CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Coram

Dr, Pramod Deo, Chairperson. Shri R. Krishnamoorthy, Member Shri. S Jyaraman, Member Shri V.S. Verma. Member

Petition No.74/2006

In the matter of

Approval of charges for Unified Load Despatch & Communication Scheme in Eastern Region for the period from 1.9.2005.to 31.8.2020

And in the matter of

Power Grid Corporation of India Limited, Gurgaon Petitioner

Vs

- 1. Bihar State Electricity Board, Patna
- 2. West Bengal State Electricity Board, Kolkata
- 3. Grid Corporation of Orissa, Ltd, Bhubaneshwar
- 4. Damodar Valley Corporation, Kolkata
- 5. Department of Power, Government of Sikkim, Gangtok
- 6. Jharkhand State Electricity Board, Ranchi Respondents

The following were present:

Shri M.G. Ramachandran, Advocate, PGCIL Ms. Swapna Seshadri, Advocate, PGCIL Shri V.V. Sharma, PGCIL Shri. N Roy, PGCIL Shri. M.M. Mondal, PGCIL

ORDER (DATE OF HEARING: 21.4.2009)

The petitioner filed this petition seeking approval of charges for Unified Load Despatch & Communication Scheme in Eastern Region (hereinafter referred to as "the Scheme") for the period from 1.9.2005, the date of commercial operation of the scheme to, 31.8.2020. As the methodology evolved for working out capital recovery factor for the return on equity and interest on loan for ULDC Scheme in Northern Region had a bearing on the methodology for the Eastern Region, the Commission vide its order dated 12.3.2007 directed that the petition be kept pending till a final view was taken on the application made by the petitioner in respect of Northern Region.

- 2. The Commission, vide its order dated 11.4.2008 in Review Petition No. 133/2006 (in Petition No. 139/2005) pertaining to charges for ULDC Scheme in Northern Region has revised the methodology for working out the capital recovery factor for the return on equity and interest on loan for the period 1.4.2004 to 31.3.2009 after accounting for additional capital expenditure incurred during 2001-04. Accordingly, this petition was taken up for hearing on 26.6.2008. During the hearing, the representative of the Petitioner proposed to submit revised calculations after accounting for audited expenditure up to 31.3.2007 which became available subsequently. Besides, the learned counsel for the first respondent also raised certain objections. Consequently, the Commission, vide its order dated 3.7.2008 directed the petitioner to submit certain additional information. After the filing of the following information by the petitioner, the case was heard on 21.4.2009:
 - (a) Revised calculations of the annual fee and charges for the scheme

- (b) "Right of way" charges, if any, for laying optic fibre cable under ground, duly apportioned between the telecom business of the petitioner and the scheme;
- (c) Detailed year-wise O&M expenses attributable to the scheme from the date of commercial operation till 31.3.2008, with details of royalty and other charges, if any, paid to the Department of Telecommunication for optic fibre cable and their apportioning between the scheme and telecom business; and
- (d) Proposal for re-setting of interest rates.
- 3. Having heard the parties and perused the pleadings, we proceed to dispose of the petition.
- 4. Investment approval for the scheme was accorded by the Central Government in Ministry of Power vide its letter dated 4.9.1998 at an estimated cost of Rs 29001 lakh including IDC of Rs 6305 lakh. Subsequently, the Central Government vide its letter dated 2.4.2003, accorded its fresh approval to the revised cost estimates of Rs. 39651 lakh including IDC of Rs 5469 lakh, consisting of (i) Central portion of Rs. 38741 lakh including IDC of Rs 5254 lakh and (ii) State portion of Rs 910 lakh including IDC of Rs 215 lakh based on 2nd quarter 2002 price level.

