CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.164/2010

Coram:

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri S.Jayaraman, Member
- 3. Shri V.S.Verma, Member

DATE OF HEARING: 26.10.2010 DATE OF ORDER: 11.2.2011

In the matter of

Determination of transmission tariff for (i) 400 kV D/C Dulhasti-Kishenpur transmission line with associated bays; and (ii) 400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora substations under Dulhasti combined transmission system in Northern Region for the period from 1.4.2009 to 31.3.2014.

And In the matter of

Power Grid Corporation of India Limited, Gurgaon ...Petitioner Vs

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
- 2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
- 3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Power Purchase Centre, Panchkula
- 8. Power Development Department, Govt. of J&K, Jammu
- 9. Uttar Pradesh Power Corporation Ltd, Lucknow
- 10. Delhi Transco Ltd. New Delhi
- 11. BSES Yamuna Power Limited, New Delhi
- 12. BSES Rajdhani Power Ltd., New Delhi
- 13. North Delhi Power Ltd., New Delhi
- 14. Chandigarh Administration, Chandigarh
- 15. Uttarakhand Power Corporation Ltd, Dehradun
- 16. North Central Railway, Allahabad
- 17. New Delhi Municipal Council, New DelhiRespondents

The following were present:

- 1. Shri U.K.Tyaqi, PGCIL
- 2. Shri M.M. Mondal, PGCIL



- 3. Shri Rajiv Gupta, PGCIL
- 4. Shri Rakesh Prasad, PGCIL
- 5. Shri T.P.S.Bawa, PGCIL

ORDER

The petition has been filed for approval of tariff for (i) 400 kV D/C Dulhasti-Kishenpur transmission line with associated bays (Asset-I); and (ii) 400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora sub-stations (Asset-II) under Dulhasti combined transmission system (hereinafter referred to as "the transmission system") in Northern Region for the period 1.4.2009 to 31.3.2014, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for additional capital expenditure incurred during 2009-10 and 2010-11. The petitioner has made the following additional prayers:-

- (a) To invoke the provision of Regulation 44 of the 2009 regulation for relaxation of Regulation 9(2) of the 2009 regulations so that the additional capital expenditure incurred/to be incurred on account of undischarged liabilities after the cut off date is allowed and considered for tariff fixation for the period 2009-14;
- (b) To invoke the provision of Regulation 44 of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that grossing up the base rate shall be considering the revised rate of MAT as per the Finance Act, 2009 for the year 2009-10 and as per the Finance Act,

2010 for the year 2010-11 and subsequent years and allow consequential impact on tariff for 2009-14 period accordingly;

- (c) In case of assets being combined to calculate the transmission charges, allow to recover full depreciation (90% of the gross block) of the assets during its useful life (25 years for sub-station and 35 years of transmission line) reckoning from its actual date of commercial operation and to permit to treat the recovery of depreciation after achieving the useful life by an asset;
- (d) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (e) Allow to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2009-14 period, if any from the respondents;
- (f) Allow to recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and
- (g) Allow reimbursement of licence fee separately from the respondents.
- 2. The administrative approval and expenditure sanction for the transmission system was accorded by Government of India vide letter dated 2.7.2002 at a total capital investment of ₹56705 lakh, which included IDC of ₹14204 lakh at 3rd quarter, 2000 price level.

- 3. The annual transmission charges for the period from the date of commercial operation to 31.3.2009 were determined by the Commission in its order dated 1.12.2008 in Petition No. 138/2007 and dated 10.2.2010 in Petition No. 234/2009 for Asset-I and Asset-II, respectively at a gross block of ₹49273.45 lakh as on 31.3.2009. The notional date of the commercial operation of the transmission assets is 1.4.2007.
- 4. The details of admitted capital expenditure and projected additional capital expenditure etc. of the transmission assets etc. are as under:

(₹ in lakh)

	Admitted	Actual cost	Capital	Capital	Total
	capital	as on the	expenditure	expenditure	capital
	expenditure	date of	incurred from	incurred	expenditure
	as on	commercial	1.4.2009 to	from 1.4.2010	
	31.3.2009	operation	31.3.2010	to 31.3.2011	
Asset-I	18411.53	18411.53	0.00	0.00	18411.53
Asset-II	30861.92	30861.92	35.74	31.16	30928.82

5. The petitioner has claimed the transmission charges as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2583.51	2585.18	2585.90	2585.90	2585.90
Interest on Loan	1921.78	1728.92	1533.60	1335.43	1139.14
Return on Equity	2322.89	2324.65	2325.46	2325.46	2325.46
Interest on Working Capital	165.96	163.36	160.75	158.13	155.64
O & M Expenses	472.64	499.64	528.30	558.51	590.36
Total	7466.78	7301.75	7134.01	6963.43	6796.50

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

(₹ in lakh)

(1.1.1.0					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	70.90	74.95	79.24	83.78	88.55
O & M expenses	39.39	41.64	44.03	46.54	49.20
Receivables	1244.46	1216.96	1189.00	1160.57	1132.75
Total	1354.75	1333.55	1312.27	1290.89	1270.50
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	165.96	163.36	160.75	158.13	155.64

