

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

- 1. Shri A.K.Basu, Chairperson**
- 2. Shri Bhanu Bhushan, Member**
- 3. Shri A.H. Jung, Member**

**I.A.No. 3/2007 in  
Petition No.118/2005**

**In the matter of**

Approval of transmission charges for Series Compensation on Panki-Muradnagar 400 kV S/C line of UPPCL in Northern Region for the period from 1.4.2004 to 31.3.2009 .

**And in the matter of**

Power Grid Corporation of India Limited, Gurgaon

**..Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
8. Power Development Department, Govt. of J&K, Srinagar
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Ltd, New Delhi
11. Chandigarh Administration, Chandigarh
12. Uttranchal Power Corporation Ltd, Dehradun
13. North Central Railway, Allahabad

**.....Respondents**

**ORDER**

The Commission by its order dated 19.6.2006 had allowed tariff for Series Compensation on Panki-Muradnagar 400 kV S/C line of UPPCL in Northern Region for the period from 1.4.2004 to 31.3.2009.

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2. The Commission in its said order dated 19.6.2006, approved the additional capitalization of Rs. 0.20 lakh during 2004-05, but had not considered the additional capitalization amount for determination of tariff since by the time the petitioner had not furnished the details of loan reconciliation for the year 2004-05. The tariff for the block years 2004-09 was worked out on the basis of gross block of Rs.1273.02 lakh as on 1.4.2004. The petitioner was granted liberty to approach the Commission for revision of tariff for period 2004-09 in accordance with law based on additional capital expenditure incurred during 2004-05.

3. Through this Interlocutory application, petitioner has prayed for revision of tariff based on additional capitalization incurred during 2004-05.

#### **CAPITAL COST**

4. The petitioner has claimed tariff based on capital cost of Rs. 1273.22 lakh after accounting for additional capitalization of Rs. 0.20 lakh for the period from 1.4.2004 to 31.3.2005 already approved, over the capital expenditure of Rs. 1273.02 lakh considered in the order dated 19.6.2006 in Petition No. 118/2005.

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

5. Clause (1) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(1) In case of the existing projects, debt–equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the

Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-

- (a) 30% of the additional capital expenditure admitted by the Commission, or
  - (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
  - (c) actual equity employed,
- whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may considered equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

6. The Note 1 below Regulation 53 lays down that any expenditure on account of committed liabilities within the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

7. The petitioner has claimed tariff based on debt-equity ratio of 71.04:28.96 as considered by the Commission in its order dated 19.6.2006 *ibid*. The petitioner has further considered the entire amount of additional capitalization against equity. The approved debt-equity ratio as indicated by the petitioner is 80:20. The additional capital expenditure of Rs. 0.20 lakh for the year 2004-05 has been segregated in the debt-equity ratio of 80:20. Accordingly, an amount of Rs. 0.16 lakh has been aggregated to loan and Rs. 0.04 lakh to equity. For the purpose of tariff, an amount of Rs.368.71 lakh has been considered as equity as on 1.4.2005. The resultant debt-equity ratio materially remains the same as considered in the order dated 19.6.2006, that is, 71.04:28.96. Based on this, the tariff approved under order dated 19.6.2006 is being revised.

## **RETURN ON EQUITY**

8. The petitioner has claimed return on equity of Rs. 385.22 lakh, which includes equity amounting to Rs. 0.20 lakh, on account of capital expenditure incurred from 1.4.2004 to 31.3.2005. Since the additional capital expenditure Rs. 0.20 lakh has been adjusted against loan and equity, for the reasons recorded in para 7 above, equity of Rs.368.71 lakh has been considered for the purpose of return on equity. Accordingly, the petitioner shall be entitled to return on equity of Rs. 51.62 lakh each year during the tariff period.