- 5. As per original investment approval dated 4.9.1998, the scheme was to be commissioned within 60 months i.e. September, 2003. As per the revised cost estimates dated 2.4.2003, the scheme was to be commissioned by June, 2005. However, the scheme was declared under commercial operation on 1.9.2005. Thus, there is a delay of two months. The petitioner has explained that overall delay was due to the condition stipulated in the TEC issued by CEA that consent of beneficiaries for participating in the scheme was to be obtained by signing of MOUs before taking up implementation of project. All constituents progressively signed MOU except BSEB who signed finally in December 2000. The constituents were not agreeing for the scheme to be declared under commercial operation from 1.9.2005. The issue was deliberated in Commercial committee and TCC meetings and finally it was agreed to accept the date of commercial operation as 1.9.2005.
- 6. Provisional tariff for the scheme was approved by the Commission vide its order dated 27.11.2008 in Petition No. 75/2006. This petition is for the award of levelised tariff.
- 7. The Petitioner has claimed the following levilsied tariff:

•								
	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital
	expenditure up	expenditure	expenditur	expenditure	expenditure	expenditure	expenditur	expenditur
	to date of	from date of	e from	from 1.4.2007	up to date of	from date	e from	e from
	commercial	commercial	1.4.2006	to 31.3.2008	commercial	of	1.4.2006	1.4.2007
	operation	operation to	to		operation	commercial	to	to
	·	31.3.2006	31.3.2007		•	operation to	31.3.2007	31.3.2008
						31.3.2006		
Annual Capital Recovery	1039.47	68.68	46.35	13.96	1515.37	99.59	82.57	40.17
Charge - Loan					1010.01	00.00	02.07	10.17
Annual Capital Recovery	186.39	47.59	31.58	9.29	271.73	69.01	56.26	26.73
Charge - Equity					271.70	00.01	00.20	20.70
Annual Capital Recovery	1225.86	116.28	77.92	23.26	1787.09	168.60	138.83	66.90
Charge - Total					1707.00	100.00	100.00	00.00
O&M Expenses	865.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	55.92	2.02	1.35	0.40	31.06	2.93	2.41	1.16
Total including O & M and IWC	2147.63	118.30	79.28	23.66	1818.15	171.53	141.23	68.06

8. The details submitted by the petitioner in support its claim of interest on working capital is as under:

		Central F	Portion			State po	rtion	
	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital
Particulars	expenditure up	expenditure	expenditure	expenditure	expenditure	expenditure	expenditur	expenditur
	to date of	from date of	from	from	up to date of	from date of	e from	e from
	commercial	commercial	1.4.2006 to	1.4.2007 to	commercial	commercial	1.4.2006	1.4.2007
	operation	operation to 31.3.2006	31.3.2007	31.3.2008	operation	operation to 31, 3,2006	to 31.3.2007	to 31.3.2008
		31.3.2000				31. 3.2006	31.3.2007	31.3.2006
Maintenance Spares	115.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M Expenses	72.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Receivables	357.94	19.72	13.21	3.94	303.03	28.59	23.54	11.34
					000.00	20.00	20.01	11.01
Total	545.54	19.72	13.21	3.94	303.03	28.59	23.54	11.34
Rate of Interest on Working	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Capital								
Interest on Working	55.92	2.02	1.35	0.40	31.06	2.93	2.41	1.16
Capital								

- 9. As the States are to bear the O&M expenses, working capital on State portion comprises only receivables.
- 10. The following principles have been adopted in these calculations
 - (a) Annual capital cost recovery shall be based on the levelised fees and charges for 15 years through recovery factor = $i(1+i)^n/(1+i)^{n-1}-1$

- where, i = weighted average rate of interest and rate of return on equity, as the case may be, and n= period.
- (b) Interest on working capital and Operation and Maintenance charges shall not be levelised.
- (c) Operation and Maintenance charges shall be payable initially @7.5.% of the admitted capital cost.
- (d) Actual Operation and Maintenance expenses incurred by the petitioner may, if found appropriate, be reimbursed with retrospective effect after a thorough scrutiny and prudence check.
- (e) Operation and Maintenance expenses for State portion are not being considered as the expenses are being borne by the State utilities concerned, who are the respondents in the proceedings.
- 11. Reply to the petition has been filed by the Grid Corporation of Orissa (GRIDCO), Bihar State Electricity Board (BSEB) and West Bengal State Electricity Distribution Company (WBSEDC). The points raised by the respondents are summarized as under:

GRIDCO

(a) As per the TEC issued by CEA, a total of 60 RTUs are to be installed under OPTCL system. Against this, only 49 RTUs have been integrated. Out of 49 RTUs only 41 are reporting and the rest are not reporting.

- (b) Estimated project cost is on the higher side and needs to be approved by CEA. Besides, the capital cost approved by the Auditor includes balance estimated expenditure which should not be considered for the purpose of tariff calculation. Further the share of GRIDCO in the capital cost appears to be disproportionately high.
- (c) Rate of interest as furnished by the petitioner is on the higher side.
- (d) As the scheme was not completed by 1.9.2005, the date of commercial operation of the scheme must be suitably modified.

