

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 55/2011

**Coram: Shri S. Jayaraman, Member
Shri V.S Verma, Member
Shri M. Deena Dayalan, Member**

Date of Hearing: 6.3.2012

Date of Order: 26.9.2012

IN THE MATTER OF

Approval of tariff of Simhadri Super Thermal Power Station Stage-II (1000 MW) for the period from 1.4.2011 to 31.3.2014.

AND

IN THE MATTER OF

NTPC Ltd, New Delhi

...Petitioner

Vs

1. Andhra Pradesh Power Coordination Committee, Hyderabad
2. Andhra Pradesh Eastern Power Distribution Company Ltd, Visakhapatnam
3. Andhra Pradesh Southern Power Distribution Company Ltd, Tirupathi
4. Andhra Pradesh Northern Power Distribution Company Ltd, Warangal
5. Andhra Pradesh Central Power Distribution Company Ltd, Hyderabad
6. Tamil Nadu Generation and Distribution Corporation Ltd, Chennai
7. Power Company of Karnataka Ltd, Bangalore
8. Bangalore Electricity Supply Company Ltd, Bangalore
9. Mangalore Electricity Supply Company Ltd, Mangalore
10. Chamundeshwari Electricity Supply Corp. Ltd, Mysore
11. Gulbarga Electricity Supply Company Ltd, Gulbarga
12. Hubli Electricity Supply Company Ltd, Hubli
13. Kerala State Electricity Board, Thiruvananthapuram
14. Electricity Department, Government of Puducherry, Puducherry

...Respondents

Parties Present:

1. Shri Ajay Dua, NTPC
2. Shri Uday Shankar, NTPC
3. Shri A.K.Juneja, NTPC
4. Shri Rohit Chhabra, NTPC
5. Shri Vinay Garg, NTPC
6. Ms. Rakhi Dua, NTPC
7. Shri G.Sreenivasan, KSEB

ORDER

This petition has been filed by the petitioner, NTPC, for approval of tariff for Simhadri Super Thermal Power Station, Stage-II (2 x 500 MW) (hereinafter referred to as "the generating station") for the period from 1.4.2011 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 an installed capacity of 1000 MW comprises of two units of 500 MW capacity each and is an expansion project to the existing Simhadri Super Thermal Power Station, Stage-I. The investment approval of the project was accorded by the Board of NTPC Ltd. in its 298th meeting held on 23.03.2007 at SBI Capital Markets Ltd appraised current estimated cost of ₹51033.94 million (₹41636.71 million + US \$212.85 million) including IDC and FC of ₹5529.30 million (₹2393.19 million + US \$71.03 million) and Working Capital Margin (WCM) of ₹1150.53 million at an exchange rate of US \$1 = ₹44.15, as of 1st Qtr. 2007 price level and indicative estimated completed cost of ₹55559.86 million (₹45808.99 million + US \$220.86 million) including IDC & FC of ₹5892.61 million (₹2549.31 million + US \$75.73 million) and WCM of Rs.1189.65 million at an exchange rate of US \$1 = ₹44.15, subject to environmental and forest clearances of Ministry of Environment and Forests and clearance of land for Ash Dyke from State Government as well as subject to adjustments in costs consequential to revision in the COD of Unit-I to 42 months from the date of environmental clearances of Ministry of Environments & Forests, Government of India, and Unit-II at six months thereafter.

3. The petitioner *vide* its affidavit dated 28.2.2011 had filed the petition for approval of tariff from the anticipated date of commercial operation of Unit-I i.e from 1.4.2011 to 30.9.2011 and from the anticipated commercial operation of Unit-II i.e from 1.10.2011 to 31.3.2014. Subsequently, in response to the Commission's directions *vide* letter dated 20.4.2011, the petitioner *vide* its affidavit dated 30.5.2011 had submitted that the expected date of commercial operation of Unit-I is 1.7.2011. Accordingly, the Commission *vide* its order dated 29.9.2011 granted provisional annual fixed charges of ₹56706 lakh for

2011-12 for Unit-I based on the capital cost of ₹257006 lakh as claimed by the petitioner. Thereafter, the petitioner *vide* its affidavit dated 9.2.2012 submitted that the Unit-I of the project has been declared under commercial operation on 16.9.2011 and that Unit-II was expected to be declared under commercial operation on 31.7.2012. Consequently, the petitioner revised the tariff computations based on capital expenditure up to the date of commercial operation of Unit-I i.e 16.9.2011 and the anticipated date of commercial operation of Unit-II i.e 31.7.2012. Accordingly, the capital cost claimed by the petitioner for the period 2011-14 *vide* affidavit dated 9.2.2012 is as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13 (1.4.2012 to 30.7.2012)	2012-13 (31.7.2012 to 31.3.2013)	2013-14
Capital cost as on date of commercial operation/ Opening capital cost	238550	238550	449949	485128
Add: Projected Additional capital expenditure claimed	0	0	35179	23393
Closing capital cost	238550	238550	485128	508521

4. The annual fixed charges claimed by the petitioner for the period 2011-14 *vide* its affidavit dated 9.2.2012 is as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13 (1.4.2012 to 30.7.2012)	2012-13 (31.7.2012 to 31.3.2013)	2013-14
Depreciation	12184	12184	23970	25472
Interest on loan	15596	15030	29185	28941
Return on equity	16804	16804	32935	34998
Interest on working capital	4366	4369	8698	8812
O&M expenses	7265	7680	15360	16240
Cost of Secondary fuel oil	1562	1557	3115	3115
Total	57778	57624	113263	117577

5. Reply to the petition has been filed by the respondents namely, TANGEDCO (respondent No. 6) and KSEB (respondent No.13). The petitioner has filed its rejoinder to the reply.

Time and Cost Overrun

6. The commissioning schedule of the project as accorded by NTPC in its 298th meeting held on 23.3.2007 is as under:

Sl. no.	Particulars	Date
1.	Investment approval by NTPC Board	23.3.2007
2.	Environmental clearance accorded	1.8.2007
3.	Placement of order for main plant equipment	26.3.2007
4.	Scheduled date of COD (as per investment approval)	Unit-I = 1.2.2011 Unit-II= 1.8.2011
5.	Actual COD of Unit-I Expected COD of Unit-II	16.9.2011 31.7.2012

7. The scheduled date of commercial operation of Unit-I of the generating station (as per investment approval) is 1.2.2011. However, the actual date of commercial operation of Unit-I is 16.9.2011. Thus, there is a time over run of more than 7 months in the commissioning of Unit-I of the generating station from the scheduled date of commercial operation. In this connection, the petitioner *vide* its affidavit dated 30.5.2011 has submitted detailed reasons for time overrun as under:

- (a) *Unprecedented rains during 2010 were more than 2 times of the average rainfall. The rainfall during 2010 in coastal Andhra Pradesh was 1614 mm which was 60% more than the normal rainfall of 1011 mm.*
- (b) *Two cyclones during the year 2010 ('Laila' during May 2010 and 'Jal' during November 2010).*
- (c) *Due to limited availability of land for expansion works there was also restriction in movement of equipments in the interface areas resulting in the additional time taken.*

