# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No.194/2010

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

Date of Hearing: 26.10.2010 Date of Order: 11.3.2011

#### In the matter of:

Approval of transmission tariff for combined element of (i) 400 kV D/C Tarapur-Padghe Ckt-I transmission line; (ii) 400 kV D/C Tarapur-Padghe Ckt-II transmission line; and (iii) 220 kV D/C Tarapur-Boisor transmission line under Tarapur Transmission System in Western 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

- Madhya Pradesh Power Trading Company Ltd., Jabalpur
- Maharashtra State Electricity Distribution Co. Ltd., Mumbai
- 3. Gujarat Urja Vikas Nigam Ltd., Vadodara
- 4. Electricity Deptt., Govt., of Goa, Panaji
- 5. Electricity Department, Administration of Daman and Diu, Daman
- 6. Electricity Department, Administration of Dadra Nagar Haveli, Silvassa
- 7. Chhattisgarh State Electricity Board, Raipur
- 8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd. Indore

... Respondents

#### The following were present:

- 1. Shri M.M. Mondal, PGCIL
- 2. Shri Rajiv Gupta, PGCIL
- 3. Shri S.S.Raju, PGCIL

### **ORDER**

The petition has been filed for approval of tariff for combined element of (i) 400 kV D/C Tarapur-Padghe Ckt-I transmission line; (ii) 400 kV D/C Tarapur-Padghe Ckt-II transmission line; and (iii) 220 kV D/C Tarapur-Boisor transmission line (collectively referred to as "the transmission assets") under Tarapur Transmission System (hereinafter referred to as "the transmission system") in Western 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"). The petitioner has made the following additional prayers:

- (a) 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 of ROE may be allowed considering the tax rates viz, MAT, surcharge, any other cess, charges, levies etc. as per the relevant Finance act and allow consequential impact of tariff on account of truing up, to be billed and settled directly with the beneficiaries every year in the tariff block;
- (b) 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;
- (c) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (d) Allow to recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and
- (e) Allow reimbursement of licence fee separately from the respondents.
- 2. The notional date of the commercial operation of the transmission assets has been taken as 1.9.2005. The annual transmission charges for the transmission assets up to 31.3.2009 were finally revised by the Commission in order dated 1.6.2010 in Petition No. 9/2010, after accounting for the additional capital expenditure incurred during 2008-09.
- 3. The petitioner has claimed the transmission charges as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1344.57	1344.57	1344.57	1344.57	1344.57
Interest on Loan	1194.41	1097.82	1000.72	903.68	806.73
Return on Equity	1090.55	1090.55	1090.55	1090.55	1090.55
Interest on Working Capital	133.82	135.14	136.64	138.33	140.24
O & M Expenses	1163.00	1229.59	1299.98	1374.27	1452.81
Total	4926.35	4897.67	4872.46	4851.40	4834.90

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

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	174.45	184.44	195.00	206.14	217.92
O & M expenses	96.92	102.47	108.33	114.52	121.07
Receivables	821.06	816.28	812.08	808.57	805.82
Total	1092.43	1103.19	1115.41	1129.23	1144.81
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	133.82	135.14	136.64	138.33	140.24

- 5. The petitioner has published the notices in the Hindustan Times, Swadesh, Asian Age, Navakal, Financial Express, Gujarat Today, Sonaparant, Gomantak Times, Daman Ganga Times, Asian Age, Gujarat Samachar, Hari Bhoomi Central chronical, Raipur on 15/16.7.2010 as required under Section 64 of the Electricity Act, 2003 (the Act) read with Regulation 3 (6) of the Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004 as amended from time to time. No comments or suggestions have been received from the public in response to the public notice.
- 6. Madhya Pradesh Power Trading Company Ltd. (MPPTCL) has made following submissions:
  - (i) In regard to MAT, MPPTCL has requested not to relax the provision of Regulation 15(3) of the 2009 regulations, as tariff should be claimed in

next tariff period, even if there is change in MAT rate during the existing tariff period 2009-10;

