#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No.243/2010

Coram:

- 1. Shri S.Jayaraman, Member
- 2. Shri V.S.Verma, Member
- 3. Shri M.Deena Dayalan, Member

#### DATE OF HEARING: 23.12.2010

#### DATE OF ORDER: 8.2.2011

#### In the matter of

Approval of transmission tariff for combined assets for (i) Ckt-III of 400 kV D/C Vindhyachal-Satna transmission line along with associated bays; (ii) 400/220 kV, 315 MVA ICT-II at Satna sub-station; (iii) Ckt-IV of 400 kV D/C Vindhyachal-Satna line along with associated bays; (iv) LILO of 400 kV Satna-Bina Ckt- I & II at Bina (Power Grid) sub-station; (v) Circuit IV of 400 kV D/C Satna-Bina transmission line; (vi) Circuit III of 400 kV D/C Satna-Bina transmission line; (vi) Circuit III of 400 kV D/C Satna-Bina transmission line; (vii) LILO of 400 kV D/C Raipur-Rourkela transmission line along with associated bays; and (viii) 400/220 kV 315 MVA ICT-II along with associated bays equipment at Raigarh sub-station under Vindhyachal Stage-III 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

- 1. Madhya Pradesh Power Trading Company Ltd., Jabalpur
- 2. 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 Rakesh Prasad, PGCIL
- 3. Shri Rajiv Gupta, PGCIL

# <u>ORDER</u>

The petition has been filed seeking approval of combined assets for (i)

Ckt-III of 400 kV D/C Vindhyachal-Satna transmission line along with associated

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bays (Asset-I); (ii) 400/220 kV, 315 MVA ICT-II at Satna sub-station (Asset-II); (iii) Ckt-IV of 400 kV D/C Vindhyachal-Satna line along with associated bays (Asset-III); (iv) LILO of 400 kV Satna-Bina Ckt- I & II at Bina (Power Grid) substation (Asset-IV); (v) Circuit IV of 400 kV D/C Satna-Bina transmission line (Asset-V); (vi) Circuit III of 400 kV D/C Satna-Bina transmission line (Asset-VI); (vii) LILO of 400 kV D/C Raipur-Rourkela transmission line along with associated bays (Asset-VII); and (viii) 400/220 kV 315 MVA ICT-II along with associated bays equipment at Raigarh sub-station (Asset-VIII) (hereinafter collectively referred to as "the transmission assets") under Vindhyachal Stage-III transmission system (the transmission system) in Western Region for the period 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for additional capital expenditure on account of undischarged liabilities during 2009-10 and 2010-11. The petitioner has made the following additional prayers:-

(a) To Allow the additional capital expenditure incurred/ to be incurred on account of undischarged liabilities after the cut off date under Regulation 9 (2) (v) of the 2009 regulations or alternatively, invoke the provision of Regulation 44 of the 2009 regulations so that additional capital expenditure incurred on account of undischarged liabilities after the cut off date is considered for the fixation of tariff for the period 2009-14;

- (b)To allow grossing up of base rate of return with the applicable tax as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-term transmission customers;
- (c) In case of the assets being combined to calculate the transmission charges, allow to recover full depreciation (90% of the gross block) of the asset during its useful life (25 years for sub-station and 35 years for transmission lines) reckoning from its actual date of the commercial operation and also permit to treat the recovery in accordance with para 1.4 of the petition;
- (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 recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and
- (f) Allow reimbursement of licence fee separately from the respondents.

2. The investment approval for the transmission system was accorded by Ministry of Power vide its letter dated 23.7.2004 at an estimated cost of ₹ 59647 lakh, which included IDC of ₹ 5289 lakh. Subsequently, approval for the revised cost estimate was accorded by Ministry of Power under its letter dated 13.11.2007 at an estimated cost of ₹ 68956 lakh, which included IDC of ₹1319

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lakh. The notional date of commercial operation of the transmission assets has been taken as 1.2.2008.