8. Subsequently, in response to the directions of the Commission during the proceedings held on 26.12.2011, the petitioner *vide* its affidavit dated 10.2.2012 has furnished the details of implication on the project cost due to price escalation and Interest During Construction (IDC) & Financing Charges (FC) on account of time overrun for the period from scheduled date of commercial operation to the actual date of commercial operation along with the percentage increase in the approved project cost due to increase in the steel prices from the date of Investment approval, as detailed hereunder:

- (a) *Regarding actual time overrun of Unit-I with respect to zero date/investment approval date and the cost implication due to IDC etc., it is submitted that scheduled date and the cost implication due to IDC etc., it is submitted that the scheduled COD of the project is February 2011 based on the investment approval and environmental clearance dated 1.8.2007. The actual COD is 16.9.2011 i.e. after 6.5 months of scheduled COD and Actual COD, the petitioner submitted that in the event of shifting of project construction and commissioning to a later date, the corresponding expenditure on the various activities also get shifted/deferred and accordingly fund deployment through loan also gets shifted/deferred. The corresponding drawl of loans during different period gets revised based on the actual, which results in revision of IDC w.r.t the IDC based on drawls as per original schedule. Therefore, IDC added between scheduled COD and Actual COD cannot be due to the shifting of scheduled COD. Since the amounts of drawls also vary depending upon the actual status of work therefore, exact impact of the same cannot be evaluated.*

(b) Regarding the percentage increase in the approved project cost due to increase in the steel price up to the date of investment approval and details computation of increase it is submitted that investment approval for the generating station was processed at 1st quarter 2007 price level. By then the steel prices over previous year had increased significantly. Iron and steel indices increased from 231.14 in January 2006 to 260 in January 2007 (increase of 12.6%). It is also submitted that it is not possible to quantify exact increase in approved project cost due to increase in the steel price. However, it is submitted that an indicative impact of 12.5% increase steel price would result in increase in overall project cost by 4.5% to 5%. Further, as submitted vide affidavit dated 30.5.2011 the project being a coastal project, involves sea water application resulting in incremental cost.

9. In order to examine the delay in the commissioning of the project, the Commission during the proceedings held on 6.3.2012, directed the petitioner to submit information on the following:

(a) Documentary evidence of cyclones and rainfall during the year 2010 from the meteorological department;

(b) Explanation as to how such rain and cyclone had affected the activities for execution of the project; and

(c) Submission of PERT chart clearly indicating the position of critical activities prior to the rainfall with reference to the schedule and the delay attributable to rain/cyclone, indicating the specific task/activities affected.

10. In response, the petitioner vide its affidavit dated 30.3.2012 has submitted clarification/information as detailed hereunder:

"(a) It is submitted that two severe cyclonic storm crossed Andhra Pradesh Coast in the year 2010 (Laila in May 2010 and 'Jal' in November 2010. Regarding documentary evidence of cyclones and rainfall during the year 2010 from the meteorological department, it is submitted that data downloaded from the official website of AP (<http://weather.ap.nic.in>) and extract from annual climate summary 2010 report available at www.imdpune.go.in are enclosed at Annexure-I. In this regard rain data collected at Simhadri station are also enclosed. From the rainfall statistics it is clear that rainfall in year 2010 at coastal AP was 1614 mm which was 60% more than normal rainfall of 1011 mm. Further, the rainfall recorded at the generating station was 1862 mm.

(b) It is submitted that incessant and heavy rain and cyclone had affected the activities of the Generating station severely. As regards the effect of such rain and cyclone on the activities for execution of project and position of critical activities prior to rainfall, it is submitted that Simhadri site experienced a rainfall of 1862 mm during the year 2010 as against the annual rainfall of 980 mm for the preceding six years. The rainfall has been incessant during the period of May 2010 to December 2010 exacerbated by the cyclone 'Laila' in May 2010 and 'Jal' in November 2010. These unprecedented rainfalls have had huge detrimental effect all around on the project construction and erection activities particularly with respect sub-zero level construction activities and site approaches. The construction activities were on schedule before commencement of the heavy rains in May 2010. Boiler Light up schedule for August 2010 was delayed by a month due to air and flue gas ducting activities getting affected by cyclone and rains from May 2010. The critical path systems which were directly affected causing delay for synchronization and COD are (a) Boiler to TG Power cycle piping readiness and condenser cooling system (CW system) and (b) Ash dyke readiness. Specific details of the delay in activities in these two areas are given below:

(i) Delay in boiler to TG Power cycle piping readiness and condenser cooling water system (CW system): Only after the completion of power cycle piping erection and welding the important commissioning activity of steam blowing can be carried out. The steam blowing was scheduled for

October 2010. Approximately 60% of P-91 joints required for steam blowing were completed by May 2010. However, incessant and heavy rainfall effect on approaches for erection as well as for working at heights pushed the completion of balance joints and subsequent steam blowing completion to January 2011. The CW system charging is mandatory for TG readiness for barring. For Simhadri Stage-II construction & erection of CW system involves (-11 meter) subzero level excavation and 3200 NB pipe line erection & welding in two tier to a length of approximately 2857 meter (for Unit #3). The work involves 216 nos. field joints, PU coating application inside the pipe line (due to sea water application) and concrete encasement of the pipelines. Besides these, the CW channels (approx 650 mtrs) & Fore bay work requires a subzero concreting job at around (-) 4 to (-) 8 meter level. The system was originally scheduled to be completed by November 2010 to support the synchronization by December 2010. Out of the total scope around 70% of works were completed by May 2010. The untimely and heavy rain in the months from May 2010 to November 2010 completely inundated the CW system excavated zones and brought the entire system work for standstill. De-watering, slush removal, Drying the pipe section for PU coating application (moisture dependent) necessitated considerably time to bring back the CW system erection, welding, PU coating jobs to normal pace and works could be completed by March 2011.

(ii) Delay in Ash dyke readiness: The completion of ash dyke is requirement for declaration of commercial operation of the unit. Geological condition of the soil is of the nature of marine clay. Simhadri II starter ash dyke bund construction involves construction of inner and outer guide bunds with earth with dyke bund of ash at the middle for the complete perimeter. The dyke bund construction for its readiness for charging involved around 11 lakh cum. of earth, sand and ash work. The front for outer guide earth work is related to completion of sand works which form the bottom layer. The dyke construction work is very much dependent on the climatic conditions because of the topographical conditions of marshy area and ground levels being near to main sea level. Even a small rainfall brings works for days to standstill due to difficulty in vehicle movement for earth/sand/ash transportation as well as for machinery movement. Moderate and heavy rainfalls have the effect of putting the progress clock behind by weeks. The dyke readiness for charging scheduled to be completed by December 2010 got delayed to September 2011 as a very small quantum of work could be carried during the period of May 2010-December 2010 against the target of about 50%.

