ORISSA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN,
UNIT – VIII, BHUBANESWAR – 751 012

*** *** ***

Present : Shri B. K. Das, Chairperson
Shri S. K. Jena, Member
Shri K. C. Badu, Member

CASE NO.62/2007

Date of Hearing : 06.02.2008

Date of Order : 20.03.2008

IN THE MATTER OF : An application for approval of Annual Revenue Requirement and determination of Transmission Tariff by OPTCL under Section 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004, and OERC (Conduct of Business) Regulations, 2004, and other Tariff related matters, for the year 2008-09.

O R D E R

M/s. Orissa Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL), a Govt. Company registered on 29th March, 2004 under the Companies Act, 1956 is carrying on business of transmission of electricity within the State of Orissa. It had commenced the business on 31st March, 2004. The necessity for formation of this Govt. Company arose because, with the enactment of the Electricity Act, 2003 (hereinafter referred to as the Act) GRIDCO which was the Bulk Supply and Transmission Licensee under the Orissa Electricity Reforms Act, 1995 could no longer carry on both supply and transmission businesses by virtue of Sec. 39, 1st proviso of the said Act. By virtue of a Transfer Scheme entitled 'Orissa Electricity Reforms (Transfer of Transmission and Related Activities)Scheme,2005' purporting to be under Sec.131 (4) of the Act, the erstwhile transmission business of GRIDCO with all the assets and liabilities of such business was transferred to and vested with OPTCL with effect from 1.4.2005. By Clause 10 of the Govt. Notification No.6892 dated. 09.06.2005, the OPTCL was notified as the State Transmission Utility (STU) u/s. 39 of the Act with effect from 01.04.2005 (i.e, the date on which the same notification came in to force). By virtue the 2nd Proviso to Sec.14 of the Act, OPTCL has been a deemed Transmission Licensee under the Act. OPTCL is now governed by License Conditions set forth in OERC (Conditions of Business) Regulations, 2004, at Appendix 4.B issued u/s.16 of the Act, as modified by Commission's order dated. 27th October 2006.

The OPTCL submitted an application in respect of its Annual Revenue Requirement (ARR) and determination of its Transmission Tariff for the FY 2008-09. The said application was duly scrutinised, registered as Case No.62/2007 and admitted for hearing. In the consultative process, the Commission heard the applicant, objectors, consumer counsel, representative of the State Government and orders as follows:

PROCEDURAL HISTORY (Para 1 to 7)

1. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for determination of Tariff) Regulations, 2004, licensees/deemed licensees are required to file the ARR within 30th November in the prescribed formats. OPTCL as a deemed licensee submitted its ARR application for 2008-09 before the Commission on 30.11.2007. After due scrutinisation and admitting the matter, the Commission directed OPTCL to publish its ARR application in the approved format in the leading and widely circulated daily newspapers and the matter was also posted in the Commission's website in order to invite objections from the intending objectors. The Commission had also directed the applicant to file its rejoinder to the objections filed by the various objectors and to serve copy to them.
2. In compliance with the Commission's aforesaid order the OPTCL published the said public notice in the leading daily English and Oriya newspapers. The Commission issued notice to the Govt. of Orissa represented by Department of Energy to send their authorised representative to take part in the ensuing tariff proceedings.
3. In response to the aforesaid public notice of the applicant, the Commission received 11 nos. of objections/suggestions from the following persons/ associations/ institutions/ organisations.
4. (1) General Secretary, FOCO, Orissa Consumers Association, Debajyoti Upobhokta Kalyan Bhawan, Biswanath Lane, Cuttack, (2) Mr. Ramesh Ch. Satpathy, 302(B), Beherasahi, Nayapalli, Bhubaneswar, (3) M/s Indian Metal & Ferro Alloys Ltd., Bomikhal, Rasulgarh, Bhubaneswar, (4) Mr. R.P. Mohapatra, 775, Jayadev Vihar, Bhubaneswar, (5) Mr. M.V. Rao, Chairman, M/s. UCCI, N/6, IRC Village, Nayapalli, Bhubaneswar, (6) NESCO, Januganj, Balasore, (7) WESCO, Burla, Sambalpur, (8) SOUTHCO, Courtpeta, Berhampur, (9) Mr. K.C. Mohapatra, Chairman, PDC, F/6, BJB Nagar, Bhubaneswar, (10) Mr. G.N. Agrawal, General Secy., Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur, (11) Mr. S.K. Nanda, Convenor, Confederation of Indian Industry(CII), 8, Forest Park, Bhubaneswar.

5. In exercise of the power u/s.94(3) of the Electricity Act, 2003 and to protect the interest of the consumers, the Commission appointed Nabakrushna Choudhury Centre for Development Studies, Chandrasekharpur, Bhubaneswar, the premier Govt. of Orissa's Institute, as Consumer Counsel for objective analysis of the licensee's Annual Revenue Requirement and tariff proposal. The Consumer Counsel submitted its report to the Commission and its representative put forth its analysis and views on the matter in the presence of all the parties present during the hearing.

6. The date for hearing was fixed and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission conducted a public hearing in its premises and heard the applicant, objectors, consumer counsel on 06.02.2008. The objections/suggestions of the objector who remained absent during the hearing has also been taken into record and considered by the Commission.

7. The Commission convened the State Advisory Committee (SAC) meeting on 12.02.2008 to discuss about the ARR application and transmission tariff proposal of the licensee. The members of SAC represented their valuable suggestions and views on the matter and the Commission considered the same.

OPTCL's ARR & TARIFF PROPOSAL FOR FY 2008-09 (Para 8 to 55)

8. OPTCL owns EHT network for transmission of power from various generating stations within the State and for interconnection with the neighboring States regions. OPTCL transmits bulk power to DISTCOS and wheels CGPs' power to their industries located elsewhere. Conveyance of power incidental to inter-state transmission is also carried through OPTCL's network. Apart from this, it is also expected to transmit power for both long term and short term open access customers as per OERC Open Access Regulations, 2005.

9. As per Clause 10 of the Transfer Scheme, OPTCL is a deemed Transmission Licensee under Section 14 of the Electricity Act 2003 for undertaking the business to transmit electricity in the State of Orissa. The OPTCL has also been notified as the State Transmission Utility and accordingly, shall discharge the State Load dispatch functions till further Orders of the State Government from the date of the Transfer.

10. As per OERC instruction vide letter No. JD (EA)-315/07/1976 dtd. 06.11.2007 to the CMD, OPTCL, the licensee was to file two ARR Applications for FY 2008-09 as under:

(i) ARR, Transmission Tariff and Transmission Loss for wheeling during transmission.
(ii) ARR covering Annual Fee and Operating Charges of SLDC.

Accordingly, OPTCL has filed two sets of applications as follows:
(i) Annual Revenue Requirement & Transmission Tariff Application for OPTCL
(ii) Annual Revenue Requirement & Levy of Annual Fee and Operating Charges for SLDC Business

Categorization of Open Access Customers:

11. All the customers seeking open access to OPTCL Transmission System are classified under two categories.

(a) **Long Term Open Access Customers (LTOA Customers)**
A Long Term Open Access Customer means a person availing or intending to avail access to the Inter-State/Intra-State Transmission System for a period of 25 years or more. Going by this, GRIDCO happens to be a long term customer of OPTCL as it uses the corridor of OPTCL for bulk power supply to DISTCOs and for transmission of the surplus power of Captive Generating Stations (CGPs) from their generating station(s) to their plant(s) located at distant places.
(b) **Short Term Open Access Customers (STOA Customers)**
Transmission customers other than Long Term Customer(s) are classified as Short Term Customer(s). The maximum duration of Short Term Customer is one year with condition to reapply after expiry of the term(s).

Revenue Requirement:

12. OPTCL has projected annual revenue requirement of Rs. 655.78 crore (including SLDC function) in its filing of Annual Revenue Requirement and Transmission Tariff for the FY 2008-09 as against expected revenue at the existing Transmission Tariff @ 22 P/U at Rs.423.23 crore. The gap in the Revenue Requirement has been projected at Rs. 232.55 crore. The summary of Transmission cost/annual revenue requirement of OPTCL for 2008-09 as given in page 25 of its application is tabulated below:

Table – 1
Revenue Requirement for FY 2008-09
(Rs. Crore)

Transmission Cost	Approved for 2007-08	OPTCL's Proposal for FY 2008-09 (Including SLDC Function)	OPTCL's Proposal for FY 2008-09 (Excluding SLDC Function)
Employee Cost	142.52	144.27	139.16
R&M Cost	47.00	82.12	75.27
A&G Cost	15.71	25.93	22.35
Interest on loan	60.86	115.16	115.16
Interest on Short Term Loan	-	3.04	3.04
Interest on Working Capital	-	13.53	13.53
Depreciation	48.10	64.53	64.47
Advance Against Depreciation	31.22	65.13	65.13
GRID Co-ordination Committee Expenses	1.56	0.13	0.13
Sub-total	**346.97**	**513.84**	**498.18**
Less Expenses capitalised	3.74	-	-
Total	**343.23**	**513.84**	**498.18**
Special Appropriation	23.01	108.32	108.32
Return on Equity	0.00	8.4	8.4
Contingency Reserve	10.49	13.1	8.6
Grand Total	376.73	**643.66**	**623.56**
Less Miscellaneous Receipts	3.00	1.00	1.00
Net	**373.73**	**642.66**	**622.56**
Rebate @ 2% of the ARR	**-**	**13.12**	**12.71**
Net Transmission Cost	**373.73**	**655.78**	**635.27**

Details of Transmission Costs:

13. The costs of OPTCL i.e. the State Transmission Utility (STU) for the FY 2008-09 for the purpose of determining the ARR and Transmission Tariff have been categorized under the following heads:

(a) Fixed Charges:

- O & M Expenses
- Interest on Loan Capital
- Depreciation, including Advance Against Depreciation
- Return on Equity
- Interest on Working Capital
- Interest on Short Term Loan

(b) Pass through Expenses:

- Interest on term loan
- Advance Against Depreciation
- Special Appropriation (loss of FY 2005-06)
- Special Appropriation (loss of FY 2006-07)

c) Additional Expenses

Details of Fixed Charges:

OPTCL proposes O & M Expenses of Rs.252.32 crore (including SLDC function) under the following heads:

Employee Cost including Terminal Benefits.

14. The Employees Expenses for FY 2008-09 has been projected by OPTCL at Rs.144.27 Crore (after capitalization) including Terminal Benefits on the basis of (i) The Audited Accounts of OPTCL for FY 2005-06 (ii) Provisional Accounts of OPTCL for FY 2006-07 (iii) Taking in to account the impact of an expected increase in employee's strength during 2008-09. This includes Rs. 5.11 crore of Employee Cost towards SLDC functions.

15. The component-wise details include salaries, dearness allowance, other allowances, reimbursement of medical expenses and house rent, encashment of unutilized earned leave on retirement, honorarium, payment under workmen compensation Act, Ex-gratia and misc. expenses, staff welfare expenses etc. The terminal benefits account for Rs. 49.36 crore.

Administrative & General Expenses

16. The A&G expenses for FY 2008-09 has been projected at Rs 25.93 Crores, an increase of 6% over revised estimate for FY 2007-08 which are based on the actual expenses incurred up to Sept. 2007.

Repairs & Maintenance Expenses

17. OPTCL proposes Repairs and Maintenance (R&M) Expenses for FY 2008-09 at Rs. 82.12 Crore. The proposed R&M Cost of OPTCL of Rs 82.12 Cr. includes Rs 6.85 Cr. of R&M Cost proposed in ARR of SLDC. R&M expenses of Rs. 82.12 crore include expenses towards Master Maintenance Plan of lines and S/S of the order of Rs. 66.65 crore, IT expenses of Rs. 2.48 crore, R&M towards telecom Rs. 13.00 crore etc.

18. Although the O & M expenses as per CERC Norms works out to Rs. 317.52 Crore, OPTCL has proposed the same on the lower side at Rs.252.32 Crore in the ARR application.

Interest on Loan Capital

19. Interest on Loan for FY 2008-09 has been projected at Rs115.16 Crore by OPTCL.

New Projects

20. OPTCL proposes to spend Rs 318.51 Crore during FY 2008-09 for on going projects and also on new projects. This includes Rs. 50 crore towards development of infrastructure for Telecommunication network, Rs. 18.01 crore for IT and Rs. 250.50 crore towards increasing overall system capacity and strengthening transmission network. The details of new lines and sub-stations are given in the table below:

Table – 2

(Rs. in Crores)

				Phasing of Expenditure			
Sl. No.	**Name of project with scope of work and status of implementation.**	**Estimtd. cost**	**Expend-iture up to 31.3.07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
1	400kV IB-Meramundali D/C line (235 kms) to be commissioned during 2008-09	182.84	106.07	40.00	36.77	0.00	0.00
2	220kV Budhipadar- Bolangir via Burla D.C line (179.563 kms) to be commissioned during 2008-09	67.00	36.66	24.00	6.34	0.00	0.00
3	132kV Bidanasi-Cuttack D/C line(12 kms) to be commissioned during 2008-09	11.55	0.00	8.00	3.55	0.00	0.00
4	2*100 MVA, 220/132 KV S/S at Bhadrak with associated transmission lines (1.75 kms) work in progress and to be commissioned during 2008-09	33.05	1.81	20.00	11.24	0.00	0.00
5	2*12.5 MVA,132/33kV S/S at Basta with associated line(3kms) work in progress and to be commissioned during 2008-09	16.98	0.00	10.00	6.98	0.0	0.00

Sl. No.	Name of project with scope of work and status of implementation.	Estimtd. cost	Expend-iture up to 31.3.07	2007-08	2008-09	2009-10	2010-11
6	2*12.5 MVA,132/33kV S/S at Karanjia with associated line(23 kms) work in progress and to be commissioned during 2008-09	24.20	0.00	10.00	14.20	0.00	0.00
7	2*12.5 MVA,132/33kV S/S at Barpali with associated line(5 kms) work in progress and to be commissioned during 2008-09work in progress and to be commissioned during 2008-09	15.86	0.00	5.00	10.86	0.00	0.00
8	400kV D/C line from Meramundali to Duburi(96 kms) work in progress and to be commissioned during 2008-09	141.48	9.02	50.00	38.56	43.90	0.00
9	2*20 MVA,132/33kV S/S at Anandpur with associated line(29.834kms) work to be commenced	23.20	0.00	0.00	10.00	13.2	0.00
10	2*100 MVA, 220/132 KV S/S at Sarua with associated transmission lines (5 kms) work to be commenced	20.00	0.00	0.00	10.00	10.00	0.00
11	2*12.5 MVA,132/33kV S/S at Dabugaon with associated line(50 kms) work to be commenced and to be commissioned during 2009-10	30	0.00	0.00	10.00	20.00	0.00
12	2*12.5 MVA,132/33kV S/S at Baki with associated line(30 kms) work to be commenced and to be commissioned during 2009-10	26.59	0.00	0.00	10.00	16.00	0.00
13	132 KV S.C line on D.C tower from Paradeep grid S/D to Jagatsing pur grid S/S(56.073 kms) with 2 nos feeder bay extension(one at each end) work to be commenced and to be commissioned during 2009-10	12.04	0.00	0.00	5.00	7.04	0.00
14	2*12.5 MVA,132/33kV S/S at Chandpur with associated line(5kms) work to be commenced	15.00	0.00	0.00	5.00	10.00	0.00
15	2*12.5 MVA,132/33kV S/S at Kuchinda with associated line (55 kms) work to be commenced	35.00	0.00	0.00	15.00	20.00	0.00
16	2*315 MVA,400/220/132/33 KV s/s at Keonjhar with associated line(50 kms) work to be commenced	100.00	0.00	0.00	25.00	50.00	25.00
17	Line for Sterlite Power Evacuation	80.00	0.00	48.00	32.00	0.00	0.00
	Grand Total	834.79	153.56	215.00	**250.50**	190.14	25.00

(a) Depreciation

21. OPTCL has projected Depreciation considering the rate of depreciation prescribed by CERC for FY 2008-09 on the book value of the Assets and additions thereto. Accordingly, the transmission licensee has projected depreciation at Rs. 64.53 Crore based on the provisional Accounts of OPTCL for FY 2006-07.

(b) Advance Against Depreciation (AAD)

22. Following CERC norms, OPTCL has projected AAD at Rs. 65.13 crore. The one-tenth of loan balance of OPTCL is worked out as Rs.129.66 crore. After deduction of Rs. 64.53 crore applying the depreciation as per CERC norms, the balance amount of Rs. 65.13 crore has been claimed as AAD.

Return on Equity

23. When OPTCL got bifurcated from the erstwhile GRIDCO effective 1.4.2005, the equity share capital of OPTCL was stated at Rs.60 Crore. Therefore, the licensee has projected ROE @14% on the equity share capital of Rs.60 Crore, which amounts to Rs. 8.40 crore.

Interest on Working Capital

24. Based on CERC norms, OPTCL has calculated its working capital needs at Rs. 135.34 crore for the FY 2008-09. Taking 10% as the rate of interest, interest on working capital amounts to Rs. 13.53 crore for 2008-09. For the purpose of determination of working capital OPTCL has taken into consideration the O & M expenses for one month, maintenance of spares at the rate of 1% of the historical cost escalated @ 6% per annum from the date of commercial operation and receivable equivalent to two months' of transmission charges calculated on target availability.

Interest on Short Term Loan

25. As stated above OPTCL proposes a total investment of Rs. 318.51 crore during 2008-09 on ongoing projects. Out of this, 80% shall be funded by long-term loan and 20% by short-term loan. OPTCL has calculated the interest to be paid for short-term loan at Rs. 3.04 crore.

Pass through Expenses

26. OPTCL proposes for pass through of Rs 108.32 Crore in the ARR for FY 2008-09 which is presented as under:

Table – 3

(Rs. Crore)

1.	Interest on Term Loan	23.37
2.	AAD	51.63
3.	Special Appropriation (loss of FY 2005-06)	14.98
4.	Special Appropriation (loss of FY 2006-07)	18.34
	Total	**108.32**

Additional Expenses

Contingency Reserve

27. A sum of Rs. 13.10 Crore has been projected for Contingency Reserve for the FY 2008-09.

Provision for Bad & Doubtful Debts

28. OPTCL does not envisage addition of any amount towards Bad and Doubtful Debts during 2008-09.

Grid Co-ordination Committee Expenses

29. As per provisions in Orissa Grid Code Para 11, OPTCL has formed Grid Coordination Committee (GCC) under it. Expenses of the Committee has been estimated at Rs.0.13 crore for the FY 2008-09.

Rebate @ 2% of Annual Revenue Requirement

30. OPTCL is receiving its billing amount from DISTCO's through GRIDCO on first charge basis for which DISTCOs are getting benefit of 2% rebate. To avoid loss to OPTCL, the licensee has made provision of Rs 12.71 Crore (Rs 622.56 Cr./0.98-Rs 622.56 Cr.) over and above Rs 622.56 Crore to recover the total ARR of Rs 635.265 Crore (Excluding ARR of SLDC).

Other Income and Cost/ Miscellaneous Receipts:

31. OPTCL estimates that it will earn Miscellaneous Receipts of Rs. 1 Crore from Inter-State Wheeling of 100 MU @ 10 Paisa per Unit during FY 2008-09. The same has been deducted from the gross revenue of OPTCL to arrive at the Net ARR for FY 2008-09.

32. OPTCL has treated the revenue receipt from short-term Open Access as nil for 2008-09.

Transmission Loss

33. OPTCL proposes Transmission Loss at 5% for wheeling for FY 2008-09 considering the loss of 5.20% estimated for first six months of 2008-09.