- (ii) Licence fee is only an essential requirement to get licence from the Commission. It has nothing to do with the project cost, on the basis of which tariff is to be computed. Therefore, licence fee should be borne by the petitioner only;
- (iii) Taxes and duties provided in the 2009 regulations should be borne by the respondents; and
- (iv) In regard to service tax, MPPTCL has submitted that Government of India vide its notification No. 11/2010-Service Tax, dated 27.2.2010 has exempted the taxable service provided to any service, by any other person for transmission of electricity, from the whole of service tax leviable, therefore respondents are not liable to pay service tax to the petitioner.
- 7. The petitioner vide its rejoinder dated 20.10.2010 has made following submission:
  - (a) In regard to MAT, the petitioner has submitted that the Commission vide its order dated 3.8.2010 in Petition No. 38/2010 has addressed this issue with direction to amend the 2009 regulations. The Commission has already issued draft amendment to the 2009 regulations. Therefore,

the petitioner has requested to allow grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and he beneficiaries/long-term transmission customers on year to year basis;

- (b) In regard to licence fee, the petitioner has submitted the license fee is a new component of cost to the transmission license under O & M charges of the project and has become incidental to the PGCIL/CTU only from 2008-09. No such cost component was incidental during the remaining years of the tariff block 2004-08. Normative O & M rates arrived in the 2009 regulations for the period 2009-14 as such did not capture the costs associated with the licence fee;
- (c) With regard to taxes and duties, it has been submitted that any statutory taxes and duties imposed/charged by any Government (Central/State) and/or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environment protection/and/or in respect of any of its installation associated the transmission and hence the same be borne by the beneficiaries;
- (d) In regard to service tax, the petitioner has submitted that order of Commissioner, Central Excise, Shillong regarding non-registration and non-payment of service tax on transmission charges and demand for

payment of service tax on transmission charge was received on 23.11.2009. However, CBEC has now exempted service tax on transmission vide notification No.1/2010, service tax, dated 27.2.2010. Further CBEC also has exempted levy of service tax on transmission for the past period up to 26.2.2010 vide notification No. 45/2010-service tax, dated 20.7.2010. It has also been submitted that transmission charges indicated, is exclusive of service tax and the same shall be borne and additionally paid by the respondents(s) to the petitioner in case the exemption as above is withdrawn in future.

8. We have considered the objections of MPPTCL and reply filed by the petitioner. The tariff of the transmission assets has been determined in this order strictly in accordance with the provisions of the 2009 regulations. The issues in regard to service tax, taxes, licence fee etc. have been addressed in relevant paras of this order.

#### CAPITAL COST

As per the last proviso to clause (2) of Regulation 7 of the 2009 9. regulations, in case of the existing projects, capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission, shall form the basis for determination of tariff.

- 10. The petitioner has claimed the capital expenditure of ₹26854.06 lakh, which was admitted by the Commission vide order dated 1.6.2010 in Petition No. 9/2010. The petitioner has not claimed any projected additional capital expenditure during 2009-14.
- 11. Accordingly, gross block of ₹26854.06 lakh as on 31.3.2009 has been considered as the capital cost for the purpose of tariff.

#### **DEBT- EQUITY RATIO**

- 12. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides as under:-
  - "(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."
- 13. The petitioner has claimed tariff based on debt-equity ratio of 76.77:23.23 as admitted on 31.3.2009 vide order dated 1.6.2010 in Petition No. 9/2010. The same debt-equity ratio has been considered for the purpose of tariff during the period 2009-14.

## **RETURN ON EQUITY**

- 14. 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."

- 15. 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 and claimed return on equity of ₹1090.55 lakh each year during the tariff period @ 17.481% against the equity base of ₹6238.48 lakh. This has been found to be in order. Accordingly, the petitioner shall be entitled to return on equity @ ₹1090.55 lakh each year during the tariff period, as claimed.
- 16. 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.

#### **INTEREST ON LOAN**

- 17. 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."

