ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN,
UNIT – VIII, BHUBANESWAR – 751 012

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Present : **Shri S. P. Nanda, Chairperson**
Shri B. K. Misra, Member
Shri S. P. Swain, Member

CASE NO.102/2012

DATE OF HEARING : 04.02.2013

DATE OF ORDER : 20.03.2013

IN THE MATTER OF: An application for approval of Annual Revenue Requirement and determination of Transmission Tariff for FY 2013-14 filed 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 2013-14.

O R D E R

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL), a Govt. Company registered on 29th March, 2004 under the Companies Act, 1956, is carrying on the business of transmission of electricity within the State of Odisha. 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 3rd Proviso of Sec.41, of the said Act. By virtue of a Transfer Scheme entitled 'Orissa Electricity Reforms (Transfer of Transmission and Related Activities) Scheme,2005, 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(1) of the Act with effect from 01.04.2005 (i.e, the date on which the same notification came in to force). By virtue of 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.

2. The OPTCL submitted an application in respect of its Annual Revenue Requirement (ARR) and determination of its Transmission Tariff for the FY 2013-14. The said application was duly scrutinized, registered as Case No.102/2012 and was admitted

for hearing. In the consultative process, the Commission heard the applicant, objectors, Consumer Counsel and representative of the State Government.

PROCEDURAL HISTORY (Para 3 to 10)

3. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for determination of Tariff) Regulations, 2004, OPTCL had submitted its ARR application for 2013-14 before the Commission on 30.11.2012. After due scrutiny and admission of the matter, the Commission has 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.

4. In compliance with the Commission's aforesaid order the OPTCL published the said public notice in the leading daily English and Odia newspapers. The Commission issued notice to the Govt. of Odisha represented by Department of Energy to send their authorized representative to take part in the ensuing tariff proceedings.

5. In response to the aforesaid public notice of the applicant, the Commission received 09 nos. of objections/suggestions from the following persons/ associations/ institutions/ organisations.

   (1) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (2) Shri M. K. Rajguru, Advocate and Shri P. K. Nath, AGM(E),NALCO are appeared on behalf of M/s. NALCO, Jaydev Vihar, Bhubaneswar, (3) Shri G.N. Agrawal, Advocate, Convener-cum-Gen. Secretary, Sambalpur District Consumers Federation, Balajee Mandir Bhawan, Khetrajpur, Sambalpur-768003,(4) Shri R. C. Mohapatra, the authorized representative of M/s Power Tech Consultants, 1-A, /6, Swati Villa, Surya Vihar, Link Road, Cuttack-753012,(5) Shri A. K. Sahani, Plot No. B/L-108, VSS Nagar, bhubaneswar and his authorized representative Shri H. P. Mohapatra, (6) Shri R. P. Mahapatra, Retd. Chief Engineer & Member(Gen.),OSEB, Plot No.775 (PT), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (7) Sri M. V. Rao, Resident Manager & Power of Attorney Holder, M/s Ferro Alloys Corporation Ltd., GD-2/10, Chandrasekharpur, Bhubaneswar and also for (8) M/s. Confederation of Indian Industry odisha, Plot no.8, Ist Floor, Forest Park, Bhubaneswar-9 (9) Shri S. K. Choudhry, V.P., SOUTHCO, the authorized representative of CEO, CSO, NESCO, WESCO, SOUTHCO, Plot No. N 1/22, IRC Village, Nayapalli, Bhubaneswar; (10) Shri A. C. Mallick, visitor and the representative of Dept. of Energy, GoO. All the above named objectors were present during tariff hearing except objector No. 3 but his written submission is taken on record and also considered by the Commission.

6. The applicant submitted its reply to issues raised by the various objectors.

7. 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 WISE, Pune as Consumer Counsel for objective analysis of the licensee's Annual Revenue Requirement and tariff proposal. The Consumer Counsel presented his views in the hearing.

8. The date for hearing was fixed as 04.02.2013 at 11 AM and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission also issued notice to the Government of Odisha through Department of Energy informing them

about the date time of hearing and requesting to send the Government's authorized representative to take part in the proceeding.

9. In its consultative process, the Commission conducted a public hearing at its premises on 04.02.2013 and heard the Applicant, Objectors, Consumer Counsel and the Representative of the Dept. of Energy, Government of Odisha at length.

10. The Commission convened the State Advisory Committee (SAC) meeting on 28.02.2013 at 3.30 PM at its premises to discuss about the ARR applications and tariff proposals of licensees. The Members of SAC, Special Invitees, the Representative of DoE, Govt. of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

OPTCL's ARR & TARIFF PROPOSAL FOR FY 2013-14 (Para 11 to 37)

11. As provided under Regulation 53 (1) at Chapter VIII of OERC (Conduct of Business) Regulations, 2004 and under Clause 19.3 of License Conditions of OPTCL approved by OERC vide order Dated 27.10.2006 in Case No. 22 of 2006, OPTCL is required to submit its Annual Revenue Requirement Application for the ensuing year before Commission for approval. Accordingly, OPTCL has filed an application before the Commission for approval of its Annual Revenue Requirement & Transmission Tariff for FY 2013-14.

Categorization of Open Access Customers

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

- **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. Based on such premise, four DISCOMs & Captive Generating Plants (CGPs) happen to be the long term customers of OPTCL.

- **Short Term Open Access Customers (STOA Customers)**

  Open access customers other than Long Term Customer(s) are classified as Short Term Customer(s). The maximum duration that a Short Term Customer can avail open access to the Inter-State / Intra-State Transmission is one year with condition to reapply after expiry of the term.

Details of Transmission Charge

13. Currently, OPTCL owns 100 nos. grid sub-stations of different voltage classes and EHT transmission line of 11344.196 ckt. km. as shown in the table below.

Table-1

Sub-Station and Line Details	
400/220 kV SS	3
220/132/33 kV SS	14
220/132 kV SS	1
220/33 kV SS	4
132 kV Sw.S	16
132/33 kV SS	58
132/33/25 kV SS	1

132/33/11 kV SS	1	
132/11 kV SS	2	
Total No. of Sub-Stations	**100**	
Voltage Level	**Lines (ckt. km.)**	**Bays**
400 kV	518.234	32
220 kV	5520.214	229
132 kV	5305.748	663
33 kV		730
25 kV		2
11 kV		18
Total	**11344.196**	**1674**

14. Till date, OPTCL has been following the Postage Stamp Method for determination of its Transmission Charges. OPTCL, the deemed Transmission Licensee is guided by the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2009 applicable for Transmission Tariff. In view of the above, OPTCL has proposed its ARR & Transmission Tariff Application for FY 2013-14 as per the related provisions pertaining to the conduct of Business Regulation and Terms and Condition of Determination of Tariff Regulations, 2004 and as per the CERC (Terms and Condition of Tariff) Regulation, 2009.

The costs of the deemed transmission licensee OPTCL for the FY 2013-14 for the purpose of determining the ARR and Transmission Tariff have been categorized under the following heads:

(A) Fixed Charges:

- Operation & Maintenance (O & M) Expenses
- Interest on Loan Capital
- Depreciation
- Special appropriation
- Return on Equity
- Interest on Working Capital

(B) Additional Expenses

- Contingency Reserve
- Grid Co-ordination Committee (GCC) Expenses
- Incentive for System Availability

Details of Fixed Charges

15. OPTCL proposes **fixed charges for FY 2013-14 as Rs.847.67 crore** including O & M Expenses of Rs.473.21 crore, Interest on Loan Capital of Rs.121.11 crore, Depreciation of Rs.172.85 crore, Return on Equity of Rs.49.04 crore and Interest of Working Capital of Rs.31.46 crore.

Depreciation

16. For FY 2013-14, OPTCL has projected **Rs. 172.85 crore towards depreciation** considering CERC Regulations, 2009 which will take care of principal repayment obligation.

Return on Equity

17. At the time of de-merger of GRIDCO effective from 1.4.2005, the equity share capital of OPTCL was stated at Rs.60.07 crore. Further, OPTCL has received Rs 143 crore (Rs.23.05 crore during FY 2008-09 + Rs. 5.00 crore during FY 2009-10 + Rs. 71.95 crore during FY 2010-11 + Rs 43 crore during FY 2011-12) from State Govt. as equity contribution for setting up transmission projects in remote areas. Therefore, the licensee has projected ROE @19.38% post-tax basis on the equity share capital of Rs.253.07 crore which amounts to **Rs.49.04 crore** for FY 2013-14.

Interest on Working Capital

18. Based on CERC norms, OPTCL has calculated its working capital needs at Rs.251.69 crore for the FY 2013-14. Taking 12.5% as the rate of interest, interest on working capital amounts to **Rs.31.46 crore for 2013-14.** 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 15% of O & M expenses and receivables equivalent to two months of fixed cost.

Additional Expenses

Contingency Reserve

19. A sum of **Rs.16.73 crore** has been projected for Contingency Reserve for the FY 2013-14.

Grid Co-ordination Committee Expenses

20. As per provisions in Orissa Grid Code (Chapter- 11), OPTCL formed Grid Coordination Committee (GCC) under it. Annual GCC expenses have been estimated at **Rs.0.30 crore** for the FY 2013-14.

Incentive for System Availability

21. The Regulation 25 to 29 under Chapter- 4 of CERC Regulations, 2009 specify the “Norms of Operation” applicable for generating stations (thermal and hydro) and transmission system for recovery of capacity charge, energy charge, transmission charge and incentive. OPTCL has proposed incentive for being able to make available the Transmission System more than 98% for the year 2011-12. The system availability of transmission network of OPTCL for FY 2011-12 has been worked out as **99.84%.** OPTCL has proposed the incentive of **Rs.10.05 crore** for FY 2011-12 to be allowed in the ARR of FY 2013-14.

Other Income and Cost/ Miscellaneous Receipts:

22. OPTCL estimates that it will earn Miscellaneous Receipts of **Rs.12 crore** during FY 2013-14 in line with the trend of revenue earning during FY 2012-13. The same has been deducted from the gross revenue of OPTCL to arrive at the ARR for FY 2013-14, to be recovered from LTOA customers.

