CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 341/2010

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

DATE OF HEARING: 25.1.2011 DATE OF ORDER: 9.5.2011

In the matter of

Petition for approval of revised transmission tariff for ATS of Kopili-Khandong [Additional Transmission Gohpur-Itanagar (ATGI)] in North Eastern Region from 1.4.2004 to 31.3.2009.

And in the matter of

Power Grid Corporation of India Ltd., Gurgaon Petitioner Vs

- 1. Assam State Electricity Board, Guwahati
- 2. Meghalaya State Electricity Board, Shillong
- 3. Government of Arunachal Pradesh, Itanagar
- 4. Power and Electricity Department, Govt of Mizoram, Aizawl
- 5. Electricity Department, Govt of Manipur, Imphal
- 6. Department of Power, Govt of Nagaland, Kohima
- 7. Tripura State Electricity Corporation Limited, Agartala .. **Respondents**

The following were present:

- 1. Shri Rajeev Gupta, PGCIL
- 2. Shri M.M. Mondal, PGCIL
- 3. Shri Rakesh Prasad, PGCIL

ORDER

The present petition has been filed for approval of revision of transmission tariff for ATS of Kopili-Khandong (hereinafter referred to as "the transmission system")[Additional Transmission Gohpur-Itanagar (ATGI)] in North Eastern Region from 1.4.2004 to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. The petitioner has made the following prayers:-

- (i) Approve the revised transmission tariff on account of refinancing of Government of India loan with LIC-III loan during the years 2007-08 and 2008-09; and
- (ii) Approve the reimbursement of expenditure by the beneficiaries towards filing and licence fee.
- 2. The impact of refinancing of LIC loan in place of Government of India loan has been considered in the present petition. As replacement of loan took place in the financial year 2007-08, there is no impact on transmission charges up to 31.3.2007. Thus, the transmission charges approved vide order dated 21.8.2009 hold good for the years 2004-05, 2005-06 and 2006-07. The transmission charges for the years 2007-08 and 2008-09 have been reconsidered after considering the impact during the years 2007-08 and 2008-09.
- 3. The annual transmission charges up to 31.3.2009 in respect of the transmission system were approved vide order dated 21.8.2009 in Petition No. 90/2006. The summary of the transmission charges approved by the said order dated 21.8.2009 is given as under:

(₹ in lakh)

		2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation		149.54	149.55	149.55	149.55	100.77
Interest on Loan		106.97	76.75	46.20	15.47	0.00
Return on Equity		387.42	387.51	387.51	387.51	387.51
Advance against		0.00	0.00	0.00	0.00	0.00
Depreciation						
Interest on Working		48.50	49.70	50.99	52.32	53.20
Capital						
O & M Expenses		993.49	1033.32	1075.09	1117.24	1162.69
1	Total	1685.92	1696.83	1709.34	1722.08	1704.18

4. The petitioner has claimed the transmission charges for the years 2007-08 and 2008-09 as under:

	(₹ in lakh)		
	2007-08	2008-09	
Depreciation	149.55	100.77	
Interest on Loan	14.10	1.62	
Return on Equity	387.51	387.51	
Advance against Depreciation	0.00	0.00	
Interest on Working Capital	52.30	53.23	
O & M Expenses	1117.24	1162.69	
Total	1720.70	1705.82	

5. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given hereunder:

	(₹ in lakh)		
	2007-08	2008-09	
Maintenance Spares	130.33	138.15	
O & M expenses	93.10	96.89	
Receivables	286.78	284.30	
Total	510.21	519.34	
Rate of Interest	10.25%	10.25%	
Interest on Working Capital	52.30	53.23	

6. Reply to the petition has been filed by Assam State Electricity Board (ASEB). ASEB in its reply has submitted that the claim of the petitioner is subject to its admissibility after prudence check. It has been submitted that over realization during 2007-08 and 2008-09 should be passed on to the beneficiary States with the interest as per Regulations 5A of the 2004 regulations. It has been further submitted that expenditure on filing fee and licence fee should not be reimbursed being part of the O & M expenditure. It is clarified that transmission

charges during the years 2007-08 and 2008-09 are being revised after prudence check.

8. Having considered the submissions of the ASEB and examined the material on record, we proceed to dispose of the petition.

CAPITAL COST

9. The petitioner has claimed the capital expenditure of ₹ 5537.51 lakh as on 1.4.2007, which was admitted vide order dated 21.8.2009 in Petition No. 90/2006. The petitioner has further considered the additional capital expenditure as admitted vide order dated 21.8.2009 in Petition No. 90/2006. The same capital expenditure has been considered for the purpose of tariff in present petition.