7. Replies to the petition have been filed by Uttar Pradesh Power Corporation Ltd. (UPPCL), Ajmer Vidyut Vitran Nigam Limited (AVVNL), Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Haryana Power Purchase Centre (HPPC). No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

CAPITAL COST

- 8. As per clause (2) of Regulation 7 of the 2009 regulations, the project cost admitted by the Commission for determination of tariff prior to 1.4.2009 shall form the basis for determination of tariff.
- 9. The petitioner has claimed the tariff after accounting for projected additional capital expenditure as under:

(₹ in lakh)

	Admitted	Actual cost	Capital	Capital	Total
	capital	as on the	expenditure	expenditure	capital
	expenditure	date of	incurred from	incurred	expenditure
	as on	commercial	1.4.2009 to	from 1.4.2010	
	31.3.2009	operation	31.3.2010	to 31.3.2011	
Asset-I	18411.53	18411.53	0.00	0.00	18411.53
Asset-II	30861.92	30861.92	35.74	31.16	30928.82

10. Accordingly, gross block of ₹49273.45 lakh as on 31.3.2009 has been considered for the purpose of tariff.

ADDITIONAL CAPITAL EXPEDNTURE

- 11. Regulation 9 of the 2009 regulations provides as under:
 - (1) The capital expenditure incurred or projected to be incurred, on the following counts with in 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 regulating 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) *****
 - (iv) *****
 - (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.

12. The details submitted by the petitioner in support of its claim for projected additional capital expenditure for the transmission line is given hereunder:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2009-10	Transmission line-Balance and	35.74
	retention payments	
2010-11	Building and Transmission line-	31.16
	Balance and retention payments	
	Total	66.90

13. The petitioner has submitted that the assets covered under the petition were declared under Commercial operation during 2004-09 wherein the admitted capital expenditure after the cut-off date because of deferred liabilities was allowed as per clause 53(2) of the 2004 regulations. Due to contractual exigencies and other reasons beyond the control of the petitioner, it had to make provisions for release of balance / retention payment beyond 2008-09. Since Regulation 9 (2) of 2009 Regulations does not provide for such undischarged liabilities as part of additional capitalization after the cut off date, the Commission may consider to invoke Regulation 44 of the 2009 Regulations for relaxation of Regulation 9 (2) of 2009 Regulations so that the additional capitalization incurred/to be incurred on account of undischarged liabilities after the cut-off date is allowed and considered for tariff fixation during 2009-14.

14. HPPC in its reply has submitted that additional capitalization shall be decided as per Regulation 9 (2) of the 2009 regulations. JVVNL and AVVNL have submitted that the additional capitalization claimed during 2009-10 and 2010-11 are after the cut-off date and shall be disallowed as it is not

permissible under Regulation 9 (2) of the 2009 regulations. UPPCL in its reply has submitted that allowing relaxation of Regulation 9 (2) after 2009 regulations will mean additional tariff burden on the beneficiaries which will contradict the basic provisions of safeguarding the consumer's interest envisaged in the section 61(d) of the Electricity Act 2003.

15. We have considered the submission made by the petitioner and the respondents. In accordance with our decision in order dated 8.2.2011 in Petition No. 176/2010, the additional capital expenditure incurred/projected to be incurred during 2009-10 and 2010-11 after the cut-off date on account of balance and retention payments have been allowed to be capitalized in this order.

TOTAL CAPITAL COST

16. Based on the above, gross block as given below, has been considered for the purpose of tariff for the transmission asset, after allowing additional capital expenditure on works as claimed by the petitioner:

(₹ in lakh)

Admitted capital	Capital expenditure	Capital expenditure	Total capital
expenditure as on	incurred from	incurred from	expenditure
31.3.2009	1.4.2009 to 31.3.2010	1.4.2010 to 31.3.2011	
49273.45	35.74	31.16	49340.35

DEBT- EQUITY RATIO

17. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides that,-

- "(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."
- 18. The petitioner has claimed tariff based on debt-equity ratio of 73.04:26.96. For the purpose of tariff, equity considered for the transmission system is as under:

		(₹	t in lakh)
Equity as	Notional equity due to	Notional equity due to	Equity as
on 1.4.2009	projected additional capital	additional capital	on
	expenditure for the period	expenditure for the	1.4.2010
	2009-10	period 2010-11	
13282.74	10.72	9.35	13302.81

RETURN ON EQUITY

- 19. Regulation 15 of the 2009 regulations 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 normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return on equity with respect to the actual 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 separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(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.

Illustration.-

(i) In case of the generating company or the transmission licensee paying

Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.1133) = 17.481%

(ii) In case of generating company or the transmission licensee paying normal

corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.3399) = 23.481%."

20. Equity has been considered as on 1.4.2009 as given in the table in para

18 above. The petitioner has computed return on equity on pre-tax basis on

11.33% MAT in accordance with tax rate applicable for the year 2008-09.