11. We have examined the submissions and the documents on record. It is observed that PERT chart indicating the position of critical activities prior to rainfall with reference to the schedule and the delay attributable to rain/cyclone indicating the specific task/activities affected, as directed by the Commission during the proceedings held on 6.3.2012 has not been submitted by the petitioner. However, petitioner has submitted the bar chart (scheduled vs actual) indicating the major activities for the commissioning of Unit-III of the generating station. From the details submitted, it is observed that the time overrun was mainly on account of heavy rainfall of 60% more than the normal rainfall and the situation had been further aggravated by the two cyclones namely "Laila" during May 2010 and "Jal" during November 2010. Based on these, we notice that the delay in the commission of the project was mainly due to delay in the construction of 'Ash dyke'. Taking into account the natural calamities like heavy rain and cyclones as narrated above, which have caused the delay in the commissioning of the project, we are of the view that

the delay in the commissioning of the project is not attributable to the petitioner as the same was beyond its control. Accordingly, we hold that the petitioner is not responsible for the time and cost overrun involved in the commissioning of the project.

Capital cost as on COD of Unit-I (i.e. 16.9.2011)

12. The petitioner has claimed the capital cost of ₹238550 lakh as on date of commercial operation of Unit-I and has furnished auditor's certificate in respect of its claim for capital cost. The following statement indicated the position of audited capital cost as on date of commercial operation of Unit-I:

<i>(₹ in lakh)</i>	
Gross block corresponding to Stage-II (inclusive of IDC & FC of ₹33088.13 lakh and FERV of ₹252.90 lakh)	265072.38
Less: Un-discharged liabilities**	26317.71
Gross Block as on COD of Unit-I (on cash basis)	238754.66

*** The party/work wise liability position duly certified by the auditor*

13. The petitioner has further submitted that as per the guidelines issued by ICAI, FERV of (-) ₹205.11 lakh has been charged by petitioner to P&L Account upto the date of commercial operation of Unit-I and accordingly adjusted this FERV to work out the capital cost as on COD of Unit-I for the purpose of tariff. Accordingly, the capital cost claimed as on the date of commercial operation of Unit-I works out to ₹238549.55 lakh.

14. As stated above, the capital employed (on cash basis) as on 16.9.2011 is ₹238754.66 lakh, inclusive of IDC & FC amounting to ₹33088.13 lakh, based on the auditor's certificate. In order to ensure the correctness of IDC claim, the petitioner was directed to furnish additional details in support of its IDC claim and in response, the petitioner has furnished IDC details only up to 30.9.2010 (instead of 16.9.2011) while revising its claim for annual fixed charges. Accordingly, the IDC amount of ₹33088.13 lakh based on auditor's certificate is considered in the present petition and the same is subject to truing up.

15. Based on the above, the capital cost of ₹238549.55 lakh as on 16.9.2011 is allowed after adjustment of FERV of ₹205.11 lakh (originally charged to P&L Account) from the auditor certified capital cost on cash basis amounting to ₹238754.66 lakh. The capital cost allowed is subject to truing up.

Capital cost as on anticipated COD of Unit-II (i.e. 31.7.2012)

16. The petitioner has claimed capital cost of ₹449949 lakh as on the anticipated date of commercial operation of Unit-II (31.7.2012) as under:

	(₹ in lakh)		
	As on COD of Unit-I i.e. 16.9.2011 (on cash basis)	Projected additional capitalization on cash basis as on COD of Unit-II	Total Projected capital cost claimed as on COD of Unit-II (generating station) (on cash basis)
Capital cost (on cash basis)	205414	181387	386801
Add: IDC, FC, FERV & Hedging cost	33136	30012	63148
Total Capital cost	238550	211399	449949

17. Thus, the anticipated capital cost of the project as on the date of commercial operation of the generating station (31.7.2012) is ₹449948.55 lakh and the capital cost along with additional capital expenditure upto 31.3.2014 works out to ₹508520.50 lakh. The cut-off date of the generating station based on the anticipated date of commercial operation would be 31.3.2015. The petitioner has not furnished any list of deferred works within the original scope of the project for the year 2014-15. Considering the capital cost up to the end of tariff period i.e. 31.3.2014, the reasonableness of the capital cost for this generating station has been compared with the capital cost for other similar projects of the petitioner commissioned during the last 4 to 5 years. The other extension projects of the petitioner commissioned during the period 2006-10 are as detailed hereunder:

(₹ in crore)							
Project	Capacity MW	Petition No	Cost of Main Plant Package	Date of award of Main Plant Package	Capital Cost	Capital Cost /MW	Remarks
Vindhyachal STPS Stage-III (2 x 500 MW)	1000	260/2009	2489.68	March/April 2003	4125.02	4.13	As approved by CEA & the Board of NTPC
Kahalgaon STPS Stage-II (3x500MW)	1500	282/2009	3465.59	March, 2003, July, 2003 and August, 2003	5824.45	3.88	Upto the cut-off date of 31.3.2013.
NCTPS Dadri, Stage-II (2 x 490 MW)	980	14/2010	1996.00	July, 2006 and November, 2006	4941.32	5.04	Upto the cut-off date of 31.3.2013.
Korba STPS, Stage-III (500 MW)	500	247/2009	998.62	24.3.2007	2588.28	5.18	Upto the cut-off date of 31.3.2014.
Simhadri Stage-II (2x500 MW) (<i>instant generating station</i>)	1000	55/2011	2169.20	26.3.2007	5085.21	5.08	Upto 31.3.2014

18. It is observed from the above table that the main plant package cost of this generating station is comparable to NCTPS, Dadri Stage-II, Korba Stage-III generating stations and is lesser than the main plant package cost of Vindhyachal Stage-III and Kahalgaon Stage-II generating stations of the petitioner. The per MW capital cost arrived at for this generating station is close to the capital cost in respect of NCTPS Dadri Stage-II and Korba Stage-III generating stations of the petitioner, the reasonability of which have been examined by the Commission in the respective tariff orders. Further, in comparison to other expansion projects of Vindhyachal Stage-III and Kahalgaon Stage-II, the per MW cost of this generating station is reasonable, considering the fact that the cost is higher on account of escalation in price during the 4 year period between the placement of orders in respect of this generating station and other similar projects. Also, the project is located in coastal area and considering the incremental cost in the power plant piping to protect the piping against corrosive nature of sea water, the cost appear to be reasonable.

19. Accordingly, the capital cost allowed for the purpose of tariff as on 16.9.2011 (COD of Unit-I) is ₹449948.55 lakh [(inclusive of capital cost of ₹238549.55 lakh for COD of Unit-I and ₹211399.00 lakh as additional capital expenditure upto 31.7.2012 (COD of Unit-II)] and the same is subject to truing up.

Projected Additional Capital expenditure during 2012-14

20. 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."

