

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 258/2010

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

Date of Hearing: 19.5.2011

Date of Order: 20.7.2011

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, for determination of transmission tariff for (i) 3rd 315 MVA Transformer at Udumalpet S/S with associated bays and equipments, (ii) 315 MVA 400/220 kV ICT-III at Trivendrum S/S with associated bays and equipments, (iii) 400 kV Tirunelveli-Udumalpet D/C Line and (iv) 1x63 MVAR Reactors at Tirunelveli S/S under transmission system associated with Kudunkulum Atomic Power Project in Southern Region for the 2009-14 period.

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon

...**Petitioner**

Vs

1. Karnataka Power Transmission Corporation, Ltd.
Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd.
Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Goa, Panaji
6. Electricity Department, Govt. of Pondicherry, Pondicherry
7. Eastern Power Distribution Company of Andhra Pradesh
Ltd., Visakhapatnam
8. Southern Power Distribution Company of Andhra
Pradesh Ltd., Tirupati
9. Central Power Distribution Company of Andhra Pradesh
Ltd., Hyderabad
10. Northern Power Distribution Company of Andhra
Pradesh Ltd. Warangal



11. Bangalore Electricity Supply Company Ltd., Bangalore
12. Gulbarga Electricity Supply Company Ltd., Gulbarga
13. Hubli Electricity Supply Company Ltd., Hubli
14. Mangalore Electricity Supply Company Ltd., Mangalore
15. Chamundeswari Electricity Supply Company Ltd.,
Mysore

..... Respondents

The following was present:

1. Shri.U. K Tyagi, PGCIL
1. Shri Y. K. Sehgal, PGCIL
2. Shri S.S. Raju, PGCIL
3. Shri Rajeev Gupta, PGCIL
4. Shri S. Balaguru, TANGEDCO
5. Ms. Geetha, TANGEDCO

ORDER

This petition has been filed seeking approval for determination of transmission tariff for i) 3rd 315 MVA Transformer at Udumalpet Sub-station with associated bays and equipments, (ii) 315 MVA 400/220 kV ICT-III at Trivendrum Sub-station with associated bays and equipments, (iii) 400 kV Tirunelveli-Udumalpet D/C Line and (iv) 1x63 MVAR Reactors at Tirunelveli Sub-station (hereinafter collectively referred to as “the transmission assets”) under the Transmission System associated with the Kudunkulum Atomic Power Project (hereinafter referred to as “the transmission system”) for the 2009-14 period, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 regulations”). The petitioner has also sought the following reliefs:

- (a) Allow, in respect of the assets being combined to calculate the transmission charges, to recover full depreciation (90% of the Gross Block) of the assets during its useful life (25 years for sub-station and 35 years for Transmission Line) reckoning from the actual date of



commercial operation and also permit the petitioner to treat the recovery of depreciation after achieving the useful life by an asset (to be reckoned from the actual date of commercial operation).

(b) Allow grossing up the base rate of return with the applicable tax rate as per the relevant Finance Acts and direct settlement of tax liability with the long term transmission customers on year to year basis.

(c) Approve the reimbursement, of expenditure, by the beneficiaries towards petition filing fee and publishing of notices in newspapers in terms of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition.

(d) Allow the petitioner to bill and recover Service Tax on transmission charges separately from the respondents, if at any time the exemption from service tax is withdrawn and transmission of power is notified as a taxable service.

(e) Allow the petitioner to bill and adjust impact on loan due to change in interest rate on account of floating rate of interest applicable during the tariff period, if any, from the respondents

(f) Allow the petitioner to bill and recover license fee separately from the respondents

2. The investment approval for the transmission system associated with Kudunkulum Atomic Power Project (2X1000 MW) was accorded by the



Government of India vide Memorandum No. 12/18/2003-PG dated 25.5.2005 of Ministry of Power at an estimated cost of ₹ 177929 lakh including Interest During Construction of ₹ 7141 lakh, at 4th quarter 2004 price level. The petitioner vide its additional submissions under affidavit dated 17.1.2011, has filed a copy of the revised cost estimate approved by its Board of Directors vide Memorandum No. C/CP/Kudunkulum dated 3.9.2010. As per the Revised Cost Estimate, the cost of the project at 1st quarter of 2010 price level is ₹ 215907 lakh including Interest During Construction of ₹ 22342 lakh.

3. The details of the elements and their respective dates of commercial operation for which transmission charges have been claimed In this petition, are as under:

(₹ in lakh)		
Asset No.	Element	Date of commercial operation
Asset No.1	3rd 315 MVA Transformer at Udumalpet S/S with associated bays and equipments	1.4.2009
Asset No.2	315 MVA 400/220 kV ICT-III at Trivendrum S/S with associated bays and equipments	1.7.2009
Asset No.3	400 kV Tirunelveli-Udumalpet D/C Line for the period	1.11.2009
Asset No.4	1x63 MVAR Reactors at Tirunelveli Sub-station	1.2.2010

4. In this order, transmission charges have been calculated for (a) Asset 1 from the date of commercial operation to 31.3.2014 (b) for Asset 2 from the date of commercial operation to 31.3.2014 (c) for Asset 3 from the date of commercial operation to 31.1.2010, on pro-rata basis and (d) for combined Assets 3 and 4 from the notional date of commercial operation, i.e. 1.2.2010 to 31.3.2014.

