CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 36/2010

Coram: Dr. Pramod Deo, Chairperson

Shri S.Jayaraman, Member Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Hearing: 9.9.2010 Date of Order: 18.3.2011

In the matter of:

Approval under Sub-section(4) of section 28 of Electricity Act 2003 for determination of revised fees and charges due to additional capitalization incurred during 2005-09 for Unified Load Despatch & Communication (ULDC) Scheme in Southern Region.

And

In the matter of:

Power Grid Corporation of India Ltd. Gurgaon

...Petitioner

Vs

- Karnataka Power Transmission Corporation, Ltd. Bangalore
- 2. Transmission Corporation of Andhra Pradesh Ltd. Hyderabad
- 3. Kerala State Electricity Board, Thiruvanandapuram
- 4. Tamil Nadu Electricity Board, Chennai
- 5. Electricity Department, Govt. of Pondicherry, Pondicherry
- 6. Eastern Power Distribution Company of Andhra Pradesh Ltd., Visakhapatnam
- 7. Southern Power Distribution Company of Andhra Pradesh Ltd., Tirupati
- 8. Central Power Distribution Company of Andhra Pradesh Ltd., Hyderabad
- 9. Northern Power Distribution Company of Andhra Pradesh Ltd., Warangal
- 10. Bangalore Electricity Supply Company Ltd., Bangalore
- 11. Gulbarga Electricity Supply Company Ltd., Gulbarga
- 12. Hubli Electricity Supply Company Ltd., Hubli
- 13. Mangalore Electricity Supply Company Ltd., Mangalore
- 14. Chamundeswari Electricity Supply Company Ltd., Mysore
- 15. Electricity Department, Govt. of Goa, Panaji

... Respondents

The following was present:

- 1. Shri U K Tyagi, PGCIL
- 2. Shri M M Mondal, PGCIL



- 3. Shri R K Gupta, PGCIL
- 4. Shri S S Raju, PGCIL
- 5. Shri V K Jain, TNEB

ORDER

This petition has been filed seeking approval for revised fees and charges consequent to additional capital expenditure incurred during 2005-09 for Unified Load Despatch & Communication (ULDC) Scheme in Southern Region hereinafter "the scheme"). The petitioner has also sought the following reliefs:

- (a) The petitioner be allowed actual reimbursement of the O&M Charges.
- (b) Approve the reimbursement by the beneficiaries, of expenditure towards petition filing fee, and publishing of notices in newspapers and other expenditure (if any) in relation to the filing of petition.
- (c) Pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.
- 2. Date of Commercial operation of the scheme is 1.7.2002. Charges for the period 1.4.2004 to 31.3.2009 were approved by the Commission vide its order dated 27.1.2009 in Petition No. 143/2005 in respect of the expenditure incurred up to 31.3.2005. While doing so, the Commission had also vide para 11 of the above order disallowed the additional capital expenditure for the period from 1.4.2005 to 31.3.2008 for want of justification. The same is being claimed through this petition together with the additional capital expenditure during the period 2008-09.
- 3. It is also significant that for 2004-09 period, no regulations/ guidelines on determination of fees and charges for ULDC existed. Therefore calculations for determination of tariff for ULDC schemes, are modelled on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)

Regulations, 2004 (hereinafter "the 2004 regulations"). Same methodology was adopted in the tariff order dated 27.1.2009 in Petition No 143/2005.

4. The petitioner has claimed the following charges:

(₹ in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Central Portion	2352.86	2355.24	2357.06	2353.03	2353.92
State Portion	4655.24	4719.54	4735.55	4735.55	4735.55

- 5. Tamil Nadu Electricity Board (TNEB) viz. respondent No. 4 alone has filed reply to the petition. Gist of the submissions by the respondent is as under:
 - (a) Sum of ₹ 6.86 lakh towards Entry tax paid to the Govt. of Kerala may be capitalized only if the equipment to which it pertains has already been capitalized.
 - (b) AMC charges for the EMS/SCADA system amounting to ₹ 109.24 lakh towards AMC charges should form part of O&M expenses and be not capitalized.
 - (c) Expenditure towards car parking for quarters at Yelahanka be allowed after ascertaining whether it is essential for effective running and operation of ULDC.
 - (d) Refund of consultancy charges has to be deducted as the excess expenditure capitalized already forms part of capital cost and being serviced by the beneficiaries.
 - (e) O&M expenditure claimed exceeds the provision to a large extent and the same may be allowed only if found appropriate as the claim is neither backed by the Auditor's certificate nor details provided.
 - (f) There are several shortcomings in the break up details provided by the petitioner such as allocation of expenditures to other business,

number of employees, rent in respect of official or residential purposes, etc.