21. UPPCL has submitted that grossing up of base rate of return on equity

should not be allowed in terms of Income Tax Act, 1961. In response, the

petitioner has submitted that return on equity has been grossed up as per

the provisions of the 2009 regulations. It is clarified that the Commission vide its

order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to

amend the 2009 regulations for allowing grossing up of the base rate of return

with the applicable tax rate as per the Finance Act for the relevant year and

for direct settlement of tax holidays of between the generating

company/transmission licensee and the beneficiaries/long-term transmission

customers on year to year basis. The process of amendment to the 2009

regulations is under way and will address the grievance of the petitioner with

regard to the MAT rate. Accordingly, the return on equity has been computed as per the existing provision of Regulation 15 (3) of 2009 regulation as under:

	(₹ in lakh						
Return on equity	2009-10	2010-11	2011-12	2012-13	2013-14		
	2322.89	2324.65	2325.46	2325.46	2325.46		

INTEREST ON LOAN

- 22. 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."

- 23. UPPCL has submitted that the 2009 regulations make provision for swapping of loans in the interest of consumers. Therefore, the petitioner prayer in regard to floating rate of interest is not tenable. In response, the petitioner has submitted that for the period 2004-09, the Commission had allowed direct settlement with beneficiaries any change in interest on account of floating rate of and same practice has been followed for the tariff period 2009-14. Accordingly, the interest on loan has been worked out as detailed below:
 - (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 1.12.2008 in Petition No. 138/2007 for the Asset-I and order dated 10.2.2010 in Petition No. 234/2009 for Asset-II for working out weighted average rate of interest;

- (ii) The tariff has been worked out considering normative loan and normative repayment. Depreciation allowed has been taken as normative repayment for the period 2009-14; and
- (iii) Weighted average rate of interest on actual loan worked out as above is applied on the average loan during the year to arrive at the interest on loan.
- 24. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh)

Details of loan		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	35990.72	35990.72	36015.74	36037.55	36037.55	36037.55
Cumulative repayment up		9336.45	11919.96	14505.14	17091.04	19676.94
to previous year						
Net Loan-Opening		26654.27	24095.77	21532.41	18946.51	16360.61
Addition due to additional		25.02	21.81	0.00	0.00	0.00
capitalisation						
Repayment during the		2583.51	2585.18	2585.90	2585.90	2585.90
year						
Net loan-closing		24095.77	21532.41	18946.51	16360.61	13774.72
Average Loan		25375.02	22814.09	20239.46	17653.56	15067.67
Weighted Average rate of		7.5735%	7.5783%	7.5773%	7.5647%	7.5602%
interest on loan						
Interest		1921.78	1728.92	1533.60	1335.43	1139.14

25. The detailed calculations in support of the weighted revised average rate of interest are contained in **Annexure** attached.

DEPRECIATION

26. 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

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- (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."
- 27. UPPCL has submitted that Commission should frame guidelines in regard to treatment of depreciation for combined assets. In response, the petitioner has submitted that depreciation has been calculated in accordance with the 2009 regulations. It is clarified that the depreciation has been worked out on the basis of capital expenditure as on 31.3.2009 and projected additional capital expenditure thereafter. Accordingly, for the periods 1.4.2009 to 31.3.2010, 1.4.2010 to 31.3.2011 and 1.4.2011 to 31.32014 the

depreciation works out to ₹2583.51 lakh, ₹2585.18 lakh and ₹2585.90 lakh respectively as shown below:

(₹ in lakh)

Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on 31.3.2009	49273.45	49273.45	49309.19	49340.35	49340.35	49340.35
Addition during 2009-14 due to projected Additional Capitalisation		35.74	31.16	0.00	0.00	0.00
Gross block as on 31.3.2009		49309.19	49340.35	49340.35	49340.35	49340.35
Average gross block		49291.32	49324.77	49340.35	49340.35	49340.35
Rate of depreciation		5.2413%	5.2411%	5.2409%	5.2409%	5.2409%
Depreciable Value	90%	44362.19	44392.29	44406.32	44406.32	44406.32
Elapsed life (Beginning of the year)		2	3	4	5	6
Balance useful life of the asset		32	31	30	29	28
Remaining depreciable Value		39989.40	37435.99	34864.83	32278.94	29693.04
Depreciation		2583.51	2585.18	2585.90	2585.90	2585.90

OPERATION & MAINTENANCE EXPENSES

28. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 S/C twin conductor, 400 kV D/C Twin conductor transmission line, 400 kV bays are prescribed for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV S/C transmission line (Twin	0.358	0.378	0.400	0.423	0.447
conductor) (₹ in lakh /km)					
400 kV D/C transmission line (Twin	0.627	0.663	0.701	0.741	0.783
conductor) (₹ in lakh /km)					
400 kV bays (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46