3. The annual transmission charges for the transmission assets up to 31.3.2009 were decided by the Commission in its order dated 19.6.2009 in Petition No. 48/2009, order dated 17.9.2008 in Petition No. 45/2008 and order dated 20.4.2009 in Petition No. 132/2008 and same were revised vide order dated 18.6.2010 in Petition No. 44/2010, after accounting for the additional capital expenditure up to 31.3.2009.

4. The petitioner has claimed the transmission charges in respect of the transmission assets as under:

				(₹	in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3342.05	3369.57	3391.60	3391.60	3391.60
Interest on Loan	3452.37	3199.24	2932.49	2637.76	2342.59
Return on Equity	3348.26	3377.02	3399.09	3399.09	3399.09
Interest on Working Capital	292.34	292.87	293.13	292.16	291.46
O & M Expenses	1618.13	1710.83	1808.76	1912.12	2021.26
Total	12053.15	11949.53	11825.07	11632.73	11446.00

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

( <b>₹</b> in							
	2009-10	2010-11	2011-12	2012-13	2013-14		
Maintenance Spares	242.72	256.62	271.31	286.82	303.19		
O & M expenses	134.84	142.57	150.73	159.34	168.44		
Receivables	2008.86	1991.59	1970.85	1938.79	1907.67		
Total	2386.42	2390.78	2392.89	2384.95	2379.30		
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%		
Interest	292.34	292.87	293.13	292.16	291.46		

6. Reply to the petition has been filed by Madhya Pradesh Power Trading Company Ltd. (MP Tradco) and Maharashtra State Electricity Distribution Co.

Ltd. (MSEDCL). The objections/comments of MP Tradco and MSEDCL have been dealt within relevant praras of this order. 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

7. As per the last proviso to clause (2) of Regulation 7 of the 2009 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.

8. The petitioner has claimed the capital expenditure of ₹63718.32 lakh, which was admitted vide order dated 18.6.2010 in Petition No. 44/2010. The petitioner has claimed projected additional capital expenditure incurred/to be incurred during the period 2009-10 and 2010-11.

# ADDITIONAL CAPITAL EXPEDNTURE

9. 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 ( <b>₹</b> in lakh)
Asset-I	2009-10 2010-11	<b>Transmission line-</b> Final Retention payments <b>Transmission line-</b> Entry tax liability subject to Hon`ble Supreme Court decision	32.76 151.78
Asset-II	2010-11	Transmission line- Final Retention payments	41.07
Asset-III	2010-11	<b>Transmission line-</b> Entry tax liability subject to Hon`ble Supreme Court decision	158.29



Asset-IV	2009-10	<b>Building and civil works-</b> Final Retention payments	98.96
		Sub-station- Final Retention payments	1.60
	2010-11	<b>Building and civil works-</b> Final Retention payments	14.50
		<b>Transmission line-</b> Entry tax liability subject to Hon`ble Supreme Court decision	1.51
		Sub-station- Final Retention payments	0.84
Asset-V	2009-10	Transmission line- Final Retention payments	9.17
		Sub-station- Final Retention payments	15.47
	2010-11	Transmission line- Final Retention payments	15.53
		<b>Transmission line-</b> Entry tax liability subject to Hon`ble Supreme Court decision	159.38
		Sub-station- Final Retention payments	15.79
Asset-VI	2009-10	Transmission line- Final Retention payments	8.3
		Sub-station- Final Retention payments	17.32
	2010-11	Transmission line- Entry tax liability subject to Hon`ble Supreme Court decision	160.03
Asset-VII	2009-10	Building and civil works- Final Retention payments	29.41
		Transmission line- Final payments	4.49
		Sub-station-Retention payments	37.63
	2010-11	Building and civil works- Retention payments	5.01
		Sub-station- Retention payments	75.04
Asset-VIII	2010-11	Sub-station-Retention payments	42.96
		Total	1096.84

10. Before entering into the specifics on the question of admissibility of the additional capital expenditure, we would like to formulate our views on the prayer of the petitioner in regard to admissibility of the additional capital expenditure incurred after the cut off date on account of un-discharged liabilities. The anomalous situation has arisen due to a change in the provisions between Central Electricity Regulatory Commission (Terms and Conditions of

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Tariff) Regulations, 2009 (the 2004 regulations) and the 2009 regulations. The

relevant portions are as under for reference.