Expected Revenue from Transmission Charges

34. The revenue receipts from various transmission charges at the existing transmission tariff of 22 P/U shall be Rs. 423.23 Crore. Revenue to be earned by OPTCL from wheeling of power to DISTCOs and other long term open access customers for FY 2008-09 at the existing rate is shown below in tabular form:

Table – 4
Sources of Revenue

Sl. No.	Customer	MU to be handled	Rate (P/U)	Transmission Loss (%)	Qty. handled including Transmission Loss If any (MU)	Amount (Rs. Crores)
1	**CESCO**	5570.00	22.00	0.00	5570.00	122.54
2	**NESCO**	5044.00	22.00	0.00	5044.00	110.97
3	**WESCO**	6373.00	22.00	0.00	6373.00	140.21
4	**SOUTHCO**	1925.00	22.00	0.00	1925.00	42.35
	Total DISTCOs	**18912.00**			**18912.00**	**416.06**
5	**Emergency Sale to CPP**	10.00	22.00	0.00	10.00	0.22
6	**Wheeling of ICCL power**	200.00	22.00	5.00	210.53	4.63
7	**Wheeling of NALCO power**	100.00	22.00	5.00	105.26	2.32
	Total	**19222.00**			**19237.79**	**423.23**

Excess or (Deficit) in the ARR:

35. OPTCL has submitted that with its present Transmission Tariff structure consisting of Transmission Charge @22 P/U & Transmission Losses @ 5.00%, it would not be able to meet its current costs as it may result in a deficit of Rs 232.55 crore as shown in table 4.

Table - 5

(Rs. Crore)

Total Annual Revenue Requirement	655.78
Less : Revenue earned from Long Term Open Access Customers	423.23
Excess or (Deficit) of ARR at the existing Wheeling Rate @ 22 P/U	**(232.55)**

36. The licensee, therefore, submits this application before the Commission with a request to approve its proposed ARR and the Transmission Tariff and Wheeling Loss for FY 2008-09.

Proposed Tariff to Meet the Revenue Requirement for FY 2008-09.

Transmission Tariff:

37. The Transmission Cost less Revenue from inter-state wheeling for FY 2008-09 is given in the following table for computation of Transmission Tariff.

Table – 6

Items	Tariff for OPTCL including SLDC function	Tariff for OPTCL excluding SLDC function
(a) Total Annual Revenue Requirement (Rs. Crore)	655.78	635.265
Monthly Fixed Transmission Cost for recovery (Rs. Crore)	54.65	52.94
(b) Total Million Units proposed for Wheeling (MU)	19222	19222
Proposed Transmission Tariff (a/b) (P/U)	34.11	33.05

38. OPTCL proposes to recover the Annual Fixed Cost of Rs.655.78 Crore (including SLDC function) in full from the Long-Term Open Access Customers like DISTCOs & CGPs on the energy drawl during FY2008-09 in two ways i.e. either through recovery of the same on monthly basis @ Rs 54.65 Crore per Month or @ 34.11 P/U from 1.04.2008 considering the Transmission Loss for wheeling at 5.00% on energy drawl.

39. Alternatively, the licensee proposes to recover the Annual Fixed Cost of Rs.635.265 Crore (excluding SLDC function) in full from the Long-Term Open Access Customers like DISTCOs & CGPs on the energy drawl during FY2008-09 in two ways i.e. either through recovery of the same on monthly basis @ Rs 52.94 Crore per Month or @ 33.05 P/U from 01.04.2008 considering the Transmission Loss for wheeling at 5.00% on energy drawl.

Long term Open Access Charges in terms of Rs./MW/Day

40. The estimated energy for transmission in OPTCL's system is expected to be 19222 MU or an average of 2194.29 MW. The net transmission cost as indicated in the table above is Rs. 655.78 Crore (including SLDC Function) and Rs. 635.27 crore (excluding SLDC function). OPTCL, therefore, proposes, the Long Term Transmission Charge on the basis of MW flow by adopting the OERC formula at Rs 8187.88 per MW per day (including SLDC function) from 01.04.08 onwards which is equivalent to 34.12 P/U. Similarly, the licensee proposes the Long Term Transmission Charge at Rs. 7931.73 per MW per day (excluding SLDC function) which is equivalent to 33.05 P/U.

Table – 7

LTOA Charges and STOA Charges in terms of Rs./MW/Day

Items	LTOA and STOA Charges of OPTCL including SLDC function	LT and STOA Charges of OPTCL excluding SLDC function
Net Annual Revenue Requirement	**655.78**	**635.27**
Energy to be transmitted in OPTCL Network (MU)	**19222.00**	**19222.00**
Proposed Transmission Tariff in P/U	**34.12**	**33.05**
Power Flow (equivalent of 20234 MU) in MW	**2194.29**	**2194.29**
Proposed LT Open Access Charges in Rs. per MW per day	**8187.88**	**7931.73**
Proposed ST Open Access Charges in Rs. per MW per day (25% of LTOA)	**2046.97**	**1982.93**

Short term Open Access Charges in terms of Rs./MW/Day

41. OPTCL proposes Short Term Open Access Charges as one fourth of the Long Term Open Access Charges as per the relevant OERC regulation. The licensee has proposed Short Term Open Access Charges (25% of LTOA) at Rs. 2046.97 per MW per day (including SLDC function). Similarly, the STOA is proposed at Rs. 1982.93 per MW per day (excluding SLDC function).

Surcharge and/ or Additional Surcharge on Short Term Open Access Charge, if any, as decided by the Hon'ble Commission shall also be leviable.

The transmission licensee shall retain 25% of the charges collected from the short-term customers and the long-term customers shall adjust the balance 75% towards reduction in the transmission charges payable.

Wheeling charges shall be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level as approved by OERC for the previous year subject to year-end adjustment.

Besides the above Open Access Charges, Short Term Open Access Customers are also required to pay **Scheduling & System Operation Charges** of Rs.3000 per day or part thereof for each transaction or as may be decided by the Commission.

The Open Access customers are also required to pay other charges like Reactive Energy Charges, Charges for Short Term Open Access through bidding, Unscheduled Interchange Charges (UI Charges) and Miscellaneous Charges in accordance with OERC Open Access Regulation.

Transmission charges payable by very short-term customers:

42. The transmission charges payable by a very short-term customer using the system for fraction of a day in case of uncongested transmission corridor shall be levied as under, namely: -

(a) Up to 6 hours in a day in one block: ¼th of the ST_rate

(b) More than 6 hours and up to 12 hours in a day in one block: ½ of ST_rate

(c) More than 12 hours and up to 24 hours in a day in one block: equal to ST_rate

The transmission charge payable by a short-term customer shall be for one day and in multiples of whole number of days.

43. **Other Open Access Charges:** The licensee has proposed the following other Open Access Charges for the FY 2008-09. OPTCL has submitted that it has not been able to file Reactive Power Pricing for FY 2008-09 along with the ARR application. The same would be filed during the hearing.

Table – 8
OA Charges proposed by OPTCL for FY 2008-09

OA CHARGES	OPTCL PROPOSAL
Scheduling & System Operation Charges	@ Rs.3,000/- per day or part thereof
Charges for Short-Term Access through Bidding	As per Regulation 9.4.b of OERC (Terms and Conditions for Open Access Charges) Regulations, 2005
UI Charges	As per Intra-State ABT Regulations in Orissa to be framed by OERC
Penal Charges	@ 25% of the Transmission Charge
Meter Charges	@ Rs.2,000/- per month
Service Charges	@ 1.5% on the sum of Transmission Charges and Wheeling Charges

Summary of Transmission Tariff Proposed by OPTCL

44. The total of Transmission Charges are applicable for wheeling of GRIDCO power from generating points to the supply point of Distribution & Retail Supply Licensee and wheeling of power from CGP to its units at a separate location. The total charges (excluding SLDC function) shall be calculated by summation of following charges stated in Para (a) to (d) below as applicable:

Transmission Charge

45. Transmission Charge @ Rs. 52.94 Crore per Month or @ 33.05 P/U and shall be applicable for transmission of GRIDCO power at 220 kV/ 132 KV over OPTCL's EHT transmission system for the purpose of transmission of energy from generator end to the substation from where energy will be fed to DISTCOs and CGPs for the use of EHT transmission system and for the purpose of transmission of energy from a CGP to its industrial unit located at a separate place as well as for transmission of power from outside the state to an industry located inside the State. Transmission loss shall be considered as 5% for the use of EHT system of OPTCL in addition to the transmission charges.

46. In terms of Rs./MW/Day, Long Term Open Access Charges will be Rs.7931.73 and that for Short Term Open Access Charges will be Rs. 1982.93 plus other applicable charges and losses.

47. Rs.3,000/- per day or part thereof towards Scheduling & System Operation Charges shall be paid.

48. 25% of the Transmission Charge towards Penal Charges.

49. Rs.2,000/- per month towards Meter Charges.

50. The transmission charge shall be applicable to the DISTCOs and CGPs, the Long Term Customers of GRIDCO for the respective month.

Rebate:

51. On payment of monthly bill, the Open Access Customer shall be entitled to a rebate of Two percent (2%) of the amount of the monthly bill (excluding arrears), if full payment is made within 48 hours of the presentation of the bill.

52. One and half percent (1.5%)of the amount of the monthly bill (excluding arrears), if a minimum of 85% of the whole amount (excluding arrears) is paid within 48 hours of the presentation of the bill and One percent (1%) on the balance amount if paid in full within 15 days from the date of the presentation of the bill.

53. One percent (1%) of the amount of the monthly bill (excluding arrears) if paid in full within 15 days from the date of the presentation of the bill.

Delayed Payment Surcharge:

54. The monthly charges as calculated above together with other charges and surcharge on account of delayed payments, if any, shall be payable within 30 days from the date of bill. If payment is not made within the said period of 30 days, delayed payment surcharge at the rate of 2% (two percent) per month shall be levied pro-rata for the period of delay from the due date, i.e. from the 31st day of the bill, on the amount remaining unpaid (excluding arrears on account of delayed payment surcharge).

Duties and Taxes:

55. The Electricity Duty levied by the Government of Orissa and any other statutory levy/ duty/ tax/ cess/ toll imposed under any law from time to time shall be charged over and above the tariff.

VIEWS OF OBJECTORS ON TRANSMISSION TARIFF PROPOSAL FOR 2008-09 (Para 56 to 164)

Analysis of the proposal by Consumer Counsel

Revenue Gap

56. OPTCL has given the proposal for revenue requirement of Rs. 635.26 crore and revenue from long-term open access customer of Rs 423.23 crore, leaving a shortfall of Rs 212.03 crore during the FY 2008-09. This shortfall has been calculated at the existing transmission tariff @ 22 P/U. OPTCL proposes to recover the annual fixed cost of Rs 635.26 crore in full from the long term open access customers like GRIDCO & CGPs on energy drawl during FY 2008-09 in two ways, i.e. either through recovery of the same on monthly basis @ Rs 52.94 crore per month, or @ 33.05 P/U from 1.4.2008 considering the transmission loss for wheeling as 5% on energy drawl.

Table – 9
Revenue Gap of OPTCL During FY 2008-09
(Rs in Crore)

Total Revenue Requirement	635.26
Revenue from long-term open access customer	423.23
Revenue Gap	212.03

Annual Revenue Requirement

57. OPTCL has projected its revenue requirement during FY 2008-09 about 69 per cent more than that of FY 2007-08. The revenue requirement constitutes not only fixed cost and additional expenses but also pass through cost of Rs 108.32 crore. Earlier these costs were not allowed by the Commission. If the pass through cost were deducted, then the revenue gap would be Rs 103.71 crore. The pass through of previous loss and liabilities would certainly impose burden on the consumers and therefore should not be allowed.

58. The areas of concern, besides the pass through loss, are increase in A & G cost (65.05%), repair and maintenance cost (74.72%), interest on loan capital (116.45%) and advance against depreciation (108.62%). The increase in A & G cost seems to be too high. Even if it were increased by 6 per cent it would be around Rs 16.65 crore. Repair and maintenance is required in order to operate the system effectively. However, for a single year, the proportion of spending seems to be too high and hence a part of this may be allowed to pass on. Otherwise, the whole burden would fall on the consumers. Further, it is of concern that machines are imported without any service facilities.

59. OPTCL had proposed an amount of Rs 131.51 crore as interest on loan capital during the FY 2007-08, but the Commission had approved only Rs 60.86 crore. Again during FY 2008-09, OPTCL has proposed Rs 131.73 crore as interest payment. OPTCL should explain such significant increase in interest. Is there any

delay in the completion of any ongoing projects, which has added to the interest? However, the entire amount should not be passed on to tariff at a time, as it would impose burden on the consumers.

Table – 10
Annual Revenue Requirement of OPTCL

(Rs. in crore)

	Proposal for 2007-08	Approval of 2007-08	Proposal for 2008-09		% Change (Including SLDC)
			Including SLDC	Excluding SLDC	
O & M expenses	**255.83**	**205.23**	**251.51**	**236.78**	**22.55**
Employees Cost	187.04	142.52	144.27	139.16	1.23
Repair & Maintenance Cost	54.00	47.00	82.12	75.27	74.72
A & G Cost	14.79	15.71	25.93	22.35	65.05
Interest on Loan Capital	131.51	60.86	131.73	131.73	116.45
Depreciation	52.95	48.10	64.53	64.47	34.16
Advance against Depreciation	84.18	31.22	65.13	65.13	108.62
Return on Equity	8.4	0.00	8.4	8.4	
Pass through Cost	138.33	23.01	108.32	108.32	370.75
Additional Expenses	12.05	12.05	13.23	8.73	9.79
Total Revenue Requirement	**673.43**	**380.47**	**643.66**	**623.56**	69.17
Less misc. receipts	4.91	3.74	1.00	1.00	-73.26
Rebate 2% ARR			13.12	12.71	
Net ARR	**678.34**	**376.73**	**655.78**	**635.26**	74.07

60. Regarding the advance against depreciation, it is to be seen that whether it satisfies the CERC norm, which stipulates that advance against depreciation should be permitted only if cumulative loan repayment up to a particular year exceeds the cumulative depreciation up to that year.

61. The significant increase in expenses as mentioned above would impose burden on the general consumers of the state, as this would be passed on to the ultimate users through GRIDCO and DISTCOs. Therefore, there is a need to reduce these expenses for the benefit of the consumers.

Revenue from Tariff

62. OPTCL has calculated the revenue receipts to be Rs 423.23 crore at the existing rate of tariff, i.e. @22 P/U, based on the projection of GRIDCO. OPTCL has expected to deliver 18912 MU of energy to GRIDCO, while the actual projection submitted by DISTCOs for the FY 2008-09 is not available. If the demand of the DISTCOMs

would be more than the projection of GRIDCO then the revenue receipts of OPTCL would be changed and hence revenue gap will be changed accordingly.

Transmission Loss

63. OPTCL has proposed a transmission loss of 5% for the FY 2008-09. The Commission had approved 5% transmission loss during FY 2007-08 though it had approved 4% for 2006-07. Kanungo Committee had recommended for a stepwise reduction of transmission loss so that the same is brought to a level at par with that of Central Power Grid by 2007. However, the trend seems to be in the reverse direction. OPTCL has failed to arrest the high transmission loss due to its inefficiency. In conformity with the power sector reform, OPTCL needs to reduce the transmission loss gradually and significantly. The transmission loss, therefore, may be fixed at 4 % for the FY 2008-09.

Tariff proposal

64. OPTCL claims that with the existing Tariff structure consisting of Transmission charge @22 P/U and Transmission Losses @5% it is not able to meet current costs, which results in a deficit of Rs. 212.03 crore. OPTCL, therefore, proposes to recover the annual fixed cost in full from DISTCOs and CGPs either through recovery on monthly basis @ Rs 54.65 crore or @ 34.11 P/U from 1.4.2008 with transmission loss for wheeling as 5% on energy drawl. Considering the ARR of OPTCL only, it proposes to recover AFC on monthly basis @ Rs 54.65 crore or @ 34.11 P/U from 1.4.2008.

Summing Up

65. OPTCL has projected its revenue requirement during FY 2008-09, which is 69 per cent more than that the estimated figure of FY 2007-08. The areas of concern are the pass through of past losses and high increase in A&G cost, repair and maintenance cost, interest on loan capital and advance against depreciation. This higher proportion of increase in cost for FY 2008-09 may not be allowed for the best interest of the consumers. Further, OPTCL has failed to arrest the high transmission loss in conformity with the power sector reform and needs to reduce the transmission loss gradually and significantly. Therefore, transmission loss may be fixed at 4% for the FY 2008-09.

66. The Commission has considered all the views of various objectors on the Transmission Tariff Proposal of OPTCL. Some of these views were found to be of general nature whereas others were specific to the proposed tariff filing for the FY 2008-09. Based on their nature and type, these views have been classified subject-wise as discussed below:

Legal Issues

67. The application so filed by the licensees for transmission of GRIDCO power is not tenable as because this Commission has no authority under law and more particularly U/S 62 of E. Act, 03 separately to determine tariff for transmission of power for the GRIDCO.

68. The OPTCL account has not been audited for the financial year 2005-06 and 2007-08 as such there is no availability of its yearly audited account to be considered as base or standard. The application may be rejected which is based on incorrectand manipulated statements.

69. The OPTCL has filed this application in question to confuse the consumer public without disclosing the purpose for such filing. Revenue requirement has been asked without giving details of calculation.

70. The notice so published inviting objection does not confirm to the requirements of law and does not disclose what purpose such revenue requirements are asked for without giving details of its calculations.

71. The law contemplate that the Commission has to determine licensee revenue for the purpose of fixing of the tariff first.

72. The procedure/method so adopted by Commission be made simple and inexpensive to enable the public to file purposeful objection and affectively.

73. OPTCL has not complied with direction issued in the earlier orders of the Commission.

74. The separation of OPTCL from GRIDCO is only cosmetic and the Commission may direct that OPTCL function as an independent engineering organization with a full fledged independent Board of Directors.

75. OPTCL in its application has proposed net ARR of 655 crores for the FY 2008-09. Repeating their proposal from their application for FY 2007-08 with minor modifications to misguide the Commission as well as the objectors.

76. Chairman of the GRIDCO/OPTCL still continue to be the Chairman of the WESCO/NESCO/SOUTHCO. The difference of opinion is not ruled out in the Board meetings.

77. Now GRIDCO and OPTCL have been bifurcated OPTCL is further bifurcated to OPTCL and SLDC, but proper co-ordination with the generating and trading agencies is still lacking.

78. OPTCL has submitted their proposal on their ARR for the FY 2008-09 for which no audited account has been submitted for the year 2006-07. Various figures given in their application for the FY 2006-07 are provisional and for FY 2007-08 figures are estimated.

79. There was a huge gap between the audited figures and the provisional / estimated figures given in the application, to prove that the provisional figures given by the licensee are not to be trusted with.

80. Licensee has failed to reduce the system loss, bad expenses, rents, rates, taxes, legal expenses, audited fees, auditor fees, other expenses, expenses on contributions to P.F Staff pension, gratuity expenses on training and other schemes, publicity, advertisement, traveling and poster expenses as such violated conditions of licensees.

81. OPTCL should have complete autonomy in functioning and taking its own decision.

Energy Handling and System Availability during 2008-09

82. OPTCL must spell out on their system planning to receive the state share which is comparatively cheaper than import of power for the state requirements.

83. NESCO, SOUTHCO and WESCO have estimated the availability of energy from different sources at 21,100 MU as against 19110 MU estimated by OPTCL.

84. During 2008-09, more energy is to be handled with high voltage transmission system i.e at 400 KV and 220 KV as new EHT Consumers have under taken to draw power at 220 KV.

Transmission Loss

85. OPTCL has not invested any money for system improvement and up gradation to arrest transmission loss.

86. The transmission loss should not be allowed at 5% which should be between 3.28% and 4% maximum. Commission has allowed transmission loss of 4% in two tariff orders for FY 2005-06 and 2006-07.

87. The increase of the “Transmission losses” to 5% against the earlier target of 3.70% is unacceptable. The transmission losses is to be allowed at 4.5% for the year 2008-09.

88. OPTCL should have achieved transmission losses of 3% by now. The Commission should not allow transmission losses more than 3% at least from this year onwards.

89. OPTCL has not taken adequate steps to reduce the transmission loss even though huge expenditure is being incurred every year for improvement of the infrastructure. Interruptions are frequent, which hampers the production in the industries.

90. Improvement of voltage necessarily accompanies reduction in transmission loss. But, the loss figure submitted by OPTCL does not indicate so. There has been no energy audit by the licensee through any recognized/authorized auditor to bring authenticity of the figures of the licensee.

91. The Commission should not permit 5% transmission loss as was permitted in the last tariff order when only 4% was allowed in previous two years.

O&M Expenses

Repair and Maintenance Expenses:

92. OPTCL has not improved its efficiency and standard of service, performance and has not reduced T&D losses, administrative expenditure etc.