- 18. The interest on loan has been worked out as detailed below:
  - (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan have been considered as per the petition;
  - (ii) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
  - (iii) 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;
  - (iv) Weighted average rate of interest on actual average loan has been worked out as per (i) above and applied on the notional average loan during the year to arrive at the interest on loan;

- (v) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 shall be considered at the time of truing up.
- 19. The detailed calculations in support of the weighted average rate of interest for the transmission asset are contained in *Annexure* attached to this order. 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	20615.58	20615.58	20615.58	20615.58	20615.58	20615.58
Cumulative Repayment		3485.89	4830.46	6175.03	7519.60	8864.17
up to Previous Year						
Net Loan-Opening		17129.69	15785.12	14440.55	13095.98	11751.41
Addition due to Additional		0.00	0.00	0.00	0.00	0.00
Capitalisation						
Repayment during the		1344.57	1344.57	1344.57	1344.57	1344.57
year						
Net Loan-Closing		15785.12	14440.55	13095.98	11751.41	10406.84
Average Loan		16457.41	15112.84	13768.27	12423.70	11079.13
Weighted Average Rate		7.2576%	7.2642%	7.2683%	7.2738%	7.2815%
of Interest on Loan						
Interest		1194.41	1097.82	1000.72	903.67	806.73

## **DEPRECIATION**

- 20. 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.

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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."
- 21. The assets covered in the present petition will complete 12 years as on beyond 2013-14 (as per the notional date of commercial operation). Therefore, the depreciation has been calculated annually based on straight line method and at rates specified in *Appendix-III* of the 2009 regulations.
- 22. For the period 1.4.2009 to 31.3.2014, the depreciation works out to ₹1344.57 lakh by applying rate of depreciation of 5.0069% as shown below:

Details of Depreciation		Up to	2009-10	2010-11	2011-12	2012-13	2013-14
		31.3.2009					
Gross block as per order 1.6.2010		26854.06	26854.06	26854.06	26854.06	26854.06	26854.06
Addition during 2009-14			0.00	0.00	0.00	0.00	0.00
due to projected							
Additional Capitalisation							
Gross block as on 31.3.2009			26854.06	26854.06	26854.06	26854.06	26854.06
Average gross block			26854.06	26854.06	26854.06	26854.06	26854.06
Rate of Depreciation			5.0069%	5.0069%	5.0069%	5.0069%	5.0069%
Depreciable Value of	90%		23430.24	23430.24	23430.24	23430.24	23430.24
combined assets							
Remaining Depreciable			19944.35	18599.78	17255.21	15910.64	14566.07
Value							
Depreciation			1344.57	1344.57	1344.57	1344.57	1344.57

## **OPERATION & MAINTENANCE EXPENSES**

23. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV and 220 kV bays are prescribed for O & M expenses:

			Year		
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C, Twin conductor	0.627	0.663	0.701	0.741	0.783
transmission line (₹ lakh per km.)					
400 kV S/C, Twin conductor	0.358	0.378	0.400	0.423	0.447
transmission line (₹ lakh per km.)					
220 kV S/C single conductor	0.179	0.189	0.200	0.212	0.224
transmission line (₹ lakh per km.)					
400 kV bay (₹ in lakh /bay)	52.40	55.40	58.57	61.92	65.46
220 kV bays (₹ in lakh /bay)	36.68	38.78	41.00	43.34	45.82

24. The petitioner has claimed O & M expenses for 142.758 ckt.km., 2.694 ckt.km., 20.56 ckt.km and 24 bays. Accordingly, 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 D/C, Twin conductor	89.40	94.53	99.95	105.65	111.64		
transmission line (142.758 km.)							
400 kV S/C, Twin conductor	0.96	1.02	1.08	1.14	1.20		
transmission line (2.694 km.)							
220 kV S/C single conductor	3.68	3.89	4.11	4.36	4.61		
transmission line (20.56 km.)							
400 kV bay (12 bays)	628.80	664.80	702.04	743.04	785.52		
220 kV bays (12 bays)	440.16	465.36	492.00	520.08	549.84		
Total	1163.00	1229.59	1299.98	1374.27	1452.81		

25. 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%. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses

in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%. 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**