5. Details of the transmission charges claimed by the petitioner are as under:

(₹ in lakh)

Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	79.35	83.71	85.56	85.56	85.56
Interest on Loan	27.48	26.84	25.20	22.88	20.56
Return on equity	78.83	83.16	85.00	85.00	85.00
Interest on Working Capital	8.33	8.75	9.06	9.30	9.55
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	283.07	296.64	304.39	308.00	311.95

(₹ in lakh)

Asset 2					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	75.10	105.30	107.28	107.28	107.28
Interest on Loan	26.27	34.43	32.26	29.35	26.43
Return on equity	74.59	104.58	106.55	106.55	106.55
Interest on Working Capital	7.01	9.80	10.11	10.33	10.57
O & M Expenses	66.81	94.18	99.57	105.26	111.28
Total	249.78	348.29	355.77	358.77	362.11

(₹ in lakh)

Asset 3	
	2009-10 (Pro rata)
Depreciation	568.87
Interest on Loan	324.71
Return on equity	565.40
Interest on Working Capital	37.15
O & M Expenses	134.73
Total	1630.86

(₹ in lakh)

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	233.75	1417.29	1421.84	1423.33	1423.33
Interest on Loan	139.02	806.37	738.58	665.40	592.82
Return on equity	232.32	1408.77	1413.49	1414.93	1414.93
Interest on Working Capital	15.74	95.58	95.50	95.24	94.99
O & M Expenses	62.62	397.29	420.04	444.04	469.32
Total	683.45	4125.30	4089.45	4042.94	3995.39

6. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(₹ in lakh)

Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M expenses	7.42	7.85	8.30	8.77	9.27
Receivables	47.18	49.44	50.73	51.33	51.99
Total	67.96	71.42	73.97	75.89	77.95
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	8.33	8.75	9.06	9.30	9.55

(₹ in lakh)

Asset 2					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M expenses	7.42	7.85	8.30	8.77	9.27
Receivables	55.51	58.05	59.30	59.80	60.35
Total	76.29	80.03	82.54	84.36	86.31
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.01	9.80	10.11	10.33	10.57

(₹ in lakh)

Asset 3	
	2009-10 (Pro rata)
Maintenance Spares	48.50
O & M expenses	26.95
Receivables	652.34
Total	727.79
Rate of Interest	12.25%
Interest	37.15

(₹ in lakh)

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	56.36	59.59	63.01	66.61	70.40
O & M expenses	31.31	33.11	35.00	37.00	39.11
Receivables	683.45	687.55	681.58	673.82	665.90
Total	771.12	780.25	779.59	777.43	775.41
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	15.74	95.58	95.50	95.24	94.99

7. Reply to the petition has been filed only by the Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO) successor of the fourth respondent, viz. Tamil Nadu Electricity Board. The respondent has objected to the under mentioned prayers made by the petitioner:

(a) The respondent has referred to the delay in commissioning of the transmission assets and submitted that beneficiaries are not responsible for the delay in commissioning of the Power House or the transmission lines and hence the beneficiaries should not be burdened with the payment of higher transmission charges for no fault of theirs. The respondent has requested that prudence check be applied and the capital cost be limited to the apportioned original sanctioned cost.

(b) Grossing up the rate of return based on the tax rate of the relevant Finance Act may be linked with the proposed amendment of the regulation by the Commission.

(c) As regards the service tax, the respondent submitted that the Commission in order dated 23.9.2010 in P. No. 62/2009 has not given any relief on a similar request in view of the Government of India's Notifications dated 27.2.2010 and 20.7.2010, wherein transmission services are exempted from the purview of the service tax. Hence, the respondent has requested to negate the respondent's claim for reimbursement of service tax.

(d) The petitioner's request to revise the norms for O&M expenditure, if the impact of wage hike effective from 1.1.2007 is more than 50%,



should be negated as the 2009 regulations do not provide for revisiting the normative O&M charges.

(e) Regulations do not provide for reimbursement of licence fee and it is a levy on the petitioner to be in the business and therefore, it should not be passed on to the beneficiaries.

(f) The respondent has further submitted that the cost of initial spares in respect of Asset 1 and Asset 2 work out to 4.2% and 5.5% respectively and the same may therefore be restricted to the prescribed value of 2.5%.

(g) That the petitioner should furnish the proof of interest in respect ADB III loan and also documentary evidence for the exchange rates adopted in converting the \$ loan to Rupees.

8. The petitioner in its rejoinder filed under affidavit dated 19.1.2011 has refuted the submissions of the respondent. It has made the following submissions:

(a) The petitioner submitted that as per the investment approval, the 400kV Tirunelveli-Udumalpet D/C line was to be commissioned in December, 2007 to match the commissioning of second unit of Kudunkulum project. The rest of the assets covered in the petition are to be commissioned within a period of 42 months from the date of investment approval in November, 2008, 10 months after the expected commissioning of second unit of Kudunkulum project in December, 2007. That the second unit Kudunkulum project has also been delayed

and is expected to be commissioned only in November, 2011. That there has been an inordinate delay in implementation of the Kudunkulum generation and therefore associated transmission system has also been implemented to match the commissioning of the generation schedule.

(b) As regards the cost overrun, it has been submitted that the high cost is due to high awarded cost received in open competitive bidding as compared to approved cost and due to price variation. That the revised cost estimate has since been approved and hence the cost as per the same be taken as the basis for determination of tariff.

(c) That the issue of MAT would be addressed once the 2009 regulations are amended by the Commission.

(d) That the beneficiaries should share the service tax once exemption of transmission services from service tax is withdrawn.

(e) That the petitioner furnished the actual O&M cost, line and Bay details of its transmission line for the five year period starting from 2004-05 to 2007-08, without taking into account expected manpower cost implications on account of wage revision. That the petitioner may approach the Commission with actual manpower costs on account of wage revision during the tariff block 2009-14 for claiming the tariff.