## **INTEREST ON LOAN**

9. Based on the revised capital cost, the year-wise details of interest on loan worked out are given hereunder:

(Rs. in lakh)

<b>Details of loan</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Interest on Loan</b>					
Gross loan as per order dated 19.6.2006		904.35			
Addition due to additional capitalisation up to 31.3.2005		0.16			
Gross Normative Loan	904.51	904.51	904.51	904.51	904.51
Addition due to additional capitalization	0.00	45.74	91.49	137.24	203.71
Cumulative Repayment up to Previous Year	904.35	858.77	813.02	767.27	700.80
Net Loan-Opening	0.16				
Repayment during the year	45.74	45.75	45.75	66.47	66.47
Net Loan-Closing	858.77	813.02	767.27	700.80	634.33
Average Loan	881.56	835.89	790.15	734.04	667.56
Weighted Average Rate of Interest on Loan	7.3453%	7.3280%	7.2963%	7.2713%	7.2633%
<b>Interest</b>	<b>64.75</b>	<b>61.25</b>	<b>57.65</b>	<b>53.37</b>	<b>48.49</b>

## **DEPRECIATION**

10. Depreciation works out to Rs. 45.74 lakh for the year 2004-05 on average gross block of Rs. 1273.12 lakh and Rs. 45.75 lakh on gross block of Rs. 1273.22 lakh each year by applying rate of depreciation of 3.5930% as shown below:

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(Rs. in lakh)

<b>Details of Depreciation</b>		<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
As per order dated 19.6.2006		1273.02				
Additions during 2004-05 due to Additional Capitalisation		0.20				
Gross Block at the end of the year		1273.22	1273.22	1273.22	1273.22	1273.22
Rate of Depreciation		3.5930%	3.5930%	3.5930%	3.5930%	3.5930%
Depreciable Value	90%	1143.68	1143.68	1143.68	1143.68	1143.68
Balance Useful life of the asset		-	-	-	-	-
Remaining Depreciable Value		1135.97	1090.40	1044.65	998.91	939.97
<b>Depreciation</b>		<b>45.74</b>	<b>45.75</b>	<b>45.75</b>	<b>45.75</b>	<b>45.75</b>

### **ADVANCE AGAINST DEPRECIATION**

11. The petitioner's entitlement to Advance Against Depreciation has also been reworked out and the relevant details are reproduced hereunder:

(Rs. in lakh)

<b>Details of Advance Against Depreciation</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
1/10th of Gross Loan(s)	90.44	90.45	90.45	90.45	90.45
Repayment of Loan	45.74	45.75	45.75	66.47	66.47
Minimum of the above	45.74	45.75	45.75	66.47	66.47
Depreciation during the year	45.74	45.75	45.75	45.75	45.75
(A) Difference	0.00	0.00	0.00	20.73	20.73
Cumulative Repayment of the Loan	45.74	91.49	137.24	203.71	270.18
Cumulative Depreciation/ Advance against Depreciation	53.27	99.02	144.77	190.51	249.46
(B) Difference	(-7.53)	(-7.53)	(-7.53)	13.20	20.73
<b>Advance Against Depreciation Minimum of (A) and (B)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>13.20</b>	<b>20.73</b>

### **OPERATION & MAINTENANCE EXPENSES**

12. There is no change in O & M expenses approved under order dated 19.6.2006.

### **INTEREST ON WORKING CAPITAL**

13. The revised computations in support of interest on working capital consequent to increase in return on equity, interest on loan and depreciation are appended hereinbelow.

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(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	12.69	13.45	14.26	15.12	16.02
O & M expenses	2.34	2.44	2.54	2.64	2.74
Receivables	32.52	32.13	31.74	33.47	34.15
Total	47.55	48.02	48.53	51.22	52.92
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
<b>Interest</b>	<b>4.87</b>	<b>4.92</b>	<b>4.97</b>	<b>5.25</b>	<b>5.42</b>

### **TRANSMISSION CHARGES**

14. A summary sheet showing the revised basic details of capital cost and other related aspects is annexed to this order. The revised transmission charges being allowed for the transmission assets in suppression of the transmission charges approved under order dated 19.6.2006 are summarised below.