- 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;
    - 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-offdate, 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. It may be noted from the above that as per the provisions of the 2009 regulations, undischarged liabilities incurred within the cut off date alone could be admitted by the Commission. Regulation 9(2) of the 2009 regulations specifically omits "(i) Deferred liabilities relating to works/services

within the original scope of work". However, corresponding provision under the 2004 regulations provided for capitalization of expenditure incurred towards undischarged liabilities even after the cut off date. In the light of the above, the petitioner had a legitimate expectation till date of publication of the 2009 regulations, that payment towards undischarged liability even after the cut off date could be capitalized. In view of above, there is appropriate reason for exercising the discretionary powers under regulation 44 of the 2009 regulations to relax Regulation 9(2) any of the provisions of the 2009 regulations and allow capitalization of expenditure on undischarged liabilities relating to works/services within the original scope of work after the cut off date.

13. MPPTCL and MSEDCL in their replies have submitted that the additional capital expenditure has not been claimed per the 2009 regulations and it is to be dealt in terms of Regulation 9 (1) of the 2009 regulations. It has been further submitted that petitioner has claimed ₹ 630 lakh as proposed additional capital expenditure for the years 2009-10 and 2010-11 on account of entry tax liabilities subject to Hon'ble Supreme Court's decision and pending decision of Hon`ble Supreme Court, it should not be levied on the beneficiaries at this stage. In response, the petitioner in its rejoinders dated 21.12.2010 and 18.1.2010 has submitted that additional capital expenditure after cut off dates on account of deferred liabilities was allowed in terms of Central Electricity Regulatory Commission (Terms Regulation 53 (2) of the and Conditions of Tariff) Regulations, 2004. Due to the contractual exegence is and other reasons beyond the control of it, it has make to make to provisions for release of balance/retention payment beyond the year 2008-09. The

petitioner has further submitted that additional capital expenditure incurred/projected to be incurred during the year 2009-10 and 2010-11 is on account of final/retention payment and entry tax and is within the original scope of work. In regard to entry tax, the petitioner has submitted that entry tax has been deposited with Madhya Pradesh Government Commercial Tax on the purchase of Aluminium conductor and steel (towers) Authorities brought from outside State of Madhya Pradesh for construction of transmission lines for the purpose of transmission of electrical energy @ 1% of the purchase value. Subsequently, Government of Madhya Pradesh vide its notification No. A-3-45-2003 (STV)(63) has enhanced the entry tax @5% w.e.f. 10.2.2004. The enhanced entry tax was challenged by the PGCIL in the court of law and it was planned to release this payment only after final decision by the Hon'ble Supreme Court. However, as per the legal advice taken by the PGCIL, the amount has been deposited during the month of October 2010. The petitioner has requested to allow for the payment which has already been deposited.

14. The petitioner vide its affidavit dated 15.12.2010 has also submitted that in respect of certain civil works and 10% payments against running bills were kept under hold as Contract Performance Guarantee till the completion of performance period as per the tender conditions, and in some cases for some rectification work. It has been submitted that payments are expected to be released in January 2011 after completion of the Performance Guarantee period in December 2010. In regard to contracts for transmission lines works, the petitioner has submitted that the payments on

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account of excise duty shall be made after re-conciliation during the month of January 2011. For sub-station works, it has been submitted that the supply of some of the spares for Sub-station Automation System (SAS) has now been completed and rectification in SAS, being highly technical in nature, has taken more time by vendor to patch up the problem, delaying the release of final payments.