21. The projected additional capital expenditure claimed by the petitioner from the anticipated date of commercial operation of the generating station (31.7.2012) is as under:

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Projected additional capital expenditure	0.00	0.00	35179.00	23392.95

22. The break-up of the additional capital expenditure claimed by the petitioner for the period 2012-14 is as under:

Sl. No.	Head of work/ Equipment	Regulations	2012-13 (31.7.2012 to 31.3.2013)	
			2012-13 (31.7.2012 to 31.3.2013)	2013-14
1	Road , Bridges, culverts etc.	9(1)(i) & 9(1)(ii)	-	-
2	Building Plants Offsite Quarters	9(1)(i) & 9(1)(ii)	- 2071 -	- 1000 2357
3	Misc town ship civil & electrical works	9(1)(i) & 9(1)(ii)		896
4	Training centre	9(1)(i) & 9(1)(ii)		37
5	Total		2071	4290
6	Plant & Machinery			
7	Steam Generator	9(1)(i) & 9(1)(ii)	9798	5172
8	Turbine Generator work	9(1)(i) & 9(1)(ii)	3750	1805
9	Miscellaneous Work	9(1)(i) & 9(1)(ii)	2448	1132
10	Coal & Ash Related Work	9(1)(i) & 9(1)(ii)	6681	3398
11	Off-site Work	9(1)(i) & 9(1)(ii)	3822	2336
12	Electric Works	9(1)(i) & 9(1)(ii)	3640	630
13	Initial Capital Works	9(1)(iii)	2000	4281
14	Total Plant & Machinery		32139.00	18752.95
15	MGR track & signaling system.	9(1)(i) 9(1)(ii) & 9(1)(iii)	250.0	0.0
16	Railway siding	9(1)(i) 9(1)(ii) & 9(1)(iii)	269.00	0
17	Office furniture and furnishing	9(1)(i) & 9(1)(ii)	150.00	150.00
18	Office Equipment	9(1)(i) & 9(1)(ii)	100.00	100.00
19	IT Equipment	9(1)(i) & 9(1)(ii)	200.00	100.00
20	Total		35179.00	23392.95

23. The respondent No.6, TNEB has submitted that the expenditure towards ash pond works may be duly revised downwards after considering the guidelines of the Ministry of Environment & Forests, Government of India, to be followed by the generating stations with regard to use of fly ash vide notification dated 3.11.2009. The respondent No.13, KSEB has submitted that the additional capital expenditure may be allowed strictly in accordance with Regulation 9 of the 2009 Tariff Regulations. In response, the petitioner has submitted that the capital expenditure projected to be incurred is required to handle the ash

generated at the station and hence the submissions of the respondent, TNEB may be rejected. We have considered the submissions of the parties. The additional expenditure claimed by the petitioner as above, is within the cut-off date of the generating station i.e 31.3.2015 and is within the original scope of work. These works are under different stages of execution and the expenditure claimed is likely to be capitalized during the respective years of the tariff period. The petitioner has claimed expenditure of ₹9566 lakh up to 31.3.2014 towards initial spares, which works out to 2.13% of the Capital cost as on 31.7.2012 (anticipated COD of the generating station) and is within the ceiling limit. However, the ceiling limit of initial spares constituting 2.5% of the original project cost can be worked out only after capitalization up to the cut-off date i.e. 31.3.2015 is ascertained. Hence, the expenditure of ₹9566 lakh is considered for the purpose of tariff. Taking into consideration the documents on record and after examining the submissions made by parties in the light of provisions of Regulation 9(1) of the 2009 Tariff Regulations, we allow the claim of the petitioner for ₹58571.95 lakh as additional capital expenditure for 2012-14, subject to truing up in terms of Regulation 6 of 2009 Tariff Regulations.

24. Accordingly, the projected/actual capital cost considered for the purpose of tariff for 2011-14 is as under:

	2011-12 (16.9.2011 to 31.03.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Opening capital cost	238549.55	238549.55	449948.55	485127.55
Add: Projected Additional capital expenditure	0.00	0.00	35179.00	23392.95
Closing capital cost	238549.55	238549.55	485127.55	508520.50
Average capital cost	238549.55	238549.55	467538.05	496824.03

Debt- Equity Ratio

25. 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."

26. The petitioner has considered debt-equity ratio of 70:30 for the purpose of tariff for the period from 16.9.2011 to 31.3.2014. In Form-14 A of the petition, the petitioner has submitted quarterly position of actual cash expenditure, debt and equity upto 30.9.2011, which reflects a debt-equity ratio of 68:32 as on 30.9.2011. However, this form does not reflect such position as on 16.9.2011 i.e. COD of Unit-I to work out the debt-equity ratio as on that date. Further, the petitioner has also not submitted Form-9A & 9B for verification of the actual cash expenditure as shown in Form-14 A. As such, the debt-equity ratio of 70:30 has been considered for computation of tariff. This subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

27. 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 tried up in accordance with Regulation 6 of these regulations."

28. The petitioner has claimed Return on Equity of 23.481% per annum on the normative equity after accounting for the admitted additional capital expenditure (considering base rate of 15.50% in terms of Clause (2) of the above regulations and tax rate of 33.99%. Accordingly, Return on equity, has been worked out @ 23.481% per annum on the normative equity after accounting for additional capital expenditure as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Normative Equity -Opening	71564.87	71564.87	134984.57	145538.27
Add: Addition to equity on account of Projected Additional capital expenditure	0.00	0.00	10553.70	7017.89
Normative Equity - Closing	71564.87	71564.87	145538.27	152556.15
Average Equity	71564.87	71564.87	140261.42	149047.21
Return on Equity	16804.15	16804.15	32934.78	34997.78

Interest on loan

29. 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."

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

- (a) The gross normative loan corresponding to 70% of the admitted capital cost works out to ₹166984.69 lakh as on 16.9.2011 and ₹ 314963.99 lakh as on 31.7.2012.
- (b) The net loan opening as on 16.9.2011 is same as the gross loan and the cumulative repayment of loan up to previous year/period is nil.
- (c) Depreciation allowed for the period has been considered as repayment.
- (d) Average net loan is calculated as average of opening and closing of loan.
- (e) Weighted average rate of interest has been calculated as shown below:
 - (i) The rate of interest considered in calculation for all loans is on annual rest basis.
 - (ii) Actual draws up to the date of commercial operation as furnished by the petitioner, has been considered.
 - (iii) Actual rate of interest corresponding to each loan, as furnished by the petitioner has been considered.
 - (iv) In line with methodology adopted by the Commission and upheld by the Tribunal, for working out the weighted average rate of interest, the average method of repayment has been considered. The calculations for weighted average rate of interest are enclosed as Annexure-I to this order.

31. Interest on loan is worked out as under:

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Gross Opening Loan	166984.69	166984.69	314963.99	339589.29
Cumulative Repayment of Loan	0.00	6591.60	10630.83	26654.84
Net Loan Opening	166984.69	160393.09	304333.15	312934.45
Addition of loan due to projected Additional Capital Expenditure	0.00	0.00	24625.30	16375.07
Repayment of loan (Normative)	6591.60	4039.23	16024.01	25471.81
Net Loan Closing	160393.09	156353.85	312934.45	303837.71
Average Loan	163688.89	158373.47	308633.80	308386.08
Weighted Average Rate of Interest on Loan	9.4932%	9.4779%	9.4372%	9.3543%
Interest on Loan	15539.34	15010.46	29126.26	28847.43

Depreciation

32. 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."