(f) That the payment towards licensee fee is not represented in the actual O&M expenses and it is an extra cost on the petitioner and hence, it should be reimbursed.

(g) As regards the cost of initial spares, the petitioner has contended that the same is to be considered for the entire project as whole and not element wise. Reiterating its submissions in the petition, the petitioner has prayed that 100% transmission tariff as prayed for in the petition be approved.

(h) The petitioner has submitted that the proof of interest rate of the ADB III loan was already filed along with the petition. The petitioner submitted the proof of exchange rate prevailing as on drawl and DOCO along with the rejoinder.

9. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition. While doing so, we also take care of the submissions of the respondent and address them in the relevant paragraphs.

CAPITAL COST

10. As regards the capital cost, Regulation 7 (1) of the 2009 regulations provides as under.

“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 fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check."

11. Capital expenditure up to the date of commercial operation based on the Auditor's certificate dated 20.10.2009, for Asset-1 and 2 and certificate dated 8.3.2010 for Asset-3 and 4 is as follows:

(₹ in lakhs)							
Asset	Apportioned approved cost	Apportioned approved cost as per RCE	Actual cost incurred as on DOCO	Expenditure from DOCO to 31.03.2010	Expenditure for 2010-11	Expenditure for 2011-12	Total estimate completion cost
Asset-1	1189	1627	1455.32	95.10	70.00	0.00	1620.42
Asset-2	1207	2048	1836.16	120.61	75.00	0.00	2031.77
Asset-3	24363	26562	25659.15	429.14	124.98	51.97	26265.24
Asset-4	500	731	698.83	12.09	0.00	3.02	713.94
Combined Asset 3 & 4	24863	27293	26357.98	441.23	124.98	54.99	26979.18

12. As stated hereinabove, transmission tariff has been calculated for Combined Asset 3 and 4 with effect from Notional DOCO, 1.2.2010, i.e the date of commercial operation of Asset 4. Actual date of commercial operation of the Assets clubbed in the instant petition i.e. individual assets 3 and 4 is 1.11.2009 and 1.2.2010 respectively. As per Commission letter Ref. No. C-7/189(204)/2009-CERC dated 31.10.2009, notional date of commercial operation of the assets which have been clubbed for the purpose of tariff determination is 1.2.2010. As the petitioner has claimed projected additional capital expenditure for whole 2009-10 period and details of breakup of additional capital cap from 1.11.2009 to 1.02.2010 are not available, capital cost as on date of commercial operation of both the assets has been clubbed for the purpose of tariff calculation. However, capital cost will be reviewed at the time of truing up.

13. The next question which engages our attention is the Time over-run, which has been objected to by respondent TANGEDCO in its reply to the petition. We notice that there is a delay of 14 months in the commissioning of Asset "1x63 MVAR Reactors at Tirunelveli sub-station". The Tirunelveli sub-station was commissioned on 1.4.2009, whereas 63 MVAR reactor at the Tirunelveli sub-station was commissioned on 1.2.2010. The petitioner submitted that the said reactor developed fault while commissioning and had to be sent back to the factory and hence the reactor could be commissioned only on 1.2.2010.

14. The failure of the reactor at site and sending it back to the factory is a bilateral issue between the petitioner and the contractor or the supplier. Hence, delay in commissioning due to the above reason should rightly be attributed to the petitioner who may settle the issue based on the provisions of the contract between the parties. We are also conscious of the fact that the commission has already condoned the delay in commissioning of the Kudunkulum associated Transmission System. Hence, under normal circumstance we would have held that the responsibility of delay in commissioning of the reactor at Tirunelveli after 1.4.2009, more precisely, on 1.2.2010 rests with the petitioner. However, it is seen from the Auditor's certificate, pertaining to the Asset "1x63 MVAR Reactors at Tirunelveli S/S", that no Capital expenditure has been incurred by the petitioner during the above mentioned period. Therefore, no capital expenditure has been deducted from the capital cost claimed by the petitioner as on date of commercial operation for the above mentioned asset. However, as per the



Auditor's certificate the expenditure from 1.4.2009 to 31.1.2010 and balance estimated expenditure is on the basis of details furnished by the Management. Therefore, the issue will again be reviewed on the basis of actual audited figures at the time of truing up.

ADDITIONAL CAPITAL EXPENDITURE

15. With regard to additional capital expenditure, Regulation 9(1) of the 2009 regulations as amended by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides as under:

“(1) The capital expenditure incurred or projected to be incurred, on the following counts within 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) Undischarged liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8 ;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) Change in law;*

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

(2) The capital expenditure incurred on the following counts after the cut-off-date, 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;
- (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 the 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 undischarged 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.”

16. The section 2(11) of 2009 regulations further defines cut-off date as under:

“cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

17. As per the above definition, cut-off date in respect of Asset 1 and 2 is 31.3.2012 and for the Combined Asset 3 and 4 the same is 31.3.2013.

18. Details of the additional capital expenditure claimed by the petitioner are as under:

(₹ in lakh)

Name of the Asset	Year	Nature	Amount (in lakh)	Details of Expenditure
Asset-1				
3rd 315 MVA Transformer at Udumalpet S/S with associated bays and equipments	2009-10	Sub Station	95.10	Balance/ Retention payments.
	2010-11	Sub Station	70.00	Balance/ Retention payments.

(₹ in lakh)

Asset 2				
315 MVA 400/220 kV ICT-III at Trivendrum S/S with associated bays and equipments	2009-10	Sub-Station	120.61	Balance/ Retention payments.
	2010-11	Sub-Station	75.00	Balance/ Retention payments.