Transmission Loss

23. OPTCL proposes Transmission Loss at 3.80% for FY 2013-14. The actual transmission loss in April 2012 – September 2012 period was 3.93% against the Commission’s approval of 3.8% for FY 2012-13.

24. The summary of the proposed Annual Revenue Requirement against different heads for FY 2013-14 is tabulated below.

Table - 2
Summary of Annual Revenue Requirement of OPTCL for FY 2013-14
(Rs. crore)

ITEMS	Proposal for OPTCL for FY 2013-14	
A. FIXED COST		
1) O&M Expenses		**473.21**
(i) Employees Cost including Terminal Benefits	341.20	
(ii) R&M Cost	108.91	
(iii) A&G Cost	23.09	
2) Interest on Loan Capital		121.11
3) Depreciation		172.85
4) Special Appropriation		0
5) Return on Equity		49.04
6) Interest on Working Capital		31.46
Sub-Total (A)		**847.67**
B. Additional Expenses		**27.08**
1) Contingency Reserve	16.73	
2) GCC Expense	0.30	
3) Incentive for system availability	10.05	
Total Trans. Cost (A+B)		**874.75**
C. Less Misc. Receipts		12.00
D. ARR to be recovered from LTOA Customers i.e. **OPTCL's Annual Revenue Requirement**		**862.75**

Expected Revenue from Transmission Charges

25. The revenue receipts from various transmission charges at the existing transmission tariff of 25 P/U shall be **Rs.638.43 crore**. Revenue to be earned by OPTCL from wheeling of 25525 MU to DISCOMs and other long term open access customers for FY 2013-14 at the existing rate is shown in the table below.

Table – 3
Revenue at existing transmission tariff

Sl. No	Customer	Commission's Approval for FY 2012-13	MU to be handled in FY 13-14	Rate (P/U)	Transmission Loss (%)	Energy handled including Loss	Amount (in Rs. crore)
1	CESU	8236	8854	25	0	8854	221.35
2	NESCO	5306	6100	25	0	6100	152.50
3	WESCO	6496	6821	25	0	6821	170.53
4	SOUTHCO	3047	3350	25	0	3350	83.75
	Total DISCOMs	**23085**	**25125**			**25125**	**628.13**
5	Emergency Sale to CGPs	100	100	25	0	100	2.50
6	Wheeling to industries from CGPs	300	300	25	3.8	312	7.80
	Total	**23485**	**25525**			**25537**	**638.43**

26. The licensee, therefore, submits this application before the Commission with a request to approve its proposed ARR and the Transmission Tariff and Transmission Loss for FY 2013-14 as follows.

Proposed Tariff to Meet the Revenue Requirement for FY 2013-14
Table – 4
Computation of Transmission Tariff

(a) Total Annual Revenue Requirement in Rs. Crore	862.75
(b) Total Million Units proposed for Wheeling in MU	25525
Proposed Transmission Tariff (P/U) = (a/b)	**33.80**
Existing transmission tariff (P/U)	25.00
Rise over existing transmission tariff	**35.2%**

Open Access Charges

27. The Commission has notified the Open Access Regulation 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 Long Term Transmission Charge on the basis of MW flow is calculated by the formula as provided in the OERC (Determination of Open Access Charges) Regulations 2006 dated 06.06.2006.

28. The revenue from Short Term Open Access Charges earned from Short Term Open Access Customers is uncertain and therefore, OPTCL has not factored the same in to the Miscellaneous Receipts proposed in this application. OPTCL submitted that the Short Term Open Access Charges as proposed will be adjusted in the revenue as year-end-adjustments at the end of the year on actual basis. Therefore, OPTCL considers revenue from Short Term Access Charges as Nil in this Application.

29. Based on the above, OPTCL proposes the LTOA charges and STOA charges as given in the table below. Besides these Charges, the Open Access customers are also required to pay any other charges as determined by the Commission as per provisions under Chapter-II (CHARGES FOR OPEN ACCESS) of the Regulations 2006.

Table - 5
Abstract of OA Charges proposed by OPTCL for FY 2013-14

DETAILS	In Rs./unit approach
Net Annual Revenue Requirement (Rs. crore)	862.75
Proposed Energy to be transmitted in OPTCL Network (MU)	25525
Proposed Transmission Tariff (P/U)	33.80
Power flow (equivalent of 25525 MU) in MW	2914
Long term Open Access Charges in terms of Rs./MW/Day	8112
Short term Open Access Charges in terms of Rs./MW/Day	2028

Reactive Energy Charges:

30. As per Regulation 4 (5) (i) under Chapter-II (CHARGES FOR OPEN ACCESS) of the Regulations 2006, the Commission shall separately determine charges for KVArh consumption from the grid in terms of paise/unit and the Open Access Customers shall pay the same.

Grid Support Charges

31. OPTCL has filed an application (Case No. 46/2012) before the Commission seeking Commission's approval for levy of Grid Support Charges (GSC) for FY 2012-13 from the CGPs running in parallel with OPTCL network. The application is pending for disposal. Based on the outcome of this case, OPTCL may be allowed to file application for levy of GSC from the CGPs for FY 2013-14.

Rebate:

32. 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 two working days (excluding holidays under N.I. Act) of the presentation of the bill and one percent (1%) of the amount if paid within 30 days of the presentation of the bill.

Delayed Payment Surcharge:

33. 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:

34. The Electricity Duty levied by the Government of Odisha 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.

35. **Summary of Transmission Tariff Proposal:**

OPTCL's proposal for FY 2013-14 are:

(i) Annual Revenue Requirement at Rs.862.75 crore.

(ii) Recovery of Transmission Charge @ 33.80 P/U.

(iii) Transmission Loss for wheeling as 3.80% on energy drawal.

36. OPTCL proposes to earn revenue from the LTOA Customers in the following manner:

(i) By charging the rate applicable on DISCOMs for wheeling of 25125 MU from Generating Stations to the supply points of DISCOMs.

(ii) By charging the rate applicable on CGPs like IMFA & NALCO for supply of 100 MU Emergency Power & Back-up Power to their CGPs and load centres located elsewhere in Odisha.

(iii) By charging the rate applicable on CGPs like IMFA & NALCO for wheeling of their surplus power of 300 MU (excluding Transmission Loss) from their CGPs to load centres located elsewhere in Odisha.

New Projects

37. In addition to this petition for approval of ARR and determination of transmission tariff, wheeling charges applicable to Open Access consumers and Grid Support Charges, M/s OPTCL intimates that it proposes to **spend Rs.639.79 crore during FY**

2013-14 as capital expenditure on new projects towards O&M, Telecom, Information Technology (IT), Transmission Project & Construction (TP & Con.) and Civil Works. The details of Capital Expenditure for FY 2013-14 are given in Annex-I.

VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2013-14 (Para 38 to 42)

38. The Licensee was allowed in the beginning of the hearing to give a power point presentation regarding its ARR and tariff application for the FY 2013-14. World Institute of Sustainable Energy (WISE), Pune appointed as Consumer Counsel put up certain queries and objections regarding ARR and tariff filing of OPTCL. The objectors then made a number of comments/observations regarding the submission of the licensee.

Analysis of the Proposal by Consumer Counsel

39. WISE acting as Consumer Counsel had analyzed the application of the licensee and some of the important observations are presented below.

Annual Revenue Requirement

40. OPTCL has projected its revenue requirement during FY 2013-14 at about 47 per cent more than that approved for FY 2012-13. In last year (FY 2012-13), the increment in total ARR was just 2.54% from approved ARR for FY 2011-12.

41. The areas of concern include the increase in employee cost (7.13%), R&M Cost (14.64%), A&G cost (8.66%), interest on loan capital (242.80%), depreciation (119.99%) and incentive (402.5%). The comparative figures of components of ARR are given in table below. OPTCL has proposed Rs.31.46 cr. as interest on working capital, which the Commission has not approved in earlier tariff orders.

Table – 6
Comparative Annual Revenue Requirement of OPTCL

ITEMS	Approved for 2011-12	Approved for 2012-13	OPTCL's Proposal for FY 2013-14	12-13 vs. 11-12	13-14 vs 12-13
Employees Cost including Terminal Benefits	338.14	318.48	341.20	-5.81%	7.13%
R&M Cost	75.00	95.00	108.91	26.67%	14.64%
A&G Cost	18.00	21.25	23.09	18.06%	8.66%
Interest on Loan Capital	61.33	35.33	121.11	-42.39%	242.80%
Depreciation	79.42	78.57	172.85	-1.07%	119.99%
Return on Equity	7.45	22.17	49.04	197.58%	121.20%
Interest on Working Capital			31.46		
Sub-Total	*579.34*	*570.80*	*847.66*	*-1.47%*	*48.50%*
Special Appropriation	33.93	38.71		14.09%	-100.00%
Contingency Reserve			16.73		
GCC Expense including SLDC charges	1.00	1.02	0.30	2.00%	-70.59%
Incentive for system availability	2.00	2.00	10.05	0.00%	402.50%
Total	**616.27**	**612.53**	**874.74**	**-0.61%**	**42.81%**
Less Misc. Receipts	43.77	25.51	12.00	-41.72%	-52.96%
Annual Revenue Requirement	**572.50**	**587.02**	**862.74**	**2.54%**	**46.97%**
Transmission Charges (paise/unit)	25.00	25.00	33.80	0.00%	35.20%

42. The significant increase in all expenses as mentioned above would impose excessive burden on the general consumers of the state, as this would be passed on to the ultimate users through GRIDCO and DISCOMs. Therefore, there is a need to review these expenses for the benefit of the consumers. Some of the important observations of WISE in this regard are as follows:

A&G cost should be linked to inflation which is 6.74% from April, 2012 to December, 2012. Actual cash flow can be considered for deciding appropriate R&M expenditure. The interest related to loan that already have been taken the licensee can only be considered for FY 2013-14. The terminal benefit and differential pension may be reviewed as per the independent valuation report of the actuary appointed by the OERC. The transmission loss for FY 2012-13 is higher than the approved figure. Therefore, transmission loss may be fixed at a reasonable level.