BSEB

- (e) The charges are to be shared by inter-State generating companies and inter-State transmission licensees who are using the system.
- (f) The charges for the RLDC portion are to be paid by the inter-State generating companies and inter-State licensees and the charges for the SLDC portion alone is payable by the intra-State generating companies and intra-State licensees.
- (g) As per clause 4.2(i) of the MOU between the parties, the modalities and basis for recovery of charges are to be mutually

discussed and agreed upon by the parties. This has not been done so far.

- (h) The petitioner should certify the completion of the project in all respect for its further assessment and verification by the respondent.
- (i) The scheme cannot be construed to have been commissioned as considerable items of work are yet to be completed.

WBSEDC

- (j) Charges for the scheme are to be levied under sub-section (4) of section 28 of the Electricity Act, 2003 (the Act) and the same is not tariff contemplated under part VII of the Act. Regulation 86 of the Conduct of Business regulations is not applicable to the proceedings for determination of charges under sub-section (4) of section 28 of the Act.
- (k) Fee and charges leviable under sub-section 4 of section 28 are not applicable to Distribution Company.
- (I) The Electricity (Removal of Difficulty) (Sixth) Order, 2005 dated 8.6.2005 by the Central Government in the Ministry of Power invoking the powers under section 183 of the Act is not tenable.
- (m) Right of Way (RoW) charges relating to the optical fibre cable should be apportioned between the telecom business and the scheme.

- 12. We have given our anxious considerations to the objections by the respondents and the rejoinders thereto by the petitioner and proceed to deal with the same in the first instance before taking up the determination of the charges.
- 13. First we would like to address the issue of maintainability raised by the respondents regarding the scope of the powers of this Commission under sub-section (4) of section 28 of the Act. This issue has been resolved by this Commission vide its order dated 3.1.2006 in Petition No. 8/2004 and the same view has been reiterated on a number of occasions including in order dated 30.10.2008 in Petition No 11/2007. No submission has been urged before us controverting the above decision. We have no doubt that the Commission has been explicitly empowered to specify the fee and charges for the Regional Load Despatch Centres. The legality of The Electricity (Removal of Difficulty) (Sixth) Order, 2005 dated 8.6.2005 by the Central Government in the Ministry of Power invoking the powers under section 183 of the Act has also been examined and upheld by this Commission in the above mentioned order. The additional issue relating to regulation 86 of the Conduct of Business Regulations is of no relevance in the present context because the Commission's power can be traced to the parent Act itself.
- 14. Having satisfied ourselves about the jurisdiction of the Commission to determine the charges for the scheme, we now propose to deal with other objections raised by the respondents.

- 15. As regards the pending work regarding integrating the RTUs the petitioner has clarified that the same is due to non-availability of work front which was to be provided by OPTCL. While it has been admitted that there have been some data reporting loses, the petitioner has attributed this to subsequent changes in power system/grid being implemented by OPTCL. As regards the objections relating to the cost of scheme, the petitioner has drawn our attention to the fact that the revised cost estimates have since been approved by the Central Government in the Ministry of Power. It is also significant that the Commission carries out prudence check before determination of charges and any abnormal or inflated expenditure will promptly be pruned down. As regards the allegation that disproportionately high share of the capital cost has been allocated to GRIDCO, it has been pointed out that 60 RTUs out of the total of 197 RTUs, and 4 control centres out of 10 are in respect of OPTCL. The petitioner has also clarified that commissioning of the scheme was deliberated in detail in the 114th meeting of TCC of the EREB. The petitioner has further clarified that teething problems associated with such a massive exercise have been resolved as and when reported. We are firmly of the opinion that deficiency of performance, if any should be attended to promptly and temporary outages should not be allowed to impede the process of determination of charges.
- 16. As regards the right of way (ROW) charges amounting to Rs. 39.32 lakh, booked to ERULDC, the petitioner vide its affidavit dated 30.10.2008 has clarified that this relates to underground Fibre Optic Link (UGFO) established in Chandil-SLDC Kusai Colony-Hatia section of JSEB sector.