15. It is observed from Regulation 9 of the provisions of 2009 regulations, that undischarged liabilities incurred within after the cut- off date is not allowed to be capitalized under Regulation 9 (2) of the 2009 regulations. In fact, clause 9(2) of the 2009 regulations specifically omits "(i) Deferred liabilities relating to works/services within the original scope of work" which was existing in Regulation 54 (2) of the 2004 regulations. In respect of existing station, the petitioner had a legitimate expectation that payment for undischarged liability incurred after the cut-off date would be capitalised. However, the absence of similar provisions in 2009 regulations has disallowed capitalization of undischarged liabilities mainly in the nature of balance and retention payments incurred after the cut-off date. For the reasons recorded in order dated 8.2.2010 in Petition No. 176/2010, we allow the claim of the petitioner for capitalization of the expenditure incurred/proposed to be incurred after the cut-off date, on account of undischarged liabilities and proposed entry tax liability subject to Hon'ble Supreme Court decision and truing up at the end of the tariff by relaxing the provisions of Regulation 9 (2) of the 2009 regulations.

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# 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 projected additional capital expenditure as claimed by the petitioner:

		(₹ in lakh)
Admitted capital	Projected additional capital	Total capital cost as
cost as on the	expenditure proposed to be	on 1.4.2014
31.3.2009	incurred during 2009-10	
63718.32	1096.84	64815.16

# DEBT- EQUITY RATIO

17. Clause (1) of Regulation 12 of the 2009 regulations *inter- alia* provides that,-

"(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"

18. The petitioner has claimed tariff based on debt-equity ratio of 70:30 for the combined assets. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the years 2009-10 and 2010-11, same has been considered for the calculation of tariff. For the purpose of tariff, equity considered for the transmission assets is as under:

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(₹ in lakh)



Equity as	Notional equity	Average	Notional equity	Average	Notional	Average	Equity as
on	due to	equity	due to	equity	Equity for	equity	on
1.4.2009	projected	for 2009-	projected	for 2010-	the	for 2013-	31.3.2014
	additional	10	additional	11	period	14	
	capital		capital		2011-14		
	expenditure for		expenditure for				
	the period 2009-		the period				
	10		2010-11				
19115.43	76.53	19153.69	252.52	19318.22	0.00	19444.48	19444.48

### **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. The petitioner has requested to allow grossing up of base rate of return with the applicable tax as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-term transmission. It is clarified that the Commission is in the process of amending the regulation to allow grossing up of the ROE as per the applicable MAT rate in accordance with the relevant Finance Act which would take care of the interest of the petitioner.

21. Accordingly, the return on equity has been computed in terms of the existing provision of Regulation 15 (3) of 2009 regulation as under:

				(₹	tin lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	19115.43	19191.96	19444.48	19444.48	19444.48
Addition due to Additional Capitalisation	76.53	252.52	0.00	0.00	0.00
Closing Equity	19191.96	19444.48	19444.48	19444.48	19444.48
Average Equity	19153.69	19318.22	19444.48	19444.48	19444.48
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	3348.26	3377.02	3399.09	3399.09	3399.09

# INTEREST ON LOAN

22. Regulation 16 of the 2009 regulations provides as under:

"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. The interest on loan has been worked out as detailed below:
  - (i) The 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;

(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 have been e 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 loan has been worked out and applied on the average loan during the year to arrive at the interest on loan; and
- (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 will be considered at the time of truing up.
- 24. Based on the above, the year-wise details of interest worked out are given hereunder:

					( <b>₹</b> in la	akh)
Details of loan	As on 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	44602.89	44602.89	44781.47	45370.68	45370.68	45370.68
Cumulative repayment up to previous year		3390.66	6732.71	10102.28	13493.88	16885.49
Net Loan-Opening		41212.23	38048.76	35268.40	31876.80	28485.19
Addition due to additional capitalisation		178.58	589.21	0.00	0.00	0.00
Repayment during the year		3342.05	3369.57	3391.60	3391.60	3391.60
Net loan-closing		38048.76	35268.40	31876.80	28485.19	25093.59
Average Loan		39630.49	36658.58	33572.60	30181.00	26789.39
Weighted Average rate of interest on loan		8.7114%	8.7271%	8.7348%	8.7398%	8.7445%
Interest		3452.38	3199.24	2932.49	2637.76	2342.59

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

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# **DEPRECIATION**

26. Regulation 17 of the 2009 regulations provides for computation of

depreciation in the following manner:

"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."

27. MSEDCL has submitted that deprecation has not claimed as per the

2009 regulations and petitioner should clarified the claim towards recovery

of depreciation after achieving the useful life of the assets. In response, the

petitioner has clarified that the deprecation has been calculated annually

as per Regulation 17 of the 2009 regulations. It has been further submitted by

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the petitioner that wherever, the assets are combined for the purpose of calculating the transmission charges, the date of commercial operation of the element commissioned at the latest becomes the notional date of commercial operation of the combined assets. However useful life of equipment in transmission line and sub-station and the depreciation of the individual assets being combined shall continue to be governed by the respective actual date of the commercial operation of the asset only. After completion of technical life of various equipment starting from the actual date of commercial operation of the individual asset, full depreciation would deemed to be recovered and the balance depreciation will be applicable for the remaining assets. It is clarified that the transmission assets were notionally declared under commercial operation w.e.f. 1.2.2008 and accordingly 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 of the 2009 regulations. Accordingly, depreciation works out is as under:

					(₹ ir	n lakh)
Details of loan		2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on 31.3.2009	63718.32	63718.32	63973.43	64815.16	64815.16	64815.16
Addition during 2009-14		255.11	841.73	0.00	0.00	0.00
due to projected						
Additional Capitalisation						
Average Gross Block		63973.43	64815.16	64815.16	64815.16	64815.16
Gross block as on 31.3.2009		63845.88	64394.30	64815.16	64815.16	64815.16
Rate of depreciation		5.2346%	5.2327%	5.2327%	5.2327%	5.2327%
Depreciable Value	90%	57427.03	57920.61	58299.39	58299.39	58299.39
Remaining depreciable		54036.37	51187.90	48197.11	44805.51	41413.90
Value						
Depreciation		3342.05	3369.57	3391.60	3391.60	3391.60

# **OPERATION & MAINTENANCE EXPENSES**

28. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV D/C twin conductor transmission line, 400 kV and 220 kV bays have been specified for O & M expenses:

	Year						
	2009-10	2010-11	2011-12	2012-13	2013-14		
400 kV D/C twin conductor transmission line (₹ in lakh per ckt/km)	0.627	0.663	0.701	0.741	0.783		
400 kV bay (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46		
220 kV bay (₹ in lakh per bay)	36.68	37.78	41.00	43.34	45.82		

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

				( <b>₹</b> i	n lakh)
	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M for 400 kV D/C twin conductor	344.81	364.61	385.50	407.50	430.60
transmission line (549.934 ckt/km)					
O & M for 400 kV bays (18 bays)	943.20	997.20	1054.26	1114.56	1178.26
O & M for 220 kV bays (9 bays)	330.12	349.02	369.00	390.06	412.38
Total	1618.13	1710.83	1808.76	1912.12	2021.26

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 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**

31. 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 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) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses specified in Regulation 19. 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 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

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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.