33. The petitioner in Form-11 of the petition has considered the weighted average rate of depreciation of 5.1077% from 16.9.2011 to 30.7.2012 and 5.1269% for the period from the anticipated date of commercial operation of Unit-II station to 31.3.2014. As such, the same has been considered. The necessary calculations in support of depreciation are as under:

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		2012-13 (1.4.2012 to 30.7.2012)	2012-13 (31.7.2012 to 31.3.2013)	
Opening capital cost	238549.55	238549.55	449948.55	485127.55
Add: Projected Additional capital expenditure	0.00	0.00	35179.00	23392.95
Closing capital cost	238549.55	238549.55	485127.55	508520.50
Average capital cost	238549.55	238549.55	467538.05	496824.03
Rate of depreciation	5.1077%	5.1077%	5.1269%	5.1269%
Depreciation for the period	6591.60	4039.23	16024.01	25471.81
Depreciation (<i>annualized</i>)	12184.47	12184.47	23970.34	25471.81

O & M Expenses

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

(₹ in lakh/MW)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
O&M expenses for 500 MW units	14.53	15.36	15.36	16.24

35. Based on above norms, the year wise O&M expenses claimed by the petitioner for the purpose of tariff are as under:

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
O&M Expenses	7265	7680	15360	16240

36. The O&M expenses claimed by the petitioner based on the above norms are in order and allowed.

Normative Plant Availability Factor (NAPAF)

37. The Normative Plant Availability Factor of the generating station is considered as 85% for the period 1.4.2009 to 31.3.2014.

Interest on Working Capital

38. 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.

39. Clause (3) of Regulation 18 of the 2009 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 triuing up.

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

Fuel Components in working capital

41. The cost for fuel component in working capital, based on price and GCV of coal & secondary fuel oil (HFO) procured and burnt for the preceding three months from June, 2011 to August, 2011 as claimed by the petitioner is as under:

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		(₹ in lakh)
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	2013-14
Cost of coal for 2 months	12605	12570	25140	25140
Cost of secondary fuel oil 2 months	260	260	519	519

42. Based on the norms specified by the Commission, the cost of fuel component in working capital based on price and GCV of coal & oil for the preceding three months of June, 2011 to August, 2011 works out as under:

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Cost of coal for 2 months	12604.61	12570.17	25140.33	25140.33
Cost of Secondary Fuel oil for 2 months	260.27	259.56	519.12	519.12

Maintenance Spares

43. The petitioner has claimed the following maintenance spares in the working capital, as under:

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Cost of maintenance spares	1453	1536	3072	3248

44. The 2009 Tariff Regulations provide for maintenance spares @ 20% of the operation and maintenance expenses as specified in Regulation 19. Accordingly, the maintenance spares claimed by the petitioner as above is considered for the purpose of tariff.

Receivables

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

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Variable Charges - 2 months	12604.61	12570.17	25140.33	25140.33
Fixed Charges - 2 months	9619.91	9600.78	19088.08	19804
Total	22224.51	22170.95	44228.42	44944.41

O&M Expenses

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

(₹ in lakh)

	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
O & M for 1 month	605	640	1280	1353

47. For the purpose of computation of interest on working loan, the O&M expenses for one month has been worked out as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
O & M for 1 month	605.42	640.00	1280.00	1353.33

48. Accordingly, the interest on working capital has been calculated based on the rate of interest of 11.75% (SBI Base Rate of 8.25% plus 350 basis points, as on 1.4.2011) for the period from 16.9.2011 to 30.7.2012 and subsequently at the rate of interest of 13.50% (SBI Base Rate of 10% plus 350 basis points, as on 1.4.2012). Necessary computations in support of calculations for interest on working capital are as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13 (1.4.2012 to 30.7.2012)	2012-13 (31.7.2012 to 31.3.2013)	2013-14
Cost of coal for 2 months	12604.61	12570.17	25140.33	25140.33
Cost of secondary fuel oil for 2 months	260.27	259.56	519.12	519.12
O&M Expenses	605.42	640.00	1280.00	1353.33
Maintenance spares	1453.00	1536.00	3072.00	3248.00
Receivables	22224.51	22170.95	44228.42	44944.41
Total working capital	37147.81	37176.68	74239.87	75205.20
Rate of interest	11.75%	11.75%	13.50%	13.50%
Interest on working capital	4364.87	4368.26	10022.38	10152.70

Cost of secondary fuel oil

49. Clause (1) of Regulation 20 of the 2009 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 Rs/ml considered initially.

NAPAF – Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW.

50. 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 oil considered for the purpose of tariff is as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Cost of secondary fuel oil for two months	260.27	259.56	519.12	519.12

Annual Fixed charges

51. The annual fixed charges for the period 2011-14 are summarized as under:

	(₹ in lakh)			
	2011-12 (16.9.2011 to 31.3.2012)	2012-13		2013-14
		(1.4.2012 to 30.7.2012)	(31.7.2012 to 31.3.2013)	
Return on Equity	16804.15	16804.15	32934.78	34997.78
Interest on Loan	15539.34	15010.46	29126.26	28847.43
Depreciation	12184.47	12184.47	23970.34	25471.81
Interest on Working Capital	4364.87	4368.26	10022.38	10152.70
O&M Expenses	7265.00	7680.00	15360.00	16240.00
Cost of secondary fuel oil	1561.63	1557.37	3114.73	3114.73
Total	57719.45	57604.70	114528.49	118824.45

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

(ii) 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.

52. The annual fixed charges shall be calculated and *prorated* to the number of days for the year. The recovery of the annual fixed charges shall be subject to triuing up, in terms of Regulation 6 of the 2009 regulations.

Energy Charge Rate (ECR)

53. Sub-clause (a) 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.

54. The petitioner has claimed Energy Charge Rate (ECR) of 215.51 paise/kwh, based on the weighted average price, GCV of fuel procured and burnt for the preceding three months of June, 2011 to August, 2011 and operational norms, the ECR works out as 215.512 paise/kwh as mentioned below:

	Unit	2009-14
Capacity	MW	2 x 500
Gross Station Heat Rate	Kcal/kWh	2424
Aux. Energy Consumption	%	6.00
Weighted average GCV of oil	Kcal/lit	9875
Weighted average GCV of coal	Kcal/kg	3177.33
Weighted average price of oil	Rs/Kl	41830.97
Weighted average price of coal	Rs/MT	2666.26
Rate of energy charge (ex-bus)	Paise/kWh	215.512

55. 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.

56. The claim of the petitioner towards recovery of RLDC fees & charges is disposed of in terms of the Commission's order dated 6.2.2012 in Petition No. 140/MP/2011.

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

57. 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.