Since the aforesaid UGFO links have been installed for the scheme only, there is no apportionment of the ROW charges or link implementation charges to Telecom. The Communication Network consisting of Fibre Optic cable was planned and established based on the requirement of the scheme which consist of mostly OPGW and small portion of Underground fibre optic cable. Since, spares fibres were available on these links, the same have been utitlized by Telecom Department of POWERGRID. Supply cost of the fibre optic cable has been apportioned between the ERULDC and telecom projects on incremental cost basis as specified and approved in para 11 of PIB meeting held on 12.10.2001. Accordingly, the supply cost has been apportioned and booked in both the projects and the ROW charges which is very small in comparison to the total ERULDC project cost, has been booked only in ERULDC project. We are satisfied with the reply by the petitioner.

CAPITAL COST

17. The petitioner has submitted the following details regarding the capital expenditure incurred by the participants on the scheme which are considered for working out the charges:

Respondents	Expenditure	Expenditure	Expenditure	Expenditure	Balance	Total
	up to	from	from	from	Expenditure	
	commercial	1.9.2005 to	1.4.2006 to	1.4.2007 to		
	operation	31.3.2006	31.3.2007	31.3.2008		
	(31.8.2005)					
RSCC	11544.67	967.36	630.42	180.53	1437.87	14760.85
BSEB	2653.52	394.83	235.48	126.28	220.81	3630.92
GRIDCO	8146.31	419.84	491.43	243.99	946.95	10248.52
JSEB	1729.88	141.58	63.91	40.10	207.89	2183.36
WBSEB	1928.64	171.8	144.19	39.55	94.66	2378.84

Total	28374.76	2370.03	1753.56	699.85	3236.7	36434.9
SIKKIM	71.49	9.36	12.10	4.78	4.21	101.94
DVC	2300.25	265.26	176.03	64.62	324.31	3130.47

18. As regards the additional capital expenditure, it is seen that after taking into consideration the impact of additional capital expenditure, the total cost of the scheme is within the approved cost i.e. Rs 39651 lakh. The petitioner, vide the auditor's certificate has indicated the head wise additional capital expenditure for the period 1.4.2005 to 31.3.2008. Additional Capital Expenditures already incurred up to 31.3.2008 as per the above table, has been considered in the calculations.

DEBT- EQUITY RATIO

19. As on date of commercial operation debt-equity ratio is as given below:

	Cen	ıtral	State						
	Rs. In lakh % F		Rs. In lakh	%					
Debt	10399.82	90.08%	15161.10	90.08%					
Equity	1144.85	9.92%	1668.99	9.92%					
Total	11544.67	100.00%	16830.09	100.00%					

20. As regards the additional capital expenditure for the period after 1.4.2004, it has been decided to apply the debt-equity ratio of 70:30 in tune with regulation 54 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter "the 2004 regulations"). Accordingly, the following debt-equity ratio is considered for computation of charges in this order:

	Central Portion		State F	Portion			
	Rs Lakh	%	Rs Lakh	%	Rs Lakh	%	
Debt	11644.63	87.40%	17292.69	87.01%	28937.32	87.17%	
Equity	1678.35	12.60%	2582.53	12.99%	4260.88	12.83%	
Total	13322.98	100.00%	19875.22	100.00%	33198.20	100.00%	

RETURN ON EQUITY

21. Return on equity as applicable @ 14% has been considered in the present calculation for the period 2004-09.

INTEREST ON LOAN

22. The petitioner has worked out year wise weighted average rate of interest after taking into consideration loans carrying floating interest rates for the years 2005-06 to 2007-08. The same has been used by the petitioner to work out the year wise additional interest amount for Central as well as State portion without working out impact of capital recovery factor. The rates of interest considered are given below:

As	on	date	of	As submitted			by	the
commercial operation				petitioner				
•				200	5-06		5.9	93%
5.5491%		200	6-07	6.78%		78%		
			2007-08		6.73%			

23. The petitioner has sought approval for the methodology for adjustment of impact of floating rate of interest on year to year basis and approve the impact of floating rate of loan amount to be recovered from the respondents for the period from date of commercial operation to 31-3-2008.