93. OPTCL may explain how much funds are allowed by the Commission in O&M head and how much they have spent during that period and what are the improvements?

94. The substations and line of OPTCL are not properly maintained by the authority in-charge due to want of required number of skilled manpower.

95. The provision for revenue requirement of 250 crore for lines and substations are not clear.

96. OPTCL in its present filing has provided an amount of Rs.66.65 crore towards maintenance of lines & substations (Master Maintenance Plan of Lines & substations) for the year 2008-09. The equipment including power transformer, circuit breakers CTs, PT/CVTs, new relays, energy meters cannot be treated as spare parts under R&M which may be allowed as per the CERC norms. The capital expenditure on new and original equipments is to be capitalized and the interest and depreciation charges shall only be allowed in the ARR.

97. The Commission should not allow the actual capital cost and interest during construction for such delayed works. The interest, depreciation and O&M charges of such value should only be taken into the ARR.

98. There is no justification to claim supervision charges for bay extension, lines, switching station @ 16%, by OPTCL being constructed by the EHT consumers. A lot of works like tendering, manufacturer's drawing approval, approval of Electrical Inspector are not being carried out by OPTCL.

99. In the R&M expenses the Commission ought to consider a reasonable increment of 6% per annum over the actual cost for the FY 2005-06 or limit the same with 6% hike over and above the ATE direction of Rs.15.00 Cr for 2006-07.

100. Most of the R&M expenditure envisaged in the ARR of OPTCL are either the Capital Expenditure as it increased the life as well as capacity of the asset or the non R&M expenditures like security personnel charges etc, which should not be treated as R&M.

101. NESCO, WESCO and SOUTHCO submitted that OPTCL may be allowed all the expenditure for implementation of the IT implementation and this need to be booked in the CAPEX. The reasonable requirement of OPTCL towards R&M as estimated by OPTCL is only Rs.18.59 crore.

102. The OPTCL must spell out the improvements in the networks so that construction power can be supplied to expedite the completion of the proposed power station.

103. The OPTCL must utilize Transformer Repair Workshops for repair of the damaged transformers. Besides OPTCL must plan for some more workshops so that expenditure for long hauling of transformers to distance places are avoided besides cutting down the repair time. The EHT Grid sub-stations have no adequate experienced Officers to attend to routine operation / preventive maintenance.

104. The licensee is not able to spend even 50% of the Commission's reduced and approved figures even though they have been always asking for more.

105. It is doubtful whether Rs.47 Cr. which was approved for this year for R&M cost can be actually spent during this Financial Year.

106. The OPTCL has no accounting of stores, no procedures and materials are not utilized and dumped in stores.

107. No cost benefit analysis has been made in utilizing the old transformers.

108. For charging a new line things get unusually delayed due to lack of proper procedure. Proper delegation of power should be in place for taking decision at lower level.

109. OPTCL is not doing adequate preventive maintenance. OPTCL should have trained persons and should not depend upon contractors.

110. For undertaking emergency situations OPTCL should have standby transformers.

Employee Cost and A&G Expenses:

111. The manpower planning assessment for OPTCL given to NPC may be reviewed since they do not have requisite experience in studying the power sector utility.

112. NESCO, WESCO and SOUTHCO submitted that the terminal benefit provisions may be allowed on the basis of the actuary valuation. The employee cost of OPTCL may be allowed at Rs.135.94 crore subject to the computation of terminal benefit provision.

113. NESCO, WESCO and SOUTHCO submitted that considering the inflation and the operational expansion, 6% increase over the employee expenses of the FY 2007-08 may be allowed to OPTCL.

114. NESCO, WESCO and SOUTHCO submitted that Rs.14.79 crore may be allowed to OPTCL towards the A&G expenses for 2008-09.

Interest on Loan Capital

115. The present requirement of Rs.119.6 Cr seems to be abnormal and the accounts need detailed scrutiny.

116. NESCO, WESCO and SOUTHCO computed the interest liability to be chargeable to the ARR of OPTCL during 2007-08 which comes to Rs.25.18 crore as against the claim of Rs.116.38 Cr by OPTCL.

117. The Commission in BST Order for FY 2005-06, Para 6.21.5 has calculated the interest due to PFC at 8.5%. Accordingly the interest rate for the PFC loan @ 8.5% may be considered.

118. OPTCL may swap the high cost loan with 8.5% loans and utilize the depreciation allowed in ARR for immediate repayment of Open Market Loan @ 11.5%.

119. The interest on New project loan may not be allowed as the Capital expenditure is yet to approved by OERC.

120. Interest on zero-coupon bonds and bonds issued/loans taken for securitization/clearing the outstanding dues of the generating companies should be allowed to be passed over to the consumers.

121. The consumer should not be penalized for any inaction, inefficiency of the distribution companies vis-à-vis for the transmission company/trading company not been able to clear the arrears of the generating companies.

Interest on Working Capital

122. Huge delay in work causing increase in Interest During Construction (IDC). The cost escalation due to delay has to be borne by the OPTCL and the expenditure beyond target date should not be allowed.

123. As the loan base is yet to be divided in to capital Exp loan and working capital loan no interest on loan allowed to OPTCL in the ARR 2008-09.

Fixed Asset and Depreciation

124. According to the Electricity Act, 2003, the “Original cost of Fixed Assets” shall be only the book value and the tariff is not to be considered on the basis of the up rated value.

125. OPTCL had considered the value of the assets at the up-valued rate, which under the instructions of the Hon’ble High Court and orders of State Govt. was reduced to the book value at the time of taking over of the assets by GRIDCO from OSEB and depreciation was to be charged at pre-1992 rates and not at the CERC rate.

126. OPTCL has submitted the depreciation at the post 94 rate in contrary to the principle adopted by the Commission to allow the depreciation at pre 92 rate i.e 3.13%

127. Depreciation may be considered at Rs.64.53 crore.

128. OPTCL has planned for capitalization of Rs.459 crore during 2007-08 which may be compared with actual up to December 2007.

129. The inflated figures given by OPTCL is due to consideration of depreciation figures on CERC rates on the upvalued figures of the assets at the time of taking over. It has not been clearly indicated whether OPTCL is maintaining an updated asset register.

130. Depreciation expense has gone up because of the capitalization of worth Rs. 450 crore. It is to be ascertained whether those works have been commissioned or not.

Contingency Reserve

131. National Tariff Policy does not support inclusion of any contingency reserve in transmission tariff also there is no provision for the investment towards Contingency Reserve in OERC (Terms and conditions for determination of Tariff) Regulations, 2004.

132. ATE has directed to allow 1/5th of the R&M towards contingency reserve for 2006-07. Accordingly, Rs.5.00 Cr may be allowed to OPTCL towards contingency reserve for 2008-09 instead of Rs.13.10 Cr.

133. The Commission is to give guidelines on contingencies as per the National Tariff Policy.

134. In the last tariff order dated 22.03.2007 Commission directed to indicate the details of investment of this reserve amount, OPTCL has not given any details.

Return on Equity:

135. Return on Equity has not been allowed by the Commission in the past tariff orders. Hence, this may be disallowed.

136. As the sector has not yet turned around, zero reasonable return may be allowed on the similar lines as the Commission has decided ARR and tariff order for OPTCL in previous years.

Past Losses

137. OPTCL claim towards past losses has no merit as the same items are already dealt in the ARR 2007-08.The Commission accordingly allowed the related Expenses in the ARR of OPTCL.

138. The truing up impact for the year 2006-07 and 2007-08 may be allowed to OPTCL.

139. The licensee has failed to explain what steps it has taken till date for realization and arresting the growth rate of bad debts.

140. OPTCL has projected provision for bad debt of Rs.5 crore for the FY 2008-09. Distribution Licensees are paying the Transmission charges in full, the provision for bad debt is unfounded and should not be allowed in the ARR of OPTCL.

141. Past losses need a detailed examination. Expenditure beyond the approved amount should be treated as unauthorized expenditure and should not be passed over.

Miscellaneous receipts

142. The Commission is to consider @ Rs.17.50 P/U while computing the wheeling income of OPTCL as directed by ATE.

143. The supervision charges collected by the licensee are in the nature of misc. revenue for utilizing the services of his skilled manpower. The Commission may therefore reduce the ARR of OPTCL to the extent of the full or part value of the supervision charges.

Revenue Requirement

144. Long-term open access and short-term open access charges are low in other States and are charged at per unit cost basis instead of per MW per day basis. This needs a detailed examination by the Commission.

145. The Commission had approved a total transmission cost of Rs.373.72 Cr for the FY 2007-08 and the present requirement of Rs.655.73 Cr projects by OPTCL is almost double of the previous year’s approved cost.

146. Licensees should not be allowed to have the revenue requirement without having any relation/basis and nexus between actual and revenue requirement and cost and service and for not providing required level/standard of service.

Transmission Tariff

147. The Commission may determine the transmission tariff for the FY 2008-09, based on the approved parameters for the FY 2008-09.

148. OPTCL has proposed increase in transmission tariff without any improvement in the quality of transmission and reduction in transmission loss.

Transmission Cost

Advanced Against Depreciation

149. The proposed transmission cost of Rs.523.21 crore of the applicant is against the statutory parameters, confirmed by the Appellate Tribunal for Electricity. The applicant having added the cost of Rs.65.13 crore towards advance against depreciation in their proposed transmission cost for the FY 2008-09 is not only violating the statutory parameters but also against the basic objectives of the National Tariff Policy.

150. NESCO, WESCO, SOUTHCO submitted to exclude the additional depreciation in computation of the OPTCL ARR for 2009 in view of the National Tariff Policy.

151. OPTCL may negotiate with the Banks/ FIs for a longer tenure or moratorium in repayment of Principal.

152. The advance against depreciation should not be allowed in tariff calculation for transmission charges. Hence, advance against depreciation may not be allowed in the tariff order for the FY 2008-09.

153. The estimate of transmission cost has not been taken into account the earnings for wheeling for inter-state power trading and earnings from the UI charges and delayed payment surcharge. As such earnings on these accounts should be taken into consideration while arriving at the net transmission cost.

Tariff Increase

154. The application proposing an increase in the transmission tariff to 34.11 p/u from 01.04.2008 against the transmission tariff approved by OERC for the year 2007-08 of 22 p/u unit without any improvement in the quality of transmission and reduction in the transmission loss may not be approved.

Income from Wheeling

155. The Hon’ble ATE has directed the Commission to consider Rs. 17.50 crore towards the income from wheeling for FY 2006-07. The same figure may be considered while computing the wheeling income of OPTCL.

Timely Completion of Project

156. The Govt. of India and the State Govt. have announced to give electricity to all through Rajib Gandhi Gramin Bidyut Yojana & Biju Jyoti Yojana. Whether the line and substations connectivity of the above load will be met by the OPTCL?

157. OPTCL has not only failed to meet the target for commissioning of new transmission system but has caused abnormal delay which is exceeding 10 years relating to some major transmission lines.

158. PGCIL is not facing any Right of way problem unlike OPTCL. OPTCL should adopt proactive and extra official methods to get their things sorted out.

159. Investment on certain new lines such as 400 KV to Keonjhar has been planned without proper assessment of the load growth.

Some Special Issues

160. It is the responsibility of OPTCL to achieve the target of pollution free energy in the light of national electricity policy.

161. There is also loss of elephant lives, which shows functionaries of DISTCOs, OPTCL and GRIDCO have not done enough to prevent it.

162. It may be considered whether a sub-load dispatch centre is required at Bhubaneswar when there is the main centre at Mancheswar.

163. The staff suggested by OPTCL for proposal of having separate groups for operational planning and services, operation service group and commercial operation does not seem to be justified for handling so less power/energy and catering so few stake holders.

164. A number of entrepreneurs have shown interest in setting up hydro power projects ranging in the order of 5 MW to 106 MW. Evacuation planning from these hydro power projects is essential for taking investment decision.

OPTCL's RESPONSE TO THE OBJECTORS (Para 165 to 226)

165. In response to the views of objectors on the ARR and Tariff Application of OPTCL for 2008-09, OPTCL had filed rejoinders for the same. The response of OPTCL has been broadly classified into the following issues.

Legal Issues

166. As per Clause 10 of the Transfer Scheme, OPTCL is a deemed Transmission Licensee for undertaking the business to transmit electricity in the State of Orissa. OPTCL is a wholly owned undertaking of the State Government and a Company incorporated under the Companies Act, 1956 with Registration No. 15-07553 of 2003-04 is discharging its obligations. w.e.f. 01.04.2005.

167. In accordance with the Chapter–III, Para-5 (1) (a) of OERC (Terms and Conditions for determination of Tariff) Regulations, 2004 and Para 19(3) of the License Conditions of OPTCL issued vide OERC Order dated 27.10.2006 in Case No 22 of 2006, OPTCL submitted its Annual Revenue Requirement for FY 2008-09 before

OERC on 30.11.07 with a request to approve the Annual Revenue Requirement for FY 2008-09 and to fix transmission Tariff to recover the revenue.

168. The public notice published on 13/14.12.2007 by OPTCL is absolutely in line with the provisions contained in Electricity Act, 2003 and conforms to the requirement under the aforesaid Act and Regulations made there under. The notice indicated that interested persons may inspect / peruse the said tariff proposal for 2008-09 and take note thereof by 10.01.2008, which are available in the O/O Sr. General Manager (R&T), OPTCL, all S.Es. of EHT(M) Circles located at Cuttack, Burla, Berhampur, Jeypore, Chainpal and Jajpur Road as well as in OERC and OPTCL Website. The full set of the tariff proposal also can be purchased from the above offices on payment of Rs.50/- for each application. Hence sufficient information has been given for inviting objection and this cannot be treated as a frustrated exercise and contrary to the law and principle of natural justice. Therefore, the allegations in this Para are not correct.

169. Submission of Annual Revenue Requirement of ensuing year by the licensee to the Commission before 30th November of current year is in accordance with Section 62 of I.E. Act. The present ARR & Transmission Tariff application of OPTCL has been prepared and submitted to OERC basing on the Audited Accounts of OPTCL for FY 2005-06, provisional Accounts of OPTCL for FY 06-07, facts and materials etc.

170. The present ARR and transmission tariff application has been prepared and submitted basing on the Audited Accounts of OPTCL for FY 05-06, provisional Accounts of OPTCL for FY 06-07, facts and materials. Moreover, OPTCL had furnished all information and other details as per the prescribed formats provided by OERC with full justifications.

ARR & Tariff

171. OPTCL does not agree to the remark that there was huge gap between the audited figures and the provisional figures. Therefore, the figures proposed for expenses for different head are reliable and trust worthy for fixing the Annual Revvenue Requirement for 2008-09.

172. OPTCL does not agree to the assumption made by the objector in different items. The calculation of ARR suggested by the Objector are based on his own assumption and are there fore different from what has been projected by OPTCL. Hence the ARR estimation and the transmission charge proposed by CII should not be taken in to consideration.

Energy Handled During 2007-08

173. Coordinated efforts by OPTCL, DISTCOMs and officials of OERC are being taken to assess the future load growth due to village electrification; and accordingly OPTCL will expand its network.

174. OPTCL gets transmission charge from four distribution companies, M/S IMFA and M/S NALCO. Four DISTCOs have projected to purchase 18,168.19 MU from GRIDCO. The wheeling of M/S IMFA and M/S NALCO power is projected as 300 MU, Total comes to 18,468.19 MU which is less than OPTCL projection of 19222MU. Hence, OPTCL does not agree to the objector's projection of 21,100 MU, since it is more than their projection of 18,168.19MU.and also projection of OPTCL.

Transmission Loss

175. Transmission loss is purely a technical loss. OPTCL have no control over the transmission loss due to several factors, which is evident from the fluctuation of transmission loss derived for different years as per the Gross Method prescribed by OERC. OPTCL has undertaken construction of new lines and sub-stations (i.e. strengthening the transmission infrastructure) for improvement of quality of power supply and considering the future load growth. Hence, OPTCL does not agree to the suggestion for fixing transmission loss maximum at 4%.

176. In some of the new lines, the loading on transformers is very less and some lines are over loaded, which are the factors for adding loss. The transmission loss of OPTCL is one of the lowest in the country compared to other States. There has been increase in Transmission Loss on account of sudden load growth in different areas. The transmission loss of each month also depends on the export and import over the same line. There has been increase in Transmission Loss on account of extension of 132 KV networks.

177. The transmission loss of 2006-07 and for FY 2007-08 (April '07 to Sept'08) is computed as 5.04% and 5.2% respectively. OPTCL has proposed the Transmission Loss @ 5 % based on the present trend and increased demand. The Commission approved 5% loss for 2007-08. The Transmission loss for the period April 07 to November-07 is computed as 5.02%.

O&M Expenses

178. The present ARR and transmission tariff application has been prepared and submitted basing on the Audited Accounts of OPTCL for FY 05-06, provisional Accounts of OPTCL for FY 2006-07 and other facts and materials. The proposal for approval of expenses of administrative, employees cost, R&M costs are based on audited accounts that can not be assumed as unjustified and imaginary.

179. After detailed discussion with the prospective industries and as per advice of the State Govt., OPTCL has formulated a policy to mobilize funds for construction of key transmission lines from EHT consumers for their benefit and the fund is being repaid to those EHT consumers along with interest @ 6% per annum. OPTCL has not forced any EHT consumers to make funds available for construction new lines. Such a policy is in the interest of the consumers of the State as it carries an interest rate of 6% per annum as against the prevailing interest rate of 11 to 12% per annum.

Employment's Cost and Administrative & General Expenses

180. OPTCL's projection of Employees Costs for 2008-09 is based on audited accounts of 2005-06, provisional accounts of 2006-07, facts and evidential documents. The projection is very much realistic which needs full consideration. OPTCL does not agree to the NESCO, WESCO and SOUTHCO's projection of Employees Costs.

181. The projection towards A&G expenses is very much realistic which needs full consideration.

182. OPTCL had not projected any provision for bad and doubtful debt.

R&M Expenses

183. The expenditure incurred by the undivided GRIDCO towards repair of its transmission lines and sub-stations up to 2005-06 was very less in view of non-availability of funds. Inadequate expenditure towards Repair and Maintenance is not a good sign and not in the long-term interest of OPTCL-the STU, DISTCOs, consumers of the State and the State as a whole. OPTCL intends to undertake preventive and proper maintenance of its lines and Grid Sub-stations in the ensuing years for which Rs.82.12Cr is proposed towards R&M expenses during the FY 2008-09.

184. The expenditure incurred towards R&M for 2006-07 is Rs.11 crore. In addition, orders have been placed for procurement of R&M Materials during 2006-07 is Rs.23 Crores. Utilization of the materials have already started against various works pertaining to R&M of EHT sub-stations and transmission lines after receipt of materials for which the expenditure incurred up to November, 2007 is already reached Rs.14.36 Crore. The suggestion of ATE to reduce the amount of Rs36 Crores to Rs 15 Crores for 2006-07 is no way can be implemented when OPTCL had planned for Rs 34Crore (Rs11Cr.+Rs23Cr) during 2006-07. The OPTCL was challenged the order of Hon'ble ATE before the Hon'ble Supreme Court of India and there is already an interim order directing OERC not to proceed on the matter for re-determination of tariff.

185. After allocation of Rs.47 Crores towards R&M expenditure for 2007-08, action plan was initiated for procurement of equipments such as breakers, CTs, PTs and LAs of different voltage class and batteries, transformer oil, hardware fittings, SF-6 gas, nuts & bolts, surplus towers and tower members, power transformers, ground wire etc. Orders have been placed for procurement of R&M Materials up to December 2007 is Rs.10.24 crores.

186. During FY 2007-08, expenditure incurred up to November2007 is Rs.14.36 Crore. Necessary steps have been taken to place order aggregating to Rs.59.20 crore up to 31.03.2008.The details action plan amounting to Rs.59.20 crores is submitted to Commission in our reply on dated 31.12.07 in response to OERC query.

187. Considering the load growth, OPTCL submitted its proposal of construction of new lines and substations for which provision of Rs 250 Crores is proposed.

188. All the items proposed under Master Maintenance Plan (MMP) by OPTCL are to be covered under R&M work since the equipment / conductor replacements works have been proposed mainly considering the outlived and old equipment / conductors presently in service.