(₹ in lakh)

Asset-3				
400 kV Tirunelveli-Udumalpet D/C Line	2009-10	Transmission Line	373.88	Balance/ Retention payments.
		Sub-Station	38.65	Balance/ Retention payments.
		PLCC	16.61	Balance/ Retention payments.
	Sub Total		429.14	
	2010-11	Building & Civil Works	26.72	Balance/ Retention payments.
		Sub-Station	93.70	Balance/ Retention payments.
		PLCC	4.56	Balance/ Retention payments.
	Sub Total		124.98	
	2011-12	Sub-Station	45.78	Balance/ Retention payments.
		PLCC	6.19	Balance/ Retention payments.
	Sub Total		51.97	

(₹ in lakh)

Combined Asset 3 & 4					
Name of the Asset	Year	Nature	Amount (₹ in lakh)	Details of Expenditure	
Combined elements of 400 kV Tirunelveli-Udumalpet D/C Line & 1x63 MVAR Reactors at Tirunelveli S/S	2009-10	Sub Station	50.74	Balance/ Retention payments.	
		Transmission Line	373.88	Balance/ Retention payments.	
		PLCC	16.61	Balance/ Retention payments.	
	Sub Total			441.23	
	2010-11	Building & Civil Works	26.72	Balance/ Retention payments.	
		Sub-Station	93.70	Balance/ Retention payments.	
		PLCC	4.56	Balance/ Retention payments.	
	Sub Total			124.98	
	2011-12	Sub-Station	48.80	Balance/ Retention payments.	
		PLCC	6.19	Balance/ Retention payments.	
		Sub Total			54.99

19. As the entire projected additional capital expenditure is within the cut-off date and towards balance and retention payment, the same has been allowed for the purpose of tariff calculation.

DEBT- EQUITY RATIO

20. Regulation 12 of the 2009 regulations provides that,-

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

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

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

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

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the



Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

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

21. Details of debt-equity in respect of the transmission assets as on the date of commercial operation are as under:

(₹ in lakh)

Particulars	Capital Cost as on actual/notional date of commercial operation	
	(₹ in lakh)	%
Asset-1		
Debt	1018.72	70.000
Equity	436.60	30.000
Total	1455.32	100.00
Asset-2		
Debt	1285.33	70.001
Equity	550.83	29.999
Total	1836.16	100.00
Asset-3		
Debt	17961.41	70.000
Equity	7697.75	30.000
Total	25659.16	100.00
Combined Asset 3 & 4		
Debt	18450.61	70.000
Equity	7907.38	30.000
Total	26357.98	100.00

22. As regards the additional capital expenditure, (referred to as “Add. Cap.” in the table below), the debt-equity details are as under:

(₹ in lakh)

	Normative(Projected)	
	(₹ in lakh)	%
Asset 1		
Add Cap for 2009-10		
Debt	66.57	70.00
Equity	28.53	30.00
Total	95.10	100.00
Add Cap for 2010-11		
Debt	49.00	70.00
Equity	21.00	30.00
Total	70.00	100.00

(₹ in lakh)

Asset 2		
Add Cap for 2009-10		
Debt	84.43	70.00
Equity	36.18	30.00
Total	120.61	100.00
Add Cap for 2010-11		
Debt	52.50	70.00
Equity	22.50	30.00
Total	75.00	100.00

(₹ in lakh)

Asset 3		
Add Cap for 2009-10		
Debt	300.40	70.00
Equity	128.74	30.00
Total	429.14	100.00

(₹ in lakh)

Combined Assets 3 and 4		
Add Cap for 2009-10		
Debt	308.86	70.00
Equity	132.37	30.00
Total	441.23	100.00
Add Cap for 2010-11		
Debt	87.49	70.00
Equity	37.49	30.00
Total	124.98	100.00
Add Cap for 2011-12		
Debt	38.49	70.00
Equity	16.50	30.00
Total	54.99	100.00

RETURN ON EQUITY

23. Regulation 15 of the 2009 regulations, as amended vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides that,-

“15. (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."

24. In this order, Return on Equity has been calculated as follows- Base rate/(1-t), where Base Rate is 15.5% and 't' is normal tax rate for the period 2008-09 applicable to the petitioner which is under MAT i.e. 10% + surcharge@ 10% + 3% Education Cess.

25. As regards the petitioner's claim for grossing up of Return on Equity as per the applicable tax rate in accordance with the relevant Finance Act, the petitioner shall be entitled to claim the short fall on account of Return of Equity due to change in the applicable Minimum Alternate Tax in accordance with clause (5) of Regulation 15 of 2009 regulations.

26. Details of return on equity calculated are as under:

(₹ in lakh)

Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	436.60	465.13	486.13	486.13	486.13
Addition due to additional capital expenditure	28.53	21.00	0.00	0.00	0.00
Closing Equity	465.13	486.13	486.13	486.13	486.13
Average Equity	450.86	475.63	486.13	486.13	486.13
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	78.82	83.14	84.98	84.98	84.98

(₹ in lakh)

Asset 2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	550.83	587.01	609.51	609.51	609.51
Addition due to additional capital expenditure	36.18	22.50	0.00	0.00	0.00
Closing Equity	587.01	609.51	609.51	609.51	609.51
Average Equity	568.92	598.26	609.51	609.51	609.51
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	74.59	104.58	106.55	106.55	106.55

(₹ in lakh)

Asset 3	
	2009-10 (Pro-rata)
Opening Equity	7697.75
Addition due to additional capital expenditure	128.74
Closing Equity	7826.49
Average Equity	7762.12
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2008-09	11.33%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	565.37

(₹ in lakh)

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Opening Equity	7907.38	8039.74	8077.24	8093.73	8093.73
Addition due to additional capital expenditure	132.37	37.49	16.50	0.00	0.00
Closing Equity	8039.74	8077.24	8093.73	8093.73	8093.73
Average Equity	7973.56	8058.49	8085.49	8093.73	8093.73
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	232.31	1408.70	1413.42	1414.87	1414.87

INTEREST ON LOAN

27. Regulation 16 of the 2009 regulations provides that,-

"16. (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."