(Rs. In lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	45.74	45.75	45.75	45.75	45.75
Interest on Loan	64.75	61.25	57.65	53.37	48.49
Return on Equity	51.62	51.62	51.62	51.62	51.62
Advance against Depreciation	0.00	0.00	0.00	13.20	20.73
Interest on Working Capital	4.87	4.92	4.97	5.25	5.42
O & M Expenses	28.12	29.25	30.42	31.63	32.90
<b>Total</b>	<b>195.11</b>	<b>192.79</b>	<b>190.41</b>	<b>200.82</b>	<b>204.90</b>

15. In all other respects the order dated 19.6.2006 shall continue to apply.

16. This order disposes of I.A.No.3/2007.

Sd-/  
**(A.H. JUNG)**  
**MEMBER**

sd-/  
**(BHANU BHUSHAN)**  
**MEMBER**

sd-/  
**(ASHOK BASU)**  
**CHAIRPERSON**

**New Delhi dated the 25<sup>th</sup> January 2007**

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Summary Sheet					
<b>Name of the Company:</b>		PGCIL			
<b>Name of the Element:</b>		Series compensation on Panki-Muradnagar 400 KV S/C Line of UPPCL in Northern Region			
<b>Actual DOCO:</b>		1.2.2004			
<b>Petition No.:</b>		118/2005			
<b>Tariff setting Period:</b>		2004-09			
(Rs.in lakh)					
<b>1</b>	<b>Capital Cost of the Project as on DOCO</b>				<b>1256.67</b>
<b>2</b>	<b>Additional Capitalisation during 2003-04</b>				16.35
<b>3</b>	<b>Admitted Capital Cost as on 1.4.2004 (1+2)</b>				<b>1273.02</b>
<b>4</b>	<b>Additional Capitalisation during 2004-09</b>				0.20
	For the year 2004-05			0.20	
	Total			0.20	
<b>5</b>	<b>Admitted Capital Cost as on 1.4.2005(3+4)</b>				<b>1273.22</b>
<b>6</b>	<b>Means of Finance :</b>				
		<b>As on 1-4-2004</b>		<b>As on 1-4-2005</b>	
	Debt	71.04%	904.35	71.04%	904.51
	Equity	28.96%	368.67	28.96%	368.71
	Total	100.00%	1273.02	100.00%	1273.22
<b>7</b>	<b>Gross Loan</b>				
	<b>As on 01.04.2004</b>		<b>904.35</b>	<b>As on 1.4.2005</b>	<b>904.51</b>
<b>8</b>	<b>Cumulative Repayment up to 31.3.2009 :</b>				<b>270.18</b>
	Repaid up to 31.3.2004			0.00	
	1.4.2004 to 31.3.2005			45.74	
	1.4.2005 to 31.3.2009			224.44	
	Total			270.18	
<b>9</b>	<b>Balance Loan to be repaid beyond 31.3.2009 :</b>				<b>634.33</b>
<b>10</b>	<b>Depreciation recovered up to 31.3.2009 :</b>				<b>270.18</b>
		<b>Dep</b>		<b>AAD</b>	<b>Total</b>
	Recovered up to 31.3.2004	7.53		0.00	7.53
	1.4.2004 to 31.3.2005	45.74		0.00	45.74
	1.4.2005 to 31.3.2009	182.99		33.92	216.91
	Total				270.18
<b>11</b>	<b>Balance Depreciation to be recovered beyond 31.3.2009 :</b>				<b>873.49</b>
	<b>Capital cost for the purpose of Depreciation</b>			<b>1256.67</b>	
	<b>ACE during 2003-04</b>			<b>16.35</b>	
	<b>Capital cost as 1.4.2004</b>			<b>1273.02</b>	
	<b>ACE during 2004-05</b>			<b>0.20</b>	
	<b>Capital cost as 1.4.2005</b>			<b>1273.22</b>	
	<b>Less: Land Cost</b>			<b>2.47</b>	
				<b>1270.75</b>	
	<b>90% of Capital Cost as above</b>			<b>1143.68</b>	
	<b>Cum. Depreciation to be recovered up to 31.3.2009</b>			<b>270.18</b>	
	<b>Balance Depreciation to be recovered beyond 31.3.2009</b>			<b>873.49</b>	

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