189. In case of 132 KV Chandaka-Mendhasal DC line, it has already served for about 30 years. Apart from that, considering the loads of Cuttack-Jagatsingpur substations (about 80 MW), and Mancheswar & proposed Badagarh substations (about 100 MW), the above DC line shall have to cater to 180 MW load shortly. Hence, proposal for replacing the existing conductors with GAP conductor having higher capacity on the existing towers, has been kept in the Master Maintenance Plan under O&M Head.

190. The cost claimed under R&M comprises the cost of various spares including transformers which need to be procured and commissioned to avoid any interruption of power supply in the State. These expenditures need to be covered under R&M and allowed in the Tariff in each years as it will not be possible on the part of OPTCL to arrange loan for such equipment and spares.

191. The transmission activities have been entrusted to OPTCL by Government vide Notification dated 09.06.2005. OPTCL has made all out effort to improve its efficiency, standard of service / performance. In fact, after commissioning of a number of new EHT lines and Grid Sub-stations during last few years, the voltage profile in most part of the State has improved considerably. The interruption in supply has also been drastically reduced.

192. In the year 2008-09, power will mainly flow through 400 KV Meramundali-Mendhasal line and 220 KV Bhanjanagar-Chandaka line to Cuttack, Bhubaneswar area, but not through 132 KV Talcher-Choudwar line.

193. The workshops, built up during OSEB period, were looking after repair of distribution transformers. Since distribution business is not looked after by OPTCL, these workshops are not required.

Interest on Loan Capital

194. The projection towards Interest on loan Capital is very much realistic as it is based on facts and evidential documents that needs full consideration. OPTCL does not agree to the suggestion for allocation of Rs25.18 Crores. OPTCL prays the Commission to take a suitable decision on interest cost for 2008-09 after due scrutiny.

Fixed Assets and Depreciation

195. OPTCL has claimed depreciation on the book value of the assets as per CERC norm and has also claimed advance against depreciation as per CERC norm to enable OPTCL to meet its loan repayment.

196. OPTCL has projected depreciation of Rs 64.53 Crore for 08-09 considering the depreciation rate as prescribed by CERC on up valued Assets and additions thereto. OPTCL have already submitted Asset Register to the Commission up to 2004-05. OPTCL does not agree to the suggestion given by NESCO, WESCO and SOUTHCO on depreciation.

Advanced Against Depreciation (AAD)

197. OPTCL submitted its application towards ARR for FY 2007-08 on 30.11.06 basing on CERC Regulation-2004. Hon'ble ATE issued order on 13.12.06 and the sentence quoted by ATE in its order toward AAD is not found in the National tariff policy resolution dated 6.1.2006. At para 5 (c) of the National tariff policy resolution Dated 6.1.2006, it is mentioned that there should be no need of A.A.D. This is a guiding factor but not a binding factor. The Central Commission had not yet issued any order relating to the Depreciation rate nor issued any order not to permit any advance against Depreciation further. The CERC Tariff Regulation-2004 is still in force. Commission is allowing depreciation at the rate prevailed before 1992 as per direction of Hon'ble High Court of Orissa. The question of applying for AAD would not have been required if depreciation rate prevailing after 1994 would have been taken in to consideration. Commission may take appropriate decision as per CERC Tariff Regulation-2004 which is still in force.

198. OPTCL has projected depreciation of Rs 64.53 Crore for 08-09 considering the depreciation rate prescribed by CERC on up valued Assets and additions thereto. OPTCL have already submitted Asset Register to the Commission up to 2004-05.

Return on Equity

199. Return on Equity is projected basing on CERC Regulations, 2004. OPTCL does not agree to the suggestion given by objector, as this is contrary to the provisions of CERC Regulation.

Pass Through Expenses

200. The proposal for pass through is based on the audited accounts up to year 2005-06 and provisional accounts for 2006-07.Under the provisions of the Act; any reasonable expenditure incurred by the licensee would be allowed as a pass through and recovered through tariff. The users of the electricity has to pay the charges incurred reasonably by the assesses. Survival of OPTCL will be doubtful if past losses are not allowed to pass through.

Contingency Reserve

201. The projection towards Contingency Reserve is very much realistic which needs full consideration.

Miscellaneous Receipt

Income from Inter-State Wheeling

202. The interstate wheeling in MU for the past years are tabulated below for kind reference of Commission.

Table – 11

Year	MU billed for Interstate wheeling
2001-02	2284.72
2002-03	2003.54
2003-04	1252.20
2004-05	667.899
2005-06	411.432
2006-07	259.01
First nine months of 2007-08 (i.e. upto Dec' 08)	142.72

203. TCL projected 100MU towards interstate wheeling considering the current year trend. OPTCL submits its bill @ 17.5 P/U but the beneficiaries are paying @ 10P/U. OPTCL does not agree to the suggestion given by objector.

Timely Completion of Projects

204. Implementation of transmission projects depends on various factors. OPTCL has been commissioning new transmission projects, but has not been able to complete some of the transmission projects in time due to reasons which are beyond the control of the licensee, such as right of way, theft of materials etc. OPTCL has taken measures to complete these lines as early as possible. Actual capital cost for commissioning these projects need to be allowed by the Commission so that OPTCL is in a position to service and repay the loan availed for completing these projects in the interest of the consumers of the State.

Some Special Issues

205. The objector IMFA advocates for no transmission tariff showing the reason that there is no actual transmission of electricity from the point of injection (i.e., from Chowdwar) to the point of delivery at Theruvally. OPTCL does not agree to the proposition that there should be no transmission tariff incase there is no physical flow of electricity because in electricity sector, flow of power is generally through displacement method The beneficiary has the obligation to pay transmission charges and the loss if it intends to wheel power from one place to another because OPTCL has made huge investments for commissioning the transmission network otherwise the expenditure being incurred by OPTCL in this context shall have to be

borne by other consumers of the State which otherwise mean increase in Transmission Tariff of OPTCL as well as RST of DISTCO.

206. The objector may find out the opportunity cost of putting up the transmission lines for its own use (i.e, wheeling of its own power from Choudwar to Theruvally by constructing its own line and to maintain the same) and compare the same with the transmission charges allowed by the Commission if the objector intends not to use OPTCL transmission system.

207. OPTCL is doing system studies through Power Research Development Consultant (PRDC) for evacuation of power from Independent Power Producer (IPP).

208. SLDC - The Bhubaneswar Sub-LDC was conceived as per the survey and planning made by Power Grid under ER-ULDC Project. It was located and accommodated in the same place of SLDC, Mancheswar, considering it to be a load center for Cuttack and Bhubaneswar command area. After completion of 400/220 KV Mendhasal Sub-station, it will function as a Power hub for Cuttack & Bhubaneswar command area. The future plan of SCADA will have Wide Area Monitoring and Control with protection time grading taking in to consideration for load end station balance of individual command area & corresponding load centers.

Revenue collection in terms of LTOA & STOA Charges

209. OPTCL have no objection to the suggestion for detail examination long-term open access and short-term open access charges at per unit cost basis instead of per MW per day basis by the Commission.

OPTCL's response to queries raised by the commission staff in the public hearing (Para 210 to 226)

Transmission Loss:

210. The transmission loss of 2006-07 and for FY 2007-08 (April '07 to Sept'08) is computed as 5.04% and 5.2% respectively. OPTCL has proposed the Transmission Loss @ 5 % based on the present trend. Commission approved 5% loss for 2007-08. In the Business plan, OPTCL proposed 5% loss up to 2010-11 and proposed reduction of transmission loss @ 0.2% from 2011-12 considering the availability of lines and S/S as proposed to meet the full demand after 2011-12 which needs for consideration in place of the proposal submitted in load forecast filing towards reduction of transmission loss.

211. The Transmission loss for the period April 07 to January-08 is computed as 4.56%.

Repair and Maintenance during FY 2006-07 and FY 2007-08

212. Due to long lead period for delivery of power equipment, there occurs some delay. Till January, 2008 the licensee has spent an amount of Rs.15.66 Crores towards R&M.

Capital Expenditure during FY 2008-09 and cost benefit analysis

213. For the capital expenditure proposed to be incurred during 2008-09 in respect of execution of new transmission projects in the State, the detailed project reports of

the individual projects are being submitted before the Commission for availing Investment Authorization in which the cost benefit analysis is incorporated.

Justification for proposing interest on working capital loan

214. Interest on working capital loan to the tune of Rs.13.53 crore is proposed as per CERC norm. The justification for proposing interest on short term loan is explained In para 8 (i) of the ARR application.

Status of following to ongoing projects to be completed during 2008-09.

- 400 kV Ib-Meramundali DC line.
- 220 kV Budhipadar-Bolangir DC line
- 132 kV Bidanasi-Cuttack DC line
- 220 kV S/S at Bhadrak along with associated lines.
- 2x12.5 MVA transformer at Basta along with associated work.
- 2x12.5 MVA transformer at Karanjia along with associated work.
- 2x12.5 MVA transformer at Barpalli along with associated work.
- 400 kV Meramundali-Duburi DC line.
- 400 KV Meramundali-Duburi DC line.

Further in case of 400 kV Meramundali-Duburi DC line and expenditure of Rs.43.9 crore has been shown to be incurred during 2009-10. OPTCL may explain how the project will be completed during 2008-09 when a part of the expenditure on the project is scheduled for 2009-10.

215. The status of the above ongoing projects is submitted to the Commission. As regards 400 KV Meramundali-Duburi DC line is being executed through PGCIL. Even though the work will be completed during 2008-09, the reimbursement will continue till 2009-10.

Mismatch in figures as far as length (in Ckt. Km.) of EHT lines and number of S/Ss vis-à-vis Business Plan and Annual Statement of system performance.

Table – 12

Lines & S/S as on 01.04.07 in Ckt. Km. & No.	As submitted in ARR filing	As submitted in the annual statement of system performance for 2006-07	As submitted in the Business Plan in October'07
400 KV line (Ckt. Km.)	442.70	460.5	460.5
220 KV line (Ckt. Km.)	4834.58	4482.4	4482.4
132 KV line (Ckt. Km.)	4797.60	4613.1	4613.1
400/220/132 KV S/S (No.)	1	1	1
220/132/33 KV S/S (No.)	12	12	12
220/33 KV S/S (No.)	4	3	3
132/33 KV S/S (No.)	58	58	58
132 KV Switching Station (OPTCL) (No.)	2	2	2
132 KV LILO Switching Stations of Industries (No.)	6	5	5

216. The deviation of figures in respect of 400 KV Line Length as submitted in ARR for 2008-09 is on account of considering the following 400 KV lines as 220 KV line (i.e. excluded from 400KV line and included in 220KV line account)

Table – 13

Sl. No.	Name of the EHT Lines	Route Length (Kms.)	Length (Ckt. Kms.)
1	The 220 KV DC Narendrapur - Chandaka DC segment utilised for Meramundali P/S to Chandaka which was inadvertently included earlier in 400 KV category is reduced to 220 KV DC line	7.190	14.380
2	The 220 KV DC line from Meramundali S/S to 400 kV Meramundali - Mendhasala Line utilised for Meramundali P/S to Chandaka which was inadvertently included earlier in 400 KV category is reduced to 220 KV DC line.	1.500	3.000
	Total	**8.690**	**17.380**

Apart from the above exclusion, some correction of 0.42 Km are made in few lines of reported 400KV line.

217. The deviation of figures in respect of 220 KV Line Length as submitted in ARR for 2008-09 is on account of inclusion of the lines as mentioned in table below.

Table – 14

Sl. No.	Name of the EHT Lines	Route Length (Kms.)	Length (Ckt. Kms.)
1	The 400 KV DC Narendrapur - Chandaka DC segment utilised for Meramundali P/S to Chandaka line which was inadvertently included earlier in 400 KV category is reduced to 220 KV DC line	7.190	14.380
2	The 400 KV DC line from Meramundali S/S to 400 kV Meramundali - Mendhasala Line utilised for Meramundali P/S to Chandaka line which was inadvertently included earlier in 400 KV category is reduced to 220 KV DC line.	1.500	3.000
3	220 kV Balimela 'T' SC	0.070	0.070
4	220 kV Duburi New - VISA Steel & Power SC	10.550	10.550
5	220 kV Budhipadar - Bhusan DC	14.056	28.112
6	220 kV Budhipadar - Katapali DC	61.716	123.432
7	220 kV Budhipadar - SPS DC	6.712	13.424
9	220 kV Kuchei - Balasore DC	74.196	148.392
	TOTAL	**167.330**	**341.360**

Apart from the above some correction of 10.58 Kms are made in few lines which are extra addition. The total 220 KV line length comes to 4834.58 Kms (4480.40+341.360+10.58).

218. The deviation of figures in respect of 132 KV Line Length as submitted in ARR for 2008-09 is on account of inclusion of the lines as mentioned in table below.

Table – 15

Sl. No.	Name of the EHT Lines	Route Length (Kms.)	Length (Ckt. Kms.)
1	132 kV Arati Steels LILO DC	11.011	22.022
2	132 kV B.K. Steels LILO DC	2.460	4.920
3	132 kV Balasore - Traction SC	3.565	3.565
4	132 kV Chhend - Adhunik Metalics SC	20.000	20.000
5	132 kV Hind Metals LILO DC	0.480	0.960
6	132 kV ICCL - Salipur SC	26.140	26.140
7	132 kV Katapali LILO DC(Chiplima PH - Bargarh Line)	12.660	25.320
8	132 kV Kuchei LILO DC(Baripada - Rairangpur Line)	1.100	2.200
9	132 kV Maheswari Ispat LILO DC	4.888	9.776
10	132 kV Meramundali - ML Rungta SC	7.468	7.468
11	132 kV Rajgangpur LILO DC	1.200	2.400
12	132 kV Rawmet Ferrous LILO DC	8.797	17.594
13	132 kV Shyam DRI LILO DC	1.900	3.800
14	132 kV Sunabeda - HAL SC	0.600	0.600
15	132 kV Vedant Alumina LILO DC	12.403	24.806
	TOTAL	**114.672**	**171.571**

Apart from the above some correction of 12.53 Kms are made in few lines which are extra addition. The total 132 KV line length comes to 4797.60 Kms (4613.10+171.57+12.93). The details of Ckt. Km. of 400 Kv, 220 KV and 132 KV have been submitted.

219. The deviation in respect of 220/33 KV S/S and 132 KV LILO Switching Stations of Industries as submitted in ARR for 2008-09 is on account of inclusion 220 / 33 KV Balimela Sub-station and 132 KV Hind Metals Switching Station for which the total no. of EHT Sub-stations has gone up to 83 as against 81 nos.

System Availability

220. The system availability of OPTCL transmission network for 2007-08 (April-October) is computed as 99.08%. This computation is done as per the procedure laid down in Appendix III of the above CERC Regulation.

221. In serial 3.B.1at page-10 of the OPTCL performance of the Transmission system for 2006-07, prepared by SLDC is for load restriction of 729.77 hours (8.33%) is due to non-availability of Transmission capacity in few Grid Sub-stations.

222. This information is submitted as per the format prepared by the Commission. Here load restrictions were imposed in few Grid Sub-stations, when the load exceeded the capacity of the S/S or line. This restriction in load cannot be presumed as system non-availability of the entire OPTCL system. The system availability is more than 99% and not 91.67%.

The availability of transmission capacity for supply of additional load to Balasore Alloys and drawl of 15 MVA power by M/s Maithan Ispat in NESCO area.

223. The present 2x100 MVA, 220/132 KV auto-transformers at Balasore Grid Sub-station will be upgraded to 2x160 MVA capacity, after which network will be available for transmission of additional 20 MVA load to M/s Balasore Alloys. The above fact have been intimated to CEO, NESCO and AGM (Regulatory Affairs), NESCO vide this Office letter No.101 dated 07.01.2008. Therefore, the network for transmission of additional 20 MVA power may not be available on 01.10.2008 as projected by NESCO.

224. OPTCL network is adequate to transmit 25 MW power at 220 KV to the industry from New Duburi Grid Sub-station. No permission for 132 KV connectivity from Duburi S/S has been given to M/s. Maithan Ispat by OPTCL, since GRIDCO has not intimated the availability of power for M/s. Maithan Ispat.

Status of Milestones

225. The details of Status on each milestone, i.e., preparedness and latest position relating to implementation of intra-state ABT, are filed separately.

Interruption (hrs) due to major incident during 2006-07

226. Statement containing information relating to duration and nature of interruption of transmission system due to major incidence during the year during 2006-07 is presented in the following table.

Table – 16

Incident	Duration of Interruption	No. of Interruption
Snapping of Jumper/conductor/Earth wire	115:17:00	35
Insulator failure	178:38:00	36
Bursting of CT / PT	106:05:00	12
Breaker Problem	32:41:00	9
System disturbance	10:14:00	9
Failure of LA	15:21:00	5
Others	970:04:00	21

OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (Para 227 to 232)

227. The SAC constituted under Section 87 of the Electricity Act, 2003 met for the 4th time on 12th February 2008 to deliberate on the Annual Revenue Requirement and Tariff Applications for the FY 2008-09 of utilities, namely, OHPC, OPTCL, GRIDCO, SLDC, CESU, NESCO, SOUTHCO and WESCO.

228. The Consumer Counsel, Dr. Shibalal Meher gave a brief presentation on the ARR and tariff applications for the FY 2008-09 of the above mentioned utilities. Members in general expressed their concern about the poor performance of the licensees rendering requisite services to the consumers, high distribution loss, non-investment by private entrepreneurs, GRIDCO's proposal for stiff hike in bulk supply price, proposed rise in R&M expenses by OPTCL despite its failure to spend the approved amount in the previous tariff orders, etc.

229. On OHPC, the Members said that the R&M expenses proposed for Hirakud and UIHEP was very high. There was a general objection that transmission loss claimed at 5% was also in the higher side transmission loss should less than 3%, they maintained. The members opined that the distribution losses projected by various distribution companies were in the higher side. There was no system improvement nor harnessing of renewable sources of energy by DISTCOs. The members observed that the licensees in general did not abide by OERC Regulations. They observed that the Commission's tariff order were pro-licensees. Even after 10 years of reform, quality of supply had not improved upto expectations. The members suggested that the licensees should improve their performance first and then come forward with the tariff application. Interruptions and voltage fluctuations took place in various places including industrial belts. In respect of past losses of licensees, the members observed that the same be considered if the licensees have performed as per OERC's direction. In fact, losses are never parts of costs. The volume of arrears has not reduced and bad debts are still in sizeable amounts. Small scale industries with connected load of below 20 KW were earlier given concessions in the last tariff order which has been withdrawn. This concessional tariff should be restored during 2008-09. Some members opined that tariff should be linked to infusion of funds. They stated that differential Retail Supply Tariff across zones may bring in competition in efficient functioning. The inefficiency of generators particularly of hydro stations may be avoided by implementing prudent commercial standards. Some members proposed continuous supply of power to farmers with rebate facility. They recommended higher rate of rebate for paying farmers. DISTCOs should take care of their Consumer Care Centres. GRIDCO should take adequate care of power supply to DISTCOs so that power interruptions may be reduced. OPTCL should upgrade its systems and installations in view of new industries coming up in many belts.

230. The Commission should finalize the CPP power policy soon. The state can ask for free power from new hydro stations.

231. Some members questioned the cost effectiveness of GRF. They stated that maintenance of lines and s/s by DISTCOs was very poor.

232. Some opined that the net fixed assets in case of DISTCOs had reduced which meant no new investment took place. DISTCOs should be advised to take up demand side management instead of they asking for increasing tariff. Bad debt should go down from the present level. The State Govt. should play its vital role as the major stake-holder of the power sector. Particularly it is the primary responsibility of he State Govt. to enforce law and order in order to effectively crush the menace of theft of electricity in various ways. Franchisees should be introduced in order to improve collection so that DISTCO's performance may be improved.

COMMISSION'S OBSERVATION (Para 233 to 357)

Introduction to OPTCL's Transmission Tariff order for FY 2008-09

233. The Commission, for the determination of transmission tariff and approval of the ARR for OPTCL for FY 2008-09, continues to follow the same principles as laid down in its terms and conditions of tariff, and continues to be guided by the provisions of the National Tariff Policy as well other statutory notifications and directives, while giving due considerations to the complexities of the Orissa Power Sector.

234. Computation of transmission loss has been estimated based on the concept of "As the System Operates". Like all other components of ARR determination, transmission losses are also projected as part of the ARR approval process, and would need to be reassessed (truing up) on the availability of the audited accounts of the licensee for the past years. Accordingly variations from the approved figures for the past year have been trued up on the basis of actual audited annual accounts.