28. In these calculations, interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.

(b) The repayment for the tariff period 2009-14 has been deemed to be equal to the depreciation allowed for that period.

(c) In respect of the Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

29. Detailed calculation of the weighted average rate of interest has been given in Annexure 1 to 4 to this order.



30. Details of the interest on loan worked on the above basis are as under:

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	1018.72	1085.29	1134.29	1134.29	1134.29
Cumulative Repayment upto Previous Year	0.00	79.35	163.06	248.62	334.18
Net Loan-Opening	1018.72	1005.94	971.23	885.67	800.12
Addition due to additional capital expenditure	66.57	49.00	0.00	0.00	0.00
Repayment during the year	79.35	83.71	85.56	85.56	85.56
Net Loan-Closing	1005.94	971.23	885.67	800.12	714.56
Average Loan	1012.33	988.59	928.45	842.90	757.34
Weighted Average Rate of Interest on Loan	2.7150%	2.7150%	2.7150%	2.7150%	2.7150%
Interest	27.48	26.84	25.21	22.88	20.56

(₹ in lakh)					
Asset 2					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	1285.33	1369.76	1422.26	1422.26	1422.26
Cumulative Repayment upto Previous Year	0.00	75.10	180.40	287.67	394.95
Net Loan-Opening	1285.33	1294.66	1241.86	1134.58	1027.31
Addition due to additional capital expenditure	84.43	52.50	0.00	0.00	0.00
Repayment during the year	75.10	105.30	107.28	107.28	107.28
Net Loan-Closing	1294.66	1241.86	1134.58	1027.31	920.03
Average Loan	1289.99	1268.26	1188.22	1080.94	973.67
Weighted Average Rate of Interest on Loan	2.7150%	2.7150%	2.7150%	2.7150%	2.7150%
Interest	26.27	34.43	32.26	29.35	26.44

(₹ in lakh)	
Asset 3	
	2009-10 (Pro-rata)
Gross Normative Loan	17961.41
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	17961.41
Addition due to additional capital expenditure	300.40
Repayment during the year	568.87
Net Loan-Closing	17692.94
Average Loan	17827.18
Weighted Average Rate of Interest on Loan	4.3715%
Interest	324.71

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	18450.61	18759.47	18846.95	18885.45	18885.45
Cumulative Repayment upto Previous Year	341.32	575.07	1992.36	3414.21	4837.53
Net Loan-Opening	18109.29	18184.40	16854.59	15471.24	14047.91
Addition due to additional capital expenditure	308.86	87.49	38.49	0.00	0.00
Repayment during the year	233.75	1417.29	1421.84	1423.33	1423.33
Net Loan-Closing	18184.40	16854.59	15471.24	14047.91	12624.59
Average Loan	18146.84	17519.49	16162.91	14759.58	13336.25
Weighted Average Rate of Interest on Loan	4.5116%	4.5149%	4.4752%	4.4065%	4.3344%
Interest	136.45	790.98	723.32	650.38	578.04

DEPRECIATION

31. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:

"17. (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.

xxxx
xxxx

(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 as admitted by the Commission up to 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."

32. The transmission assets were put under commercial operation on various dates from 1.4.2009 to 1.2.2010. Accordingly, the same will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III

33. Details of the depreciation worked out are as under:

(₹ in lakh)

	Asset -1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	1455.32	1550.42	1620.42	1620.42	1620.42
Addition during 2009-14 due to projected ACE	95.10	70.00	0.00	0.00	0.00
Closing Gross Block	1550.42	1620.42	1620.42	1620.42	1620.42
Average Gross Block	1502.87	1585.42	1620.42	1620.42	1620.42
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value (90%)	1352.58	1426.88	1458.38	1458.38	1458.38
Remaining Depreciable Value	1352.58	1347.53	1295.32	1209.76	1124.20
Depreciation	79.35	83.71	85.56	85.56	85.56

(₹ in lakh)

	Asset 2				
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	1836.16	1956.77	2031.77	2031.77	2031.77
Addition during 2009-14 due to projected ACE	120.61	75.00	0.00	0.00	0.00
Closing Gross Block	1956.77	2031.77	2031.77	2031.77	2031.77
Average Gross Block	1896.47	1994.27	2031.77	2031.77	2031.77
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value (90%)	1706.82	1794.84	1828.59	1828.59	1828.59
Remaining Depreciable Value	1706.82	1719.74	1648.20	1540.92	1433.64
Depreciation	75.10	105.30	107.28	107.28	107.28



(₹ in lakh)

Asset 3	
	2009-10 (Pro-rata)
Opening Gross Block	25659.16
Addition during 2009-14 due to projected ACE	429.14
Closing Gross Block	26088.30
Average Gross Block	25873.73
Rate of Depreciation	5.2767%
Depreciable Value (90%)	23286.36
Remaining Depreciable Value	23286.36
Depreciation	568.87

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	26357.98	26799.21	26924.19	26979.18	26979.18
Addition during 2009-14 due to projected ACE	441.23	124.98	54.99	0.00	0.00
Closing Gross Block	26799.21	26924.19	26979.18	26979.18	26979.18
Average Gross Block	26578.60	26861.70	26951.69	26979.18	26979.18
Rate of Depreciation	5.2768%	5.2763%	5.2755%	5.2757%	5.2757%
Depreciable Value (90%)	23920.74	24175.53	24256.52	24281.26	24281.26
Remaining Depreciable Value	23579.42	23600.46	22264.15	20867.06	19443.73
Depreciation	233.75	1417.29	1421.84	1423.33	1423.33