Recovery of additional cost due to increase in water charges over and above the O&M expenses:

58. The petitioner has submitted that there has been manifold increase in the water charges levied by the State Governments /State Government agencies and the O&M expense norms for 2009-14 notified by the Commission cannot cover any abnormal/unnatural increase in any cost component which is beyond the control of the utility. The petitioner has further submitted that the additional cost incurred in respect of the increase in water charges over and above the O&M expenses be permitted to be billed and recovered additionally from the beneficiaries. We notice that the petitioner has filed Petition No.121/2011 claiming the same relief and the matter has been heard on 13.10.2011. Accordingly, the relief prayed for in this petition would be governed by the final decision to be taken by the Commission in Petition No. 121/2011.

Application fee and the publication expenses

59. The petitioner has sought approval for the reimbursement of fees deposited for the year 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 24.5.2011 has submitted that an expenditure of ₹4,50,234/- has been incurred by it for publication of notice in the newspapers.

60. In terms of 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 application 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 2011-12 and for publication of notices in connection with the present petition shall be directly recovered from the beneficiaries, on *pro rata* basis. 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, 2012.

61. 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.

62. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 29.9.2011. The provisional billing of tariff shall be adjusted in terms of the proviso to Regulation 5(3) of the 2009 Tariff Regulations.

63. This order disposes of Petition No.55/2011.

Sd/-
[M. Deena Dayalan]
Member

Sd/-
[V.S. Verma]
Member

Sd/-
[S. Jayaraman]
Member

Calculation of Weighted Average Rate of Interest on Loan

(₹ in lakh)

Sl. No.	Loan Drawn		2011-12 (16.9.2011 to 31.3.2012)	2012-13 (1.4.2012 to 30.7.2012)	2012-13 (31.7.2012 to 31.3.2013)	2013-14
1	OBC-I (T2, D1)	Net opening loan	3,714.29	3,428.57	3,142.86	2,857.14
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	285.71	285.71	285.71	571.43
		Net Closing Loan	3,428.57	3,142.86	2,857.14	2,285.71
		Average Loan	3,571.43	3,285.71	3,000.00	2,571.43
		Rate of Interest	11.2500%	11.2500%	11.2500%	11.2500%
		Interest	401.79	369.64	337.50	289.29
2	UBI-II (T2, D1)	Net opening loan	5,000.00	4,285.71	4,285.71	3,571.43
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	714.29	-	714.29	714.29
		Net Closing Loan	4,285.71	4,285.71	3,571.43	2,857.14
		Average Loan	4,642.86	4,285.71	3,928.57	3,214.29
		Rate of Interest	8.0000%	8.0000%	8.0000%	8.0000%
		Interest	371.43	342.86	314.29	257.14
3	UBI-II (T2,D2)	Net opening loan	2,500.00	2,142.86	2,142.86	1,785.71
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	357.14	-	357.14	357.14
		Net Closing Loan	2,142.86	2,142.86	1,785.71	1,428.57
		Average Loan	2,321.43	2,142.86	1,964.29	1,607.14
		Rate of Interest	8.0000%	8.0000%	8.0000%	8.0000%
		Interest	185.71	171.43	157.14	128.57
4	Vijaya Bank-III (T1, D1)	Net opening loan	5,000.00	4,285.71	4,285.71	3,571.43
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	714.29	-	714.29	714.29
		Net Closing Loan	4,285.71	4,285.71	3,571.43	2,857.14
		Average Loan	4,642.86	4,285.71	3,928.57	3,214.29
		Rate of Interest	11.4000%	11.4000%	11.4000%	11.4000%
		Interest	529.29	488.57	447.86	366.43
5	SBI-V(T1, D2)	Net opening loan	3,500.00	3,000.00	3,000.00	2,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	500.00	-	500.00	500.00
		Net Closing Loan	3,000.00	3,000.00	2,500.00	2,000.00
		Average Loan	3,250.00	3,000.00	2,750.00	2,250.00
		Rate of Interest	12.0000%	12.0000%	12.0000%	12.0000%
		Interest	390.00	360.00	330.00	270.00
6	SBI-V (T2,D1)	Net opening loan	7,500.00	6,428.57	6,428.57	5,357.14
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	1,071.43	-	1,071.43	1,071.43
		Net Closing Loan	6,428.57	6,428.57	5,357.14	4,285.71
		Average Loan	6,964.29	6,428.57	5,892.86	4,821.43
		Rate of Interest	12.0000%	12.0000%	12.0000%	12.0000%
		Interest	835.71	771.43	707.14	578.57
7	SBI-V(T3,D1)	Net opening loan	5,000.00	4,285.71	4,285.71	3,571.43
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	714.29	-	714.29	714.29
		Net Closing Loan	4,285.71	4,285.71	3,571.43	2,857.14

		Average Loan	4,642.86	4,285.71	3,928.57	3,214.29
		Rate of Interest	12.0000%	12.0000%	12.0000%	12.0000%
		Interest	557.14	514.29	471.43	385.71
8	CBI-III (T1, D2)	Net opening loan	10,000.00	9,285.71	8,571.43	7,857.14
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	714.29	714.29	714.29	1,428.57
		Net Closing Loan	9,285.71	8,571.43	7,857.14	6,428.57
		Average Loan	9,642.86	8,928.57	8,214.29	7,142.86
		Rate of Interest	11.5000%	11.5000%	11.5000%	11.5000%
		Interest	1,108.93	1,026.79	944.64	821.43
9	IDFC-II (T1, D2)	Net opening loan	6,000.00	6,000.00	6,000.00	5,550.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	450.00	600.00
		Net Closing Loan	6,000.00	6,000.00	5,550.00	4,950.00
		Average Loan	6,000.00	6,000.00	5,775.00	5,250.00
		Rate of Interest	8.9800%	8.9800%	8.9800%	8.9800%
		Interest	538.80	538.80	518.60	471.45
10	Punjab & Sindh Bank (T2, D1)	Net opening loan	6,100.00	6,100.00	6,100.00	5,664.29
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	435.71	871.43
		Net Closing Loan	6,100.00	6,100.00	5,664.29	4,792.86
		Average Loan	6,100.00	6,100.00	5,882.14	5,228.57
		Rate of Interest	10.7500%	10.7500%	10.7500%	10.7500%
		Interest	655.75	655.75	632.33	562.07
11	Punjab & Sindh Bank (T2, D2)	Net opening loan	5,000.00	5,000.00	5,000.00	4,642.86
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	357.14	714.29
		Net Closing Loan	5,000.00	5,000.00	4,642.86	3,928.57
		Average Loan	5,000.00	5,000.00	4,821.43	4,285.71
		Rate of Interest	10.7500%	10.7500%	10.7500%	10.7500%
		Interest	537.50	537.50	518.30	460.71
12	Syndicate Bank-II (T2, D1)	Net opening loan	2,500.00	2,500.00	2,500.00	2,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	357.14
		Net Closing Loan	2,500.00	2,500.00	2,500.00	2,142.86
		Average Loan	2,500.00	2,500.00	2,500.00	2,321.43
		Rate of Interest	11.7500%	11.7500%	11.7500%	11.7500%
		Interest	293.75	293.75	293.75	272.77
13	Allahabad Bank-III (T1, D1)	Net opening loan	2,500.00	2,500.00	2,500.00	2,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	178.57
		Net Closing Loan	2,500.00	2,500.00	2,500.00	2,321.43
		Average Loan	2,500.00	2,500.00	2,500.00	2,410.71
		Rate of Interest	11.2500%	11.2500%	11.2500%	11.2500%
		Interest	281.25	281.25	281.25	271.21
14	SBI-VII (T1, D1)	Net opening loan	3,500.00	3,500.00	3,500.00	3,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	-
		Net Closing Loan	3,500.00	3,500.00	3,500.00	3,500.00
		Average Loan	3,500.00	3,500.00	3,500.00	3,500.00
		Rate of Interest	10.7500%	10.7500%	10.7500%	10.7500%
		Interest	376.25	376.25	376.25	376.25
15	LIC-V (T1, D1)	Net opening loan	10,000.00	10,000.00	10,000.00	8,571.43
		Add: Addition during the period	-	-	-	-