- 26. 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 average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 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) 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 works out to ₹174.45 lakh as on 1.4.2009.
  - (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 as claimed in the petition. 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 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.
- 27. 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	174.45	184.44	195.00	206.14	217.92
O & M expenses	96.92	102.47	108.33	114.52	121.07
Receivables	821.06	816.28	812.08	808.57	805.82
Total	1,092.42	1,103.18	1,115.40	1,129.23	1,144.81
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	133.82	135.14	136.64	138.33	140.24

## **TRANSMISSION CHARGES**

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

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1344.57	1344.57	1344.57	1344.57	1344.57
Interest on Loan	1194.41	1097.82	1000.72	903.67	806.73
Return on Equity	1090.55	1090.55	1090.55	1090.55	1090.55
Interest on Working Capital	133.82	135.14	136.64	138.33	140.24
O & M Expenses	1163.00	1229.59	1299.98	1374.27	1452.81
Total	4926.35	4897.67	4872.45	4851.39	4834.90

# Application fee and the publication expenses

29. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. 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 on *pro rata* basis. The petitioner shall also be entitled for reimbursement of publication expenses from the beneficiaries on *pro rata* basis.

## **Service Tax**

30. The petitioner has prayed for reimbursement of service tax, if it is subjected to such tax in future. As the petitioner has no liability for service tax at present, the prayer is infructuous and is accordingly rejected.

#### Licence fee

- 31. The petitioner has prayed to allow reimbursement of licence fee separately from the respondents. A view in the matter is yet to be taken by the Commission.
- 32. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondent in accordance with Regulation 33 of the 2009 regulations.
- 33. This order disposes of Petition No. 194/2010.

Sd/-(V.S.Verma) Member Sd/-(S.Jayaraman) Member Sd/-(Dr. Pramod Deo) 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 XII					
	Gross loan opening	39.00	39.00	39.00	39.00	39.00
	Cumulative Repayment up to the	13.00	16.25	19.50	22.75	26.00
	date of commercial					
	operation/previous year					
	Net Loan-Opening	26.00	22.75	19.50	16.25	13.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.25	3.25	3.25	3.25	3.25
	Net Loan-Closing	22.75	19.50	16.25	13.00	9.75
	Average Loan	24.38	21.13	17.88	14.63	11.38
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	2.36	2.05	1.73	1.42	1.10
	Rep Schedule		12 Annual I	nstalments fro	m 28.3.2006	
2	Bond XV					
	Gross loan opening	2650.00	2650.00	2650.00	2650.00	2650.00
	Cumulative Repayment up to the	441.66	662.49	883.33	1104.16	1324.99
	date of commercial					
	operation//previous year					
	Net Loan-Opening	2208.34	1987.51	1766.67	1545.84	1325.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	220.83	220.83	220.83	220.83	220.83
	Net Loan-Closing	1987.51	1766.67	1545.84	1325.01	1104.17
	Average Loan	2097.92	1877.09	1656.26	1435.42	1214.59
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	140.14	125.39	110.64	95.89	81.13
	Rep Schedule		12 Annual I	nstalments fro	m 28.2.2008	
3	Bond XVI					
	Gross loan opening	12330.00	12330.00	12330.00	12330.00	12330.00
	Cumulative Repayment up to	1233.00	2466.00	3699.00	4932.00	6165.00
	DOCO/previous year					
	Net Loan-Opening	11097.00	9864.00	8631.00	7398.00	6165.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1233.00	1233.00	1233.00	1233.00	1233.00
	Net Loan-Closing	9864.00	8631.00	7398.00	6165.00	4932.00
	Average Loan	10480.50	9247.50	8014.50	6781.50	5548.50
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	744.12	656.57	569.03	481.49	393.94
	Rep Schedule		10 Annual II	nstallments fro	m 18.2.2009	
4	Bond XVIII ( Add Cap for 2005-06)					
	Gross loan opening	250.00	250.00	250.00	250.00	250.00
	Cumulative Repayment up to the	0.00	20.83	41.67	62.50	83.33
	date of commercial operation					
	/previous year					
	Net Loan-Opening	250.00	229.17	208.33	187.50	166.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	20.83	20.83	20.83	20.83	20.83
	Net Loan-Closing	229.17	208.33	187.50	166.67	145.83
	Average Loan	239.58	218.75	197.92	177.08	156.25