VIEWS OF OBJECTORS ON TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2013-14 (Para 43 to 99)

Legal Issues

43. One Objector has the view that the separation of OPTCL from GRIDCO would only cosmetic and both operate as one institution. Hence OPTCL is violating the 3rd proviso to Sec 41 of EA 2003 which provides that no transmission licensee shall enter into any contract or otherwise engage in the business of trading.

44. The Commission has not formulated specific tariff regulations for transmission of electricity. Therefore, any hearing on the application of OPTCL to approve ARR and transmission tariff would contravene the orders of Hon'ble ATE. Hon'ble ATE, in case no 24/2011, has directed to formulate specific tariff regulations for transmission of electricity. The present transmission tariff at the rate of 25 P/U may continue until formulation and notification of tariff regulations for transmission of electricity.

Transmission Loss

45. One objector submits that the proposed transmission loss of 3.8% may be considered after checking the findings of the latest load flow study and in case of less transmission loss, the same may be considered. The actual wheeling of power to the entities would be on higher side and more than projection made by OPTCL.

46. OPTCL have not yet identified the areas where loss is maximum, so as to formulate action plans for loss reduction. OPTCL should inform the methodology adopted to estimate the transmission loss for every year. OPTCL should have under taken energy audit of lines and sub-stations to know the quantum of transmission loss in the system and the said works may be assigned to energy auditing firms/certified energy auditor.

47. The reduction of transmission loss from existing 3.9% to 3.8% is not sufficient and proposed rate is also quite high as there is no significant reduction. This needs to be reduced further.

48. The transmission loss proposed by OPTCL has to be justified with the various measures taken or else burden will ultimately go to the consumer only. The Standard of performance of OPTCL transmission system should be monitored by third party auditor to assess the actual performance.

49. OPTCL should have achieved transmission losses of 3% by now. OERC time to time has allowed to increase transmission losses and therefore, OPTCL is not prepared to reduce their transmission losses. A number of CGPs have been synchronized with

OPTCL network. A number of 132 kV/ 220 kV transmission lines have been commissioned. Hence, transmission loss must have been reduced, but OPTCL wants to continue with 3.8% transmission loss in FY 2013-14 without any efforts to reduce its losses. This alone is increasing the power procurement requirement of GRIDCO and adding to the bulk supply price. The Commission should not allow transmission losses more than 3% at least from this year onwards.

Capital Expenditure

50. OPTCL has proposed a long list of new works. Capitalization of any work can only be made after completion of work. Capitalization of such work should be done in phased manner so that its effect on tariff is minimal.

51. OPTCL has proposed a huge sum as CAPEX requirement. It is not known if such a proposal has been approved by OERC earlier. OPTCL may be directed to submit the detail project report along with approval order of OERC. It may be indicated to what extent this proposal will bring down the system loss. This proposal should have been submitted to OERC separately for approval with full justification.

52. OPTCL is silent regarding the timely implementation and expenditure of the approved investment proposals.

53. One Objector suggests that OPTCL should prepare a Comprehensive Renovation Scheme (CRS) for sub-stations of more than 20 years old and arrange funding from Financial Institutions (FIs). The entire cost of replacement of equipments of capital nature under O&M is not permissible. Only depreciation, interest charge and return on equity should be considered while determining the transmission charges.

54. The Capex Programme should include the renovation and modernization of the transmission lines and grid substations.

55. OPTCL should confirm that equipments for online data transmission to SLDC from the EHT feeders of all EHT substations have been provided.

56. OPTCL was required to complete installation of SCADA interface point within 3 years, i.e. by 31.03.2013. OPTCL has failed to proceed with the works and has offloaded the work to PGCIL and paid advance only in 02/2011.

57. OPTCL should confirm the schedule for completion of the works relating to provision of PLCC/SCADA equipments in each 36 substations.

58. OPTCL has not only failed to meet the target for commissioning of new transmission system but has caused abnormal delay. The Cost over run & time over run due to delay in completion of projects should be not allowed in the ARR. The original capital cost along with IDC for the schedule period of completion may be treated as capital cost of the works.

59. NESCO submitted that the Capital Expenditure Schemes ought to be filed separately and should be detailed in nature and should include the Cost Benefit Analysis so that the same can be scrutinized. The proposed amount may be allowed limiting to the approved Capex by the Commission.

R&M Expenditure

60. The proposed R&M cost is 14.61% more than previous year approved cost. There is no satisfactory justification for such increased expenditure. The lists of expenditure proposed to be undertaken under R&M are supposed to be met out of O&M

provisions and no separate provision for R&M should be made. Provision for IT & Telecom appears to be very high.

61. OPTCL has never been able to achieve the R&M expenditure to the extent of 50% of the approved amount. OPTCL states that in FY 2012-13, the expenditure shall be the same as approved by the Commission without hinting at what is the expenditure till date. In the absence of the same all doubts are that for 2012-13, the approved amount shall not be also expended.

62. The actual R&M expenses for FY 2010-11 were Rs.28.31 crore against the approved figure of Rs 60 crore. The estimated R&M expenditure for FY 2012-13 is Rs 95.02 crore. Even in the absence of fund constraint, the levels of expenditure are low as compared to the approved R&M expenses. Hon Commission ought to consider a reasonable increment of 6% per annum over the actual cost for FY 2010-11. R&M expenses for FY 2013-14 ought to be Rs 50.50 crore considering 10% increase over the actual expenditure of 2011-12 and that the same can be trued up as and when actual expenditures are submitted after necessary prudence checks.

63. Some objectors submitted that expenditure on circuit breakers, station batteries, CTs, PTs/ CVTs, Las, energy meters, station transformers, CR panels, DG sets, restoration of 132 KV feeders are capital in nature which should not be permitted under O&M expenditure.

Employee and A & G Cost

64. The employee cost, including terminal benefits, of OPTCL may be allowed at Rs.259.42 crore subject to due scrutiny by the Hon commission. Regarding terminal benefits, Hon Commission may determine the amount of deficit funding, if any, after adjusting for expected corpus availability. In line with the previous principle of the Commission, deficit financing may be amortized over several years. The required fund of Rs 401.17 Cr may be amortized in 4 years starting from FY 2013-14. Thus Rs 100.29 cr may be allowed for FY 2013-14.

65. OPTCL may be allowed an amount of Rs.22.85 crore towards the A&G expenses for FY 2013-14 i.e. escalation of 8.87% (rate of inflation as measured by WPI) is allowed over the approved figure of FY 2012-13 including license fee and inspection fee.

Depreciation

66. The huge increase in depreciation is due to artificial increase in capital base which is based on proposed expenditure to be made during year 2013-14. This should not be allowed as it is not allowed to capitalize expenditure unless the work is completed.

67. As the sector has not yet turned around, the Commission may adopt the same principle for calculation of depreciation as followed for previous year. DISCOMs submitted that the depreciation may be considered at Rs.104.79 crore.

Interest on Loan

68. The significant increase in interest on loan would impose excessive burden on the general consumer. There is a need to reduce these expenses.

69. The Commission, in case no 63/2006, had directed that no infrastructure loan shall be collected and all infrastructure loan paid prior to the date of order shall be repaid accordance to the loan agreement. The Hon'ble ATE, in case no 30/2012, has also upheld the orders of OERC. Therefore, principal repayment has to be reviewed and

suitable provisions be made. No provision has been made towards interest payment during FY 2013-14.

70. The finance charge projected by OPTCL is Rs.13.61 crore in line with earlier orders of the Commission is to be allowed for FY 2013-14 as pass through.

71. The interest on new loan of Rs.543.82 crore may not be allowed since the details of which are not available for scrutiny. Hence, the principal CB as on 31.03.2013 is considered and interest on that (Rs 43.01 crore) has been considered.

Interest on Working Capital

72. DISCOMs submit that transmission charge of OPTCL is recovered as first charge from monthly BSP bill. So, interest on working capital may not be allowed.

Contingency Reserve

73. OPTCL is having contingency reserve of Rs 95.75 crore, therefore contingency reserve further claimed by OPTCL should not be allowed.

Return on Equity

74. The return on equity is also higher due to artificial increase in equity base taking higher capital base.

75. The Commission in its earlier orders had not allowed any return on equity on equity of Rs 60 crore since the sector has not yet turned around. State Govt had agreed to finance transmission projects in remote areas to the extent of Rs 143 crore by way of equity contribution, which it has received as on 31-03-2012 + Rs 50 crore during FY 2012-13. DISCOMs submit that the return @ 15.5% on the equity value of Rs 193 crore may be allowed i.e. Rs 29.92 crore.

Past Losses/Pass through Expenses

76. The claim of past losses has no merit as the same items have been previously dealt and Commission found a surplus in truing up exercise based on audited data.

Special Appropriation:

77. DISCOMs proposed to exclude the special appropriation in computation of the OPTCL ARR for 2013-14 as per Hon ATE order. Regarding shortfall of repayment of loan over and above the allowed depreciation, OPTCL may negotiate with the Banks/FIs for a longer tenure or moratorium in repayment of Principal.

Transmission Tariff

78. The proposed transmission tariff of 33.80 P/U for the FY 2013-14 against approved rate of 25.0 P/U which is not acceptable. The proposed hike is almost 35% as compared to the rate fixed for the last two years which is totally illegal and arbitrary.

79. The increase in transmission tariff by 36% wills ultimately adversely affect the retail supply tariff.

80. OPTCL has failed to submit its explanation for failure to reduce transmission losses and has not submitted any concrete action plan to achieve this with sustained reduction in loss which will yield revenue indirectly.

81. OPTCL proposed an increment in transmission tariff without any improvement in the quality of transmission and reduction in the transmission loss.

82. DISCOMs submitted that there will be revenue surplus of Rs.114.26 crore during FY 2013-14 instead of the Revenue Gap of Rs.224.32 crore proposed by OPTCL based on existing transmission tariff of 25.00 P/U.