- 24. Regarding the adjustment of floating rate of interest on year to year basis, it is noted that in the cases of regular transmission tariff petitions, the Commission is generally allowing the Transmission Company and the beneficiary States to mutually settle the changes arising due to the impact of floating rates of interest. A similar approach is being adopted for the ULDC charges calculations as well.
- 25. As per the petition, additional capital expenditure during 2005-06 and 2006-07 is partly funded through IBRD-II loan which had 4.92% rate of interest (as on DOCO), and partly through equity. These details cannot be captured from the Loan Reconciliation, as loan reconciliation gives the details of loan drawn up the year end i.e. 31.3.2006. Therefore details of IBRD-I & IBRD-II loans as per petition have been considered. For 2007-08 additional capital expenditure, the actual loan funding has not been indicated. Therefore, 4.92% rate of interest is being applied for working out the recovery factors corresponding to additional capital expenditure during 2005-06, 2006-07 and 2007-08.
- 26. Details of the computation of the weighted average rate of interest is given hereunder:

	(13. III lakii)								
Loan	Gross Loan	Paid up to date of commercial operation	Net loan outstanding as on date of commercial operation	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond-IX	514.00	154.20	359.80	12.25%	44.08				
Bond-X	929.00	154.83	774.17	10.90%	84.38				
Bond-XI (Option-I)	717.00	0.00	717.00	9.80%	70.27				

PNB-II	396.00	33.00	363.00	8.60%	31.22	
Oriental Bank of Commerce	330.00	27.50	302.50	8.60%	26.02	
Bond-XII	50.00	0.00	50.00	9.70%	4.85	
IBRD-I	559.19	80.90	478.292	5.54%	26.50	
IBRD-II	22065.74	0.00	22065.74	4.92%	1085.63	
Total Loan	25560.93		25110.50		1372.94	5.4676%

CAPITAL RECOVERY FACTOR

- 27. Capital recovery factor has been worked out on the following basis:
 - (a) Return on equity applicable for the tariff period 2004-09 i.e.@14% has been considered for calculations.
 - (b) Based on Weighted average rate of interest and return on equity as mentioned above, recovery factors have been worked out for 15 years for the capital expenditure up to the date of commercial operation.
 - (c) As regards the additional expenditure, the petitioner has considered the recovery factors for 14.67, 13.92 and 12.92 years for the additional capital expenditure during 2005-06, 2006-07 and 2007-08 respectively. However, the same have been revised as 14.4166, 13.4166 and 12.4166 years respectively by following the methodology considered for determination of ULDC charges for other regions.
 - (d) Base don the above, the following formula has been arrived at Recovery Factor: $i * (1+i)^n / [(1+i)^n - 1]$ Where,

i = Weighted average rate of interest and Return on equity, as the case may be and n = period

- (e) Based on the above, capital recovery factor up to the date of commercial operation has been computed as 0.099411 for loan and 0.16281 for equity.
- (f) As regards the additional capital expenditure, the annual capital recovery factor has been worked out as under:

Year	Annual capital recovery factor					
	Loan	Equity				
2005-06	0.09847	0.16494				
2006-07	0.10357	0.16916				
2007-08	0.10953	0.17424				

OPERATION AND MAINTENANCE EXPENSES

28. It has been decided to allow O&M charges at the rate of 7.5% of the admitted capital cost for Central Sector, for 2004-09 period provisionally subject to adjustment based on actuals. As stated above, the O&M Expenses for the State portion is being borne by the States and therefore is not being allowed in this order.

INTEREST ON WORKING CAPITAL

29. The Components of working capital and the interest thereon are discussed as under:

(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. In the present case, capital expenditure as on the date of commercial operation is Rs.11544.67 lakh for the Powergrid portion, which has been considered as the historical cost for the purpose of the present petition and maintenance spares haven worked out accordingly by escalating 1% of the historical cost @ 6% per annum. The value of maintenance spares works out to Rs. 115.45 lakh as on 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. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the central sector as claimed in the petition. This has been considered in the working capital.

(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. The petitioner has claimed the receivables on the basis 2 months' charges claimed in the petition.

In the fees and charges being allowed, receivables have been worked out on the basis 2 months' 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 that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2005, which is in accordance with the 2004 regulations and has been allowed.