		Less: Repayment during the period	-	-	1,428.57	1,428.57
		Net Closing Loan	10,000.00	10,000.00	8,571.43	7,142.86
		Average Loan	10,000.00	10,000.00	9,285.71	7,857.14
		Rate of Interest	11.0000%	11.0000%	11.0000%	11.0000%
		Interest	1,100.00	1,100.00	1,021.43	864.29
16	LIC-V (T1, D2)	Net opening loan	12,500.00	12,500.00	12,500.00	10,714.29
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	1,785.71	1,785.71
		Net Closing Loan	12,500.00	12,500.00	10,714.29	8,928.57
		Average Loan	12,500.00	12,500.00	11,607.14	9,821.43
		Rate of Interest	11.0000%	11.0000%	11.0000%	11.0000%
		Interest	1,375.00	1,375.00	1,276.79	1,080.36
17	HUDCO LTD (T1, D2)	Net opening loan	5,000.00	5,000.00	5,000.00	5,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	-
		Net Closing Loan	5,000.00	5,000.00	5,000.00	5,000.00
		Average Loan	5,000.00	5,000.00	5,000.00	5,000.00
		Rate of Interest	11.2500%	11.2500%	11.2500%	11.2500%
		Interest	562.50	562.50	562.50	562.50
18	PFC-V(T1, D1)	Net opening loan	7,500.00	7,500.00	7,500.00	7,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	468.75
		Net Closing Loan	7,500.00	7,500.00	7,500.00	7,031.25
		Average Loan	7,500.00	7,500.00	7,500.00	7,265.63
		Rate of Interest	10.3000%	10.3000%	10.3000%	10.3000%
		Interest	772.50	772.50	772.50	748.36
19	PFC-V(T1, D2)	Net opening loan	2,000.00	2,000.00	2,000.00	2,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	125.00
		Net Closing Loan	2,000.00	2,000.00	2,000.00	1,875.00
		Average Loan	2,000.00	2,000.00	2,000.00	1,937.50
		Rate of Interest	8.9700%	8.9700%	8.9700%	8.9700%
		Interest	179.40	179.40	179.40	173.79
20	PFC V (T2, D1)	Net opening loan	6,000.00	6,000.00	6,000.00	6,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	375.00
		Net Closing Loan	6,000.00	6,000.00	6,000.00	5,625.00
		Average Loan	6,000.00	6,000.00	6,000.00	5,812.50
		Rate of Interest	7.9300%	7.9300%	7.9300%	7.9300%
		Interest	475.80	475.80	475.80	460.93
21	PFC V (T2, D3)	Net opening loan	6,000.00	6,000.00	6,000.00	6,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	375.00
		Net Closing Loan	6,000.00	6,000.00	6,000.00	5,625.00
		Average Loan	6,000.00	6,000.00	6,000.00	5,812.50
		Rate of Interest	8.2300%	8.2300%	8.2300%	8.2300%
		Interest	493.80	493.80	493.80	478.37
22	PFC V (T2,D4)	Net opening loan	10,000.00	10,000.00	10,000.00	10,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	625.00
		Net Closing Loan	10,000.00	10,000.00	10,000.00	9,375.00
		Average Loan	10,000.00	10,000.00	10,000.00	9,687.50
		Rate of Interest	8.1000%	8.1000%	8.1000%	8.1000%
		Interest	810.00	810.00	810.00	784.69

23	PFC V (T2,D6)	Net opening loan	10,000.00	10,000.00	10,000.00	10,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	625.00
		Net Closing Loan	10,000.00	10,000.00	10,000.00	9,375.00
		Average Loan	10,000.00	10,000.00	10,000.00	9,687.50
		Rate of Interest	7.9600%	7.9600%	7.9600%	7.9600%
		Interest	796.00	796.00	796.00	771.13
24	PFC V (T2,D10)	Net opening loan	1,000.00	1,000.00	1,000.00	1,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	62.50
		Net Closing Loan	1,000.00	1,000.00	1,000.00	937.50
		Average Loan	1,000.00	1,000.00	1,000.00	968.75
		Rate of Interest	8.1300%	8.1300%	8.1300%	8.1300%
		Interest	81.30	81.30	81.30	78.76
25	PFC V (T2, D11)	Net opening loan	27,000.00	27,000.00	27,000.00	27,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	1,687.50
		Net Closing Loan	27,000.00	27,000.00	27,000.00	25,312.50
		Average Loan	27,000.00	27,000.00	27,000.00	26,156.25
		Rate of Interest	8.2800%	8.2800%	8.2800%	8.2800%
		Interest	2,235.60	2,235.60	2,235.60	2,165.74
26	PFC V (T3, D1)	Net opening loan	5,000.00	5,000.00	5,000.00	5,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	312.50
		Net Closing Loan	5,000.00	5,000.00	5,000.00	4,687.50
		Average Loan	5,000.00	5,000.00	5,000.00	4,843.75
		Rate of Interest	7.7300%	7.7300%	7.7300%	7.7300%
		Interest	386.50	386.50	386.50	374.42
27	PFC V (T3, D3)	Net opening loan	4,000.00	4,000.00	4,000.00	4,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	250.00
		Net Closing Loan	4,000.00	4,000.00	4,000.00	3,750.00
		Average Loan	4,000.00	4,000.00	4,000.00	3,875.00
		Rate of Interest	8.7400%	8.7400%	8.7400%	8.7400%
		Interest	349.60	349.60	349.60	338.68
28	PFC V (T3,D4)	Net opening loan	1,000.00	1,000.00	1,000.00	1,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	62.50
		Net Closing Loan	1,000.00	1,000.00	1,000.00	937.50
		Average Loan	1,000.00	1,000.00	1,000.00	968.75
		Rate of Interest	8.8900%	8.8900%	8.8900%	8.8900%
		Interest	88.90	88.90	88.90	86.12
29	PFC V (T3, D5)	Net opening loan	1,000.00	1,000.00	1,000.00	1,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	62.50
		Net Closing Loan	1,000.00	1,000.00	1,000.00	937.50
		Average Loan	1,000.00	1,000.00	1,000.00	968.75
		Rate of Interest	9.3400%	9.3400%	9.3400%	9.3400%
		Interest	93.40	93.40	93.40	90.48
30	PFC V (T3,D10)	Net opening loan	5,000.00	5,000.00	5,000.00	5,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	312.50
		Net Closing Loan	5,000.00	5,000.00	5,000.00	4,687.50
		Average Loan	5,000.00	5,000.00	5,000.00	4,843.75