83. Month wise actual data for the total energy wheeled and financial figures on different heads pertaining to FY 2012-13 are to be provided by OPTCL.

84. DISCOMs of the view that the truing of exercise may be done by the Commission keeping in view of the above data vis-à-vis the approved figure for FY 2012-13 and the resultant benefit if any may be passed on to the consumers by way of truing up exercise.

85. Hon OERC has allowed only the 1.5 p/u increase in the last year transmission tariff. So, the Commission should scrutinize the Transmission cost proposed by OPTCL critically and reduce the transmission tariff to 20 Paisa/Unit.

Miscellaneous Income and Income from Wheeling

86. The Commission should consider an amount of Rs.17.50 crore towards income from Inter State Wheeling in line with the order of ATE.

87. The miscellaneous receipt for FY 2013-14 seems unlikely looking at the previous year figures. DISCOMs have projected the misc. receipt as 26.65 crore average of FY 2011-12 and FY 2012-13.

Reactive Energy Charges and Grid Support Charges

88. If it is decided by the OERC to collect reactive energy charges in future, the same should be collected prospectively and not retrospectively.

89. OPTCL has proposed to collect grid support charges for FY 2012-13 from the CGPs running in parallel with OPTCL network. If such levy to be collected in future, that should be collected prospectively and not retrospectively.

Other Issues

90. Re-structuring of OPTCL is urgent considering that it has lost its core competence and is depending on central agencies for several works.

91. An objector held that OERC may direct OPTCL to give an undertaking through Affidavit that it would supply quality power at proper voltage to all the consumers of the State, which has not been supplied during FY 2012-13.

92. OPTCL has to furnish all relevant documents regarding cost proposed by OPTCL, OERC approved expenses and actual annual R&M and A&G expenses from FY 2000-01 to FY 2012-13.

93. Sub-stations and lines of OPTCL are not properly maintained by the authority in-charge due to want of required number of skilled manpower. OPTCL has to appoint skilled labourers in the sub- station maintenance work. A clear-cut guideline should be issued to the official in charge of sub-station and lines maintenance work.

94. Govt. of India and the State Govt. have announced to give electricity to all through Rajib Gandhi Gramin Bidyut Yojana & Biju Jyoti Yojana programme but lines and sub-stations connectivity of the OPTCL are not in a position to evacuate power to the distribution network for which the programmes are not been properly implemented.

95. OPTCL should produce a status report regarding the directions given by Hon OERC in the ARR orders for FY 2009-10, 2010-11 and 2011-12 particularly action plan for

evacuation of power from 21 nos. of Mega Thermal Power Plants coming up in Odisha for which 13 nos. of IPPs and 8 nos. MPPs have signed MoUs with Govt. of Odisha for installation of about 32000 MW.

96. OPTCL may carry out planning process from time to time as per the requirement for identification of major state transmission system. OPTCL should also produce status report on perspective action plan for drawal of Odisha share as well as the evacuation of surplus power from these mega thermal power plants.

97. OPTCL should also produce the status report about the joint venture company.

98. OPTCL should produce the status report of overloaded lines and sub-station of the state and should file an affidavit that all lines and sub-stations are well equipped to give quality power supply.

99. OPTCL has not submitted any compliance report regarding implementation of directives of OERC related to continuous monitoring of operation of transmission system, improvement in performance standard etc.

REJOINDER BY OPTCL TO THE QUERY OF OBJECTORS (Para 100 to 152)

100. In response to the views of objectors on the ARR and Tariff Application of OPTCL for 2013-14, OPTCL had filed rejoinders for the same. The response of OPTCL has been broadly classified into the following issues.

Legal Issues

101. OPTCL, a wholly owned Government of Odisha Undertaking, has been incorporated under the Companies Act, 1956. The Corporation is carrying on the business of transmission of electricity as per the ‘Object Clause’ prescribed in the Memorandum of Association of the Corporation and by virtue of the licence granted by the OERC. Being a Government Company, the Directors on the Board of OPTCL consists of 10 nos. of Directors (4 Functional Directors including CMD and 6 Non-functional / Independent Directors). This composition is as per the guidelines prescribed under the Corporate Governance Manual issued by the Government of Odisha for State PSUs. There is no violation of Section 41 of the Electricity Act, 2003 as the Corporation is not engaged in the business of trading in electricity.

102. The present ARR and Transmission Tariff application has been prepared and submitted based on OPTCL’s Provisional Accounts for FY 2011-12 (now audited), all relevant data/information and materials. Moreover, OPTCL had furnished all requisite information and details as per the prescribed formats of the Commission with full justifications. OPTCL has also submitted additional information / clarifications to queries raised by the Commission. Hence, the statement that the proposed transmission charge is totally illegal, arbitrary and exaggerated merits no consideration.

103. OPTCL has filed the present ARR and Transmission Tariff application before the Commission on 30.11.2012 as per relevant provisions of the Electricity Act, 2003 and Regulations framed by the Commission. The Commission would dispose of the application following the extant procedure and hearing is a part of it.

Quality of Supply

104. OPTCL has conducted the transmission planning study for its transmission system in coordination and consultation with GRIDCO and DISCOMs. Accordingly OPTCL is taking all effort to renovate / modernize and strengthen its infrastructure to cater the

future load. OPTCL endeavors its best for successful implementation of the Central and State sponsored schemes like RGGVY, BGJY in coordination with GRIDCO & DISCOMs. In each investment proposal submitted before the Commission seeking approval, OPTCL is making DISCOMs and Govt of Odisha as Respondents for obtaining their views for consideration by the Commission before disposing of the OPTCL's proposal.

105. To address low voltage problems and for reactive energy compensation, OPTCL is in the process of installing 33kV Capacitor Banks with an aggregate capacity of 275 MVAR at 20 nos. of existing grid sub-stations. The installation and commissioning work at 10 nos. sub-stations shall be completed by March 2013. Work at balance 10 nos. sub-stations is expected to be completed by June, 2013.

106. During last few years, OPTCL has considerably increased its performance level and has completed large number of projects which were pending for a longer period. OPTCL has completed commissioning of 3rd bays along with transformers at a number of existing grid sub-stations thereby appreciably enhancing transformation capacity. Completion of these projects has added to the improvement of quality of supply at various areas of the State.

107. The above amply shows effort of OPTCL to provide quality supply to DISCOMs at its grid sub-station end. OPTCL is not responsible for failure of DISCOMs to supply quality power to end consumers of the State through their distribution network. Hence, giving undertaking through affidavit as has been urged by the Objector does not arise.

108. The new Projects taken up by OPTCL shall also share and reduce the loads on the existing grid sub-stations and EHT lines. Works for conversion of existing S/C lines on D/C towers to D/C lines have been proposed for proper load management. Besides, works for uprating of conductor capacity in existing EHT lines, as per feasibility, have also been taken up by OPTCL.

System Availability

109. OPTCL is making all out efforts to supply the power requirement of the State through its transmission system comprising 100 grid sub-stations and more than 11344 ckt. km. EHT transmission lines of different voltage classes spread across the geographical area of the State. One of the key performance indicators i.e. Availability of Transmission System of OPTCL is more than 98% in all the previous years since 2005-06 i.e. the year OPTCL commenced its business. Uses of latest techniques and pro-active preventive measures adopted by OPTCL in line with the 5-year Master Maintenance Plan (2008-13) have resulted in maintaining its massive asset base with a system availability of 99.86%, 99.84% and 99.84% during the year 2009-10, 2010-11 and 2011-12 respectively.

110. Recognizing the OPTCL's best efforts and meritorious performance in maintaining transmission system availability, Central Electricity Authority (CEA), Ministry of Power (MoP), New Delhi has conferred the prestigious national level "Bronze Shield for the year 2009-10".

Transmission Projects

111. For any major investment with cost investment of Rs.10 cr. and above, OPTCL obtains the approval of the Commission justifying the purpose of the investment along with the cost benefit analysis of the Projects. Works are executed through Open

Tender to ensure fair price, competitiveness and transparency. The details of the Projects along with OERC approval have been indicated in the Compliance report to OERC Queries. For each and every Project seeking approval of the Commission, Detailed Project Report (DPR) is submitted. There are a number of Projects awaiting Commission's approval. The Commission approves the Projects after hearing to OPTCL, concerned DISCOMs, Govt. of Odisha. New Projects have been identified after undertaking detailed planning study and with a view to cater to growing demand including the object to bring down system loss, improve voltage profile etc. Hence, the apprehension regarding huge investment proposed by OPTCL is misconceived.

112. In order to meet the growing load demand of the State, for steady power supply and to overcome low voltage problems, OPTCL has augmented the transformer capacity in a number of EHT grid sub-stations. The DISCOM Zone wise details for the Years 2011-12 and 2012-13 are given at **Annex-II.**

Transmission Tariff

113. The contention to reduce the transmission charge to 20 p/u for FY 2013-14 without proper justification and supporting calculation as pointed out by some objectors does not merit consideration.

Income

114. OPTCL has clearly explained the current status on revenue earnings from inter-state wheeling. For the FY 2013-14, the revenue under this head cannot be correctly assessed as the same is to be determined by Hon'ble CERC. Hence, to consider Rs. 17.50 cr. as income from inter-state wheeling during FY 2013-14 is totally misconceived.

Misc. Receipt

115. The Misc. Income as per Provisional Accounts (now audited) for FY 2011-12 is Rs21.44 cr. which includes Rs.7.06 cr. as deferred income (transferred from capital reserve). Hence, the actual Misc. Income is Rs.14.38 cr. In view of reducing revenue trend from short-term open access charges, Supervision Charges which is reduced to 6% from 16% and uncertainty involved in revenue generation from other sources as well, OPTCL expects the Misc. Receipts of Rs.12.00 cr. during FY 2013-14. Thus, the revenue from Misc. Receipts is projected as Rs.12.00 cr. considering present trend of revenue earning from different sources.

Reactive Energy Charges and Grid Support charges

116. OPTCL will comply with the Commission's direction with regard to collection of Reactive Energy Charges for FY 2013-14.