DEBT- EQUITY RATIO

9. The petitioner has claimed tariff based on debt-equity ratio of 50:50 as considered by the Commission in its order dated 21.8.2009 in Petition No. 90/2006. The same debt-equity ratio has been considered for the purpose of revision of tariff. Accordingly, equity of ₹ 2767.93 lakh has been considered for the transmission system during the years 2007-08 and 2008-09.

RETURN ON EQUITY

10. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in

accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

11. Equity as given in para 9 above has been considered. As there has been no impact of swapping of loan on equity, return on equity of ₹ 387.51 lakh for the years 2007-08 and 2008-09, approved vide order dated 21.8.2009 in Petition No. 90/2006 has been considered for the purpose of tariff.

INTEREST ON LOAN

- 12. Clause (i) of Regulation 56 of the 2004 regulations *inter-alia* provides as under:-
 - "(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.
 - (b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.
 - (c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries."
- 13. The interest on loan has been worked out as detailed below:
 - (i) Interest on loan has been worked out as per the previous order dated 21.8.2009 in Petition No. 90/2006;

- (ii) Government of India loan with 14.59% interest rate has been replaced with LIC-III loan with 10.00% interest rate. Government of India loan was getting repaid during 2007-08;
- (iii) LIC-III loan to the tune of ₹4931.83 lakh was drawn on 13.9.2007 and ₹0.80 lakh was apportioned against the asset under this petition. As per the loan agreement dated 3.8.2007 submitted by the petitioner, repayment of loan was started with effect from 31.3.2008 which is repayable in 10 annual instalments;
- (iv) Weighted average rate of interest on actual loan has been worked out and has been applied on the notional loan during the year to arrive at the interest on loan.
- 14. It can be seen that in the previous calculations, interest on normative loan was ₹ 15.47 lakh for the year 2007-08 and `nil` for the year 2008-09. However, after replacement of Government of India loan by LIC-III in the year 2007-08, interest on loan has been worked out to ₹14.10 lakh and ₹1.62 lakh for the years 2007-08 and 2008-09, respectively. This is due to the fact that, prior to the replacement of loan, entire normative loan had been paid off in the year 2007-08 and, depreciation was computed as per Regulation 56(ii)(a) and (iii) of the 2004 regulations which provides that "On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life

of the asset". However, in the present petition, due to replacement of Government of India loan by LIC-III, normative loan is getting repaid in the year 2008-09.

15. The detailed calculations in support of the weighted average rates of interest on loan have been computed as per the **Annexure** attached to this order. Based on the above, interest on loan has been worked out for the years 2007-08 and 2008-09 are given hereunder:

	(₹ in lakh)		
	2007-08	2008-09	
Gross Normative Loan	2769.58	2769.58	
Cumulative Repayment up to Previous Year	2587.63	2737.18	
Net Loan-Opening	181.95	32.40	
Repayment during the year	149.55	32.40	
Net Loan-Closing	32.40	0.00	
Average Loan	107.18	16.20	
Weighted Average Rate of Interest on Loan	13.16%	10.00%	
Interest	14.10	1.62	

DEPRECIATION

- 16. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:
 - "(i) The value base for the purpose of depreciation shall be the historical cost of the asset.
 - (ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.

- (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 17. The petitioner has replaced Government of India loan with LIC-III loan. As per the order dated 21.8.2009 in Petition No. 90/2006, the notional loan repayment for year 2007-08 and onwards is zero. Hence, depreciation was spread over to the remaining useful life of the asset. However, with the replacement of Government of India loan by LIC-III, normative loan gets repaid in the year 2008-09.
- 18. The petitioner has considered the depreciation for the year 2008-09 as per the earlier order dated 21.8.2009 in Petition No. 90/2006. Therefore, there is a difference in depreciation amount as claimed by the petitioner and as per our calculation.
- 19. Depreciation allowed has been worked out as under:

	(₹ in lakh)		
Details of Depreciation	2007-08	2008-09	
Gross block as on the date of	5537.51	5537.51	
commercial operation			
Gross block as on 31.3.2004	5537.51	5537.51	
Average gross block	-	-	
Rate of Depreciation	2.701%	2.701%	
Depreciable Value (90%)	4973.41	4973.41	
Elapsed Life	-	-	
Balance Useful life of the asset	-	-	
Remaining Depreciable Value	1661.12	1511.57	
Depreciation	149.55	149.60	

ADVANCE AGAINST DEPRECIATION

20. Petitioner has not claimed advance against depreciation.

Therefore, the advance against depreciation works out to `nil`.