OPERATION & MAINTENANCE EXPENSES

34. Clause (g) of regulation 19 of the 2009 regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are given overleaf:



(₹ in lakh)

Name of Elements	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C, twin conductor Transmission Line (₹ Lakh per km.)	0.627	0.663	0.701	0.741	0.783
400 kV Bay (₹ lakh/ bay)	52.40	55.40	58.57	61.92	65.46
220 kV bay (₹ lakh/ bay)	36.68	38.78	41.00	43.34	45.82

35. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which are allowed:

(₹ in lakh)

Asset 1					
Name of Elements	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV Bay 1 No.	52.40	55.40	58.57	61.92	65.46
220 kV Bay 1 No.	36.68	38.78	41.00	43.34	45.82
Total	89.08	94.18	99.57	105.26	111.28

(₹ in lakh)

Asset 2					
Name of Elements	2009-10 (pro rata)	2010-11	2011-12	2012-13	2013-14
400 kV Bay 1 No.	39.3	55.40	58.57	61.92	65.46
220 kV Bay 1 No.	27.51	38.78	41.00	43.34	45.82
Total	66.81	94.18	99.57	105.26	111.28

(₹ in lakh)

Asset 3	
Name of elements	2009-10 (Pro rata)
264.987 km of 400 kV twin conductor transmission line	41.54
400 kV Bay 3 No.	39.3
Total	80.84

(₹ in lakh)

Combined Asset 3 and 4					
Name of Elements	2009-10 (pro rata)	2010-11	2011-12	2012-13	2013-14
264.987 km of 400 kV twin conductor transmission line	27.69	175.69	185.76	196.36	207.48
400 kV Bay 3 No.	34.93	221.6	234.28	247.68	261.84
Total	62.62	397.29	420.04	444.04	469.32

36. The petitioner has submitted that O & M expenditure for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M charges for the tariff period 2009-14. The petitioner has further submitted that it reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure in case the impact of wage hike with effect from 1.1.2007 is more than 50%. The petitioner has further submitted that in O & M norms for the period 2009-14, the cost associated with license fees had not been captured and therefore licence fee be allowed to be recovered separately from the respondents.

37. We observe that these issues have been raised by the petitioner in other petitions also. A view is yet to be taken by the Commission on reimbursement of the cost of wage hike and reimbursement of licence fees. The decision as and when taken will be applicable to the present case also.



INTEREST ON WORKING CAPITAL

38. As per the 2009 regulations the components of the working capital and the interest thereon are discussed hereunder:

(i) Receivables As per Regulation 18(1) (c) (i) of the 2009 regulations, receivables will be equivalent to two months' of fixed cost. The petitioner has claimed the receivables on the basis of 2 months' transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of interest on working capital As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared



under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

39. Necessary computations in support of interest on working capital are appended herein below:

(₹ in lakh)

Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M expenses	7.42	7.85	8.30	8.77	9.27
Receivables	47.18	49.44	50.73	51.33	51.99
Total	67.96	71.41	73.96	75.89	77.95
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	8.33	8.75	9.06	9.30	9.55

(₹ in lakh)

Asset 2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M expenses	7.42	7.85	8.30	8.77	9.27
Receivables	55.51	58.05	59.29	59.79	60.35
Total	76.29	80.02	82.53	84.36	86.32
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.01	9.80	10.11	10.33	10.57

(₹ in lakh)

Asset 3	
	2009-10 (Pro rata)
Maintenance Spares	29.10
O & M expenses	16.17
Receivables	391.40
Total	436.67
Rate of Interest	12.25%
Interest	22.29

(` in lakh)

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	56.36	59.59	63.01	66.61	70.40
O & M expenses	31.31	33.11	35.00	37.00	39.11
Receivables	680.82	684.92	678.97	671.26	663.37
Total	768.49	777.62	776.98	774.86	772.88
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	15.69	95.26	95.18	94.92	94.68

TRANSMISSION CHARGES

40. The transmission charges being allowed for the transmission assets are summarized below:

(₹ in lakh)

Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	79.35	83.71	85.56	85.56	85.56
Interest on Loan	27.48	26.84	25.21	22.88	20.56
Return on equity	78.82	83.14	84.98	84.98	84.98
Interest on Working Capital	8.33	8.75	9.06	9.30	9.55
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	283.06	296.62	304.38	307.98	311.93

(` in lakh)

Asset 2					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	75.10	105.30	107.28	107.28	107.28
Interest on Loan	26.27	34.43	32.26	29.35	26.44
Return on equity	74.59	104.58	106.55	106.55	106.55
Interest on Working Capital	7.01	9.80	10.11	10.33	10.57
O & M Expenses	66.81	94.18	99.57	105.26	111.28
Total	249.78	348.30	355.77	358.77	362.12

(` in lakh)

	Nov. 2009 to Jan. 2010
Depreciation	341.32
Interest on Loan	194.83
Return on equity	339.22
Interest on Working Capital	22.29
O & M Expenses	80.84
Total	978.50

* Transmission charges for Asset-3 is being allowed for 3 months, i.e. November, 2009 to January, 2010.