- 6. The petitioner vide its rejoinder has confirmed that the equipments for which entry tax has been claimed have already capitalized. As regards the O&M charges, it has been stated that the MAC charges claimed in this petition are part of the original LOA of the project and unless the same is capitalized, recovery of cost will be denied and will cause loss to the petitioner. The petitioner has further clarified that the car parking charges incurred during the execution of the project forms an essential part of the building and civil works. The petitioner has also confirmed that the retention payment amounting to ₹ 12.40 lakh has actually been paid. In view of the above, the petitioner has reiterated that the annual fee and charges claimed by it be approved 100%.
- 7. Having heard the representatives of the parties and examined the material on record, we proceed to dispose of the petition.

CAPITAL COST

8. In these calculations, the following capital cost as on 31.3.2004 as admitted by the Commission vide order dated 27.1.2009 in Petition No 143/2005 has been considered.

(a) Central portion ₹ 11969.63 lakh
 (b) State portion ₹ 38578.57 lakh
 (c) TOTAL ₹ 50548.20 lakh

ADDITIONAL CAPITAL EXPENDITURE

9. The petitioner has submitted following details of capital expenditure vide Auditor's certificate dated 2.12.2009 on the basis of audited accounts up to 31.3.2009:

(₹ in lakh)

Expenditure up to 1-7-2002 -Date of commercial operation	50548.20
Expenditure from Date of commercial operation to 31.3.2003	1359.79
Expenditure from 1.4.2003 to 31.3.2004	424.85
Expenditure from 1.4.2004 to 31.3.2005	472.82
Expenditure from 1.4.2005 to 31.3.2006	116.10
Expenditure from 1.4.2006 to 31.3.2007	-31.43
Expenditure from 1.4.2007 to 31.3.2008	0.00
Expenditure from 1.4.2008 to 31.3.2009	12.40
Total	52902.73

- 10. The expenditure up to 31.3.2009 has been verified from the audited statements of accounts of the petitioner. The balance estimated expenditure is as per the details furnished by the petitioner.
- 11. The break-up of capital cost including additional capital expenditure after date of commercial operation is detailed below:

(₹ in lakh)

(Cirriani)							
	Central Portion	State portion	Remarks				
Expenditure upto Date	11969.63	38578.57					
Commercial operation (1.7.2002							
Expenses from	320.33	1774.34	A d i44 - d: d -				
01.07.2002 to 31.03.2003			Admitted vide				
Expenses from	89.29	-48.02	order dated 27.01.2009				
01.04.2003 to 31.03.2004			in petition no.143/2005				
Expenses from	11.83	460.99					
01.04.2004 to 31.03.2005							
Expenses from	6.86	109.24	Claimed in this petition				
01.04.2005 to 31.03.2006			-				
Expenses from	-31.43	0	Claimed in this petition				
01.04.2006 to 31.03.2007			-				
Expenses from	0	0	NIL expenditure.				
01.04.2007 to 31.03.2008			-				
Expenses from	12.40	0	Claimed in this				
01.04.2008 to 31.03.2009			Petition				
Total	12378.91	40875.12					

12. The additional capital expenditure sought to be included through this petition, i.e. incurred after 31.3.2005 is in respect of works which are within the original scope of approved capital cost. The expenditure has been made towards balance payment / works.

DEBT- EQUITY RATIO

13. In accordance with the methodology adopted in order dated 29.1.2009, additional capital expenditure (referred to as 'ACE' in the table below) for the

years 2005-06 to 2008-09 has been segregated in the debt-equity ratio of 70:30. Accordingly, the details of debt-equity on various dates are as under:

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	Debt	Equity	Total	Debt%	Equity%
31-03-2004	46655.80	6028.34	52684.14	88.56%	11.44%
ACE during 2004-05	330.97	141.85	472.82	70.00%	30.00%
31-03-2005	46986.78	6170.19	53156.96	88.39%	11.61%
ACE during 2005-06	81.27	34.83	116.10	70.00%	30.00%
31-03-2006	47068.05	6205.02	53273.06	88.35%	11.65%
ACE during 2006-07	-22.00	-9.43	-31.43	70.00%	30.00%
31-03-2007	47046.05	6195.59	53241.63	88.36%	11.64%
ACE during 2007-08	0.00	0.00	0.00		-
31-03-2008	47046.05	6195.59	53241.63	88.36%	11.64%
ACE during 2008-09	8.68	3.72	12.40	70.00%	30.00%
31-03-2009	47054.73	6199.31	53254.03	88.36%	11.64%

INTEREST ON LOAN

14. No loan details have been indicated in the petition, implying that the petitioner has funded the entire additional capital expenditure through equity only. Accordingly, NIL interest on loan is being allowed.