235. OPTCL has inherited from GRIDCO a considerable ageing network. Continuous up-gradation and regular repairs and maintenance are required to keep the network in a safe and operational condition, as well as to meet the growing requirements in terms of Distco demand in terms of energy, as well as to meet the Commission's and consumers' expectations on quality of supply, performance standards and availability of transmission network. As a result of this, the Commission has, over the past several years, been allowing a significantly higher amount for R&M expenses encouraging the licensee to undertake regular and adequate maintenance. The same principle has been followed by the Commission for this ARR determination as well.

236. The Commission takes a pragmatic view of the provisions of the National Tariff Policy in the case of allowing for depreciation in the ARR. It is evidently clear that the depreciation available on a Straight Line Method based on the rates notified by the Govt. of India in 1994 falls short in meeting principal repayment obligations in the later years of the term of the loan. Advance Against Depreciation (AAD) is therefore required by the licensees to meet the principal obligations. This has been

amply demonstrated in the section of this tariff order dealing with depreciation. The Commission has continued to allow AAD in this order as well to ensure that OPTCL is allowed to meet all its external principal repayment obligations.

237. Contingency Reserves are essential to meet unforeseen requirements in future, and hence licensees should ideally provide for contingency reserves on a regular basis to build up a corpus to meet future unforeseen eventualities. However, the Commission has in the past sought information and proof from the licensees on whether the amount approved in past tariff orders as contingency reserves have actually been invested in the corpus.This has been trued-up on the basis of audited annual accounts made available to the Commission.

238. The OPTCL, which is now operating the SLDC has put forth the following Annual Revenue Requirement for the purpose of recovery of SLDC charges through Annual Fee and Operating Charges for FY 2008-09.

Table – 17

Item	Proposal for separate SLDC function for FY 08-09 **(Rs. Crs.)**
Employee Cost	5.11
Repair & Maintenance Cost for both SLDC and ULDC	6.85
A&G cost	3.58
Interest on Loan	0.00
Interest on Working Capital	0.00
Depreciation	0.06
Provision of reinvestment for infrastructure development for EBC (Rs2 Cr.) and ULDC Project (Rs. 2.5 Cr.)	4.50
Contingency Reserve	0.00
Bad & Doubtful Debt	0.00
Reasonable Return	0.00
Total	**20.10**

239. OPTCL has not filed relevant documents in support of authenticity of the claims put forth in the above table. By a petition dated 13.03.2008 OPTCL admits that it is not in a position to achieve the important milestones laid down in the Road Map prepared by the Commission and has prayed for deferring for one year the decision of implementing levy of Annual Fee and Operating Charges for SLDC functions of Orissa. In view of the averments in the said petition no useful purpose would be served in keeping this matter pending. Accordingly the Case No. 63 of 2007 is dismissed by the Commission. Hence, the recovery of charges of SLDC functions has been included in the OPTCL ARR & Transmission Tariff for FY 2008-09.

240. These principles forming the basis of this ARR determination exercise are dealt in greater detail in the main text of this order under the relevant components of the ARR.

Computation of Transmission Loss

241. The transmission system of OPTCL operates as an integral part the Eastern Regional Grid to serve the internal demand of the State as well as to carry out import and export of power depending upon the system demand under the overall supervision of the Eastern Regional Load Dispatch Centre in accordance with the GRID CODE. Transmission loss therefore has been determined on the basis of ‘As the System Operates’. During the months from April’07 to January’08 of the current FY the total units lost in transmission was 771.79 MU.

242. Some of the objectors had pointed that addition of transmission assets during the last few years should have resulted in reduced level of transmission loss than what is being reported now. The Commission also takes into consideration the submission of OPTCL with regard to the existing level of transmission loss as indicated in this order. In fact, OPTCL had reported that the transmission loss upto September of the current financial year was 5.2% and by end of January’08 it was 4.56%. This kind of loss variation is on account of the nature and quantum of power flow in the system.

243. The National Tariff Policy envisages that the loss compensation should be reasonable and should be linked to an applicable technical loss benchmark. It also states that the transactions should be charged on the basis of average losses arrived at after appropriately considering the distance and direction sensitivity, as applicable to relevant voltage level, on the transmission system. System strengthening as contemplated in the Transmission Planning of OPTCL system can be a factor in reducing the transmission loss.

244. During the public hearing, a query was made by the Director (Tariff) on the proposed Transmission Loss of 5% by OPTCL for 2008-09, considering the loss of 5.2% estimated for first six months of 2007-08. However, in the load forcast filling for 2007-08. OPTCL has taken 5% transmission loss for the intial year 2006-07. In that filing, OPTCL proposed a reduction of 0.2% in steps every year. Thus in the year 2008-09, the transmission loss should have been 4.6% instead of 5%.

245. In response to the said query on Transmission Loss, OPTCL stated that, the transmission loss of 2006-07 and for FY 2007-08 (April ’07 to Sept’08) is computed as 5.04% and 5.2% respectively. OPTCL has proposed the Transmission Loss @ 5 % based on the present trend. Hon’ble Commission approved 5% loss for 2007-08. In the Business plan, OPTCL proposed 5% loss up to 2010-11 and proposed reduction of transmission loss @ 0.2% from 2011-12. The Transmission loss for the period April 07 to January-08 is computed as 4.56%.

246. The allocation of loss to all the users of OPTCL’s transmission system based on the consumption figures of first ten months of 2007-08 is furnished in the table below:

Table – 18

CALCULATION OF TRANSMISSION LOSS IN EHT SYSTEM					
PERIOD - ACTUALS FOR APRIL-07 TO JANUARY-08					
SL. NO.	SOURCE	GROSS INPUT MU	GROSS OUTPUT MU	Prop. Loss sharing (MU)	Proportion Loss sharing (%)
A	STATE DEDICATED STATIONS				
1	HIRAKUD	882.87			
2	BALIMELA	1,573.50			
3	RENGALI	933.31			
4	U.KOLAB	944.79			
5	INDRAVATI	1,232.83			
6	OHPC	5,567.30			
7	MACHHKUND	149.78			
8	OPGC	1,861.30			
9	TTPS	2,531.17			
	TOTAL OF STATE GEN. INPUT	10,109.55			
B	CPPS				
1	ICCL	285.14	277.67	13.27	1.72%
2	NALCO	261.47	144.09	6.89	0.89%
3	INDAL	38.47	-	-	0.00%
4	RSP	56.41	-	-	0.00%
5	NINL	70.95	-	-	0.00%
6	NBFA	61.95	-	-	0.00%
7	BHUSAN, THELKOLAI	185.20	-	-	0.00%
8	ARATI STEEL	70.47	-	-	0.00%
9	MESCO	-	-	-	0.00%
10	Bhusan S & S	14.43	-	-	0.00%
11	Tata Sponge	92.78	-	-	0.00%
12	Shyam DRI Ltd.	4.60	-		
13	Vedant Alumina	8.51	-		
	TOTAL CPP	1,150.36	421.76	20.16	2.61%
C	EREB			-	0.00%
1	Joda-Jamshedpur	143.38	59.09	2.82	0.37%
2	Joda-Ramchandrapur	179.00	50.91	2.43	0.32%
3	Rengali(SY)-Regali (PG)	899.08	-	-	0.00%
4	Jeypore-Jayanagar	93.46	911.40	43.57	5.65%
5	Rourkela-Tarkera	141.91	202.39	9.68	1.25%
6	Rengali-TSTPS	-	279.45	13.36	1.73%
7	TTPS-TSTPS	510.98	-	-	0.00%

SL. NO.	SOURCE	GROSS INPUT MU	GROSS OUTPUT MU	Prop. Loss sharing (MU)	Proportion Loss sharing (%)
8	Meramundali-TSTPS / Duburi-Kaniha	1,256.68	-	-	0.00%
9	Joda-Kenduposi	0.02	1.27	0.06	0.01%
10	Rourkela-Goelkera	-	-	-	0.00%
11	*Indravati PH-Indravati (PG)*	-	-	-	0.00%
12	Budhipadar-Korba	101.40	-	-	0.00%
13	132 kvKalabadia-Rairangpur	23.52	33.71	1.61	0.21%
14	132 kvKalabadia-Baripada	329.10	-	-	0.00%
15	220 kV Kalabadia- Balasore	265.16	-		
16	132 kV Kalabadia- Balasore	52.94	-		
17	Meramundali ICT Loading	1,658.52	-	-	0.00%
	Input from EREB	5,655.15	1,538.21	73.54	9.53%
18	Export to APTRANSCO	-	-	-	0.00%
19	DISTCOs		14,183.30	678.08	87.86%
	GRAND TOTAL	16,915.05	16,143.26	771.79	100.00%
	LOSS	771.79			
	LOSS(% OF GROSS INPUT)		4.56%		

247. It is observed that, the transmission loss is dependent on system configuration and power flow requirements at different load centres. It is hoped that with installation of high accuracy CTs & PTs in various grid s/s an accurate level of loss can be determined. Looking at the available figures we accept a figure of 4.5% for the FY 2008-09 as transmission loss for wheeling.

248. OPTCL shall continuously monitor the operation of the transmission system, prevent over loading wherever possible by load diversion and take up innovative measure for improving system loading of the existing network as no. of new lines are likely to be commissioned during FY 2008-09. Effective utilization of new lines and their impact on transmission loss need to intimated to the Commission periodically and kept in the website of OPTCL.

249. Dispute arose between the Bulk Supply Licensee GRIDCO and the distribution company SOUTHCO on the issue of metering at Rambha Traction Sub-station and Jeypore-Machhkund Traction Sub-station because GRIDCO billed SOUTHCO as per meter provided at their (GRIDCO) Grid Sub-stations and not at the Rambha Traction Sub-station which is 26 kms away from the GRIDCO Sub-station. OERC vide its order dated August 20, 2005 in case No. 13 of 2005 arising out of the petition filed by SOUTHCO against GRIDCO, directed that GRIDCO should prefer Bulk Supply Tariff Bills (BSTB) to SOUTHCO in respect of Rambha Traction considering the meter reading at Rambha Traction Point. OERC vide its order dated July 22, 2006 in case No. 51 of 2006 regarding the review petition of GRIDCO

against SOUTHCO, dismissed the review petition. On the same order GRIDCO has appealed before ATE. During the hearing at ATE, the learned counsel for the appellant has contended that the actual losses are not being allowed to them. The order of ATE vide their order dated 29.02.2008 is reproduced below:

"Whereas, it is for the Commission to satisfy itself as to whether or not actual losses should be allowed but we make it clear that while working out the losses in the transmission system, losses in the Railway transmission feeders must also be taken into account by the Commission if not being taken into account presently as alleged by the appellant. In view of the aforesaid analysis and discussions, we find no justification for interfering with the Commission's Order and therefore, in the result, the appeal is dismissed but with no order as to cost."

250. The Commission has taken care the above factor while calculating the transmission loss in the OPTCL system. Computation of transmission loss has been estimated on the concept of "As the System Operates".

Operation and Maintenance (O&M) Expenses

251. The O&M expenses for OPTCL may be considered under the following heads:-

- Employees Cost
- Administration & General Expenses
- Repair and Maintenance Expenses
- Less expenses capitalized

Employees' Cost

252. OPTCL has projected employee expenses of Rs.144.27 crore for the FY 2008-09. Major components of the expenses are as follows:

Table – 19

(Rs. in Crore)

Basic Pay	52.39
DA	26.19
HRA	7.86
Others	16.08
Terminal benefit (Pension & Gratuity)	49.36
Total	151.88
Less : capitalisation	7.61
Net	144.27

253. The figures in respect of employees' cost based on provisional accounts for 2006-07 as submitted by OPTCL in its filing is given as under:

Table – 20

(Rs. in Crore)

	As per provisional accounts FY 2006-07
Basic Pay	46.16
DA	12.99
HRA	5.31
Others	9.87
Terminal Benefits	46.16
Total	120.49
Less capitalisation	5.51
Net	114.98

254. On the basis of provisional accounts for FY 2006-07 submitted by OPTCL, the Commission allows escalation @ 3% on the basic pay towards normal annual increment on year to year basis. This is in line with Commission's order of the previous years. For determining the basic pay the induction and reduction in number of employees are considered every year. As submitted by OPTCL, during hearing the position of number of employees from 01.04.2005 to 31.03.2009 as given in the following table:

Table – 21

(Rs. in Crore)

Year	**2005-06**	**2006-07**	**2007-08**	**2008-09**
Opening Strength	4851	4580	4312	4048
Less Reduction	275	271	274	213
Add induction	4	3	10	396
Closing	4580	4312	4048	4231
Average number of employees		4446	4180	4140

.

255. As regards DA, the present rate of dearness allowance by Govt. of Orissa is 35%. However, Govt. of India has announced two doses of DA of 6% each w.e.f. 01.07.2007 and w.e.f. 01.01.2008 enhancing it to the level of 47%. With an anticipated rise in DA @3% w.e.f. 01.07.2008 and 01.01.2009, the annual average rate of DA may reach 50%, as emerges from the figure given in the table below. The Commission calculates D.A. @50% over the Basic pay + Dearness Pay for the FY 2008-09.

Table – 22

With effect from	Notified by GoO DA (%)	Notified by GoI DA (%)	Remarks
01.01.2005	17%	17%	67% (As per GoO order dtd. 15.09.2006 the DA equivalent to 50% of Basic Pay has been merged with Basic Pay w.e.f 01.04.2006)
01.07.2005	21%	21%	
01.01.2006	24%	24%	
01.07.2006	29%	29%	
01.01.2007	35%	35%	
01.07.2007	41%*	41%	*(*) Anticipated by the Commission*
01.01.2008	47%*	47%	
01.07.2008	50%*		
01.01.2009	53%*		

256. In respect of expenditures such as medical reimbursement, house rent allowance and encashment of earned leave, the principle adopted in the last year has been followed mutatis mutandis. Medical reimbursement has been allowed @ 5% on the basic pay. House rent has been allowed proportionately based on provisional figure for 2006-07. The miscellaneous expenditure of Rs.3.66 crore under the head employees cost has been disallowed by the Commission since detailed expenditure is not available.

257. **Terminal Benefits**: For the year 2008-09, OPTCL has claimed a sum of Rs.49.36 crore towards terminal benefits.

258. The Commission is of the view that the provision of terminal liabilities like pension, gratuity, and leave salary contribution should be based on periodic actuarial valuation in line with the accounting standard 15 issued by ICAI. As mentioned in the last tariff order, the Commission, vide order No.1761 dt.20.10.2006, awarded the contract of valuation of the terminal liabilities of the employees and pensioners of OPTCL, WESCO, NESCO, SOUTHCO and CESU to an independent actuary. The actuary has sent the final report in February, 2007 in respect of all the companies. The valuation of pension payment of retired employees in respect of SOUTHCO could not be obtained due to non-submission of necessary information to the actuary. Similarly, the liability on account of unutilized leave for CESU was not valued by the independent actuary due to non-submission of required information by CESU. A table showing the liabilities ascertained by the actuary as on 31.3.2006, 31.03.2007 & 31.03.2008 is furnished below:-

Table - 23
ACTURIAL VALUATION AS ON 31.3.2008

(Rs. in crore)

	As on	Pension	Gratuity	Leave	Pension Payment	TOTAL
WESCO	31.3.2006	155.21	31.96	27.67	78.59	293.43
	2006-07	11.25	4.68	0.05	4.11	20.09
	31.3.2007	166.46	36.64	27.72	82.7	313.52
	2007-08	8.35	4.6	2.71	2.95	18.61
	31.3.2008	174.81	41.24	30.43	85.65	332.13
NESCO	31.3.2006	121.82	17.81	20.56	52.51	212.7
	2006-07	16.74	2.71	2.05	4.2	25.7
	31.3.2007	138.56	20.52	22.61	56.71	238.4
	2007-08	14.61	2.72	1.82	3.67	22.82
	31.3.2008	153.17	23.24	24.43	60.38	261.22
SOUTHCO						
	31.3.2006	124.66	22.82	21.6	41.88	210.96
	2006-07	17.47	3.21	2.17	2.73	25.58
	31.3.2007	142.13	26.03	23.77	44.61	236.54
	2007-08	15.98	3.26	1.91	2.22	23.37
	31.3.2008	158.11	29.29	25.68	46.83	259.91
CESU						
	31.3.2006	247.75	32.34		96.68	376.77
	2006-07	26.87	3.84	0	3.27	33.98
	31.3.2007	274.62	36.18		99.95	410.75
	2007-08	5.12	0.91	0	2.25	8.28
	31.3.2008	279.74	37.09		102.2	419.03
OPTCL						
	31.3.2006	207.65	27.15	31.51	377.23	643.54
	2006-07	23.8	0.81	3.51	9.41	37.53
	31.3.2007	231.45	27.96	35.02	386.64	681.07
	2007-08	10.5	3.7	3.7	3.68	21.58
	31.3.2008	241.95	31.66	38.72	390.32	702.65

259. In the year 1998-99, GRIDCO carried out an actuarial valuation for quantification of the terminal liabilities of employees of its transmission as well as its distribution business as on 31.3.1999 as mandated by the transfer notification dt.28.11.1998 by an independent actuary. Although the valuation was disputed by DISTCOs, the Commission in principle accepted the audited figures of GRIDCO as it was done in accordance with the transfer notification. According to the report of the actuary, the total terminal liabilities as on 31.3.1999 are given as under:-

Table – 24

(Rs. in crore)

		GRIDCO/OPTCL	WESCO	NESCO	SOUTHCO	CESU	Total
No. of Employees	Existing	5,974	5,562	4,599	4,674	8,608	29,417
	Retired	4,493	Nil	Nil	Nil	Nil	4,493
	Total	**10,467**	**5,562**	**4,599**	**4,674**	**8,608**	**33,910**
Pension of the existing employees		74.28	44.85	42.83	42.63	83.02	287.61
Gratuity		23.74	16.20	15.42	14.85	29.37	99.58
Leave		6.01	4.10	3.90	3.76	7.43	25.20
Pension in Payment		80.04	-	-	-	-	80.04
Total		**184.07**	**65.15**	**62.15**	**61.24**	**119.82**	**492.43**

260. The Commission in tariff order 2007-08 agreed with the principles that the provision of terminal liabilities like pension, gratuity and leave salary contribution should be based on periodic actuarial valuation in line with Accounting Standard 15 issued by ICAI and the pension and gratuity liabilities should be made from the earning From Corpus fund in full and Corpus Fund should be created by the company by regular contribution based on actuarial valuation. The Commission in its previous order had allowed terminal benefits to the licensees which the companies were supposed to pass on to the trust and for the trusts to invests the same in securities or fixed deposits as per the guidelines issued by Govt. of India. The following tables show the expected fund availability in corpus of all the companies.

Table – 25

(Rs. in Crore)

	GRIDCO/OPTCL	WESCO	NESCO	SOUTHCO	CESU
OB As on 01.04.99/Fund transfer from GRIDCO to DISTCOs	184.07	70.77	68.00	67.39	138.56
Allowed by the Commission					
1999-00	11.68	6.71	5.62	7.78	0.00
2000-01	25.22	6.27	7.07	7.07	0.00
2001-02	27.74	7.92	7.00	6.63	6.09
2002-03	30.52	8.08	7.21	6.81	6.27
2003-04	33.57	8.96	7.56	7.57	6.90
2004-05	117.54	11.3	8.35	9.40	3.25
2005-06	40.62	12.06	8.92	10.03	3.51
2006-07	44.68	12.07	9.55	9.73	13.19
2007-08	55.38	16.36	15.30	13.97	18.28
Sub-Total	386.95	89.73	76.58	78.99	57.49
Grand Total	**571.02**	**160.50**	**144.58**	**146.38**	**196.05**

261. The corpus valuation as per the actuary for each licensee, the expected corpus availability as on 31.03.2008 and the difference thereof is presented in the following table:

Table – 26

(Rs. in crore)

Name of the Company	Valuation as per Actuary	Expected corpus availability	Difference
OPTCL	702.65	571.02	(-)131.63
WESCO	332.13	160.50	(-)171.63
NESCO	261.22	144.58	(-)116.64
SOUTHCO	259.91	146.38	(-)113.53
CESU	419.03	196.05	(-)222.98

262. From the above table, it is revealed that the shortfall in OPTCL trust fund is Rs.131.63 crore. If, it is funded, then there should be no necessity to allow interest as well as repayment of earlier pension trust bond of Rs.271.91 crore. As regards, Rs.150 crore of bonds, it is issued to the pension trust fund of GRIDCO under Transfer Scheme vide notification No.257/96 dated 1st April, 1996 of Department of Energy, Govt. of Orissa i.e. prior to privatization by the Government of Orissa. This amount was not funded at the time of Transfer Notification. This issue is addressed in Para 305 under the head interest to pension trust bond.

