	2.2130%	0.8670%	0.8670%	0.8670%	0.8670%	0.8670%
		Average Loan	60,559.25	56,667.30	48,572	32,381	16,190	4,047
		Interest	1,340.18	491.31	421.12	280.74	140.37	35.09
30	GRAND TOTAL							
		Gross Loan - Opening	3,38,506.68	3,51,506.68	3,44,616.85	3,44,616.85	3,44,616.85	3,44,616.85
		Cumulative repayment FERV	27,233.33	46,842.86	49,985.71	1,01,050.35	1,43,059.42	1,86,391.07
			-	(6,889.83)	-	-	-	-
		Net Loan - Opening	3,11,273.35	2,97,773.99	2,94,631.13	2,43,566.50	2,01,557.42	1,58,225.78
		Add: Drawl du the period	13,000.00	-	-	-	-	-
		Less: Repayment	19,609.52	3,142.86	51,064.63	42,009.08	43,331.65	37,258.48
		Net Loan - Closing	3,04,663.82	2,94,631.13	2,43,566.50	2,01,557.42	1,58,225.78	1,20,967.30
		Rate of Int on Loan	6.8110%	6.5498%	6.6307%	6.8812%	7.2364%	7.6566%
		Average Loan	3,07,968.58	2,96,202.56	2,69,098.81	2,22,561.96	1,79,891.60	1,39,596.54
		Interest	20,975.62	19,400.77	17,843.21	15,315.03	13,017.75	10,688.32

Summary Sheet			
Company : NTPC Ltd.			
Generating Station : Kahalgaon STPS, Stage-II (3x500 MW)			
Petition no. : 282/2009 with IA. no. 33/2010			
Tariff Setting Period : 2009-14			
			(₹ in lakh)
A	(1) Capital Cost of the Project as on 20.3.2010 (COD)		4,72,306.43
	(2) Means of Financing Capital Cost as on 20.3.2010		
	Debt (Notional)	70.00%	3,30,614.50
	Equity (Notional)	30.00%	1,41,691.93
	Total	100.00%	4,72,306.43
	(3) Normative Loan outstanding as on 20.3.2010		3,08,246.62
	Gross Loan as on 20.3.2010		3,30,614.50
Less: Repayment upto 20.3.2010		22,367.89	
Normative Loan o/s as on 20.3.2010		3,08,246.62	
B	(1) Additional capital expenditure projected to be incurred during the period 20.3.2010 to 31.3.2014		
	From 20.3.2010 to 31.3.2010		1,406.00
	2010-11		38,714.00
	2011-12		24,850.00
	2012-13		26,464.00
	2013-14		1,000.00
			92,434.00
	(2) Means of Financing the Projected additional capital expenditure		
	Debt (Notional)	70.00%	64,703.80
	Equity (Notional)	30.00%	27,730.20
Total	100.00%	92,434.00	
C	(1) Total Capital Cost of the Project as on 31.3.2014		5,64,740.43
	(2) Normative Loan o/s as on 31.3.2014		2,62,522.99
	Gross Loan as on 20.3.2010		3,30,614.50
	Add: Addition to loan due to projected additional capital expenditure		64,703.80
			3,95,318.30
	Less: Repayment upto 20.3.2010		22,367.89
	Less: Repayment during 20.3.2010 to 31.3.2010		799.18
	Less: Repayment during 2011-12		25,368.06
	Less: Repayment during 2012-13		26,972.48
	Less: Repayment during 2013-14		28,291.01
	Less: Repayment during 2013-14		28,996.71
Normative Loan o/s as on 31.3.2014 (to be repaid beyond 31.3.2014)		2,62,522.99	
D	Total Depreciation recovered upto 31.3.2014		
			Total
	Recovered upto 20.3.2010		22,367.89
	From 20.3.2010 to 31.3.2010		799.18
	2010-11		25,339.18
	2011-12		26,972.48
	2012-13		28,291.01
	2013-14		28,996.71
	Add: Cumulative Depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009		28.88
	Total		1,32,795.31
E	Balance Depreciation to be recovered as on 31.3.2014		
	Capital cost as on 20.3.2010		4,72,306.43
	Add: Additional capital expenditure projected to be incurred during 20.3.2010 to 31.3.2014		92,434.00
	Capital cost as on 31.3.2014		5,64,740.43
	Average Capital Cost as on 31.3.2014		5,64,240.43
	Less: Cost of Freehold Land		-
			5,64,240.43
	90% of the Capital Cost as above		5,07,816.39
	Cumulative depreciation recovered upto 31.3.2014		1,32,795.31
	Balance Depreciation to be recovered as on 31.3.2014		3,75,021.08