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	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	19.53	17.83	16.13	14.43	12.73
	Rep Schedule		12 Annual I	nstalments fro	m 9.3.2010	
5	Bond XIII - option I					
	Gross loan opening	950.00	950.00	950.00	950.00	950.00
	Cumulative Repayment up to the	237.50	316.67	395.83	475.00	554.17
	date of commercial					
-	operation/previous year	710.50	(22.22	FF 4 1 7	475.00	205.02
	Net Loan-Opening	712.50	633.33	554.17	475.00	395.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	79.17	79.17	79.17	79.17	79.17
	Net Loan-Closing	633.33	554.17	475.00	395.83	316.67
	Average Loan	672.92	593.75	514.58	435.42	356.25
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	Interest	58.07	51.24	44.41	37.58	30.74
	Rep Schedule		12 Annual Ir	nstalments fro	m 31.7.2006	
6	Bond XIX ( Add Cap for 2006-07)					
	Gross loan opening	160.00	160.00	160.00	160.00	160.00
	Cumulative Repayment up to the	0.00	0.00	13.33	26.67	40.00
	date of commercial operation					
	/previous year					
	Net Loan-Opening	160.00	160.00	146.67	133.33	120.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	13.33	13.33	13.33	13.33
	Net Loan-Closing	160.00	146.67	133.33	120.00	106.67
	Average Loan	160.00	153.33	140.00	126.67	113.33
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	14.80	14.18	12.95	11.72	10.48
	Rep Schedule		12 Annual Ir	nstalments fro	m 24.7.2010	
7	Bond XXII ( Add Cap for 2006-07)					
	Gross loan opening	735.00	735.00	735.00	735.00	735.00
	Cumulative Repayment up to the	0.00	0.00	61.25	122.50	183.75
	date of commercial operation					
	/previous year					
	Net Loan-Opening	735.00	735.00	673.75	612.50	551.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	61.25	61.25	61.25	61.25
	Net Loan-Closing	735.00	673.75	612.50	551.25	490.00
	Average Loan	735.00	704.38	643.13	581.88	520.63
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	63.80	61.14	55.82	50.51	45.19
	Rep Schedule		12 Annual Ir	nstalments fro	m 7.12.2010	
	Bridge Financing from IOB w.e.f.					
	01.08.2005 upto 21.09.2005 /Bond-					
8	XVII w.e.f 22.09.2005					
	Gross loan opening	2400.00	2400.00	2400.00	2400.00	2400.00
	Cumulative Repayment up to the	0.00	240.00	480.00	720.00	960.00
	date of commercial operation					
	/previous year					
	Net Loan-Opening	2400.00	2160.00	1920.00	1680.00	1440.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	240.00	240.00	240.00	240.00	240.00

Net Loan-Closing	2160.00	1920.00	1680.00	1440.00	1200.00
Average Loan	2280.00	2040.00	1800.00	1560.00	1320.00
Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
Interest	168.49	150.76	133.02	115.28	97.55
Rep Schedule		10 Annual I	nstalments fro	m 22.9.2009	
Total Loan					
Gross loan opening	19514.00	19514.00	19514.00	19514.00	19514.00
Cumulative Repayment up to the date of commercial operation	1925.16	3722.24	5593.91	7465.58	9337.24
/previous year					
Net Loan-Opening	17588.84	15791.76	13920.09	12048.42	10176.76
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1797.08	1871.67	1871.67	1871.67	1871.67
Net Loan-Closing	15791.76	13920.09	12048.42	10176.76	8305.09
Average Loan	16690.30	14855.92	12984.26	11112.59	9240.92
Weighted Average Rate of Interest	7.2576%	7.2642%	7.2683%	7.2738%	7.2815%
Interest	1211.31	1079.16	943.73	808.31	672.88