29. The petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV S/C transmission line (Twin	50.04	52.83	55.91	59.12	62.48
conductor) (139.77 ckt.km)					
400 kV D/C transmission line (Twin	108.20	114.41	120.97	127.87	135.12
conductor) (172.565 ckt.km)					
400 kV bays (6 bays)	314.40	332.40	351.42	371.52	392.76
3					
Total	472.64	499.64	528.30	558.51	590.36

- 30. The petitioner has submitted that O & M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O & M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O & M charges for 2009-14 periods. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expense in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.
- AVVNL, JVVNL, UPPCL and HPPC have submitted that O & M expenses should be allowed as per the 2009 regulations. In response, the petitioner has submitted that the rates of O & M have been worked out based on 5 years actual O & M expenses. It has been further submitted that the wages for all the levels of employees have been done revised but the total impact of wage hike would be more as compared to the compensation provided in the O &M rates. The petitioner has submitted that it shall approach the Commission separately for additional manpower cost on account of wage revision during the period 2009-14 for claiming the tariff. With reference to the submission of the petitioner it is clarified that if any such application is made, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

- The components of the working capital and the interest thereon are 32. discussed hereunder:
 - (i) **Receivables:** As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months of annual transmission charges. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.
 - (ii) Maintenance spares: Regulation 18(1)(c)(ii) the 2009 of regulations provides for maintenance spares @ 15% per annum of the O & M expenses specified in Regulation 19 of the 2009 regulations. The value of maintenance spares has been accordingly 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 O&M expenses of the respective year, which has been considered for computing 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 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.

33. The necessary computations in support of interest on working capital are appended hereinbelow:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	70.90	74.95	79.25	83.78	88.55
O & M expenses	39.39	41.64	44.03	46.54	49.20
Receivables	1244.46	1216.96	1189.00	1160.57	1132.75
Total	1,354.75	1,333.54	1,312.27	1,290.89	1,270.50
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	165.96	163.36	160.75	158.13	155.64

TRANSMISSION CHARGES

34. The transmission charges being allowed for the transmission asset are summarised below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2583.51	2585.18	2585.90	2585.90	2585.90
Interest on Loan	1921.78	1728.92	1533.60	1335.43	1139.14
Return on Equity	2322.89	2324.65	2325.46	2325.46	2325.46
Interest on Working Capital	165.96	163.36	160.75	158.13	155.64
O & M Expenses	472.64	499.64	528.30	558.51	590.36
	7466.79	7301.74	7134.01	6963.44	6796.50

Application fee and the publication expenses

35. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission tariff. Regulation 42 of the 209 regulations provides as under:

"The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be."

36. UPPCL has submitted that the filing fee should be allowed in view of the Hon'ble Commission's order dated 11.9.2008 in Petition No. 129/2005. It is clarified that the said decision was applicable to the tariff period 2004-09. However, Regulation 42 of the 2009 regulation provides for reimbursement of filing fees and expenses on publication of notices may be allowed in the direction of the Commission. In accordance with our 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.

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

Service Tax

38. The prayer of the petitioner for reimbursement of service tax if it is revised in future has been opposed by UPPCL. We have already decided in our order dated 23.9.2010 in Petition No. 62/2009 that the petitioner is

exempted from service tax as per the extent policy of the Government of India. As regards the reimbursement of service tax is imposed on the petitioner in future, the prayer is premature at this stage and if any application is made by the petitioner, the same will be dealt in accordance with law.

Licence fee

- UPPCL has submitted that licence fee is the onus of the licensee 39. therefore, it should not be passed on the consumers. In this regard it is clarified that a view in the matter is yet to be taken by the Commission.
- 40. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.
- 41. This order disposes of Petition No.164/2010.

Sd/-Sd/-Sd/-(V.S.Verma) (S.Jayaraman) (Dr. Pramod Deo) Member Member Chairperson

Annexure

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	Bond VII					
	Gross loan opening	442.00	442.00	442.00	442.00	442.00
	Cumulative Repayment up to	442.00	442.00	442.00	442.00	442.00
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule		5 Annual ii	nstalments fro	m 4.8.2003	
2	Bond XIII-Option-II					
	Gross loan opening	1768.00	1768.00	1768.00	1768.00	1768.00
	Cumulative Repayment up to	1768.00	1768.00	1768.00	1768.00	1768.00
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	7.85%	7.85%	7.85%	7.85%	7.85%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule		6 Annual ii	nstalments fro	m 3.7.2003	
3	CORPORATION BANK					
	Gross loan opening	221.00	221.00	221.00	221.00	221.00
	Cumulative Repayment up to	132.60	152.24	171.88	191.52	211.16
	the date of commercial					
	operation /previous year	00.40	(0.7)	10.10	00.40	0.04
	Net Loan-Opening	88.40	68.76	49.12	29.48	9.84
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	19.64	19.64	19.64	19.64	9.82
	Net Loan-Closing	68.76	49.12	29.48	9.84	0.02
	Average Loan	78.58	58.94	39.30	19.66	4.93
<u> </u>	Rate of Interest	11.40%	11.40%	11.40%	11.40%	11.40%
	Interest	8.96	6.72	4.48	2.24	0.56
	Rep Schedule		20 HY INST	alments from	10.3.2004	
4	PNB-I					
<u> </u>	Gross loan opening	442.00	442.00	442.00	442.00	442.00
	Cumulative Repayment up to	265.20	309.40	353.60	397.80	442.00
	the date of commercial					
	operation /previous year	17/ 00	122 / 0	00.40	44.00	0.00
	Net Loan-Opening	176.80	132.60	88.40	44.20	0.00
-	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	44.20	44.20	44.20	44.20	0.00
	Net Loan-Closing	132.60	88.40	44.20	0.00	0.00