32. The computations in support of interest on working capital are given as under:

					(₹ in lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	242.72	256.62	271.31	286.82	303.19
O & M expenses	134.84	142.57	150.73	159.34	168.44
Receivables	2008.86	1991.59	1970.85	1938.79	1907.67
Total	2,386.42	2,390.78	2,392.89	2,384.95	2,379.29
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	292.34	292.87	293.13	292.16	291.46

# **TRANSMISSION CHARGES**

The transmission charges being allowed for the transmission asset are 33. summarised below:

				(₹ in lakh)			
	2009-10	2010-11	2011-12	2012-13	2013-14		
Depreciation	3342.05	3369.57	3391.60	3391.60	3391.60		
Interest on Loan	3452.38	3199.24	2932.49	2637.76	2342.59		
Return on Equity	3348.26	3377.02	3399.09	3399.09	3399.09		
Interest on Working Capital	292.34	292.87	293.13	292.16	291.46		
O & M Expenses	1618.13	1710.83	1808.76	1912.12	2021.26		
	12053.15	11949.53	11825.07	11632.73	11446.00		

# Application fee and the publication expenses

34. MSEDCL has submitted that the claim of filing fee should be dealt as per the decision taken by Commission vide order dated 11.9.2008 in Petition No. 129/2005 (Suo motu). 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

Order in Petition No. 243/2010

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.

35. 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

36. MSEDCL has submitted that the Government of India vide its notification dated 27.2.2010 has categorically exempted transmission services from the purview of levy of service tax in the public interest. Therefore, the petitioner's presumption of withdrawal of exemption of service tax and making future provision at this is not justified. It is clarified that the prayer of the petitioner for reimbursement of service tax has become infructuous as transmission service has been exempted from the ambit of the service tax.

#### Licence fee

37. MSEDCL has submitted that the petitioner should explain the provision of the 2009 regulation under which license fee is allowed. In response, the petitioner has submitted that license fee has been a new component of cost to the transmission licensee under O & M stage of the project and has become incidental to the petitioner/CTU only from 2008-09. Normative O & M rates arrived for the period 2009-14 in the 2009 regulation as such did not capture the costs associated with licence fee. It is clarified that a view in the matter is yet to taken by the Commission.

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38. 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.