OPERATION & MAINTENANCE EXPENSES

21. The O&M expenses as taken for the tariff calculations as per order dated 21.8.2009 in Petition No. 90/2006 has been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

- 22. The components of the working capital and the interest thereon are discussed hereunder:
 - (i) Maintenance spares: Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. Accordingly, maintenance spares have been worked out on the historical cost and by providing escalation from the date of commercial operation.
 - (ii) O & M expenses: Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. O&M expenses as considered in the order dated 21.8.2009 in Petition No. 90/2006 have been considered.

- (iii) Receivables: As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months' average billing calculated on target availability level. Accordingly, in the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.
- (iv) Rate of interest on working capital: As per Regulation 56 (v) (2) of the 2004 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 1.4.2004 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding whether or not the transmission licensee has taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2004, which is in accordance with the 2004 regulations and has been allowed.
- 23. It can be seen that the Commission vide order dated 21.8.2009 in Petition No. 90/2006 allowed the transmission charges of ₹1722.08 lakh and ₹ 1704.18 lakh for the years 2007-08 and 2008-09 respectively. However, after replacement of Government of India loan by LIC-III in the

year 2007-08, annual transmission charges has been worked out to ₹ 1720.70 lakh and ₹ 1755.50 lakh for the years 2007-08 and 2008-09, respectively.

- 24. It is observed that there is a decrease of ₹ 1.38 lakh in annual transmission charges for the year 2007-08 due to replacement of Government of India loan by LIC-III. However, there is an increase of ₹ 51.32 lakh in annual transmission charges for the year 2008-09. This is due to the fact that, prior to the replacement of loan, entire normative loan had been paid off in the year 2007-08 and, depreciation was computed as per Regulation 56(ii)(a) and (iii) of the 2009 regulations. However, in the present petition, due to replacement of GOI loan by LIC-III, normative loan has been repaid in the year 2008-09.
- 25. The necessary computations in support of interest on working capital are as under:

	(₹ in lakh)		
	2007-08	2008-09	
Maintenance Spares	130.33	138.15	
O & M expenses	93.10	96.89	
Receivables	286.78	292.58	
Total	510.22	527.63	
Rate of Interest	10.25%	10.25%	
Interest on Working Capital	52.30	54.08	

TRANSMISSION CHARGES

26. The revised transmission charges being allowed for the transmission asset for the years 2007-08 and 2008-09 are summarised below:

(₹ in lakh) 2007-08 2008-09 149.55 149.60 Depreciation 14.10 Interest on Loan 1.62 Return on Equity 387.51 387.51 Advance against Depreciation 0.00 0.00 Interest on Working Capital 52.30 54.08 O & M Expenses 1117.24 1162.69

Total

27. The petitioner shall adjusted the transmission charges awarded vide order dated 21.8.2009 in Petition No. 90/2006 in one installment. These charges shall be shared in accordance with the 2004 regulations

1720.70

1755.50

- 28. The petitioner has also sought reimbursement of filing fee paid. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (suo-motu) has decided that the petitioner shall not be allowed reimbursement of the petition filing fee. The decision on reimbursement of the licence fee shall be communicated separately.
- 29. This order disposes of Petition No. 341/2010.

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

<u>Annexure</u>

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	(k in lakh)					
	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	NHPC BOND					
	Gross Loan opening	2.05	2.05	2.05	2.05	2.05
	Cumulative Repayment up to DOCO/previous year	2.05	2.05	2.05	2.05	2.05
	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					
	Interest	0.00	0.00	0.00	0.00	0.00
2	GOI loan replaced by LIC-III loan w.e.f.2007-08					
	Gross Loan opening	10.18	10.18	10.18	10.18	10.18
	Cumulative Repayment up to DOCO/previous year	7.01	7.80	8.59	9.38	9.47
	Net Loan-Opening	3.17	2.38	1.59	0.80	0.71
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.79	0.79	0.79	0.09	0.12
	Net Loan-Closing	2.38	1.59	0.80	0.71	0.59
	Average Loan	2.78	1.99	1.20	0.75	0.65
	Rate of Interest	17.00%	17.00%	17.00%	13.1567%	10.00%
	Interest	0.47	0.34	0.20	0.10	0.06
	Repayment schedule	Repayment w.e.f. 31.3.2008 in 10 instalments as per LIC-III Loan Agreement.				per LIC-III
	Total Loan					
	Gross Loan opening	12.23	12.23	12.23	12.23	12.23
	Cumulative Repayment up to DOCO/previous year	9.06	9.85	10.64	11.43	11.52
	Net Loan-Opening	3.17	2.38	1.59	0.80	0.71
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.79	0.79	0.79	0.09	0.12
	Net Loan-Closing	2.38	1.59	0.80	0.71	0.59
	Average Loan	2.78	1.99	1.20	0.75	0.65
	Rate of Interest	17.00%	17.00%	17.00%	13.1567%	10.00%
	Interest	0.47	0.34	0.20	0.10	0.06