		Rate of Interest	9.8600%	9.8600%	9.8600%	9.8600%
		Interest	493.00	493.00	493.00	477.59
31	Andhara Bank (T1, D1)	Net opening loan	2,500.00	2,500.00	2,500.00	2,142.86
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	357.14	357.14
		Net Closing Loan	2,500.00	2,500.00	2,142.86	1,785.71
		Average Loan	2,500.00	2,500.00	2,321.43	1,964.29
		Rate of Interest	11.6500%	11.6500%	11.6500%	11.6500%
		Interest	291.25	291.25	270.45	228.84
		32	SBI-VI (T1, D2)	Net opening loan	6,000.00	6,000.00
Add: Addition during the period	-			-	-	-
Less: Repayment during the period	-			-	857.14	857.14
Net Closing Loan	6,000.00			6,000.00	5,142.86	4,285.71
Average Loan	6,000.00			6,000.00	5,571.43	4,714.29
Rate of Interest	12.5000%			12.5000%	12.5000%	12.5000%
Interest	750.00			750.00	696.43	589.29
Rate of Interest	8.8900%			8.8900%	8.8900%	8.8900%
Interest	88.90			88.90	88.90	86.12
33	SBI-VI (T1, D2)			Net opening loan	4,000.00	4,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	571.43	571.43
		Net Closing Loan	4,000.00	4,000.00	3,428.57	2,857.14
		Average Loan	4,000.00	4,000.00	3,714.29	3,142.86
		Rate of Interest	12.5000%	12.5000%	12.5000%	12.5000%
		Interest	500.00	500.00	464.29	392.86
34	SBI-VI (T2, D3)	Net opening loan	2,000.00	2,000.00	2,000.00	1,714.29
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	285.71	285.71
		Net Closing Loan	2,000.00	2,000.00	1,714.29	1,428.57
		Average Loan	2,000.00	2,000.00	1,857.14	1,571.43
		Rate of Interest	11.9000%	11.9000%	11.9000%	11.9000%
		Interest	238.00	238.00	221.00	187.00
35	SBI-VI (T2, D4)	Net opening loan	5,000.00	5,000.00	5,000.00	4,285.71
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	714.29	714.29
		Net Closing Loan	5,000.00	5,000.00	4,285.71	3,571.43
		Average Loan	5,000.00	5,000.00	4,642.86	3,928.57
		Rate of Interest	11.9000%	11.9000%	11.9000%	11.9000%
		Interest	595.00	595.00	552.50	467.50
36	BOM-III (T2,D1)	Net opening loan	5,000.00	5,000.00	5,000.00	4,642.86
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	357.14	714.29
		Net Closing Loan	5,000.00	5,000.00	4,642.86	3,928.57
		Average Loan	5,000.00	5,000.00	4,821.43	4,285.71
		Rate of Interest	10.7500%	10.7500%	10.7500%	10.7500%
		Interest	537.50	537.50	518.30	460.71
37	BOM-III (T2,D2)	Net opening loan	4,500.00	4,500.00	4,500.00	4,178.57
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	321.43	642.86
		Net Closing Loan	4,500.00	4,500.00	4,178.57	3,535.71
		Average Loan	4,500.00	4,500.00	4,339.29	3,857.14
		Rate of Interest	10.7500%	10.7500%	10.7500%	10.7500%
		Interest	483.75	483.75	466.47	414.64
38	BTMU	Net opening loan	12,148.96	12,148.96	12,148.96	12,148.96

		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	-
		Net Closing Loan	12,148.96	12,148.96	12,148.96	12,148.96
		Average Loan	12,148.96	12,148.96	12,148.96	12,148.96
		Rate of Interest	1.8000%	1.8000%	1.8000%	1.8000%
		Interest	218.68	218.68	218.68	218.68
39	Bond XXIV Series	Net opening loan	19,000.00	18,000.00	18,000.00	16,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	1,000.00	-	2,000.00	2,000.00
		Net Closing Loan	18,000.00	18,000.00	16,000.00	14,000.00
		Average Loan	18,500.00	18,000.00	17,000.00	15,000.00
		Rate of Interest	8.6377%	8.6377%	8.6377%	8.6377%
		Interest	1,597.97	1,554.79	1,468.41	1,295.66
40	Bond XXV Series	Net opening loan	5,000.00	5,000.00	4,642.50	4,285.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	357.50	357.50	715.00
		Net Closing Loan	5,000.00	4,642.50	4,285.00	3,570.00
		Average Loan	5,000.00	4,821.25	4,463.75	3,927.50
		Rate of Interest	9.4000%	9.4000%	9.4000%	9.4000%
		Interest	470.00	453.20	419.59	369.19
41	Bond XXVI Series	Net opening loan	2,500.00	2,500.00	2,321.25	2,142.50
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	178.75	178.75	357.50
		Net Closing Loan	2,500.00	2,321.25	2,142.50	1,785.00
		Average Loan	2,500.00	2,410.63	2,231.88	1,963.75
		Rate of Interest	9.0900%	9.0900%	9.0900%	9.0900%
		Interest	227.25	219.13	202.88	178.50
42	Bond XXVIII Series	Net opening loan	17,500.00	17,500.00	17,500.00	17,500.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	-
		Net Closing Loan	17,500.00	17,500.00	17,500.00	17,500.00
		Average Loan	17,500.00	17,500.00	17,500.00	17,500.00
		Rate of Interest	11.0300%	11.0300%	11.0300%	11.0300%
		Interest	1,930.25	1,930.25	1,930.25	1,930.25
43	Bond XXX Series	Net opening loan	15,000.00	15,000.00	15,000.00	15,000.00
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	-	-	-	-
		Net Closing Loan	15,000.00	15,000.00	15,000.00	15,000.00
		Average Loan	15,000.00	15,000.00	15,000.00	15,000.00
		Rate of Interest	7.9200%	7.9200%	7.9200%	7.9200%
		Interest	1,188.00	1,188.00	1,188.00	1,188.00
44	Gross Total	Net opening loan	280,963.25	274,891.82	273,355.57	257,826.46
		Add: Addition during the period	-	-	-	-
		Less: Repayment during the period	6,071.43	1,536.25	15,529.11	24,566.25
		Net Closing Loan	274,891.82	273,355.57	257,826.46	233,260.21
		Average Loan	277,927.53	274,123.69	265,591.01	245,543.34
		Rate of Interest	9.4932%	9.4779%	9.4372%	9.3543%
		Interest	26,384.26	25,981.14	25,064.24	22,968.92