263. As such, the Commission approves to allow the deficit funding of Rs.131.63 crore within a span of three years under the head terminal benefits along with the carrying charges. This will take care of the fund requirement in trust upto 31.03.2008. The incremental fund requirement for future years shall be allowed as and when the Commission receives the actuary report from time to time.

264. The summary of employees' cost proposed by OPTCL and approved by the Commission is shown in the table below***:***

Table – 27

Employees' Cost

(Rs. Crore)

Sl No.	Particulars	FY 07-08 (Appr.)	FY 08-09 (Prop.)	FY 08-09 (Appr.)	Assumption
1.	Salaries(Basic Pay+DP)	57.04	52.39	45.59	3% increase as per provisional account of 2006-07 with 50% merger of DA with basic pay as DP.
3	Dearness Allowance	19.96	26.19	22.80	50% of the basic pay + DP
4	Other Allowance	0.56	0.64	0.64	
5	Bonus and Overtime		0.51	0.51	
6	Sub Total (1 to 4)	77.56	79.74	69.54	
	OTHER STAFF COST				
7	Reimbursement of Medical Expenses	1.71	3.12	2.28	5% of the basic pay + DP
8	Leave Travel Concession	1.00	1.00	1.00	
9	Reimbursement of House Rent	5.95	7.86	7.29	Pro-rated
10	Interim Relief to Staff		-	-	
11	Encashment of Earned Leave	-	4.84	-	
12	Honorarium	0.01	0.01	0.01	
13	Payment under Workmen compensation Act	0.06	0.10	0.10	
14	Ex-gratia	-	1.20	1.20	
15	Miscellaneous	0.30	3.66	-	
16	Sub Total (7 to 14)	9.03	21.78	14.64	
17	Staff Welfare Expenses	0.55	1.00	1.00	
18	Terminal Benefits	55.38	49.36	51.34	
19	Total (6+15+16+17)	142.52	155.88	132.86	
	Less :Capitalisation	3.74	7.61	7.61	
	Net Total	138.78	144.27	125.25	

Repair & Maintenance Expenses

265. OPTCL has proposed an amount of Rs.82.13 crore towards repair and maintenance expenses for 2008-09. The details of R&M expenditure furnished by OPTCL is given below:

Table – 28

(Rs. in Crores)

R&M Expenses	OERC approval for 2006-07	OERC approval for FY07-08	Proposal for FY 08-09 (including SLDC function)
Master Maintenance Plan of lines and S//S (Transmission network of the State)	36.00	47.00	66.65
IT expenses	-	-	2.48
Telecom R&M incl. ULDC	-	-	13.00
Total R&M Expenses	**36.00**	**47.00**	**82.13**

266. The proposed R&M cost of OPTCL of Rs. 82.13 crore includes Rs. 6.85 crore of R&M cost proposed in ARR of SLDC. Details of Repairs and Maintenance (R&M) Expenses for FY 2008-09 under different categories for OPTCL is explained below.

267. Provision of Rs 66.65 Crores is made for FY 2008-09 to augment the R & M works of transmission lines, substations in order to keep the lines and sub stations in a proper working condition to maintain uninterrupted and quality power supply in the State, the details of which is shown in the table below.

Table – 29

MASTER MAINTENANCE PLAN (O&M) FOR 2008-09

Sl. No.	**Line/Equipment details**	**Unit Rate (in Cr.)**	**Item Category**	**Quantity**	**Total Cost (in Cr.)**
1	Power Transformer.	5.053	160MVA	2 nos.	10.106
		3.25	40MVA	3 nos.	9.750
2	Circuit Breaker				
	(a) 400kV	LS			
	(b) 220kV	0.30	220kV	4nos.	1.200
	(c) 132kV	0.094	132kV	25nos.	2.350
	(d) 33kV	0.031	33kV	20nos.	0.620
3	Station Battery Sets	0.100	SS Battery	10Sets	1.000
4	Battery Charger	0.050	Charger	5Sets	0.250
5	C.T.				
	(a) 400kV				
	(b) 220kV	0.0377	220kV	5nos.	0.1885
	(c) 132kV	0.015	132kV	50nos.	0.750
	(d) 33kV	0.0035	33kV	100nos.	0.350
6	P.T./C.V.T.				
	(a) 400kV				
	(b) 220kV	0.032			

Sl. No.	Line/Equipment details	Unit Rate (in Cr.)	Item Category	Quantity	Total Cost (in Cr.)
	(c) 132kV	0.0135	132kV	30nos.	0.405
	(d) 33kV	0.0025	33kV	30nos.	0.075
7	L.A.				
	(a) 400kV				
	(b) 220kV	0.0075	220kV	5nos.	0.0375
	(c) 132kV	0.0065	132kV	50nos.	0.325
	(d) 33kV	0.002	33kV	100nos.	0.200
8	Relays (Assorted Variety)	LS	Relays	LS	1.000
9	Testing equipment (Different types)	LS	Testing equipment	LS	2.000
10	Transformer Oil	0.005	Trf. Oil	200Kl.	1.000
11	Control cable.	LS	C.Cable	LS	0.500
12	SF-6 Gas (Cylinder of 50 kg.)	0.005	SF-6 Gas	6000Kg.	0.600
13	Tower members for replacement.	LS	Tower Members	LS	1.000
14	Overhauling of CB	LS	OH of CBs	LS	1.000
15	Illumination of Grid Substation.	LS	Illumination	LS	0.800
16	Spare for ERS system.	LS	ERS spare	LS	1.000
17	AMC on Energy Metering System.	LS	AMC (Meter)	LS	0.550
18	Engagement of Security personnel	LS	Security	LS	3.500
19	Repair of defective Power Transformer	LS	Tfr. Repair	LS	1.000
20	Renovation of Earthing system of EHT lines & Grid S/s.	LS	Earthing System	LS	2.000
21	Misc. expenses for O&M field divisions such as; painting of towers & transformers, Switch yard cleaning, transportation of trfs., Welding of tower members, AMC on A/c. machines etc.	LS	Misc. Expense	LS	7.500
22	Civil Works	LS	Civil Works	LS	1.000
23	Energy meters & accessories/ year.				
	a) Modules - **40 nos**.	0.0091	Energy Metering	Nos.	0.910
	b) Racks - **20 nos**.	0.0193			
	c) Pannels - **15 nos**.	0.0099			
	d) Modem - **15 nos.**	0.0011			
24	132kV Chandaka-Mancheswar DC line (Upgradation)	0.400/Km.	132kV	11 Ckt. Km.	4.400
25	132kV Chandaka-Nimapara SC line	0.0661/Km	132kV	37.22 Ckt. Km.	2.460
26	132kV TTPS-Duburi SC line on DC towers.	0.0661/Km	132kV	88.00 Ckt. Km.	5.820
27	Spare Towers	LS	Spare	LS	1.000
	Total				**66.65**

268. The Commission observed that desegregated GRIDCO has not taken effective steps to take-up required R&M works of transmission lines and sub-stations by spending money approved by the Commission in past years. An analysis of the figures approved by the Commission for past 7 years and actuals as per audited accounts is given in the table below:

Table – 30

(Rs. in Crore)

Year	Approved	Actual
1999-00	19.84	9.51
2000-01	14.67	9.90
2001-02	15.99	8.81
2002-03	17.43	9.35
2003-04	13.35	7.03
2004-05	14.07	4.59
2005-06	14.80	6.94
2006-07	36.00	25.57
2007-08	47.00	59.20 proposed
2008-09		82.13 (Prop.) including SLDC function

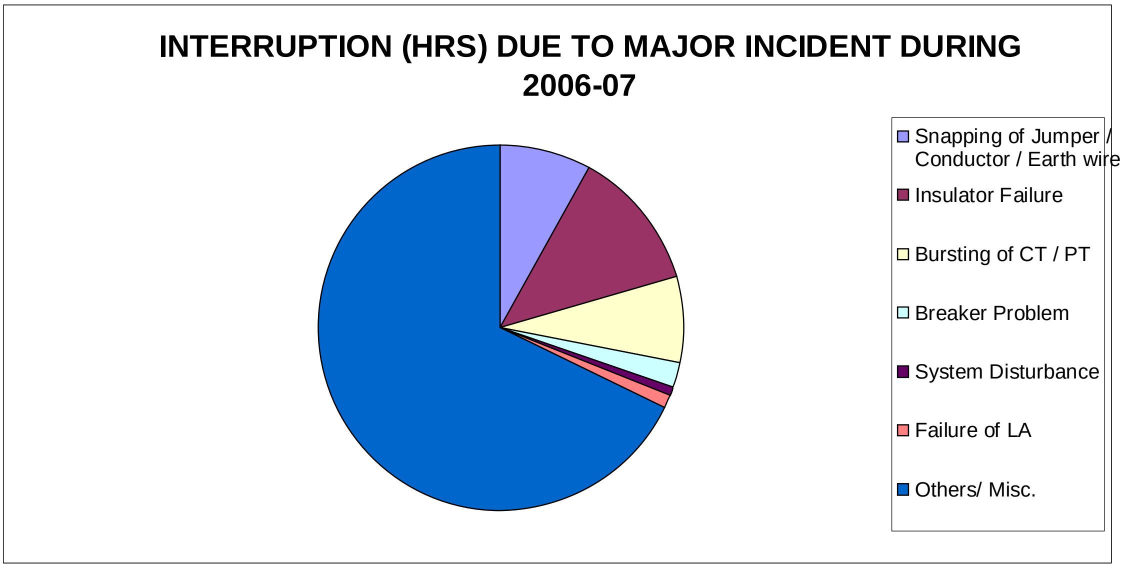
269. It is revealed from the table that the actual expenditure for each year is always less than the approved figure. In reply to the query raised during hearing, OPTCL in its written submission stated that the low level of expenditure on R&M was due to fund constraints. After OPTCL became operational, there have been no fund constraints as it is getting paid its revenue fully by GRIDCO on demand. Therefore, OPTCL has undertaken a lot of measures to spend higher amount on R&M. OPTCL submitted that only after the Commission approved the R&M estimates in tariff order 2006-07 they have been able to take effective steps for material procurement. Without an approved they cannot take up procurement action. Heavy equipments required by OPTCL take large processing time for delivery. Tariff orders are delivered in March. Thereafter they start procurement action. Hence there is a carry over of the permitted expenditure in 2007-08 of the unspent amount of 2006-07. During 2006-07, as revealed from the annual accounts, the expenditure is Rs.25.50 crore as against the approved figure of Rs.36.00 crore. During 2007-08, they have already incurred an expenditure of Rs.14.36 cr upto November, 2007. They have given an action plan of O&M works for 2007-08 which includes procurement of equipments such as breakers, CTs, PTs and Lightening Arresters of different voltage class and batteries, transformer oil, hardware fittings, SF-6 gas, nuts & bolts, surplus towers and power members, power transformers, ground wire etc. OPTCL during hearing have clarified that they have placed orders aggregating to Rs. 59.20 crores upto 31.03.2008 and most of the materials for which have also been received by the OPTCL.

270. The transmission system of OPTCL is the life-line of the power system of Orissa. The Commission holds the view that the lines and sub-stations of OPTCL should be kept in proper conditions to ensure uninterrupted and quality power supply in the State. Unless the transmission system is maintained properly, the DISTCOs who are the real beneficiary would be put in trouble and the entire power system would be in complete jeopardy.

271. The Commission also desires that the operation and maintenance standards of OPTCL should be suitably brought at par with the lines and sub-stations being maintained by leading entities like the Power Grid Corporation of India. A table and a pie chart indicating the duration and nature of interruption of transmission system of OPTCL during 2006-07 is depicted below:

Table – 31

Incident	Duration of Interruption	No. of Interruptions
Snapping of Jumper/ Conductor/ Earth wire	115:17:00	35
Failure Insulators	178:38:00	36
Bursting of CT / PT	106:05:00	12
Breaker Problem	32:41:00	9
System Disturbance	10:14:00	9
Failure of LA	15:21:00	5
Others/ Miscellaneous	970:04:00	21



272. The Commission expresses grave concern about the interruptions occurring in the EHT transmission system due to snapping of conductors, burning of jumpers, failure of insulators, bursting of CTs/PTs, damage to transmission towers, failure of equipments at various sub-stations causing dislocation of power supply which can hardly be tolerated in view of growing importance for maintaining continuity and quality of power supply in the developing industrial economy of the State. Theft of

tower members and conductors have almost reached a menacing proportion that requires serious attention of not only of OPTCL but also the law and order authorities of the Govt. The Commission directs that OPTCL should have in place an appropriate security mechanism for continuous monitoring of various transmission lines to prevent failure of such lines. The OPTCL was also directed in course of the tariff hearing to prepare a master plan for renovation and modernization of their existing transmission network where required and submit the same to the Commission for completion of such maintenance in a definite time frame.

273. On further scrutiny of the proposal, it is observed that in the Master Maintenance Plan, OPTCL has proposed 5 nos. of power transformers to be kept as spares estimated to be procured at the cost of Rs. 19.86 crores. It further proposes towards maintenance and upgradation of 132 KV Chandaka-Mancheswar DC line, 132 Chandaka-Nimapara AC line and 132 KV TTPS-Duburi AC line amounting total cost of Rs. 10.68 crores. The above expenditure are of capital intensive nature and may therefore be booked under the capital expenditure head.

274. In order to minimize the time of interruption due to transformer failures at least one no. of power transformer of 160 MVA and 40 MVA capacity each may be kept as stand by.

275. OPTCL has further proposed Rs. 13 crores (Rs. 8 crore towards telecom R&M expenses and Rs. 5 crore for procurement of ULDC equipments) towards upgrading the existing operating system to match with the state-of-the-art technology for FY 2008-09. OPTCL has also proposed an amount of Rs. 2.48 crore towards R&M expenses on IT for FY 2008-09. Out of the total proposed amount of Rs. 15.48 crore, Rs. 6.88 crore is booked towards SLDC function and balance towards OPTCL expenses.

276. In this connection, SLDC in its proposal has submitted that a MoU has been signed between Power Grid Corporation of India Limited (PGCIL) and all the constituents of Eastern Regional Power Committee including GRIDCO on 18.03.1998 for establishment of Load Despatch Centres with associated communication facilities in the Eastern Region under Unified Load Despatch Communication Scheme and subsequent annual operation and maintenance of these facilities. Pursuant to the said MoU and the orders passed by CERC on 27th November 2006 (Petition No.74 of 2006), PGCIL is claiming monthly fees and charges from GRIDCO as PGCIL has made investment for commissioning of the ULDC Scheme on behalf of the constituents. The fees and charges have already been determined by CERC for a period of four years from FY 2005-06 to 2008-09, which includes capital recovery and interest on working capital. GRIDCO has been allowed the fees and charges for FY 2007-08 and GRIDCO also has informed that they are claiming fees and charges amounting to Rs.14.13 Cr. to be recovered through Bulk Supply Price for the FY 2008-09. The above fees and charges do not include annual operation and maintenance charges which will be payable by SLDC.

277. In view of the above, SLDC has not claimed in its ARR for FY 2008-09 towards fees and charges for commissioning of the said Unified Scheme. SLDC, however

claims an amount of Rs.5.88 Crore for R&M of the said ULDC system which is 5.4% of the total capital investment of Rs.108.85 cr. allocated to the State of Orissa/GRIDCO. Further, SLDC has proposed another Rs.1 cr during FY 2008-09 to meet the R&M Cost of SLDC. SLDC has therefore proposed a total amount of Rs.6.88 cr towards R&M expenses for SLDC functions during FY 2008-09.

278. It is to reiterate that Orissa has entered a phase of industrial resurgence which requires quality power supply of international standards if industrial units are to utilize their capacity to the fullest extent.

279. There has been phenomenal growth of railway traction which obviously requires uninterrupted power supply for 24 hours for 365 days in a year. This also is the case of many other industries having sophisticated equipments. In view of that, OPTCL shall have to gear up its operation and maintenance to supply uninterrupted power of proper quality. But, there has been persistent failure on the part of the licensee to maintain the system upto the desired level for which it requires more money for R&M works.

280. The Commission is aware that the R&M activity is a time taking process which includes planning, approval of the projects by the Commission, tendering, awarding of purchase order, receipt of materials and execution. Commission after carefully considering all the facts given by the OPTCL is of the opinion that OPTCL spend Rs. 59.00 crore which will cover Rs.47.00 cr allowed in the tariff order of 2007-08 & the unspent amount of 2006-07.

281. In view of above the Commission allows an amount of Rs. 47.00 crore towards R&M expense for 2008-09 i.e. equal to the level of R&M expenses allowed to OPTCL during 2007-08. Further, the Commission allows Rs. 6.88 crore towards R&M Expenses relating to SLDC. The R&M expenditure both for OPTCL and SLDC function comes to 53.88 crore for the year 2008-09.

282. The Commission will continue to take up the periodical review of Repair and Maintenance works of the licensee and engage an independent team of experts to monitor & report the progress of R&M works being undertaken. If OPTCL fails to build up the system as desired by the Commission, the expenditure now allowed shall be revised & the transmission tariff may be reduced in the mid-year review apart from any other action that may be considered appropriate.

Administration and General Expenses

283. Administration and General Expenses include property related expenses like license fee, rent, taxes, insurance, communication charges, professional charges, consultancy charges, conveyance charges, travel expenses and other sundry expenditures. OPTCL had proposed Rs.25.93 crore under this head for 2008-09. The Commission had approved an amount of Rs.15.71 crore towards A&G expenses for 2007-08. The commission in accordance with the earlier orders allows escalation of 5.5% over the approved figure of 2007-08 and approves an amount of Rs.16.57 crore for the FY 2008-09.

Interest on Loan

284. OPTCL has proposed gross interest expenses of Rs.115.16 crore for the FY 2008-09. The loan-wise interest payment schedule is given in the table below:

Table – 32

Sl No	Particulars	Rate of Interest	Principal (C.B.) as on 31.03.08	Loan to be Received during 08-09	Principal repayment for 08-09	Interest payment for 08-09
1	State Govt.(Cash)	13.00%	2.00		0.12	0.26
2	St.Govt Loan(C R F)	-	15.00		-	-
3	Zero Coupon Bonds	13.00%	400		20.00	26.00
4	Central Govt	8.75%	11.26		-	1.01
5	IBRD Loan (Thr. GOO)	13.00%			-	-
	Sub Total		**428.26**		**20.12**	**27.27**
6	REC (Term Loan)	10.61%	5.36		5.35	0.12
7	PFC (F L)	16.05%	25.61		14.95	3.51
	Sub Total		**30.97**		**20.31**	**3.63**
8	OSEB Loan	11.50%	24.03		10.73	2.14
9	Bond PF/99 (P.Trust)	9.00%	106.5		18.00	7.22
	Sub Total		**130.53**		**28.73**	**9.36**
10	Union Bank of India- II	8.25%	55.84		14.29	4.07
11	HUDCO	10.50%	166.02		28.87	16.04
12	UCO Bank	10.25%	113.81		33.36	10.10
13	OBC	10.00%	173.75		28.57	16.07
	Sub Total		**509.42**		**105.09**	**46.28**
14	HDFC Ltd.- (Emp. Housing Loan)	12.00%	0.89		-	-
15	Loan for new Infrastructure from PFC/ REC	10.90%	166.43	214.00		41.47
16	Deposit From EHT Consumers	6.00%	30.25		6.20	
17	Finance Charge		0.00		0	21.24
18	Less: Interest Capitalization					(34.09)
	TOTAL		1296.75	214.00	180.45	**115.16**

285. It is observed from the above that excepting Rs.380.43 crore which is proposed to be availed of for new projects, all other loans are old and have been approved by the Commission. OPTCL has submitted for approval of Annual Revenue Requirement

(ARR) and determination of Transmission Tariff for the FY 2008-09. It was mentioned there that a loan of Rs.166.43 crore at the interest rate of 10.9% per annum would be availed from REC/PFC during 2008-09 for creation of new infrastructure. The said loan will be availed from the REC for implementation of the following projects.