	Avorago Loan	154.70	110.50	66.30	22.10	0.00
	Average Loan Rate of Interest	9.41%	9.41%	9.41%	9.41%	0.00%
	Interest	14.56	10.40	6.24 Instalments from	2.08	0.00
_	Rep Schedule		10 amuam	istaiments noi	11 30.3.2004	
5	BOI(Foreign Currency)	773.53	773.53	773.53	773.53	772.52
	Gross loan opening		244.42	285.12		773.53
	Cumulative Repayment up to the date of commercial	203.72	244.42	285.12	325.82	366.52
	operation /previous year					
	Net Loan-Opening	569.81	529.11	488.41	447.71	407.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	40.70	40.70	40.70	40.70	40.70
	Net Loan-Closing	529.11	488.41	447.71	407.01	366.30
)					
	Average Loan	549.46	508.76	468.06	427.36	386.66
	Rate of Interest	3.32%	3.32%	3.32%	3.32%	3.32%
	Interest	18.22	16.87	15.52	14.17 ts from 10.6.20	12.82
	Rep Schedule	191	equai naii yea T	any mstaimen	15 110111 10.6.20	J4
6	Bond III SERIES (2nd) (9.75%)	020.70	020.70	020.70	020.70	020.70
	Gross loan opening	838.79	838.79	838.79	838.79	838.79 838.79
	Cumulative Repayment up to the date of commercial	838.79	838.79	838.79	838.79	838.79
	operation /previous year Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
-						
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest Page Sala adula	0.00	0.00	0.00 llet Repayme	0.00	0.00
	Rep Schedule	 	Bu	пет кераупте	T	
7	Bond III SERIES (Ist)	124 21	134.21	124.21	124.21	124 21
	Gross loan opening	134.21 134.21		134.21	134.21	134.21 134.21
	Cumulative Repayment up to the date of commercial	134.21	134.21	134.21	134.21	134.21
	operation /previous year					
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Rep Schedule	0.00		llet Repayme		0.00
8	INDIAN OVERSEAS BANK II	1	Da	пет перауппе		
0	Gross loan opening	1500.00	1500.00	1500.00	1500.00	1500.00
-	Cumulative Repayment up to	900.00	1050.00	1200.00	1350.00	1500.00
	the date of commercial	700.00	1030.00	1200.00	1330.00	1300.00
	operation /previous year					
	Net Loan-Opening	600.00	450.00	300.00	150.00	0.00
 	Additions during the year	0.00	0.00	0.00	0.00	0.00
l		0.00	0.00			
		150.00	150 00	150 00	150 00	$\cap \cap \cap$
	Repayment during the year	150.00 450.00	150.00	150.00	150.00	0.00
		150.00 450.00 525.00	150.00 300.00 375.00	150.00 150.00 225.00	150.00 0.00 75.00	0.00 0.00 0.00

	Rate of Interest	9.90%	9.90%	9.90%	9.90%	9.90%
	Interest	51.98	37.13	22.28	7.43	0.00
	Rep Schedule	31.70		nstalments fro		0.00
9	BOND X		1071111111111		11 11 2 200 1	
7	Gross loan opening	43.00	43.00	43.00	43.00	43.00
	Cumulative Repayment up to	17.92	21.50	25.09	28.67	32.25
	the date of commercial	17.72	21.30	25.07	20.07	32.23
	operation /previous year					
	Net Loan-Opening	25.08	21.50	17.91	14.33	10.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.58	3.58	3.58	3.58	3.58
	Net Loan-Closing	21.50	17.91	14.33	10.75	7.16
	Average Loan	23.29	19.71	16.12	12.54	8.96
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	2.54	2.15	1.76	1.37	0.98
	Rep Schedule	2.01		nstalments fro		0.70
10	BOND-XI- OPTION-I					
	Gross loan opening	46.00	46.00	46.00	46.00	46.00
	Cumulative Repayment up to	15.33	19.16	23.00	26.83	30.66
	the date of commercial	10.00	17.10	20.00	20.00	00.00
	operation /previous year					
	Net Loan-Opening	30.67	26.84	23.00	19.17	15.34
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.83	3.83	3.83	3.83	3.83
	Net Loan-Closing	26.84	23.00	19.17	15.34	11.50
	Average Loan	28.75	24.92	21.09	17.25	13.42
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	2.82	2.44	2.07	1.69	1.32
	Rep Schedule		12 annual li	nstalments fro	m 7.12.2005	
11	BONDS XII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00
	Cumulative Repayment upto	1.00	1.25	1.50	1.75	2.00
	DOCO/previous year					
	Net Loan-Opening	2.00	1.75	1.50	1.25	1.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.25	0.25	0.25	0.25	0.25
	Net Loan-Closing	1.75	1.50	1.25	1.00	0.75
	Average Loan	1.88	1.63	1.38	1.13	0.88
	Rate of Interest	9.7000%	9.7000%	9.7000%	9.7000%	9.7000%
	Interest	0.18	0.16	0.13	0.11	0.08
	Rep Schedule		12 yearly Ir	nstalments from	n 28.3.2006	
12	BOND XIII-OPTION-I					
	Gross loan opening	2247.00	2247.00	2247.00	2247.00	2247.00
	Cumulative Repayment up to	561.75	749.00	936.25	1123.50	1310.75
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	1685.25	1498.00	1310.75	1123.50	936.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	187.25	187.25	187.25	187.25	187.25
	Net Loan-Closing	1498.00	1310.75	1123.50	936.25	749.00
	Average Loan	1591.63	1404.38	1217.13	1029.88	842.63
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
1	Interest	137.36	121.20	105.04	88.88	72.72