ANNUAL CAPITAL RECOVERY FACTORS

15. Recovery factors in respect of the additional capital expenditure allowed through this order has been worked out by considering the weighted average rate of interest as on 1.4.2004 and 14% rate of Return on Equity. The factors computed on the above basis are as under:

	2004-05	2005-06	2006-07	2007-08	2008-09
Recovery Factor for loan	0.120794	0.127953	0.136571	0.147123	0.160313
Recovery Factor for equity	0.175191	0.181580	0.189458	0.199316	0.211884

OPERATION & MAINTENANCE EXPENSES

16. The petitioner has pointed out that the Commission had allowed O&M Charges @ 7.5% of the Capital cost vide order dated 27.1.2009 in Petition No. 143/2005 subject to adjustment based on actual as extracted hereinbelow:

- 19. The Commission, vide its order dated 9.5.2005 in Petition No. 139/2005, has decided to retain the O&M charges allowed for the previous period. Accordingly, in these calculations also O&M charges amounting to Rs.897.72 lakh per annum as approved in the previous tariff period, subject to adjustment based on actuals..
- 17. Accordingly, the petitioner has claimed the actual O&M expenses in the present proceedings. The petitioner was asked vide Commission's letter dated 1.5.2010 to submit the following details relating to O&M Expenses:
 - (a) Actual O&M cost for the year 2006-07 to 2008-09 without wage revision and with wage revision
 - (b) Reason for sudden increase in the actual O&M charges in the year 2003-04, 2007-08 and 2008-09 with reference to their respective preceding years.
 - (c) Reason and justification for significant increase in repair and maintenance cost in the years 2003-04, 2005-06 and 2007-08 with reference to their respective previous years.
- 18. The details have been submitted by the petitioner vide its affidavit dated 25.5.2010.
- 19. The details of O&M allowed by the Commission, actual expenditure including provision for wage revision and Actual O&M without provision for wage revision during 2002-03 to 2008-09 are as under:

(₹ in lakh.)

Period	O&M	Actual O&M including	provision	Actual O&M without
	allowed	provision for wage	for wage	provision for wage
		revision	revision	revision
	1	2	3	4=2-3
2002-03	673.29	606.26	0	606.26
(Prorata)				
2003-04	897.72	1343.81	0	1343.81
2004-05	897.72	1184.70	0	1184.70
2005-06	897.72	1312.72	0	1312.72
2006-07	897.72	1320.91	27.97	1292.94
2007-08	897.72	1649.03	206.61	1442.42
2008-09	897.72	1911.37	223.48	1687.89
Total	6059.61	9328.80	458.06	8870.74

- 20. As regards the higher repair and maintenance cost during 2005-06 and 2007-08, the petitioner has submitted that it was due to post warranty AMC for Digital Microwave, exchange rate variation in payment for AMC of EMS/SCADA system.
- 21. Based on the details submitted by the petitioner, the O&M on account of both employee's cost and R&M, except for the wage revision component is allowed to the petitioner. The issue of wage revision impact for the year 2006-07 to 2008-09 is common with the Petition No. 101/2010 filled by the petitioner and a common view would to be taken.
- 22. There is a de-capitalisation of ₹ 12.17 lakh mainly on account of credit passed by the Keema consultants (one of the consultants of ULDC Project).
- 23. The petitioner has claimed an additional capitalization of ₹ 109.24 lakh on account of AMC charges of EMS/ SCADA during the year 2005-06. Bing an AMC charge, this cannot be capitalized and hence is allowed as a one time charge to be reimbursed by the beneficiaries to the petitioner. This was pointed out by the Commission during the hearing on 9.9.2010 and the petitioner has agreed for the one time reimbursement of the AMC charges.
- 24. Accordingly, O&M charges as per column 4 of the table hereinabove are allowed. As per the previous tariff order dated 27.1.2009, O &M charges are admissible only in respect of the Central portion. Based on the above, the following O&M charges have been allowed for the central portion:

					(₹ in lakh)
	2004-05	2005-06	2006-07	2007-08	2008-09
Central Portion	1184.70	1312.72	1292.94	1442.42	1687.89
State portion	0.00	0.00	0.00	0.00	0.00

NTEREST ON WORKING CAPITAL

25. The components of the working capital and the interest thereon are discussed hereunder in conformity with the previous tariff order dated 27.1.2009, in Petition No. 143/2005:

(i) Receivables:

Receivables have been calculated on the basis of two months' annual charge as worked out above.