(` in lakh)

Combined Asset 3 and 4					
	2009-10 (Pro rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	233.75	1417.29	1421.84	1423.33	1423.33
Interest on Loan	136.45	790.98	723.32	650.38	578.04
Return on equity	232.31	1408.70	1413.42	1414.87	1414.87
Interest on Working Capital	15.69	95.26	95.18	94.92	94.68
O & M Expenses	62.62	397.29	420.04	444.04	469.32
Total	680.82	4109.53	4073.81	4027.53	3980.23

OTHER ISSUES

41. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with the Commission's decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries.

42. Accordingly, expenses incurred by the petitioner on petition filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiary on pro-rata basis.

43. The petitioner has made a specific prayer to be allowed to bill and recover the Service tax on Transmission charges separately from the respondents, if the exemption granted to it is withdrawn and transmission of power is made a taxable service. We consider the prayer pre-mature. The petitioner is at liberty to approach the Commission for any relief at the appropriate as per law.

44. As regards the prayer for reimbursement of licence fee, it is clarified that the matter is under consideration of the Commission and any decision taken will apply to this case as well.



45. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulations upto 30.6.2011. With effect from 1.7.2011, the billing, collection and disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses, Regulations, 2010) and the Removal of Difficulties orders issued thereunder.

46. This order disposes of Petition No. 258/2010.

Sd/-
(M.Deena Dayalan)
Member

Sd/-
(V.S.Verma)
Member

Sd/-
(Dr. Pramod Deo)
Chairperson



Asset 1

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	ADB-III (Exchange Rate @ 51.55)					
	Gross loan opening	1018.63	1018.63	1018.63	1018.63	1018.63
	Cumulative Repayment upto DOCO/previous year	0.00	15.38	48.38	84.75	124.88
	Net Loan-Opening	1018.63	1003.25	970.24	933.88	893.74
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	15.38	33.00	36.37	40.13	44.21
	Net Loan-Closing	1003.25	970.24	933.88	893.74	849.54
	Average Loan	1010.94	986.74	952.06	913.81	871.64
	Rate of Interest	2.715%	2.715%	2.715%	2.715%	2.715%
	Interest	27.45	26.79	25.85	24.81	23.67
	Rep Schedule	30 Half yearly Instalments from 15.01.2010				
	Total Loan					
	Gross loan opening	1018.63	1018.63	1018.63	1018.63	1018.63
	Cumulative Repayment upto DOCO/previous year	0.00	15.38	48.38	84.75	124.88
	Net Loan-Opening	1018.63	1003.25	970.24	933.88	893.74
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	15.38	33.00	36.37	40.13	44.21
	Net Loan-Closing	1003.25	970.24	933.88	893.74	849.54
	Average Loan	1010.94	986.74	952.06	913.81	871.64
	Rate of Interest	2.7150%	2.7150%	2.7150%	2.7150%	2.7150%
	Interest	27.45	26.79	25.85	24.81	23.67

Asset 2

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
1 ADB-III (Exchange Rate @ 48.65)					
Gross loan opening	1285.33	1285.33	1285.33	1285.33	1285.33
Cumulative Repayment upto DOCO/previous year	0.00	19.41	61.05	106.94	157.58
Net Loan-Opening	1285.33	1265.92	1224.28	1178.39	1127.75
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	19.41	41.64	45.89	50.64	55.78
Net Loan-Closing	1265.92	1224.28	1178.39	1127.75	1071.97
Average Loan	1275.63	1245.10	1201.34	1153.07	1099.86
Rate of Interest	2.715%	2.715%	2.715%	2.715%	2.715%
Interest	34.63	33.80	32.62	31.31	29.86
Rep Schedule	30 Half yearly Instalments from 15.01.2010				
Total Loan					
Gross loan opening	1285.33	1285.33	1285.33	1285.33	1285.33
Cumulative Repayment upto DOCO/previous year	0.00	19.41	61.05	106.94	157.58
Net Loan-Opening	1285.33	1265.92	1224.28	1178.39	1127.75
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	19.41	41.64	45.89	50.64	55.78
Net Loan-Closing	1265.92	1224.28	1178.39	1127.75	1071.97
Average Loan	1275.63	1245.10	1201.34	1153.07	1099.86
Rate of Interest	2.7150%	2.7150%	2.7150%	2.7150%	2.7150%
Interest	34.63	33.80	32.62	31.31	29.86



Asset 3		
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST		
(₹ in lakh)		
Details of Loan	2009-10	
1 Bond-XXI		
Gross loan opening	100.00	
Cumulative Repayment upto DOCO/previous year	0.00	
Net Loan-Opening	100.00	
Additions during the year	0.00	
Repayment during the year	0.00	
Net Loan-Closing	100.00	
Average Loan	100.00	
Rate of Interest	8.73%	
Interest	8.73	
Rep Schedule	12 Annual instalments from 11.10.2010	
2 Bond-XXII		
Gross loan opening	2600.00	
Cumulative Repayment upto DOCO/previous year	0.00	
Net Loan-Opening	2600.00	
Additions during the year	0.00	
Repayment during the year	0.00	
Net Loan-Closing	2600.00	
Average Loan	2600.00	
Rate of Interest	8.68%	
Interest	225.68	
Rep Schedule	12 Annual instalments from 07.12.2010	
3 Bond-XXIV		
Gross loan opening	200.00	
Cumulative Repayment upto DOCO/previous year	0.00	
Net Loan-Opening	200.00	
Additions during the year	0.00	
Repayment during the year	0.00	
Net Loan-Closing	200.00	
Average Loan	200.00	
Rate of Interest	9.95%	
Interest	19.90	
Rep Schedule	12 Annual instalments from 26.03.2011	