	Rep Schedule		12 yearly In	stalments fror	n 31.7.2006	
13	BOND XV		, ,			
-13	Gross loan opening	6700.00	6700.00	6700.00	6700.00	6700.00
	Cumulative Repayment upto	1116.67	1675.00	2233.34	2791.67	3350.00
	DOCO/previous year	1110.07	1070.00	2200.01	2771.07	0000.00
	Net Loan-Opening	5583.33	5025.00	4466.66	3908.33	3350.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	558.33	558.33	558.33	558.33	558.33
	Net Loan-Closing	5025.00	4466.66	3908.33	3350.00	2791.66
	Average Loan	5304.16	4745.83	4187.50	3629.16	3070.83
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	354.32	317.02	279.72	242.43	205.13
	Rep Schedule		12 yearly In	stalments fror	n 23.2.2008	
14	BOND XVI					
	Gross loan opening	3323.00	3323.00	3323.00	3323.00	3323.00
	Cumulative Repayment up to	332.30	664.60	996.90	1329.20	1661.50
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	2990.70	2658.40	2326.10	1993.80	1661.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	332.30	332.30	332.30	332.30	332.30
	Net Loan-Closing	2658.40	2326.10	1993.80	1661.50	1329.20
	Average Loan	2824.55	2492.25	2159.95	1827.65	1495.35
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	200.54	176.95	153.36	129.76	106.17
	Rep Schedule		10 Annual in	stallments fro	m 18.2.2009	
15	BOND XVII					
	Gross loan opening	7326.00	7326.00	7326.00	7326.00	7326.00
	Cumulative Repayment up to	0.00	732.60	1465.20	2197.80	2930.40
	the date of commercial					
	operation /previous year	7007.00	(502.40	F0/0 00	F100.00	4205 (0
	Net Loan-Opening	7326.00	6593.40	5860.80	5128.20	4395.60
	Additions during the year Repayment during the year	0.00 732.60	0.00 732.60	0.00 732.60	0.00 732.60	732.60
	i	+			-	
	Net Loan-Closing Average Loan	6593.40 6959.70	5860.80 6227.10	5128.20 5494.50	4395.60 4761.90	3663.00 4029.30
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	514.32	460.18	406.04	351.90	297.77
		314.32				Z71.11
<u> </u>	I Ren Schedille		(I) Annual in	stallments fror	11 22.09 2009	
14	Rep Schedule		10 Annual Ins	stallments fror	11 22.09.2009	
16	BOND XVIII	2540.00				2540.00
16	BOND XVIII Gross loan opening	2540.00	2540.00	2540.00	2540.00	2540.00 846.67
16	BOND XVIII Gross loan opening Cumulative Repayment up to	2540.00 0.00				2540.00 846.67
16	Gross loan opening Cumulative Repayment up to the date of commercial	+	2540.00	2540.00	2540.00	
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year	+	2540.00	2540.00	2540.00	
16	Gross loan opening Cumulative Repayment up to the date of commercial	0.00	2540.00 211.67	2540.00 423.33	2540.00 635.00	846.67
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year	0.00	2540.00 211.67 2328.33	2540.00 423.33 2116.67	2540.00 635.00	846.67 1693.33
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening	0.00 2540.00 0.00	2540.00 211.67 2328.33 0.00	2540.00 423.33 2116.67 0.00	2540.00 635.00 1905.00 0.00	846.67 1693.33 0.00
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	0.00 2540.00 0.00 211.67	2540.00 211.67 2328.33 0.00 211.67 2116.67	2540.00 423.33 2116.67 0.00 211.67	2540.00 635.00 1905.00 0.00 211.67	1693.33 0.00 211.67 1481.67
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year Repayment during the year	0.00 2540.00 0.00 211.67 2328.33	2540.00 211.67 2328.33 0.00 211.67 2116.67 2222.50	2540.00 423.33 2116.67 0.00 211.67 1905.00 2010.83	2540.00 635.00 1905.00 0.00 211.67 1693.33 1799.17	1693.33 0.00 211.67 1481.67 1587.50
16	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 2540.00 0.00 211.67 2328.33 2434.17	2540.00 211.67 2328.33 0.00 211.67 2116.67	2540.00 423.33 2116.67 0.00 211.67 1905.00	2540.00 635.00 1905.00 0.00 211.67 1693.33	846.67 1693.33 0.00 211.67 1481.67 1587.50 8.15%
16	Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	0.00 2540.00 0.00 211.67 2328.33 2434.17 8.15%	2540.00 211.67 2328.33 0.00 211.67 2116.67 2222.50 8.15% 181.13	2540.00 423.33 2116.67 0.00 211.67 1905.00 2010.83 8.15%	2540.00 635.00 1905.00 0.00 211.67 1693.33 1799.17 8.15% 146.63	1693.33 0.00 211.67 1481.67 1587.50
17	BOND XVIII Gross loan opening Cumulative Repayment up to the date of commercial operation/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	0.00 2540.00 0.00 211.67 2328.33 2434.17 8.15%	2540.00 211.67 2328.33 0.00 211.67 2116.67 2222.50 8.15% 181.13	2540.00 423.33 2116.67 0.00 211.67 1905.00 2010.83 8.15% 163.88	2540.00 635.00 1905.00 0.00 211.67 1693.33 1799.17 8.15% 146.63	1693.33 0.00 211.67 1481.67 1587.50 8.15%