30. Detailed calculation on interest on working capital is as under:

		Central F	Portion			State po	rtion	
	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital	On Capital
Particulars	expenditure up	expenditure	expenditure	expenditure	expenditure	expenditure	expenditur	expenditur
	to date of	from date of	from	from	up to date of	from date of	e from	e from
	commercial	commercial	1.4.2006 to	1.4.2007 to	commercial	commercial	1.4.2006	1.4.2007
	operation	operation to	31.3.2007	31.3.2008	operation	operation to	to	to
		31.3.2006				31. 3.2006	31.3.2007	31.3.2008
Maintenance Spares	115.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M Expenses	72.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Receivables	356.99	19.42	13.18	3.95	301.64	28.16	23.47	11.35
Total	544.59	19.42	13.18	3.95	301.64	28.16	23.47	11.35
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	55.82	1.99	1.35	0.40	30.92	2.89	2.41	1.16

31. Based on the foregoing principles and methodologies, the annual fees and charges for the Scheme are calculated as under:

	Central portion								
Particulars	On Capital expenditure up to date of commercial operation	On Capital expenditure from date of commercial operation to 31.3.2006	On Capital expenditure from 1.4.2006 to 31.3.2007	On Capital expenditure from 1.4.2007 to 31.3.2008					
	2004-09	2004-09	2004-09	2004-09					
Capital Cost	11544.67	967.36	630.42	180.53					
Notional Loan	10399.82	677.15	441.29	126.37					
Notional Equity	1144.85	290.21	189.13	54.16					
Years	15.00000	14.416667	13.41666667	12.41666667					
Recovery Factors -Loan	0.09941	0.09847	0.10358	0.10953					
Annual Capital Recovery Charge - Loan	1033.86	66.68	45.71	13.84					
Recovery Factors -Equity	0.16281	0.16494	0.16916	0.17424					
Annual Capital Recovery Charge - Equity	186.39	47.87	31.99	9.44					
Annual Capital Recovery Charge - Total	1220.25	114.55	77.70	23.28					
O&M Expenses @ 7.5% of the capital cost	865.85	0.00	0.00	0.00					
Interest on Working Capital ¹	55.82	1.99	1.35	0.40					
Total Annual charges	2141.92	116.54	79.05	23.68					

State portion						
Particulars	On Capital expenditure up to date of commercial operation	On Capital expenditure from date of commercial operation to 31.3.2006	On Capital expenditure from 1.4.2006 to 31.3.2007	On Capital expenditure from 1.4.2007 to 31.3.2008		
	2004-09	2004-09	2004-09	2004-09		
Capital Cost	16830.09	1402.67	1123.14	519.32		
Notional Loan	15161.10	981.87	786.20	363.52		
Notional Equity	1668.99	420.80	336.94	155.80		
Years	15.00000	14.41667	13.41667	12.41667		
Recovery Factors -Loan	0.09941	0.09847	0.10358	0.10953		

Annual Capital Recovery Charge - Loan	1507.18	96.69	81.43	39.82
Recovery Factors -Equity	0.16281	0.16494	0.16916	0.17424
Annual Capital Recovery Charge - Equity	271.73	69.41	57.00	27.15
Annual Capital Recovery Charge - Total	1778.91	166.10	138.43	66.96
O&M Expenses @ 7.5% of the capital cost	0.00	0.00	0.00	0.00
Interest on Working Capital ⁴	30.92	2.89	2.41	1.16
Total Annual charges	1809.83	168.98	140.84	68.13

- 32. The Central portion charges as per the preceding para shall be shared by the respondents (beneficiaries/constituents in Eastern Region only) in the ratio of central generating capacity allocation, including the allocation from unallocated capacity from the Central Generating stations. Inter-regional export/import of power, whether bilateral or multilateral, would not affect the sharing of charges for Unified Scheme. The State portion charges as per the preceding para shall be shared by the States in proportion to respective capital cost.
- 33. In addition to the above charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations. These charges shall be shared by the respondents in accordance with the 2004 regulations.
- 34. The petitioner by an affidavit dated 26.9.2006 has sought approval for the reimbursement of expenditure of Rs. 1,02,162/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one installment in the ratio

applicable for sharing of the fees and charges. The Commission by its separate 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.

- 35. It is to be noted that the full capital cost shall be recovered over a period of 15 years with interest/return. After full capital recovery, the assets shall be transferred to the respective constituents at nominal value.
- 36. This disposes of Petition No 74/2006.

Sd/= Sd/= Sd/= Sd/=

(V.S. Verma) (S. Jayaraman) (R. Krishnamoorthy) (Dr. Pramod Deo)
Member Member Member Chairperson

New Delhi, dated the 28th July 2009