Table – 33

(Rs. in Cr.)

Sl.No.	Name of the Project	Project cost	Amount of loan sanctioned
1.	Installation of new 132/33 KV, 2x20 MVA Grid S/s at Basta in Balasore District	16.985	13.14
2.	Installation of new 132/33 KV, 2x12 MVA Grid s/s at Karanjia in Mayurbhanj district	24.207	18.80
3.	Installation of new 2x20 MVA 132/33 KV Grid s/s at Barapali in Bargarh District	15.867	12.22
4.	Installation of 220/132 KV 2x100 MVA s/s at Bhadrak along with associated transmission line in Bhadrak District	33.058	19.12
5.	Construction of 400 KV DC line from Maramundali to Duburi	14.148	79.71
6.	Installation of 132/33 KV s/s at Anandpur along with associated transmission lines	23.206	19.74

286. *Regarding loan addition during 2008-09 for the new projects the OPTCL had given a brief not at the time of hearing, which is reproduced below:*

The total capital investment proposed by OPTCL for the FY 2008-09 is Rs. 318.51 crore which includes commissioning of new projects and implementation of ongoing projects. 80% of this capital expenditure is to be funded by availing term loan from PFC and REC and it is proposed to be repaid over a period of 13 years with a moratorium of 3 years on principal prepayment. The 80% of the total capital expenditure as reduced by capitalization of the interest of Rs. 214.00 crore is to be availed as a loan from PFC/REC @10.9% per annum.

Implementation of the following projects are covered under the aforesaid loan:

Table - 34

Sl.No.	Name of the Project
Servicing of loan for ongoing projects	
1.	Installation of new 132/33 kV, 2x20 MVA Grid S/S at Basta in Balasore District
2.	Installation of new 132/33 kV, 2x12.5 MVA Grid S/S at Karanjia in Mayurbhaj District`
3.	Installation of new 2x20 MVA 132/33 kV Grid S/S at Barapali in Bargarh District
4.	Installation of 220/132 kV, 2x100 MVA S/S at Bhadrak along with associated transmission line in Bhadrak District.
5.	Construction of 400 kV DC line from Meramundali to Duburi
6.	Installation of 132/33 kV S/S at Anandpur along with associated transmission lines.
Sl.No.	**Name of the Project**
Servicing of loan for new projects	
1.	400 KV D/C line from Ib-Meramundali (235 Kms)
2.	220 KV Budhipadar-Bolangir via Burla D/C Line (179.563 Kms)
3.	132 KV Bidanasi-Cuttack D/C line (12 Kms)
4.	2x100 MVA, 220/132 kV S/S at Sarua with associated transmission lines (5 Kms)
5.	2x12.5 MVA, 132.33 kV S/S at Dabugaon with associated lines (50 Kms)
6.	2 x 12.5 MVA, 12/33 kV S/S at Banki with associated lines (30 Kms.)
7.	132 KV S/C Line on D/C Tower from Paradeep Grid S/S to Jagatsinghpur Grid s/S (56.073 Kms) with 2 nos. Feeder Bay Extension (one at each end)
8.	2 x 12.5 MVA, 132/33 kV S/S at Chandpur with associated lines (5 Kms)
9.	2 x 12.5 MVA, 132/33 kV S/S at Kuchinda with associated lines (55 Kms)
10.	2x315 MVA, 400/220/132/33 kV S/S at Keonjhar with associated lines (50 Kms.)
11.	Transmission line for Sterlite Power Evacuation
12.	Infrastructure for Telecommunication Network
13.	Infrastructure for IT

287. The Commission has approved all the six projects mentioned in Table-34 as per the requirements of the License Conditions.

288. OPTCL will avail the loan for setting up of the projects mentioned above. So far, OPTCL has incurred an expenditure of Rs.60.00 crore and is expected to incur a further expenditure of Rs.65.00 crore during the current financial year. OPTCL is also taking steps for availing the loan by 31st March, 2008. All the projects are under construction stage. OPTCL will avail the entire loan of Rs.166.43 crore from REC for commissioning of all the six projects and will require to service the loan from 2008-09 as per the terms of the loan agreement.

289. OPTCL has proposed to allow interest @ 10.9% of the entire loan for the FY 2008-09 and also allows the said loan to be taken for the purpose of computation of Advance Against Depreciation.

290. The impact of interest @ 10.9% per annum on the above loan of Rs.380.43 crore amounts to Rs.41.47 crore claimed for the year 2008-09 out of which Rs.34.09 crore is shown as interest during construction leaving a balance of Rs.7.38 crore to be charged to revenue. The Commission accepts the loan proposed to be utilized in the new project. But, allow the entire interest of Rs.41.47 crore to be shown under interest during construction because the Commission feels that the completion of the new project will take a minimum three years time and the utility of the asset will be available after 2008-09. Moreover, the OPTCL has a huge work-in-progress amounting to Rs.801.88 crore at the beginning of the year 2007-08 which needs to be completed first. Therefore, the interest charge to revenue under this head is treated as NIL.

291. **State Govt. Loan**: OPTCL has reported that loan from State Govt. (Cash loan) stands at Rs.2.00 crore as on 31.03.2008. Since debt servicing of State Govt. loan has been kept in abeyance vide notification dtd.29.01.2003 of GoO, the Commission does not consider the interest impact on the above loan to be passed on to tariff.

292. **Central Govt. Loan**: As far as the remaining loan amount of Rs.11.26 crore of Central Govt. as on 31.03.2007 availed by the erstwhile OSEB for construction of transmission lines at an average rate of interest of 9.25% is concerned, OPTCL has not proposed any repayment for 2006-07 and 2007-08. The Commission, therefore, allows interest on a loan balance of Rs.11.26 crore to be passed on to tariff for the year 2008-09.

293. **GoO Bonds**: The amount of Rs.400.00 crore in the form of zero coupon bond issued to State Govt. by GRIDCO, is now transferred to OPTCL. The Commission, in its earlier tariff orders, had decided not to take into account the effect of up-valuation of asset for the purpose of determination of tariff as it was not a real out go by the Govt. of Orissa. As such, no interest shall be allowed on the bond for FY 2007-08.

294. **IBRD Loan**: GRIDCO in its annual account for 2004-05 has shown a balance of Rs.242.45 crore on account of this loan as on 31.03.2005. Out of this, an amount of Rs.129.24 crore was assigned to OPTCL leaving a balance of Rs.113.21 crore with GRIDCO. The position of IBRD loan is indicated in the table below:

Table – 35

(Rs. in Crore)

Loan availed of upto 31.03.04 (Net of 30% Grant)	441.12
Received during 2004-05	2.03
Total Loan	443.15
Repayment during 2004-05 (Through swapping by taking Rs.200 crore loan from UCO Bank @ 8.25%)	200.71
Balance of loan as on 31.03.2005 as per desegregated accounts of 2004-05	242.44
Assigned to OPTCL in the provisional transfer notification	129.24
Retained with GRIDCO to be transferred to DISTCOs	113.20

295. OPTCL, in its filing, proposed repayment of entire loan of Rs.129.24 crore along with outstanding interest of Rs.71.22 crore during 2005-06 and 2006-07 by availing of a fresh loan of Rs.200.00 crore from Oriental Bank of Commerce at current floating rate of 10% per annum.

296. As regards the loan of Rs.113.20 crore assigned to DISTCOs, the impact of interest has not been considered in the revenue requirement by GRIDCO, since the same will be transferred to DISTCOs. Therefore, neither OPTCL nor GRIDCO has assumed interest impact on IBRD loan during 2008-09.

297. **REC Loan:** The loan from REC is project related which GRIDCO had availed at different rates of interest from time to time. This was availed for transmission as well as distribution networks. The average rate of interest of the above loan is shown at 12.15%. The total loan balance as on 31.3.2005 amounts to Rs.45.95 crore which now stands reduced to Rs.20.34 crore as on 31.3.2007 after repayment. Further, during 2007-08 the licensee proposed to repay an amount of Rs.14.98 crore leaving a balance of Rs.5.36 crore as at the end of 31.3.2008. During 2008-09, it propose to repay Rs.5.36 leaving NIL balance as on 31.03.2009. The Commission approves an amount of Rs.0.12 crore towards interest proposed by licensee.

298. **PFC Loan:** The loan balance as on 01.04.2005 based on the segregated audited account amounts to Rs.70.46 crore. This was also a project related loan. The loan now stands reduced to Rs.10.66 crore as on 31.3.2009 after repayment. The Commission approves the same and allows the interest to be calculated @8.5% (Tax free) as per Govt. notification dated 29.01.2003, on average loan outstanding at the beginning and end of the year as against 16.05% proposed by OPTCL.

299. **Loan from Union Bank of India:** GRIDCO during 2004-05 availed of a loan of Rs.100 crore to swap a portion of Bond IC/99 of NALCO, Bond 1/2002 of NALCO at an average rate of 8.25%. GRIDCO, after making a repayment of Rs.1.20 crore

during 2004-05, transferred the loan balance of Rs.98.80 crore to OPTCL. The loan balance after repayment stands at Rs.41.55 as on 31.03.2009.

300. The Commission in its order for FY 2007-08, allowed the interest to be passed on to the tariff to OPTCL. Based on the same principle, the Commission now considers to allow the interest impact to be passed on to tariff for the FY 2008-09.

301. **Loan from HUDCO**: GRIDCO had availed of a loan of Rs.300.00 crore from HUDCO @7.75% (floating rate) to discharge the old loan from LIC, ICICI (project related loan) and a portion of power bonds during 2003-04. The loan balance after repayment has been worked out to Rs.252.63 core and was transferred to OPTCL. The loan balance after repayment stands at Rs.137.15 crore as on 31.03.2009. The Commission allows the interest impact to be passed on to tariff.

302. **Loan from UCO Bank:** As discussed earlier, GRIDCO had availed of an amount of Rs.200 crore from UCO Bank at an average rate of 8.25% to swap IBRD loan during 2004-05. During 2005-06, 2006-07, 2007-08 and 2008-09, OPTCL assumed repayment of Rs.19.47 crore, Rs.33.36 crore, Rs.33.36 crore and Rs.33.36 crore respectively leaving a balance of Rs.80.45 crore as at the end of 31.03.2009. The Commission approves the same and allows the interest to be passed on to tariff.

303. Loan from Oriental Bank of Commerce: During 2005-06, GRIDCO had availed of an amount of Rs.200.00 crore as loan from Oriental Bank of Commerce to swap principal of IBRD loan along with outstanding interest which has been assigned to OPTCL. Upto FY 2008-09, an amount of Rs 54.82 crore has been proposed towards repayment of principal leaving a balance of Rs.143.18 crore as on 31.3.2009. The Commission approves the same and allows the interest to be passed on to tariff.

304. **Open Market Loan**: GRIDCO had inherited a loan from OSEB period at an average rate of interest if 11.5% which works out to Rs.24.03 crore as on 01.04.2005 and the same has been allocated to OPTCL. The Commission allows the interest to be passed on to tariff for the year 2008-09, based on the principle adopted in the last year's tariff, after considering the estimated repayment for the FY 2008-09.

305. **Pension Trust Bond:** OPTCL has claimed an amount of Rs.7.22 crore towards interest on pension trust bond. Till 2007-08, the Commission was allowing the interest on original value of Rs. 150 crore @9% per annum. As regards, Rs.150 crore of bonds it is issued to the pension trust fund of GRIDCO under Transfer Scheme vide notification No.257/96 dated 1st April, 1996 of Department of Energy, Govt. of Orissa i.e. prior to privatization. This amount was not funded at the time of Transfer Notification. In the note to accounts of 1998-99 of GRIDCO the auditors have pointed out that the provision has been kept on account of retired benefit by taking into consideration the issue of Rs.50 crore to GRIDCO pension trust. But, the State govt. has not issued any such bond to the trust fund. This bond includes Rs.119.76 crore of pension liability allocated to DISTCOs which has not yet been transferred by the GRIDCO to DISTCOs. In other wards, Rs.150 crore of bond is now retained with GRIDCO. Since this bond relates to the period before privatization. The Commission accepts the bond and allows interest of Rs.7.22

crore for the purpose of determination of revenue requirement. But, for the purpose of calculation of Advance Against Depreciation the bond value of Rs.150 crore has not been considered given the fact that GRIDCO has to transfer a substantial amount to DISTCOs.

306. **Finance Charges:** OPTCL has claimed an amount of Rs.21.24 crore under the head finance and other charges. The details were obtained from OPTCL at the time of hearing which is produced below:

Table - 36

(Rs. in crore)

Sl.No.	Head of Account	2008-09
1	Discount/Rebate to consumers for timely payment	9.16
2.	Bank Commission for collection from consumers	0.60
3.	Bank charges for demand draft etc. purchased	0.03
4.	Bank charges (incidentals) on Bank Accounts	-
5.	Other Bank charges	0.08
6.	Guarantee charges	7.48
7.	Stamp duty	1.13
8.	Service fee	-
9.	Commitment charges	-
10.	PFC Management Commission	-
11.	Audit (AG)	2.32
12.	Issue and Management Expenses & others	0.44

307. The Commission allows the same to be included in the Annual Revenue Requirement except expenditure under the head issue and management amounting to Rs.0.44 crore leaving a balance of Rs.20.80 crore to be recovered through tariff for the year 2008-09.

308. Based on the above factors, the interest liability of OPTCL has been calculated and the same works out to Rs.79.43 crore.

Table – 37

(Rs. in Crore)

		Rate of Interest	Commission's Approval 2007-08	OPTCL's Proposal 2008-09	Commission's Approval 2008-09
A	Govt. Loans				
	State Govt.(Cash Loan)	13.00%	-	0.26	-
	State Govt.(CRF)	0.00%	-	-	-
	Central Govt. Loan	9.25%	1.01	1.01	1.01
	GoO Bonds	13.00%	-	26.00	-
	IBRD Loan	13.00%	-	-	-
	Sub Total		**1.01**	**27.27**	**1.01**
B	Institutional Loans				
	REC Loan	12.15%	1.09	0.12	0.12
	PFC Loan	16.05%	2.81	3.51	1.86
	Sub Total		**3.90**	**3.63**	**1.98**
C	Secured Loan				
	Union Bank of India	8.25%	5.20	4.07	4.07
	HUDCO	10.50%	13.99	16.04	16.04
	U Co Bank	10.25%	10.77	10.10	10.10
	Oriental Bank of Commerce	10.00%	15.42	16.07	16.07
	Sub Total		**45.37**	**46.28**	**46.28**
D	GRIDCO Bonds				
	Open Market Loan	11.50%	2.75	2.14	2.14
	Pension Trust Bond	9.00%	7.83	7.22	7.22
	Sub Total		**10.58**	**9.36**	**9.36**
E	Loans for New Projects	10.90%	-	41.47	41.47
	Total		**60.86**	**128.01**	**100.10**
F	Finance Charges		-	21.24	20.80
	Grand Total		**60.86**	**149.25**	**120.90**
G	Less interest capitalization		-	34.09	41.47
H	**Interest Chargeable**		**60.86**	**115.16**	**79.43**

Depreciation

309. OPTCL has claimed Rs.64.53 crore towards depreciation for the year 2008-09. The detailed statement of fixed asset and block wise computation of depreciation is given below:

Table – 38

Rs. in Crores

Particulars	Depreciation Rate prescribed by CERC	Gross Block (01-04-07) (Provisional)	Gross Block (01-04-08)	Depreciation for (2008-09)
Land and Rights	0	33.4	33.73	0
Buildings	1.80%	64.58	67.72	1.42
Plant and Machinery (Other Civil works)	1.80%	4.13	4.15	0.09
Plant and Machinery	2.57%	730.14	933.24	22.87
Plant and Machinery (Lines, Cables & Network Assets)	2.57%	1258.29	1509.73	39.42
Vehicles	18.00%	1.23	1.27	0.27
Furniture, Fixture	6.00%	1.67	1.85	0.12
Office Equipment	6.00%	4.77	5.67	0.35
TOTAL		**2098.21**	**2557.36**	**64.53**

310. From the annual accounts for FY 2006-07 submitted by OPTCL, it is found that the fixed asset as on 31.03.2007 amounts to Rs.2051.27 crore and the work in progress on the same date is Rs.801.89 crore. The fixed asset as on 31.03.2008 is shown at Rs.2557.36 crore which means an addition of Rs.505.09 crore is proposed during 2007-08. Considering a huge work in progress of Rs.801.89 crore at the beginning of the year the conversion of fixed asset of Rs.505.09 crore sounds reasonable. Moreover, the incomplete transmission project hanging for a long time needs to be completed for stability of the power system. As such, the Commission accepts the figure of asset addition furnished by the licensee for the calculation of depreciation. However, if the OPTCL fails to meet the target the depreciation figure shall be revisited at the time of truing up exercise apart from any other action that the Commission may contemplate for non-achieving of the target.

Up-valuation of Assets

311. The Deptt. of Energy Notification No.1068/E dated 29.01.03 envisages that “The effect of up-valuation of assets of OHPC and GRIDCO indicated in notification No.52010 dated 01.04.96 and No.5207 dt.01.04.1996 would be kept in abeyance from the financial year 2001-02 prospectively till 2005-2006 or the sector turns around, whichever is earlier to avoid re-determination of tariff for past years and also re-determination of asset of various DISTCOs. For this purpose, depreciation would be calculated at pre-92 norms notified by the GOI”. As such, the depreciation shall be calculated for the assets at pre-1992 norms.

312. The Commission in its letter No.460 dtd.22.03.2005 had advised the State Govt. in terms of Section 86 of the Electricity Act, 2003 to keep in abeyance the up-valuation of assets as well as moratorium on debt servicing to the state government for a period of another five years beyond FY 2005-06 i.e. till FY 2010-11 as the

sector has not so far turned around. The Govt. was reminded on the matter vide Commission's letter No.1968 dt.16.12.2005 to accept its recommendations in order to avoid a tariff shock to the consumers. The projected additional liability on this account could have an adverse impact on the consumer tariff. Till date, the Govt.'s decision has not been received.

313. The CERC (Terms and Conditions of Tariff) Regulations, 2004 notified on 26th March, 2004 at Para 56(II)(a)(I) stipulates that the value base for the purpose of depreciation shall be the historical cost of the asset. In OERC regulation, it has also been prescribed for the purpose of tariff determination and the rate of depreciation could be linked to the useful life of the asset, calculated on straight line method. This is in line with the CERC Regulation also. In view of this, the Commission has approved calculation of depreciation on the basis of historical cost.

314. The Commission has extensively dealt with the valuation of assets and calculation of depreciation in Para 5.36.1 to 5.37.5 of tariff order dated 23.06.2003 and treated transmission asset base of undivided GRIDCO at Rs.514.32 crore as on 01.04.1996.

315. A table showing gross fixed assets as on 1.4.96 and year-wise asset addition thereafter till 2007-08 is depicted below:-

Table – 39

(Rs. in crore)

Year	OPTCL
GFA as on 1.4.1996	514.32
1996-97	49.46
1997-98	39.94
1998-99	62.5
1999-00	111.79
2000-01	134.10
2001-02	86.44
2002-03	132.17
2003-04	69.46
2004-05	71.72
2005-06	158.91
2006-07	129.07
2007-08	505.09
Asset on 1.4.2008	2064.97

316. The Commission has calculated depreciation on the approved asset based at Pre-92 rate. The classification of assets has been done proportionately based on the proposal submitted by GRIDCO. Accordingly the Commission approves an amount of Rs.61.62 crore towards depreciation for the FY 2008-09. The detailed calculation is shown in the table below:

Table - 40

(Rs. Crore)

Particulars	**Pre-92 rate of depreciation as per GOI notification dated 31.01.92**	**Book Value of asset as on 01.04.1996**	**Book Value of asset as on 01.04.2008**	**Depreciation for the year 2008-09**
Land and Rights		8.07	27.24	0.00
Building	1.80%	13.09	54.68	0.98
Plant & Machinery (other civil works	1.80%	-	3.35	0.06
Plant & Machinery	3.80%	-	753.55	28.64
Plant & Machinery (line, cables and network)	2.57%	492.71	1219.04	31.33
Vehicles	12.86%	0.02	1.03	0.13
Furniture, Fixture	4.55%	0.19	1.50	0.07
Office equipment	9.00%	0.25	4.58	0.41
Grand Total		514.32	2064.97	61.62

Advance against Depreciation

317. The OPTCL has claimed an amount of Rs.65.13 crore towards advance against depreciation as per Regulation 56(ii) of CERC (Terms & Conditions of Tariff) Regulations 2004. The amount claimed is limited to the difference between $1/10^{th}$ of the loan amount and depreciation. The loan amount considered by OPTCL for calculation of advance against depreciation is Rs.1296.75 crore. $1/10^{th}$ of the loan amount works out to Rs.129.66 crore. Setting aside the depreciation amount of Rs. 64.53 crore claimed by OPTCL, the balance amount of Rs.65.13 crore is claimed towards advance against depreciation. The Appellate Tribunal in its verdict stated that the amount allowed as advance against depreciation for the FY 2006-07 is illegal on the sole reasoning that such an allowance runs counter to National Tariff Policy published by the Central Govt. on 06.01.2006 under Section 3 of the Electricity Act, 2003.