1	Gross loan opening	21.00	21.00	21.00	21.00	21.00
	Cumulative Repayment up to	8.75	10.50	12.25	14.00	15.75
	the date of commercial	0.70	10.00	12.20	1 1.00	10.70
	operation /previous year					
	Net Loan-Opening	12.25	10.50	8.75	7.00	5.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.75	1.75	1.75	1.75	1.75
	Net Loan-Closing	10.50	8.75	7.00	5.25	3.50
	Average Loan	11.38	9.63	7.88	6.13	4.38
	Rate of Interest	9.60%	9.60%	9.60%	9.60%	9.60%
	Interest	1.09	0.92	0.76	0.59	0.42
	Rep Schedule			stallments fro		
18	PNB-II					
	Gross loan opening	25.00	25.00	25.00	25.00	25.00
	Cumulative Repayment up to	10.42	12.50	14.59	16.67	18.75
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	14.58	12.50	10.41	8.33	6.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.08	2.08	2.08	2.08	2.08
	Net Loan-Closing	12.50	10.41	8.33	6.25	4.16
	Average Loan	13.54	11.46	9.37	7.29	5.21
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	1.27	1.07	0.88	0.68	0.49
	Rep Schedule		12 Annual II	nstallments fro	om 8.3.2005	
19	BOND XXVIII					
	Gross loan opening	151.00	151.00	151.00	151.00	151.00
1	Cross learr opering					
	Cumulative Repayment up to	0.00	0.00	0.00	0.00	12.58
				0.00		
	Cumulative Repayment up to			0.00		
	Cumulative Repayment up to the date of commercial			0.00 151.00		
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year	0.00	0.00		0.00	12.58 138.42 0.00
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year	0.00 151.00 0.00 0.00	0.00 151.00 0.00 0.00	151.00 0.00 0.00	0.00 151.00 0.00 12.58	12.58 138.42 0.00 12.58
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year	0.00 151.00 0.00 0.00 151.00	0.00 151.00 0.00 0.00 151.00	151.00 0.00 0.00 151.00	151.00 0.00 12.58 138.42	12.58 138.42 0.00 12.58 125.83
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 151.00 0.00 0.00 151.00	0.00 151.00 0.00 0.00 151.00	151.00 0.00 0.00 151.00	151.00 0.00 12.58 138.42 144.71	12.58 138.42 0.00 12.58 125.83 132.13
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	151.00 0.00 0.00 151.00 151.00 9.33%	151.00 0.00 12.58 138.42	12.58 138.42 0.00 12.58 125.83
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	0.00 151.00 0.00 0.00 151.00	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50	12.58 138.42 0.00 12.58 125.83 132.13
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50	12.58 138.42 0.00 12.58 125.83 132.13 9.33%
	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50	12.58 138.42 0.00 12.58 125.83 132.13 9.33%
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50	12.58 138.42 0.00 12.58 125.83 132.13 9.33%
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening	0.00 151.00 0.00 0.00 151.00 151.00 9.33%	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50	12.58 138.42 0.00 12.58 125.83 132.13 9.33%
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	0.00 151.00 0.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 stallments from	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial	0.00 151.00 0.00 151.00 151.00 9.33% 14.09	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Ins	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 stallments fror	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year	0.00 151.00 0.00 0.00 151.00 9.33% 14.09 1489.85 0.00	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Ins 1489.85 0.00	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 stallments from	0.00 151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012 1489.85 124.15	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Inst	151.00 0.00 0.00 151.00 9.33% 14.09 stallments from 1489.85 0.00	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012 1489.85 124.15	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual In: 1489.85 0.00	151.00 0.00 0.00 151.00 9.33% 14.09 stallments from 1489.85 0.00	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 n 15.12.2012 1489.85 124.15 1365.70 0.00	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year Repayment during the year	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00 1489.85 0.00	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual In: 1489.85 0.00 1489.85 0.00	151.00 0.00 0.00 151.00 9.33% 14.09 stallments fror 1489.85 0.00 1489.85	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 n 15.12.2012 1489.85 124.15 1365.70 0.00 124.15	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00 124.15
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00 1489.85	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Ins 1489.85 0.00 1489.85	151.00 0.00 0.00 151.00 9.33% 14.09 stallments from 1489.85 0.00 1489.85 0.00 124.15 1365.70	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012 1489.85 124.15 1365.70 0.00 124.15 1241.54	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00 124.15 1117.39
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing Average Loan	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00 1489.85 1489.85	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Inst	151.00 0.00 151.00 151.00 9.33% 14.09 stallments from 1489.85 0.00 124.15 1365.70 1427.77	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012 1489.85 124.15 1365.70 0.00 124.15 1241.54 1303.62	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00 124.15 1117.39 1179.46
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00 1489.85 0.00 1489.85 9.47%	151.00 0.00 0.00 151.00 151.00 9.33% 14.09 12 Annual Inst	151.00 0.00 0.00 151.00 9.33% 14.09 stallments from 1489.85 0.00 124.15 1365.70 1427.77 9.47%	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 m 15.12.2012 1489.85 124.15 1365.70 0.00 124.15 1241.54 1303.62 9.47%	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00 124.15 1117.39 1179.46 9.47%
20	Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule BOND XXVII(ADDCAP FOR 2007-2008-31-MAR-2008) Gross loan opening Cumulative Repayment up to the date of commercial operation previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing Average Loan	0.00 151.00 0.00 151.00 151.00 9.33% 14.09 1489.85 0.00 1489.85 1489.85	151.00 0.00 0.00 151.00 9.33% 14.09 12 Annual In: 1489.85 0.00 1489.85 0.00 1489.85 1489.85 9.47% 141.09	151.00 0.00 151.00 151.00 9.33% 14.09 stallments from 1489.85 0.00 124.15 1365.70 1427.77	151.00 0.00 12.58 138.42 144.71 9.33% 13.50 n 15.12.2012 1489.85 124.15 1365.70 0.00 124.15 1241.54 1303.62 9.47% 123.45	12.58 138.42 0.00 12.58 125.83 132.13 9.33% 12.33 1489.85 248.31 1241.54 0.00 124.15 1117.39 1179.46