4	Bond- XXVI	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	9.30%
	Interest	9.30
	Rep Schedule	12 Annual instalments from 07.03.2012
5	Bond- XXVIII	
	Gross loan opening	44.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	44.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	44.00
	Average Loan	44.00
	Rate of Interest	9.33%
	Interest	4.11
	Rep Schedule	12 Annual Instalments from 15.12.2012
6	Bond- XXV	
	Gross loan opening	1500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1500.00
	Average Loan	1500.00
	Rate of Interest	10.10%
	Interest	151.50
	Rep Schedule	12 annual inatalments from 12.06.2011



7	ADB-III (Exchange Rate @ 47.41)	
	Gross loan opening	13417.03
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	13417.03
	Additions during the year	0.00
	Repayment during the year	202.60
	Net Loan-Closing	13214.43
	Average Loan	13315.73
	Rate of Interest	2.715%
	Interest	361.52
	Rep Schedule	30 Half yearly Instalments from 15.01.2010
	Total Loan	
	Gross loan opening	17961.03
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	17961.03
	Additions during the year	0.00
	Repayment during the year	202.60
	Net Loan-Closing	17758.43
	Average Loan	17859.73
	Rate of Interest	4.3715%
	Interest	780.74



CALCULATION WEIGHTED AVERAGE RATE OF INTEREST

(₹ in lakh)

	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond-XXI					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.33	16.67	25.00
	Net Loan-Opening	100.00	100.00	91.67	83.33	75.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.33	75.00	66.67
	Average Loan	100.00	95.83	87.50	79.17	70.83
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	8.73	8.37	7.64	6.91	6.18
	Rep Schedule	12 Annual instalments from 11.10.2010				
2	Bond-XXII					
	Gross loan opening	2600.00	2600.00	2600.00	2600.00	2600.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	216.67	433.33	650.00
	Net Loan-Opening	2600.00	2600.00	2383.33	2166.67	1950.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	216.67	216.67	216.67	216.67
	Net Loan-Closing	2600.00	2383.33	2166.67	1950.00	1733.33
	Average Loan	2600.00	2491.67	2275.00	2058.33	1841.67
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	225.68	216.28	197.47	178.66	159.86
	Rep Schedule	12 Annual instalments from 07.12.2010				
3	Bond-XXIV					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	16.67	33.33	50.00
	Net Loan-Opening	200.00	200.00	183.33	166.67	150.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	16.67	16.67	16.67	16.67
	Net Loan-Closing	200.00	183.33	166.67	150.00	133.33
	Average Loan	200.00	191.67	175.00	158.33	141.67
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	19.90	19.07	17.41	15.75	14.10
	Rep Schedule	12 Annual instalments from 26.03.2011				

4	ADB-III (Exchange Rate 47.41)					
	Gross loan opening	13417.03	13417.03	13417.03	13417.03	13417.03
	Cumulative Repayment upto DOCO/previous year	0.00	202.60	637.31	1116.30	1644.93
	Net Loan-Opening	13417.03	13214.43	12779.72	12300.73	11772.10
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	202.60	434.71	478.99	528.63	582.30
	Net Loan-Closing	13214.43	12779.72	12300.73	11772.10	11189.80
	Average Loan	13315.73	12997.08	12540.23	12036.42	11480.95
	Rate of Interest	2.715%	2.715%	2.715%	2.715%	2.715%
	Interest	361.52	352.87	340.47	326.79	311.71
	Rep Schedule	30 Half yearly Instalments from 15.01.2010				
5	Bond- XXVI					
	Gross loan opening	389.20	389.20	389.20	389.20	389.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	32.43	64.87
	Net Loan-Opening	389.20	389.20	389.20	356.77	324.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	32.43	32.43	32.43
	Net Loan-Closing	389.20	389.20	356.77	324.33	291.90
	Average Loan	389.20	389.20	372.98	340.55	308.12
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	36.20	36.20	34.69	31.67	28.65
	Rep Schedule	12 Annual instalments from 07.03.2012				
6	Bond- XXVIII					
	Gross loan opening	44.00	44.00	44.00	44.00	44.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	3.67
	Net Loan-Opening	44.00	44.00	44.00	44.00	40.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	3.67	3.67
	Net Loan-Closing	44.00	44.00	44.00	40.33	36.67
	Average Loan	44.00	44.00	44.00	42.17	38.50
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	4.11	4.11	4.11	3.93	3.59
	Rep Schedule	12 Annual Instalments from 15.12.2012				



7	Bond- XXV					
	Gross loan opening	1700.00	1700.00	1700.00	1700.00	1700.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	141.67	283.33
	Net Loan-Opening	1700.00	1700.00	1700.00	1558.33	1416.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	141.67	141.67	141.67
	Net Loan-Closing	1700.00	1700.00	1558.33	1416.67	1275.00
	Average Loan	1700.00	1700.00	1629.17	1487.50	1345.83
	Rate of Interest	10.100%	10.100%	10.100%	10.100%	10.100%
	Interest	171.70	171.70	164.55	150.24	135.93
	Rep Schedule	12 annual inatalments from 12.06.2011				

	Total Loan					
	Gross loan opening	18450.23	18450.23	18450.23	18450.23	18450.23
	Cumulative Repayment upto DOCO/previous year	0.00	202.60	878.98	1773.73	2721.79
	Net Loan-Opening	18450.23	18247.63	17571.25	16676.50	15728.44
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	202.60	676.38	894.75	948.06	1001.73
	Net Loan-Closing	18247.63	17571.25	16676.50	15728.44	14726.70
	Average Loan	18348.93	17909.44	17123.88	16202.47	15227.57
	Rate of Interest	4.5116%	4.5149%	4.4752%	4.4065%	4.3344%
	Interest	827.83	808.59	766.33	713.96	660.02