117. OPTCL's application for levy of Grid Support Charges (GSC) for FY 2012-13 (Case No. 46/2012) has been admitted by the Commission vide interim order No.2 dated 27.12.2012. The Commission has decided to hear the case further on merit. OPTCL will comply with the Commission's direction with regard to collection of GSC for FY 2012-13. In the present ARR application for FY 2013-14, OPTCL has sought permission of the Commission to file application for levy of GSC for FY 2013-14 based on the outcome of the Case No. 46/2012.

Transmission Cost

Operation and Maintenance Cost

118. Regulation 3(28) under Chapter-I of CERC (Terms & conditions of Tariff) Regulation, 2009 defines O & M expenses means the expenditure incurred on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, spares, consumable, insurance and overheads. Similarly Regulation 19(g) under Chapter-3 prescribes the norms for operation and maintenance expenses for the FY 2009-10 to 2013-14. Accordingly, the O&M expenses works out Rs.623.51 Crore. But OPTCL has proposed Rs.473.20 Crore which is almost 24% less than the norms fixed by CERC.

Employee cost:

119. OPTCL appointed the independent and certified actuary M/s. Bhudev Chatterjee, Kolkata to assess the terminal liabilities (viz. Pension, Gratuity and Leave encashment) for FY 2011-12 with projections for next two years. As per valuation made by the actuary, the terminal liabilities as on 31.03.2014 is Rs.1537.62 cr. The figures have been arrived at on the basis of the data available as at 31.03.2012 considering the funding of Rs. 1136.46 cr. already allowed in the past tariff orders upto FY 2012-13. The additional fund requirement has been calculated as Rs. 428.50 cr. Besides, OPTCL has proposed Rs.1.30 Crore for Employer's Contribution for Non-Pensioners & New Pension Scheme.

120. The total number of Pensioners stands at around 7500. OPTCL is aware of the fact that if the Commission would allow the total terminal benefit liability of Rs.428.50 cr. in FY 2013-14 as claimed by OPTCL, it will cause tariff shock to the consumers. On the other hand, OPTCL has to meet its obligations towards Pension, Gratuity and Leave Encashment. In view of the above, OPTCL has claimed 1/3rd of Rs.428.50 cr. i.e. Rs.142.83 cr. in FY 2013-14. The balance liability is to be treated as Regulatory Assets and be allowed as pass through in next two years starting from FY 2014-15. Hence, the increase of 7.1% in Employee Cost as projected for FY 2013-14 over the approved amount for FY 2012-13 is quite justified.

121. Regarding Differential pension and pensionary benefit, the Commission has already allowed Rs.13 Crore and hence the balance Rs.23 Crore is required to meet the obligation soon after notification comes out.

122. The report of NPC has been approved by the BoD of OPTCL in its 54th meeting held on 17.12.2012. It has been submitted to Govt. and Screening Committee for consideration and approval. Same is likely to be approved very shortly. The financial implication of new posts and recruitment as per NPC report in the Employee Cost of OPTCL is Rs.14.00 cr. per annum. Expenses on this head may be considered under Employee Cost in the ARR of OPTCL for FY 2013-14.

123. The wage revision of non-executive is due w.e.f. 01.04.2010. The approval of the Govt. of Odisha is awaited. It is estimated that the financial implication for FY 2010-11, 2011-12 and 2012-13 would be around Rs.14.09 Crore which need to be paid during 2013-14. The contention to claim at the time of wage revision in several years is also not an acceptable proposition.

124. The Commission may allow HRA @ 20 % (Basic Pay+GP) as the amount was actually paid to employees w.e.f 01.12.2008. The estimation of HRA @ 15 % (Basic Pay +GP) is not acceptable.

125. The projections related with employee cost made by OPTCL in its application are very much realistic which need full consideration. OPTCL does not agree to the projections of Rs.259.42 cr. towards Employee Cost against proposal of OPTCL of Rs. 341.20 cr.

R & M Cost:

126. OPTCL in its ARR application for FY 2013-14 (page 9-18) has submitted in details regarding R&M Expenses to be undertaken in different streams of activities namely O&M, Telecom, IT and Civil Works. The item wise expenditure has been indicated to arrive at the projected figure of Rs.108.91 cr. The Capital Expenditure details have been separately dealt in page 20-31 of the ARR application. The items considered under Capital Expenditure have also been clearly shown. For any major investment with cost investment of Rs.10 cr. and above, OPTCL obtains the approval of the Commission justifying the purpose of the investment along with the cost benefit analysis of the projects.

127. OPTCL has submitted the audited figures of last 5 years under R&M head. R&M expenses during FY 2012-13 (up to Nov'12) is Rs. 74.29 cr. OPTCL expects to spend the approved amount of Rs. 95 cr. during FY 2012-13.

128. OPTCL intends to undertake preventive and proper maintenance of its lines and grid sub-stations for which Rs.108.91 cr. is proposed towards R&M expenses for FY 2013-14. The expenditure incurred towards R&M during FY 2012-13 up to Nov' 2012 is Rs. 74.29 cr. which include Rs. 36.43 cr. booked to capital in the accounts towards procurement of 14 Nos. 132/33 kV, 63 MVA Transformers. Considering the materials and work expenses in the pipeline, the total R&M Expenses will reach the approved amount by the year end.

129. Hon'ble ATE in order dated 08.11.2010 in Appeal No.55, 56 & 57 of 2007 with regard to Transmission Tariff order of OPTCL for FY 2007-08 had confirmed the findings given by the State Commission with the following observations.

"(a) The mere fact that OPTCL was unable to utilize the amount allocated towards R&M expenses in the previous year can not be a ground to deny the Repair & Maintenance expenses to the OPTCL on the basis of norms for the subsequent year, since OPTCL is required to carry on its obligation for efficient management of the Transmission system in the state.

(b) The State Commission has been monitoring the Repair & Maintenance works of the OPTCL by taking up periodical review and engaging an independent team of experts to monitor and report the progress of the Repair & Maintenance works being undertaken by OPTCL.

(c) The Transmission system of OPTCL is the backbone of the power system of the State of Odisha. The lines and substations 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 Distribution Companies who are the real beneficiaries would be put into trouble and the entire power system would be in complete jeopardy. Odisha has seen a phase of industrial resurgence which requires quality power supply of international standard, if industrial units are to utilize the capacity to the fullest extent."

A & G Expenses:

130. The proposed A&G Expenses for FY 2013-14 is Rs. 23.09 Crore i.e. 8.65% excess over the amount of Rs. 21.25 Crore approved for FY 2012-13. The excess claimed is justified considering the present rate of inflation of about 9% per annum.

131. Also, lack of sufficient funds towards A&G Expenses would adversely affect efficient functioning of OPTCL. Therefore, the A&G Expenses of Rs.23.09 cr. proposed for FY 2013-14 is very much realistic which need full consideration.

Interest on loan

132. The loans proposed to be availed from REC/PFC/Commercial Banks are in respect of various projects which have been approved by the Commission. Accordingly, the amount of Rs. 639.79 Crore has been provided as CAPEX for the FY 2013-14. For financing the above CAPEX, interest of Rs 54.81 cr. has been proposed against new loan of Rs. 351.11 cr. during FY 2012-13 and Rs.543.82 cr. proposed to be availed during FY 2013-14.

133. Out of the total interest on loan of Rs. 121.11 cr., OPTCL projected Rs.54.81 cr. on new loan to be taken for the different projects mentioned at TRF-2 based on the 85:15 Debt: Equity ratio. The Finance Charges of Rs.13.61 cr. has been proposed to meet the expenses towards Payment of Guarantee Commission, Rebate to consumer for timely payment and Bank Charges etc. The balance of Rs.52.69 cr. is the actual interest to be paid on the existing loan at the existing rates. Hence, projected interest of Rs. 121.11 cr. on loan capital is fully justified.

134. In case of very few numbers of projects, OPTCL has taken more than 10 years time for completion. This delay was beyond the control of OPTCL and mostly attributable to severe RoW problem and prolonged court cases. It is neither under the control of OPTCL nor Executing Agencies. Efforts are being made at various levels to sort out the constraint caused due to RoW or any other case. Constant monitoring, regular review meeting with the Executing Agencies as well as field officials are being made to sort out the issue so as to complete the project as per the schedule.

135. However, OPTCL has been able to complete record number of projects including long delayed projects during FY 2010-11. OPTCL is giving maximum efforts in planning the project execution, regular monitoring of work and review of progress of projects to complete the projects as per the schedule. The IDC for a project is capitalized and treated as Capital Cost of the works as per the normal accounting principle.

136. The Commission in order dated 22.07.2006 had observed as under:

"29. The Commission finds no justification for collection of Rs.10 lakh per MW from the prospective consumer for construction of lines and s/s upto the load centre to be developed by OPTCL after due regulatory approval which has to be financed by OPTCL following prudent financial practices. However, the Commission shall have no objection if prospective consumers come forward voluntarily for giving loan to the transmission company at the prevailing bank rate."

137. OPTCL filed a review petition against the above order which was disposed of by the Commission vide Order dated 26.04.2011. OPTCL filed an appeal against this order in ATE (Appeal No. 30/2012) and pending disposal of the appeal, OPTCL had projected to repay Rs.3.00 Crore during the FY 2013-14 and Rs. 2.00 Crore was shown as receivable during the said year.

138. The ARR application was filed on 30.11.2012 and the ATE judgment came out on 14.12.2012. As per the ATE order the infrastructure loan already taken or agreed to be taken on or after the date of this order will be governed or regulated as per the agreement already entered into and there is no question of any immediate refund of such infrastructure loan already taken. Accordingly, OPTCL is planning to repay the same.

Depreciation:

139. OPTCL has projected depreciation of Rs. 172.85 cr. for FY 2013-14 based on the Provisional Accounts (now Audited) of OPTCL for FY 2011-12 considering the depreciation rate as prescribed in CERC Regulations 2009 on up valued Asset Base and projected additions thereto during FY 2013-14. OPTCL does not agree with the contention that the projected depreciation is artificial increase of Capital Base.