318. The Commission, in its tariff order for FY-02, had linked the computation of depreciation to the life of the assets, by adopting the deprecation rates notified by the Govt. of India in 1992 on the gross fixed assets of the licensee. However, the Commission also recognized that in reality the actual debt service obligation of the licensee could be higher than the depreciation computed on the above basis.

Keeping this in mind, the Commission, in Para 5 (G) of its Terms and Conditions for determination of Tariff Regulations 2004, has clearly laid down the following:

319. The depreciation allowed by the Commission will be linked to the useful life of the asset and shall be calculated on a Straight Line method;

320. A higher rate of depreciation will be permitted in case of any inadequacy of cash for debt repayment;

321. The Commission can consider AAD in special cases, provided AAD and depreciation together for the year do not exceed 1/12th of the loan amount, and the total depreciation allowed does not exceed 90% of the original loan amount.

322. The National Tariff Policy, notified by the Ministry of Power, Govt. of India, in para 5.3 (c) lays down that "there should be no need for any advance against depreciation".

323. As per the National Tariff Policy, the depreciation rates are to be notified by the CERC. Under normal circumstances, these rates should ideally meet the debt service coverage for those assets.

324. However, in case of Orissa, the ground reality is different. Because of the directives and orders of the Hon'ble High Court of Orissa, the Commission is bound to compute depreciation, for the purpose of determination of ARR and tariff, on the basis of pre-'92 rates of depreciation on the original book value of assets (i.e., after rolling back the effect of re-valuation of 1996 from the value of the assets). Depreciation computed on this basis falls short of the principal repayment obligations of the licensee, which makes it necessary to allow advance against depreciation to ensure financial viability of the licensee and to ensure that the licensee meets its principal repayment obligations.

325. In the earlier years, as per the notification of the Govt. of India in 1994 specifying the rates of depreciation to be chargeable for various classes of assets in the electricity business, the rates of depreciation were adjusted so that investors were allowed to recover the cost of the asset (limited to 90%) over a much shorter period.

326. The National Tariff Policy has left the CERC with the task of notifying rates for depreciation for the generation and transmission business, with suitable modifications to make it applicable to the Distribution business. Current norms laid down by CERC link the depreciation rates to the life of the asset.

327. Even in case of depreciation rates notified in 1994 by the Govt. of India, it can be clearly demonstrated that for a particular asset financed by a 70:30 Debt Equity Ratio on a loan with a tenor of say, 11.5% payable over a 12- year period, there is a shortfall in the coverage of debt servicing from the 10th year onwards.

Table - 41

Comparison of Principal Servicing obligations vis-à-vis Depreciation available

Asset Value Capitalized = Rs. 10 crores	**Financing on 70:30 D/E ratio**	**Loan component at 11.5% interest, repayable in equal monthly installments over a 12- year period**	
YEAR	Annual Depreciation in Rs. Crores (at Post-'94 Rates of 7.84%)	Annual Depreciation in Rs. Crores (at Pre-'92 Rates of 3.80%)	Principal Component of EMI (in Rs. Crores)
Year – 1	0.78	0.38	0.29
Year – 2	0.78	0.38	0.32
Year – 3	0.78	0.38	0.36
Year – 4	0.78	0.38	0.41
Year – 5	0.78	0.38	0.45
Year – 6	0.78	0.38	0.51
Year – 7	0.78	0.38	0.57
Year – 8	0.78	0.38	0.64
Year – 9	0.78	0.38	0.72
Year – 10	0.78	0.38	0.81
Year – 11	0.78	0.38	0.90
Year – 12	0.78	0.38	1.01

328. As seen from the preceding table, the shortfall in depreciation coverage to meet principal repayment obligation is even more acute when depreciation is on a pre-92 basis. In this case, the shortfall starts from the fourth year itself.

329. For an utility like that of OPTCL inheriting massive ageing transmission network, it is very evident that the depreciation would fall short of the principal servicing obligation, as is evident from the table in the preceding paragraph.

330. Based on this, the Commission feels it necessary to allow advance against depreciation for the licensee so that it meets its debt repayment obligations.

331. In line with the earlier order the Commission allows the advance against depreciation to be passed into the tariff, but re-assess the loan balance as on 31.3.2008. A comparative table showing the loan amount proposed by the OPTCL for calculation of Advance Against Depreciation on the loan balance as on 1.4.2008 and the loan amount approved by the Commission as on 31.3.2008 is shown below:-

Table – 42

Sl No	Particulars	Closing Balance as on 31.03.08	Ceiling of 1/10th of Loan Amount as per Regulation 54	Closing balance of loan as on 31.03.2008 (Approved)	Ceiling of 1/10th of loan amount
1	State Govt.(Cash)	2.00	0.20	Nil	NIL
2	St.Govt Loan(C R F)	15.00	1.50	Nil	NIL
3	Zero Coupon Bonds	400	40	Nil	NIL
4	Central Govt	11.26	1.126	11.26	1.13
5	IBRD Loan (Thr. GOO)		0.00	0.00	NIL
	Sub Total	**428.26**	**42.826**	**11.26**	**1.13**
6	REC (Term Loan)	5.36	0.536	5.36	0.54
7	PFC (F L)	25.61	2.561	25.61	2.56
	Sub Total	**30.97**	**3.097**	**30.97**	**3.10**
8	OSEB Loan	24.03	2.403	24.03	2.40
9	Bond PF/99 (P.Trust)	106.5	10.65	Nil	NIL
	Sub Total	**130.53**	**13.053**	**24.03**	**2.40**
10	Union Bank of India- II	55.84	5.58	55.84	5.58
11	HUDCO	166.02	16.60	166.02	16.60
12	UCO Bank	113.81	11.38	113.81	11.38
13	OBC	173.75	17.37	173.75	17.37
	Sub Total	**509.42**	**50.94**	**509.42**	**50.94**
14	HDFC Ltd.- (Emp. Housing Loan)	0.89	0.09	-	NIL
15	Loan for new Infrastructure	166.43	16.64	166.43	16.64
16	Deposit From EHT Consumers	30.25	3.02	-	NIL
17	Finance Charge	0.00	0.00		0.00
	TOTAL	**1296.75**	**129.66**	**742.11**	**74.21**

332. Commission thus approves an amount of Rs. 74.21 crore towards repayment of loan. Setting aside the depreciation allowed by the Commission for an amount of Rs. 61.62 crore, the balance amount of Rs.12.59 crore is allowed towards advance against depreciation.

Asset Register

333. OPTCL has furnished the fixed asset register upto the FY 2005-06.

Contribution to Contingency Reserve

334. For the year 2008-09, OPTCL has proposed Rs.13.10 crore towards Contribution to Contingency Reserve to be passed on to tariff. In justification towards the claim the OPTCL has stated that the requirement of contingency reserve in a natural calamity prone state like Orissa need not be over emphasized. Investment towards contingency reserve relates to maintaining an emergency fund to meet expenses towards unforeseen calamities. Contingency reserve is being kept in a separate reserve fund and invested in the specified securities. The corpus of the reserve appropriated from profit and loss account till 2006-07 is Rs. 72.24 crore which is invested in specified securities. The Commission, in line with earlier order allows a total of Rs. 13.10 crore on account of provision towards contingency reserve in the ARR for OPTCL for the Year 2008-09.

Return on Equity

335. OPTCL has claimed an amount of Rs.8.40 crore towards Return on Equity on its share capital of Rs.60 crore @ 14% per annum. In application, OPTCL has stated that at the time of vesting of the transmission & distribution business with GRIDCO by the State Govt. on 01.04.1996, the Equity Share Capital was Rs.327.00 Crore. During the subsequent year's upto FY 2004-05, there were additional infusions of equity capital of Rs.165.98 Crore by the State Govt. raising the total equity of GRIDCO to Rs.492.98 Crore. At the time of de-merger of GRIDCO effective from 01.04.2005, the equity share capital of OPTCL was stated at Rs.60 Crore, leaving the balance equity share capital with GRIDCO. The equity share capital issued to Govt. of Orissa was both in consideration of cash & other than cash. Therefore, the licensee is entitled to ROE @14% on the equity share capital of Rs.60 Crore. The commission in earlier orders referred to the GoO notification of 29.1.2003, where in it has been stated that GRIDCO & OHPC shall not be entitled to any return in equity till the sector becomes viable or FY 2005-06 whichever is earlier. Further, in a partial modification earlier notification the Govt. of Orissa in its letter no. 5302 dtd. 6.5.2003 stated the following "GRIDCO and OHPC shall not be entitled to any Return on Equity (ROE) except in respect of the new projects Commissioned after 01.04.2006 till the sector become viable or and of 2005-06 whichever is earlier. The Commission would like to clarify that letters have been written to Govt. of Orissa to clarify the status of the letter dtd. 29.1.2003, as it has great impact on Tariff. But the Govt. of Orissa has not responded yet. As regards infusion of capital for the new project, the Commission verified audited accounts of GRIDCO upto 2004-05. It is found that the addition of share capital shown in the balance sheet after 96-97 is only the grants received from DFID towards R&M expenditure and rehabilitation assistance. As per Project Memorandum signed between Govt. of India and Govt of Orissa and DFID, the above amount has sown under share deposit account pending allotment of shares for non-receipt of approval from GoO.

336. Keeping in view of the above fact, the Commission does not consider it proper to allow return on equity to OPTCL for the Year 2008-09.

Interest on Working Capital

337. OPTCL has proposed an amount of Rs.13.53 crore towards interest on working capital for financial year 2008-09 as per CERC (Terms and Conditions of Tariff) Regulations-2004. The Commission does not feel it justified to allow the same in the revenue requirement since the transmission charge is the first charge to be recovered from BSP Bills of DISTCOs. Moreover, the rebate allowed by OPTCL has been considered as a part of the revenue requirement for the year 2008-09. As such, the Commission disapproves the claim towards interest on working capital for the year 2008-09.

Interest on short-term loan for equity component of the project

338. The OPTCL has claimed an amount of Rs. 3.04 crs towards interests under the above head as a part of revenue requirement. The equity component of the project is calculated on 20% of the total fund of Rs. 318.51 crores to be availed during 2008-09. The Commission does not feel it justify to allow the amount since many of the new projects has not been approved by the Commission. The same will be considered after the audited accounts are available with the Commission.

Pass Through of Previous Losses and Truing Up Exercise

339. OPTCL for the financial year 2008-09 claimed an amount of Rs.108.32 crore to be passed on to tariff towards loss for the financial year 2005-06 (Based on provisional account) and expected uncovered gap during FY 2007-08. The details of loss and the estimated uncovered gap are shown in table below:

Table - 43

(Rs. In Crores)

1.	Interest on Term Loan	23.37
2.	AAD	51.63
3.	Special Appropriation (loss of FY 2005-06)	14.98
4.	Special Appropriation (loss of FY 2006-07)	18.34
	Total	108.32

340. Regarding Rs.23.37 crore of interest liability proposed by OPTCL the Commission would like to clarify that for the year 2007-08 the computation of the approved interest was based on certain principle which has been narrated in Para 5.4.4.1 to 5.4.4.21 of Commission’s order dated 22.03.2007 in Case No. 56 of 2006. There is no justification to reconsider the decision of the Commission again for passing the extra burden of interest.

341. Regarding repayment of principal the Commission allowed it through Advance Against Depreciation considering the loan balance as on 31.3.2007 in line with the CERC Regulation dated 26th March, 2004. As such, the Commission does not think it proper to reconsider its decision to allow repayment of principal beyond 10% of the approved loan balance.

342. Regarding special appropriation i.e. loss for the FY 2005-06 and 2006-07, OPTCL has claimed an amount of Rs.14.98 crore and Rs.18.34 crore respectively to be included in the revenue requirement. The audited account of OPTCL for FY 2005-06 has been received. It is found that the loss for FY 2005-06 amounts to Rs.24.94 crore out of which the Commission has already allowed Rs.9.94 crore in the revenue requirement for the year 2007-08.The balance amount of Rs.15 crore is allowed pass through in the revenue requirement for FY 2008-09.

343. Regarding the special appropriation i.e. the loss for FY 2006-07, the audit report for that year is not available to the Commission yet. Hence, the Commission disapproves the claim of Rs.18.34 crore of OPTCL.

Grid Co-ordination Committee Expenses:

344. OPTCL has claimed an amount of Rs.0.13 crore under the above head as pass through during FY 2008-09. The Commission approves the same.

Miscellaneous Receipts:

345. OPTCL had proposed to earn Rs.1.00 crore from inter-state wheeling during FY 2008-09. OPTCL has stated that as per Western Regional Power Committee ABT based Regional Energy Account, total 84.17 MU of ER-NTPC Scheduled Energy is wheeled through Orissa System in the first six months of 2007-08. Considering the present trend of wheeling during the first six months of 2007-08, OPTCL estimates Inter State Wheeling of 100MU for 2008-09 and will earn Miscellaneous Receipts of Rs. 1.00 Crores @ 10 Paise per Unit during FY 2008-09. The same has been deducted from the gross revenue of OPTCL to arrive at the Net Annual Revenue Requirement of OPTCL for FY 2008-09 to be recovered from Long Term Open Access Customers. The revenue receipt from short term open access is treated as NIL.

Rebate

346. Rebate of 2% on Annual Revenue Requirement amounting Rs.13.12 crore is claimed by OPTCL as a part of the revenue requirement. The Commission has verified the details of the revenue requirement furnished by OPTCL. In the interest charges an amount of Rs.21.24 crore has been claimed towards finance and other charges which include an amount of Rs.9.16 crore towards rebate to consumer for timely payment. The Commission has already allowed it. Therefore, the Commission does not find any justification to approve the amount of Rs.13.12 crore again towards rebate.

Transmission Cost

347. The total energy to be transmitted in the OPTCL system is estimated at 17930 MU the details of which are presented in the table below:

Table – 44

Transmission Details	**Proposed MU by OPTCL**	**Approved MU by OERC**
Sale to DISTCOs	18912	17620
Wheeling to industries from CGP	300	300
Sale to CGP by GRIDCO	10	10
Total	19222	17930

348. The details of expenses proposed by OPTCL and approved by the Commission for FY 2008-09 towards transmission charges are depicted in the table below:

Table - 45

(Rs. Crore)

Transmission Cost	**Proposed by OPTCL**	**Approved by Commission including SLDC function**
Employee Cost	151.88	132.86
R&M Cost	82.12	53.88
A&G Cost	25.93	16.57
Interest on loan	115.16	79.43
Interest on working capital and short-term loan	16.57	-
Depreciation	64.53	61.62
Advance against depreciation	65.13	12.59
GRID Co-ordination Committee Expenses	0.13	0.13
Sub-total	521.45	357.08
Less Expenses capitalised	7.61	7.61
Total	513.84	349.47
Special Appropriation	108.32	15.00
Return on Equity	8.40	-
Contingency Reserve	13.10	13.10
Rebate 2% on ARR	13.12	-
Grand Total	656.78	377.57
Less Inter-state wheeling	1.00	1.00
Net Transmission Cost	655.78	376.57
Total transmission in MU	19222	17930
Transmission Tariff (p/u)	34.11	21.00

Transmission Charges

349. Transmission Charges worked out to 21.00 paise per unit shall be applicable for transmission of power at 220 KV/ 132KV over OPTCL's EHT transmission lines and sub-stations and shall be payable by the DISTCOs and CGPs. It will also be applicable for the purpose of transmission of energy from a CGP to its industries located at a separate place(s) within the State.

350. The Commission has notified the Intra-state Open Access Regulations, 2005 under Section 42 (2) of the Electricity Act, 2003.Consumers availing open access shall be required to pay the transmission charges for use of the transmission lines and substations of OPTCL. The estimated energy for transmission in OPTCL's system is 17,930 MU with an average demand of 2047 MW. The net transmission cost as indicated in the table above is Rs.376.57 crore. This works out to a sum of Rs.5040.00/MW/day. The long term open access customer availing Open Access under relevant Regulations of OERC shall pay Rs.5040.00/MW/Day towards transmission charges. In accordance with our Regulation, the short term open access customer shall pay at the 25% of the long-term open access charges. Accordingly the Commission approves rate of Rs.1260.00/MW/day. This will be in addition to other charges in accordance with Open Access Regulation.

351. GRIDCO shall purchase power from the generator end and at inter-state points from outside sources while OPTCL will bill the customers for payment of Transmission charges at the delivery points. There would be a gap between the units treated as lost on account of delivery to the customers on the normative basis approved by the Commission and the actual figure, since part of this is to be assigned for export of power outside the state taking place in the intra-state system due to power exchange. It will be desirable that existing practice of actual loss shall be followed and final adjustment shall be carried out at the end of FY 2008-09 between GRIDCO and OPTCL. GRIDCO shall give credit to OPTCL for the units deemed to have been lost on account of export of power, if any.

Transmission Loss for Wheeling

352. OPTCL has proposed that out of the energy supplied to transmission licensee, 5% shall be deducted towards transmission loss and balance is liable to be delivered at delivery point at 220/132 kV. The Commission directs that the transmission loss shall be calculated at the rate of 4.5% for the FY 2008-09. Therefore, for the purpose of billing, the transmission loss for wheeling shall be 4.5%.

Transmission Charge Payment Mechanism

353. As per clause 11 of the Orissa Electricity Reforms (Transfer of Transmission and Related Activities) Scheme, 2005, the transmission charge of OPTCL shall be duly secured by a first charge over the receivables of GRIDCO from DISTCOs and other Open Access Customers in favour of OPTCL. Receivables of DISTCOs are escrowed in favour of GRIDCO. As on today there is no escrow arrangement between DISTCOs and OPTCL. According to the Transfer Scheme, the charge of OPTCL shall be duly secured by a first charge over the receivable of GRIDCO in favour of OPTCL. DISTCOs are customers of OPTCL. OPTCL will bill the Distribution Companies for the use of transmission services on the basis of meter reading at the delivery point to DISTCOs with a copy to GRIDCO. This bill will be paid by GRIDCO to OPTCL from the receivables of DISTCOs escrowed with them.

Rebate

354. For payment of bills through a letter of credit on presentation/upfront by cash within two working days, a rebate of 2% shall be allowed. If the payments are made by a mode other than through a letter of credit but within a period of one month of presentation of bills, by the Distribution Licensee, a rebate of 1% shall be allowed.

Late Payment Surcharge

355. In case payment of bills by the licensees is delayed beyond a period of 1 month from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL.

356. The transmission tariff in respect of OPTCL will become effective from 1st April, 2008 and shall continue until further order.

Separation of SLDC Charges

357. In keeping with the prayer of the Licensee in the Petition dated 13.03.2008 to defer for one year the decision of implementing the SLDC Charges as OPTCL is not in a position to achieve the important milestones laid down in the Road Map issued by the Commission, the Commission in Para-239 of the Order allowed to include the charges of SLDC functions in the ARR and Transmission Tariff for FY 2008-09 for OPTCL. The Commission directs that the charges for OPTCL shall not include the charges of SLDC with effect from 01.04.2009.

The application of M/s OPTCL is disposed off accordingly.

(K.C. BADU) **MEMBER**	**(S.K. JENA)** **MEMBER**	**(B.K. DAS)** **CHAIRPERSON**