(ii) Maintenance spares:

In line with the previous tariff order dated 27.1.2009, cost of maintenance spares as on the date of commercial operation of ₹ 119.70, has been considered and escalated at 6% per annum for 2004-05 and onwards. Further spares have been calculated for RSCC portion only.

(iii) O & M expenses:

One month O&M expenses have been provided towards computation of working capital.

- **(iv)** Rate of interest on working capital: In continuation of the previous tariff order dated 27.1.2009, the SBI PLR as on 1.4.2004 i.e. 10.25% is considered as the rate of interest on working capital.
- 26. Necessary computations in support of interest on working capital are appended hereinbelow:

(₹ in lakh)

Central Portion								
	2004-05	2005-06	2006-07	2007-08	2008-09			
Maintenance Spares	119.70	126.88	134.49	142.56	151.11			
O&M Expenses	98.73	109.39	107.75	120.20	140.66			
Receivables	441.22	463.51	460.43	485.32	527.45			
Total	659.64	699.78	702.67	748.08	819.22			
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%	10.25%			
Interest on Working Capital	67.61	71.73	72.02	76.68	83.97			

(₹ in lakh)

State Portion								
	2004-05	2005-06	2006-07	2007-08	2008-09			
Maintenance Spares	0.00	0.00	0.00	0.00	0.00			
O&M Expenses	0.00	0.00	0.00	0.00	0.00			
Receivables	775.87	786.59	789.26	789.26	789.26			
Total	775.87	786.59	789.26	789.26	789.26			
Rate of Interest on Working Capital	10.25%	10.25%	10.25%	10.25%	10.25%			
Interest on Working Capital	79.53	80.63	80.90	80.90	80.90			



ANNUAL CHARGES

27. The Annual charges being allowed for the scheme are summarized below:

(₹ in lakh)

Central portion								
	2004-05	2005-06	2006-07	2007-08	2008-09			
Recovery Factors –Loan	0.120794	0.127953	0.136571	0.147123	0.160313			
Annual Capital Recovery Charge - Loan	1175.48	1176.48	1177.10	1174.09	1174.09			
Recovery Factors -Equity	0.175191	0.181580	0.189458	0.199316	0.211884			
Annual Capital Recovery Charge - Equity	219.52	220.15	220.52	218.73	218.73			
Annual capital recovery charges - Total	1395.01	1396.63	1397.62	1392.82	1392.82			
O&M Expenses	1184.70	1312.72	1292.94	1442.42	1687.89			
Interest on working capital	67.61	71.73	72.02	76.68	83.97			
Total Charges	2647.32	2781.08	2762.58	2911.92	3164.68			

(₹ in lakh)

State portion									
	2004-05	2005-06	2006-07	2007-08	2008-09				
Recovery Factors -Loan	0.120794	0.127953	0.136571	0.147123	0.160313				
Annual Capital Recovery Charge - Loan	3801.93	3840.91	3850.69	3850.69	3850.69				
Recovery Factors –Equity	0.175191	0.181580	0.189458	0.199316	0.211884				
Annual Capital Recovery Charge - Equity	773.78	798.01	803.96	803.96	803.96				
Annual capital recovery charges - Total	4575.71	4638.92	4654.65	4654.65	4654.65				
O&M Expenses	0.00	0.00	0.00	0.00	0.00				
Interest on working capital	79.53	80.63	80.90	80.90	80.90				
Total Charges	4655.24	4719.54	4735.55	4735.55	4735.55				

Application fee

28. The petitioner has sought approval for the reimbursement of expenses incurred by it in connection with the filing of the petition. The petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No.129/2005, wherein it was decided that the application filing fees being part of the allowable O&M expenses is not separately reimbursable.

- 29. The charges for the unified scheme under central sector allowed in this order shall be shared by the respondent beneficiaries/constituents in Southern Region in the ratio of central generating capacity allocation including the allocation from unallocated capacity from the Central Generating stations.
- 30. The charges for Unified scheme under State sector mentioned shall be shared by the respondents in proportion to the capital cost of the State portion.
- 31. This order disposes of Petition No. 36/2010.

Sd/- Sd/- Sd/- Sd/- Sd/
(M.Deena Dayalan) (V.S.Verma) (S.Jayaraman) (Dr. Pramod Deo)

Member Member Member Chairperson