Special Appropriation:

140. For FY 2013-14, OPTCL has projected Rs 172.85 cr. towards depreciation as per CERC Regulations 2009 which will take care of the principal repayment obligation. Hon'ble ATE in order dated 08.11.2010 in Appeal No. 55, 56 & 57 of 2007 with regard to Transmission Tariff order of OPTCL for FY 2007-08 had confirmed the findings given by the State Commission regarding Advance Against Depreciation with the following observations.

"(a) The conjoint reading of the relevant Regulation, namely, Regulation 56 (ii) (b) of the Central Commission, Regulation 3 (a) of the State Commission, Tariff Policy and the provision of the Electricity Act, 2003 would make it clear that the National Tariff policy provides with regard to Depreciation that the Central Commission shall notify the rate of Depreciation in such a manner that there should be no need for any Advance Against Depreciation. This means that unless the Central Commission notifies such a rate of Depreciation, the Advance Against Depreciation cannot be denied on the basis of policy.

(b) In the present case, the Orissa State Commission computed the Depreciation on the basis of the pre-1992 rate of Depreciation and allowed the special appropriation to ensure the financial viability and also to ensure that the Transmission companies, namely, OPTCL meets its principal repayment obligation.

(c) While allowing the Special appropriation, the State Commission has given all the reasons which are in consonance with the Regulations of the Central Commission as well as the State Commission."

141. Hence, OPTCL does not agree to the suggestion of the Objectors and prays to take appropriate decision as per CERC Regulations 2009.

Return on Equity:

142. Return on Equity is projected in accordance with Clause (3) of Regulation 15 of CERC Regulations, 2009. This has been claimed on the original equity investment as well as additional investment made in OPTCL out of the business cash flow. OPTCL does not agree with the contention that equity base has been artificially increased taking higher capital base. Hence, the projection towards RoE is very much realistic which needs full consideration.

Interest on Working Capital:

143. Interest on working capital may be allowed as per norms of CERC Regulations 2009. OPTCL does not agree to the suggestion of the Objectors as this is contrary to the provisions of CERC Regulations.

144. Even though Transmission Charges of OPTCL are recovered as first charge from monthly revenue earning of DISCOMs through Escrow Mechanism, the bills are not paid immediately by DISCOMs. SOUTHCO and WESCO are violating the Commission’s order as they are paying the BSP bill to GRIDCO without paying Transmission Charge to OPTCL which is first charge. SOUTHCO is not paying the Transmission Charge to OPTCL since August, 2012 but paying BSP bills regularly to GRIDCO and availing rebate. CESU and NESCO are making payment within two days and WESCO is paying within 30 days of submission of bills by OPTCL. Further, as per letter of OERC vide No. Dir(T)-330/08/1387 dtd. 05/08/2011, CESU, NESCO & WESCO have paid 97% and SOUTHCO has paid 95% of the Transmission Charge bills raised during FY 2011-12 and the receivable of FY 2011-12 was less by Rs. 18.93 Crore which has not been paid so far.

145. OPTCL requires minimum cash balance to meet the expenses towards Employee Cost, R&M expenses, A & G expenses and Interest expenses.

146. Thus OPTCL is entitled to interest on working capital as per CERC Regulations in view of Section 61 (a) of the Electricity Act, 2003 since OERC has not framed any Regulations in this regard. Rate of interest on working capital shall be on normative basis and shall be equal to the Short-term Prime Lending rate of State Bank of India.

147. The interest on working capital shall be payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency.

Contingency Reserve:

148. The projection towards Contingency Reserve is very much realistic which needs full consideration. Hon’ble ATE in its order dated 08.11.2010 in Appeal No. 55, 56 & 57 of 2007 in respect of Transmission Tariff order of OPTCL for FY 2007-08 had confirmed the findings given by the State Commission regarding Contingency Reserve with the following observations.

(a) In regard to allowing the claim of Contingency Reserve, it has to be stated that State like Orissa which is highly prone to natural calamities like cyclone and floods every now and then, the provision of Contingency Reserve to meet such contingency is quite desirable and reasonable. It may not be correct to contend that the Contingency Reserve can be allowed only when the Regulations were framed with regard to that.

(b) The provision of Contingency Reserve is essential for a deemed Transmission Licensee like OPTCL with a vast Transmission Network.

149. OPTCL prays the Commission to take a suitable decision in this regard. The Contingency Reserve may be created @ 0.5 % on Gross Block Maximum of 5 % of Gross Block. Therefore, the contention of Objectors is not acceptable.

Pass through Expenses:

150. OPTCL has not claimed any amount under this head. OPTCL requests the Commission for carrying out truing up on the basis of the audited accounts for FY 2011-12 to be submitted by OPTCL very shortly.

Expenditure towards R&M, A&G, O&M

151. Year wise proposal, approval and actual expenditure towards R&M, A&G, and O&M for the period from 2000-01 to 2012-13 (up to Nov' 12) are given below. The actual figures are as per audited accounts up to the year 2011-12. For the year 2012-13 (up to November 2012), the actual figures are based on cash flow statement.

Table - 7
Proposed, approved and actual expenditure towards R&M, A&G, and O&M

Year	**R&M Cost (Rs.Cr.)**			**A&G Cost (Rs.Cr.)**			**O&M Cost (Rs. Cr.) (Employee Cost+ R&M cost + A&G cost)**		
	Proposal	Apprv.	Actual	Proposal	Apprv.	Actual	Proposal	Apprv.	Actual
2000-01	23.74	14.67	9.9	19.85	12.25	14.33	124.76	103.23	126.38
2001-02	27.16	15.99	8.81	21.74	12.86	14.67	148.55	111.19	165.18
2002-03	28.73	17.43	9.35	27.65	13.51	15.13	171.46	117.11	171.37
2003-04	13.35	13.35	7.03	21.03	14.19	22.88	152.66	127.6	225.47
2004-05	17.59	14.07	4.59	18.91	14.96	49.66	218.96	213.14	238.48
2005-06	20.73	14.8	6.94	18.54	15.73	35.54	226.5	142.75	199.67
2006-07	116.65	36.00	11.31	15.85	14.89	17.3	291.39	166.05	142.32
2007-08	54.00	47.00	16.51	14.79	15.71	12.82	250.91	201.49	239.99
2008-09	82.12	53.88	16.91	25.93	16.57	18.24	252.32	195.70	527.77
2009-10	122.74	47.00	26.14	36.94	14.35	26.68	644.34	234.46	349.84
2010-11	98.14	60.00	28.32	26.99	15.14	33.82	990.25	354.70	272.14
2011-12	93.89	75.00	45.70	38.34	18.00	20.18	1084.29	431.14	336.96
2012-13	95.46	95.00	37.86 (up to Nov'12)	39.11	21.25	12.27 (up to Nov'12)	789.93	434.73	222.57 (up to Nov'12)

Sales projection

152. The forecast of the Objectors that actual wheeling of power to the entities would be on the higher side and more than the projection made by OPTCL may not be a correct prediction at this point of time.

OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC)

153. The Commission convened the State Advisory Committee (SAC) meeting on 28.02.2013. The Members of SAC deliberated on different issues related to power sector and the Annual Revenue Requirement of various licensees. However, no specific view was offered related to Annual Revenue Requirement and Tariff filing of OPTCL.

COMMISSION'S OBSERVATIONS (Para 154 to 242)

154. The Commission, for approval of ARR and determination of transmission tariff for OPTCL for the FY 2013-14 continues to follow the same principles as laid down in CERC Tariff Regulations, and guided by the provisions of the National Tariff Policy as well as other statutory Notifications and directives, while giving due considerations

to the ground realities of the Odisha Power Sector. The same principle has also been followed by the Commission for this ARR determination of OPTCL for FY 2013-14.

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

156. The Tariff Policy, 2006 framed under the Electricity Act 2003, has embodied the National Tariff Framework which provides that the transmission tariff is to be sensitive to distance, direction and related to quantum of power flow in a transmission service network. Para 7(1) (3) of the National Tariff Policy provides for Transmission charges to be determined on MW per circuit kilometer basis, zonal Postage Stamp basis, or on the basis of some other pragmatic variant, the ultimate objective being to get the transmission system users to share the total transmission cost in proportion to their respective utilization of the transmission system. The overall tariff framework should be such as not to inhibit planned development/augmentation of the transmission system, but should discourage non-optimal transmission investment.

157. Further, Para 7.3(1) of Tariff Policy states that the financial incentives and disincentives should be implemented for the CTU and the STU around the Key Performance Indicators (KPI) for these organizations. Such KPIs would include efficient Network Construction, System Availability and Loss Reduction.

Computation of Transmission Loss for FY 2013-14

158. The transmission system of OPTCL operates as an integral part of 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'.

159. 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) after the availability of the audited accounts of the Licensee for the past years. Accordingly, variations from the approved figures for the past years have to be trued up on the basis of data available from actual audited annual accounts of the Licensee and after taking into account the target of performance parameters fixed by the Commission.

160. OPTCL in its ARR filing for FY 2013-14 stated that the actual transmission loss in the OPTCL transmission system from April 2012 to November 2012 works out to be 3.86% and OPTCL proposes transmission loss of 3.80 % for the year FY 2013-14 based on the present trend. The approved and actual transmission loss for the year 2005-06 to 2011-12 is furnished in the table below.

Table – 8

FY	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Approved (%)	4.00	5.00	4.50	4.00	4.00	3.90	3.80
Actual audited (%)	5.04	4.82	4.52	4.11	3.93	3.88	3.86(Apr -Nov-12)

161. M/s OPTCL, in its rejoinder has submitted that transmission loss is purely a technical loss and is dependent on generation sources, system configuration and power flow requirements at different load centres. OPTCL has no control over the same due to several factors. The transmission system of OPTCL operates as an integral part of 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. In view of the increasing demand for power at an accelerated pace due to ongoing industrialization and implementation of central & state sponsored schemes like RGGVY, BGJY etc. in Odisha, there will be increased flow of power in the OPTCL transmission network contributing to increased transmission loss. Hence, the transmission loss is being computed on the basis of 'As the System Operates' adopting OERC Gross Method.