39. This order disposes of Petition No. 243/2010.

Sd/-	Sd/-	Sd/-
(M.Deena Dayalan)	(V.S.Verma)	(S.Jayaraman)
Member	Member	Member



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#### Annexure

#### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	Details of Loan	2009-10	2010-11	2011-12	2012-13	(₹ in lakh) 2013-14		
1	Bond- XVIII	2007 10	2010 11	2011 12		2010 11		
-	Gross loan opening	19117.00	19117.00	19117.00	19117.00	19117.00		
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	1593.08	3186.17	4779.25	6372.33		
	Net Loan-Opening	19117.00	17523.92	15930.83	14337.75	12744.67		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	1593.08	1593.08	1593.08	1593.08	1593.08		
	Net Loan-Closing	17523.92	15930.83	14337.75	12744.67	11151.58		
	Average Loan	18320.46	16727.38	15134.29	13541.21	11948.13		
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%		
	Interest	1493.12	1363.28	1233.44	1103.61	973.77		
	Rep Schedule			nstalments fro		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
2	Bond- XX							
	Gross loan opening	12039.00	12039.00	12039.00	12039.00	12039.00		
	Cumulative Repayment up to the date of	0.00	0.00	1003.25	2006.50	3009.75		
	commercial operation /previous year	0.00	0.00	1003.23	2000.30			
	Net Loan-Opening	12039.00	12039.00	11035.75	10032.50	9029.25		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	1003.25	1003.25	1003.25	1003.25		
	Net Loan-Closing	12039.00	11035.75	10032.50	9029.25	8026.00		
	Average Loan	12039.00	11537.38	10534.13	9530.88	8527.63		
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%		
	Interest	1075.08	1030.29	940.70	851.11	761.52		
	Rep Schedule		12 annual ir	nstalments fr	om 7.9.2010			
3	Bond- XXIV (For ACE) (Date of Drawal 26.03.2007)							
	Gross loan opening	2675.00	2675.00	2675.00	2675.00	2675.00		
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	222.92	445.83	668.75		
	Net Loan-Opening	2675.00	2675.00	2452.08	2229.17	2006.25		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	222.92	222.92	222.92	222.92		
	Net Loan-Closing	2675.00	2452.08	2229.17	2006.25	1783.33		
	Average Loan	2675.00	2563.54	2340.63	2117.71	1894.79		
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%		
	Interest	266.16	255.07	232.89	210.71	188.53		
	Rep Schedule			Annual Instalments from 26.3.20				
	Short Term Bridge Loan SBI @ 7.95% w.e.f. 24.08.2007 to 06.03.2008, Replaced by Bond XXVI @ 9.3%							
	from 07.03.2008 (ADD Cap for 2007-08)							
4		3953.00	3953.00	3953 00	3953.00	3053 00		
4	Gross loan opening	3953.00	3953.00	3953.00	3953.00	3953.00		
4	Gross loan opening Cumulative Repayment up to the date of	3953.00 0.00	3953.00 0.00	3953.00 0.00	3953.00 329.42	3953.00 658.83		
4	Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	329.42	658.83		
4	Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening	0.00 3953.00	<b>0.00</b> 3953.00	<b>0.00</b> 3953.00	<b>329.42</b> 3623.58	<b>658.83</b> 3294.17		
4	Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year	0.00 3953.00 0.00	0.00 3953.00 0.00	0.00 3953.00 0.00	<b>329.42</b> 3623.58 0.00	<b>658.83</b> 3294.17 0.00		
4	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 3953.00 0.00 0.00	0.00 3953.00 0.00 0.00	0.00 3953.00 0.00 329.42	<b>329.42</b> 3623.58 0.00 329.42	<b>658.83</b> 3294.17 0.00 329.42		
4	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 3953.00 0.00 0.00 3953.00	0.00 3953.00 0.00 0.00 3953.00	0.00 3953.00 0.00 329.42 3623.58	<b>329.42</b> 3623.58 0.00 329.42 3294.17	<b>658.83</b> 3294.17 0.00 329.42 2964.75		
4	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 3953.00 0.00 0.00 3953.00 3953.00	0.00 3953.00 0.00 0.00 3953.00 3953.00	0.00 3953.00 0.00 329.42 3623.58 3788.29	<b>329.42</b> 3623.58 0.00 329.42 3294.17 3458.88	658.83 3294.17 0.00 329.42 2964.75 3129.46		
4	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 3953.00 0.00 0.00 3953.00	0.00 3953.00 0.00 0.00 3953.00	0.00 3953.00 0.00 329.42 3623.58	<b>329.42</b> 3623.58 0.00 329.42 3294.17	658.83		