24	BOND XXII (ADD CAP FOR 2008-2009-02-NOV-2006)					
21	Gross loan opening	250.00	250.00	250.00	250.00	250.00
	Cumulative Repayment up to	0.00	0.00	20.83	41.67	62.50
	the date of commercial	0.00	0.00	20.00	11.07	02.00
	operation /previous year					
	Net Loan-Opening	250.00	250.00	229.17	208.33	187.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	20.83	20.83	20.83	20.83
	Net Loan-Closing	250.00	229.17	208.33	187.50	166.67
	Average Loan	250.00	239.58	218.75	197.92	177.08
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	21.70	20.80	18.99	17.18	15.37
	Rep Schedule		12 Annual Ir	nstallments fro	m 24.7.2010	•
22	BONDS XXIX(ADD CAP FOR 2008-09 DRAWL ON 12-MAR- 2009-12-MAR-2009					
	Gross loan opening	764.00	764.00	764.00	764.00	764.00
	Cumulative Repayment up to	0.00	0.00	0.00	0.00	63.67
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	764.00	764.00	764.00	764.00	700.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	63.67	63.67
	Net Loan-Closing	764.00	764.00	764.00	700.33	636.67
	Average Loan	764.00	764.00	764.00	732.17	668.50
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	70.29	70.29	70.29	67.36	61.50
	Rep Schedule		12 Annual I	nstallmets fror	m 12.3.2013	1
	Total Loan					
	Gross loan opening	31048.38	31048.38	31048.38	31048.38	31048.38
	Cumulative Repayment up to	6748.66	9036.85	11345.87	13779.05	16288.48
	the date of commercial					
	operation /previous year	0.4000 70	00044.50	10700 50	170/0.00	1 1750 00
	Net Loan-Opening	24299.72	22011.53	19702.50	17269.33	14759.90
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2288.19	2309.02	2433.18	2509.43	2305.41
	Net Loan-Closing	22011.53	19702.50	17269.33	14759.90	12454.49
	Average Loan	23155.62	20857.02	18485.91	16014.61	13607.19
	Rate of Interest	7.5735%	7.5783%	7.5773%	7.5647%	7.5602%
	Interest	1753.70	1580.60	1400.73	1211.45	1028.73