162. Over the years, OPTCL has been continuously undertaking construction of new lines and sub-stations for strengthening the transmission infrastructure to improve quality of power supply, meet the future load growth and to reduce transmission loss effectively. As a result, the transmission loss is gradually reducing year over year as evident from the data on transmission loss. The transmission loss in OPTCL system is one of the lowest in the country compared to other states.

163. Based on the submission of OPTCL, the Commission approves 3.80% for FY 2013-14 as transmission loss for wheeling and directs that OPTCL shall continuously monitor the operation of the transmission system, prevent overloading wherever possible by load diversion and take up innovative measures for improving system loading of the existing network. Effective utilization of new lines and their impact on transmission loss need to be intimated to the Commission periodically and kept in the website of OPTCL for information of all stakeholders.

Execution of Projects

164. Many objectors pointed out that the strategy of OPTCL in execution of Projects is not matching to the downstream network planning of the State. Commission is not able to appreciate the reason cited by the OPTCL as regard to inordinate delay in completion of its on going projects. The Licensee is adopting a casual approach towards completion of Projects. Responsibility and accountability must be fixed on Project Managers for effecting completion of the Projects as per the schedule. The Project Managers must identify the critical paths ahead of schedule. The Commission further direct OPTCL that DISCOMs are to be intimated before hand so that they should be prepared for receiving power from new/augmented grid s/s and accordingly build their down stream distribution lines for evacuation of power. OPTCL should discuss with the DISCOMs before submission of transmission project for approval of OERC, so that the investment s/s should not be left idle due to non-completion inter linking transmission lines.

165. M/s OPTCL, in its rejoinder and in the hearing process submitted that it proposes to evacuate Odisha State share power from the upcoming IPPs through identification of certain individual IPPs & pooling its entire power rather than pooling network for each individual IPP by connecting the IPPs to the pooling stations in the near vicinity.

OPTCL has filed an application before OERC on 08.09.2011 (Case No. 71/2011) seeking approval of the Evacuation Plan and for directions to Respondent IPPs to have connectivity as envisaged in the evacuation plan. Out of 29nos. of IPPs, OPTCL has considered 16nos. of IPPs and OPGC, NTPC and Odisha UMPP having installed capacity of 34,310MW in Evacuation Plan since substantial progress have been made by those IPPs. OPTCL has filed its rejoinders before OERC in response to counters filed by Respondents. Further, OPTCL has also filed the amended / revised IPP Evacuation Plan before the Commission on 05.10.2012 in compliance with the order No.2 dated 17.05.2012 of Commission.

166. With the approval of Commission, restoration work of 400 kV Ib-Meramundali D/C line (235 km) has been assigned to M/s Sterlite Energy Ltd. The schedule date of completion was November -2012. As per the latest restoration status, the line will be commissioned within June, 2013. Out of 621 nos. of locations, 617 nos. stub setting, 571 nos. tower erection and stringing of 138 km line have been completed by end of January 2013.

167. The present peak demand of the State is about 3500 MW. The peak demand at the end of 12th Plan i.e. in the year 2016-17 is forecasted to be 5334 MW. In order to take care of the future load of the State, OPTCL is planning to complete about 124 nos. projects during the 12th Plan period out of which 38 nos. are under execution stage and 86 nos. are at various stages of implementation. A good number of ongoing projects will be completed in the current year and in 2013-14.

168. Load growth and expansion of transmission network are continuous processes. During the last three years i.e. 2010-11, 2011-12 & 2012-13 (upto 25.01.2013), the total transformation capacity addition in the EHT grid sub-station of OPTCL has been 775MVA, 772.5MVA & 666MVA respectively. In the CAPEX Plan for 2013-14, augmentation of capacity at different grid sub-stations have been proposed looking at the load profile and load growth projected by DISCOMs.

Evacuation of IPP power

169. OPTCL has proposed a transmission plan for evacuation of IPP power which has been registered as case No 71/2011 and the same is under active consideration of the Commission. However, in the meantime the Licensee should continue in its endeavor to bring all the stakeholders to resolve the issues involved and find a consensus on the evacuation plan of IPP power in the State for long term benefit for the consumers of the state as well as economise on transmission corridor and forest land clearance.

170. As per approval of the State Govt., the following Joint Venture Companies have been floated for developing the intra-state transmission capacity in the State of Odisha during 12^{th} plan period.

i. **Kalinga Bidyut Prasaran Nigam Private Limited:** The Joint Venture Company has been floated by Odisha Power Transmission Corporation Limited (OPTCL) and Power Grid Corporation of India Limited (PGCIL) on 50:50 equity participation basis and has been incorporated under the Companies Act, 1956 having its registered office at Bhubaneswar. The JV Company will undertake Intra-state transmission projects after grant of licence by OERC.

ii. **Neelachal Power Transmission Company Private Limited:** The Joint Venture Company has been floated by Odisha Power Transmission Corporation Limited (OPTCL) and Mahanadi Coalfields Limited (MCL) on 50:50 equity participation basis and has been incorporated under the Companies Act, 1956 having its registered office at Bhubaneswar. The JV Company will undertake Intra-state transmission projects after grant of licence by OERC.

Financial Issues

Operation and Maintenance Expenses

171. The Licensee OPTCL proposes O & M Expenses under the following heads:

(a) Employees Cost including Terminal Benefits

(b) Administrative and General Expenses

(c) Repair and Maintenance Expenses

Employees Cost

172. For the Financial year 2013-14, OPTCL has estimated an amount of Rs.341.20 crore towards employees cost. Major components of the expenses for the FY 2013-14 proposed by the Licensee along with the approval of the Commission for FY 2012-13 are given in the table as under:-

Table - 9
Components of Employees Cost

(Rs. In crore)

Sl No.	Particulars	2013-14 (proposed)	12-13 (approved)
1	Basic Pay + Grade Pay	69.74	62.69
2	Dearness Allowance	59.98	45.14
3	Provision towards Wage revision of Non-executive w.e.f. 1.4.2010	14.09	2.80
4	Enhanced salary due to implementation of NPC	14.00	Nil
5	6th Pay Commission Arrears (Final installment)	Nil	49.04
6	Terminal benefits	144.13	129.80
7	Payment of differential pension to Govt. employees	23.00	10.00
8	Others (including HRA)	24.54	23.65
9	Total	349.48	323.12
10	Loss capitalization	8.28	4.64
11	Employees cost to be passed on ARR	341.20	318.48

173. On scrutiny of the Audited data for the FY 2011-12 it is found that the employees cost booked in the Annual Accounts was Rs.271.08 crore.With the broad analysis as mentioned in the above Para, the item wise (major items) analysis of employees cost of OPTCL is discussed as under.

174. **Salary (Basic Pay + GP) :** Under this head OPTCL proposed an amount of Rs.69.74 core. For the purpose of comparison, the audited figure of 2011-12 and approved figure of FY 2012-13 are given below:-

Table - 10

Basic Pay + GP (Rs. In Crore)		
2011-12 (Audited)	**2013-13 (Approved)**	**2013-14 (Proposed)**
67.13	62.69	69.74

175. Every year the Commission called for the month-wise break-up of salary drawn during the current year, for a realistic assessment of the Basic Pay + GP during ensuring year. This year also the Commission called for month wise data of Basic Pay

+ GP drawn during the Financial Year 2012-13.In compliance to the query raised by the Commission, OPTCL submitted the following information.

Table – 11

(In Rs Cr.)

Month	Basic Pay + GP	DA	HRA	Total
April 2012	5.04	3.28	0.64	8.96
May 2012	5.03	3.23	0.65	8.91
Jun 2012	5.04	3.22	0.66	8.92
July 2012	5.02	3.11	0.65	8.78
August 2012	4.99	3.16	0.66	8.81
September 2012	5.00	3.15	0.67	8.82
October 2012	5.01	3.61	0.66	9.28
November 2012	4.97	3.58	0.66	9.21
Arrear DA	-	0.97	-	0.97
Total	40.10	27.31	5.25	72.66

176. OPTCL in its modified reply to query dated 29.1.2013 stated the following:-

(i) 56 Nos. of Management Trainee (MT) in E-2 Scale and 23 Nos. of MT in E3 Scale will be recruited. The office order is yet to be issued. Total financial impact on Basic Pay and Grade Pay will be Rs.1.26 crore. per annum which was not included in the figures submitted above.

(ii) Further, as per Cabinet decision, Jr. Class-I scale will be extended at entry level to Degree Engineer. Thus will have an additional impact of Rs.3.72 crore per annum on Basic pay & GP alone.

177. The Commission agrees in principle to the enhancement of pay of MT and implementation of Jr. Class-I Scale at entry level. But the financial implication shall be considered only after OPTCL pass necessary orders along with the supported calculation. Presently the impact is not considered in estimating the Basic Pay + GP for the ensuing FY 2013-14.

178. OPTCL in its modified submission dated 29.1.2013 had given information on number of employees as under.

Table -12

1.	Number of employees as on 01.4.2011	3642
2.	Induction new employees in FY 2011-12	74
3.	Retired during 2011-12	234
4.	No. of employees as on 31.3.2012	3482
5.	Induction of new employees in 2012-13	42
6.	Retired/to be retired during 2012-13	281
7.	No. of new employees as on 2013-14	3243
8.	Induction of new employees in 2013-14	973
9.	To be retired during 2013-14	282
10.	No. of employees as on 31.3.2014	3934

179. The Commission examined the number of employees submitted by OPTCL. During 1998-99 GRIDCO carried out an actuarial valuation for quantification of terminal

liabilities of employees of transmission as well as distribution business before separation as mandated in the Transfer Notification dated 28.11.1998.

180. As per the actuarial valuation report, number of employees allocated to GRIDCO/OPTCL was 5974 in number, as on 31.3.1999. The number is now drastically reduced to 3482 as on 31.3.2012. Over a period of 13 years, the asset addition of OPTCL is nearly 2 ½ times of the asset base inherited by OPTCL. (Gross fixed asset as on 31.3.1999 was Rs.1178.93 core, whereas Gross fixed asset as on 31.3.2012 is Rs.2929.12 crore based on the Audited Accounts). Time and again the Commission in their Tariff Orders emphasized the need for filling the vacancy for proper maintenance of Network assets of OPTCL.