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5	Bond XXVIII (ADD Cap for 2008-09 DRAWL on 31.03.2009)						
	Gross loan opening	1124.00	1124.00	1124.00	1124.00	1124.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	93.67	
	Net Loan-Opening	1124.00	1124.00	1124.00	1124.00	1030.33	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	93.67	93.67	
	Net Loan-Closing	1124.00	1124.00	1124.00	1030.33	936.67	
	Average Loan	1124.00	1124.00	1124.00	1077.17	983.50	
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%	
	Interest	104.87	104.87	104.87	100.50	91.76	
	Rep Schedule	1	2 Annual inst	talments fro	m 15.12.2012		
6	Bond XXIX ( ADD Cap for 2008-09 DRAWL on 31.03.2009)						
	Gross loan opening	932.00	984.00	984.00	984.00	984.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	82.00	
	Net Loan-Opening	932.00	984.00	984.00	984.00	902.00	
	Additions during the year	52.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	82.00	82.00	
	Net Loan-Closing	984.00	984.00	984.00	902.00	820.00	
	Average Loan	958.00	984.00	984.00	943.00	861.00	
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%	
	Interest	88.14	90.53	90.53	86.76	79.21	
	Rep Schedule		12 Annual ins	stalments fro	m 12.3.2013		
7	Bond XXI						
	Gross loan opening	520.00	520.00	520.00	520.00	520.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	43.33	86.67	130.00	
	Net Loan-Opening	520.00	520.00	476.67	433.33	390.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	43.33	43.33	43.33	43.33	
	Net Loan-Closing	520.00	476.67	433.33	390.00	346.67	
	Average Loan	520.00	498.33	455.00	411.67	368.33	
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%	
	Interest	45.40	43.50	39.72	35.94	32.16	
	Rep Schedule	12 Annual instalments from 11.10.2010					
8	Bond XXII						
	Gross loan opening	1204.00	1204.00	1204.00	1204.00	1204.00	
	Cumulative Repayment up to the date of commercial operation/previous year	0.00	0.00	100.33	200.67	301.00	
	Net Loan-Opening	1204.00	1204.00	1103.67	1003.33	903.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	100.33	100.33	100.33	100.33	
	Net Loan-Closing	1204.00	1103.67	1003.33	903.00	802.67	
	Average Loan	1204.00	1153.83	1053.50	953.17	852.83	
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%	
	Interest	104.51	100.15	91.44	82.73	74.03	
	Rep Schedule		12 Annual ins	stalments fro	m 7.12.2010		
9	Bond XXIII						
	Gross loan opening	1617.00	1617.00	1617.00	1617.00	1617.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	134.75	269.50	404.25	
	Net Loan-Opening	1617.00	1617.00	1482.25	1347.50	1212.75	



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	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	134.75	134.75	134.75	134.75
	Net Loan-Closing	1617.00	1482.25	1347.50	1212.75	1078.00
	Average Loan	1617.00	1549.63	1414.88	1280.13	1145.38
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	149.57	143.34	130.88	118.41	105.95
	Rep Schedule	1	12 Annual ir	nstalments fro	om 9.2.2011	
10	Bond XXXI (Add Cap for 2009-10 Drawl on 31.03.2010)					
	Gross loan opening	0.00	41.58	41.58	41.58	41.58
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	41.58	41.58	41.58	41.58
	Additions during the year	41.58	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	3.47
	Net Loan-Closing	41.58	41.58	41.58	41.58	38.12
	Average Loan	20.79	41.58	41.58	41.58	39.85
	Rate of Interest	8.90%	8.90%	8.90%	8.90%	8.90%
	Interest	1.85	3.70	3.70	3.70	3.55
	Rep Schedule		12 Annual in	stalments fro	om 25.2.2014	
11	Bond XXX (Add Cap for 2009-10 drawl on 31.03.2010)					
	Gross loan opening	0.00	85.00	85.00	85.00	85.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	85.00	85.00	85.00	85.00
	Additions during the year	85.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	7.08
	Net Loan-Closing	85.00	85.00	85.00	85.00	77.92
	Average Loan	42.50	85.00	85.00	85.00	81.46
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	3.74	7.48	7.48	7.48	7.17
	Rep Schedule		12 Annual in	stalments fro	om 29.9.2013	
	Total Loan					
	Gross loan opening	43181.00	43359.58	43359.58	43359.58	43359.58
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	1593.08	4690.75	8117.83	11720.58
	Net Loan-Opening	43181.00	41766.50	38668.83	35241.75	31639.00
	Additions during the year	178.58	0.00	0.00	0.00	0.00
	Repayment during the year	1593.08	3097.67	3427.08	3602.75	3613.30
	Net Loan-Closing	41766.50	38668.83	35241.75	31639.00	28025.70
	Average Loan	42473.75	40217.66	36955.29	33440.37	29832.35
	Weighted Average Rate of Interest	8.7114%	8.7271%	8.7348%	8.7398%	8.7445%
	Interest	3700.06	3509.85	3227.96	2922.62	2608.68



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