181. In reply to query No.12 of the Commission, OPTCL submitted a brief summary of organizational restructuring and manpower assessment prepared by National Productive Council (NPC). The NPC, Bhubaneswar was entrusted with the consultancy assignment of organization restructuring and assessment of manpower requirement of OPTCL on 19.7.2007. The NPC submitted their draft final report on 23.12.2010. After suggesting certain medication, the report was forwarded to Govt. on 29.6.2012 for final approval. The same will be implemented as soon as the final report from the State is obtained. NPC in their final report have submitted that the proposed manpower as at the end of 2013-14 should be 5277 in numbers.

182. In view of the above observation the Commission in principle accepts the submission of OPTCL and directs that the report of NPC has to be implemented as soon as it is approved by the State Govt. In Form TRF – 13. OPTCL for the FY 2013-14 booked an amount of Rs.14.00 Cr. towards enhancement of salary due to implementation of NPC structure for executives and non-executives. The Commission don't agree to the proposal of OPTCL, as the same will be considered after the recommendation of NPC is implemented.

183. The number of employees at the end of the year and average number of employees submitted for the financial year approved by the Commission is given as under:

Table - 13

	As on 31.03.2012	**As on 31.03.2013**	**As on 31.03.2014**
No. of existing employee	3482	3243	3934
Average no. of employee		3362.5 (2012-13)	3588.5 (2013-14)

184. The basic pay + GP for the financial year 2013-14 is determined factoring in average number of employees approved by the Commission in the above table and considering annual increment @3% as Basic Pay + GP extrapolated for 12 months for FY 2012-13. The amount of Basic Pay + GP worksout to Rs.66.12 Cr. for the financial year 2013-14. The Commission approves the same.

185. **Dearness Allowance :** As regards Dearness Allowance, the prevailing rate approved by Govt. of Odisha is 72% w.e.f. 01.07.2012. Last time the incremental rate of DA was 7%. GRIDCO proposed the annual average rate of DA at 86% during 2013-14, with an anticipated rise of 7% in each dose i.e. as 01.01.2013, 01.07.2013 and 01.01.2014. The Commission approves the same i.e. 86% for the FY 2013-14.

186. **House Rent and Medical Allowance :** In line with the Order of the last year, the Commission for the FY 2013-14 approves the medical allowance and HRA @5% and

15% of Basic Pay + GP respectively as against the claim of 5% and 20% for medical allowance and HRA respectively by GRIDCO.

187. **Stipend to Management Trainee (Execution) and Stipend to New recruited non-executives:** Under this head OPTCL proposed Rs.1.06 cr and Rs.1.62 cr. for the year 2013-14. The Commission approves the same.

Terminal Benefits

188. OPTCL claimed an amount of Rs.142.83 Cr. towards terminal benefits for the financial year 2013-14. Further the fund requirement under the head employers contribution Non-pensioners and New Pension Scheme is estimated at Rs.1.30 cr. In the last year's Tariff Order the Commission in Para 243 observed that, pending periodical actuarial valuation as per the direction of the Commission. The terminal benefit may be allowed based on the actual cash out flow. The same principle is followed by the Commission in determining the terminal liability for the financial year 2013-14.

189. OPTCL in its supplementary submission on 29.01.2013, gave information on Disbursement details towards Terminal liabilities upto December, 2012. As per the submission the total cash out flow upto December (9 months period) amounts to Rs.86.91 Cr. To determine the annual terminal liability for a period of 12 months the amount of Rs.86.91 is extrapolated, which workouts to Rs.115.88 Crores for the financial year 2012-13. The Commission approves the same i.e. Rs.115.88 Cr. for 2013-14 as against the claim of Rs.142.83 Cr. by GRIDCO. As regards the claim of Rs.1.30 Cr. towards contribution for Non-pensioner and New Pension Scheme, the Commission approves the same. Thus the Commission approves a total sum of Rs.117.18 cr. (Rs.115.88 Cr.+ Rs.1.30 Cr) towards terminal benefit for the FY 2013-14.

190. **Differential amount of Pension and Pensionary benefit to absorbed Govt. Engineers in OPTCL:** Under this head OPTCL claimed an amount of Rs.23.00 Cr. during 2013-14. During FY 2012-13 the Commission approved an amount of Rs.10.00 Cr. provisionally and directed OPTCL to pursue the matter with Govt. of Odisha and workout the actual liability on the basis of Govt. of Odisha notification.

191. The Commission made a query on 24.12.2012 regarding up-to-date status of Govt. notification for determining the actual liability. OPTCL in their modified reply dated 29.01.2013 stated that the proposal for payment of differential amount of pension and pensionary benefit to Govt. Engineers who are permanently absorbed in OPTCL is pending with Govt. for final decision. OPTCL is pursing with officials of Energy and Finance Dept. from time to time to expedite the matter. OPTCL expects that Finance Dept. will issue notification very soon. After receipt of communication from Govt. in this regard necessary notification shall be issued. In anticipation of Govt. approval OPTCL already made a provision of Rs.36.00 Cr. in the Audited Accounts for FY 2010-11. The Commission had already allowed Rs.3.00 Cr. and Rs.10.00 Cr. in the ARR for the FY 2011-12 and FY 2012-13 respectively. For the remaining balance of Rs.23.00 Cr. OPTCL proposed the same in the ARR for FY 2013-14.

192. The Commission approves the same and allow Rs.23.00 Cr. as a pass through in the ARR for FY 2013-14. The statement of Employees Cost for FY 2013-14 proposed by OPTCL and approved by the Commission is given as under:

Table – 14
Employees Cost proposed and approved for FY 2013-14

(Rs. Cr.)

Sl. No.	Particulars	Approved for FY 12-13	Proposed for FY 13-14	Approved for FY 13-14
1.	Salaries (Basic Pay+ Grade Pay)	62.69	69.74	66.12
2.	Overtime	-	-	-
3.	Dearness Allowance	45.14	59.98	56.86
4.	Other Allowance	0.66	0.69	0.69
5.	Bonus and Overtime	0.13	0.01	0.01
6.	Provision towards Wage revision for non-executive w.e.f. 01.04.2010	2.80	14.09	14.09
7.	Enhanced in Salary (NPC)	-	14.00	-
8.	**Sub Total (1 to 7)**	**111.42**	**158.51**	**137.77**
	Other Staff Cost			
9.	Reimbursement of Medical Expenses	3.13	3.49	3.31
10.	Leave Travel Concession	0.77	0.59	0.59
11.	Reimbursement of House Rent	9.40	13.95	9.92
12.	Interim Relief to Staff/ Premium under GIS	0.46	0.26	0.26
13.	Encashment of Earned Leave	-	-	-
14.	Stipend to Management Trainee (Executive)	3.39	1.06	1.06
15.	Stipend for new recruited Non-Executive	1.90	1.62	1.62
16.	Honorarium	0.08	0.01	0.01
17.	Payment under Workmen compensation Act	0.06	0.02	0.02
18.	Ex-gratia	-	0.01	0.01
19.	Miscellaneous	0.13	1.24	1.24
20.	Uniform and liveries	0.33	1.39	1.39
21.	**Sub Total (9 to 20)**	**19.66**	**23.64**	**19.43**
22.	Staff Welfare Expenses	3.20	0.20	0.20
23.	Terminal Benefits	129.80	144.13	117.18
24.	Payment of differential pension and pensionary benefit to the absorbed Govt. Engineer in OPTCL/GRIDCO	10.00	23.00	23.00
25.	**Total (7+21+22+23+24)**	**274.08**	**349.48**	**297.58**
26.	Less : Capitalisation	4.64	8.28	8.28
27.	Net Total	**269.44**	**341.20**	**289.30**
28.	Arrear due to 6^{th} Pay Commission recommendation	49.04	-	-
	Total	**318.48**	**341.20**	**289.30**

Repair and Maintenance Expenses (R&M)

193. OPTCL proposed an amount of Rs.108.91 Cr. for the FY 2013-14 under Repair & Maintenance. In the filing, the item-wise details of R & M has been submitted under these four broad heads.

Table - 15

1.	R&M of O&M Wing	Rs.83.08 Cr.
2.	Telecom R&M	Rs.14.59 Cr.
3.	Civil Works	Rs.6.00 Cr.
4.	Information Technology	Rs.5.24 Cr.
	Total	Rs.108.91 Cr

194. The Commission reviewed the actual amount spent vis-à-vis amount approved by the Commission towards R&M in different years.

Table - 16
Actual R&M Expenses vis-à-vis approved R&M Expenses
(Rs. cr.)

Year	R&M Expenses approved by OERC	Actual R&M Expenditure
1999-2000	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	11.31
2007-08	47.00	16.52
2008-09	53.88	15.66
2009-10	47.00	26.14
2010-11	60.00	28.32
2011-12	75.00	45.70
2012-13	95.00	37.86 (As per cash flow upto November, 2012)

195. It is observed from the table above that actual expenditure for the financial year is always less than the amount approved by OERC towards R&M expenses.

196. The transmission system of OPTCL is the life-line of the power system of Odisha. 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 DISCOMs who are the real beneficiaries would be put in trouble and the entire power system would be in complete jeopardy. Hence, the Commission directs OPTCL to carry out the orders mentioned in the Business Plan Order dtd. 19.07.2010.

197. The Commission in consideration of concern raised by the objectors and DISCOMs regarding low voltage problem, took note of voltage profile of the low tension side of the Grid Substation of OPTCL. OPTCL is advised to take suitable action like putting up capacitor banks and additional remedial measures like system up-gradation to

improve the voltage profile. OPTCL should also monitor the reactive drawl of DISCOMs from its grid S/s and wherever DISCOM draw excessive reactive load at low voltage condition in grid S/S, it shall take up with them for remedial measure M/s.OPTCL should keep its on-line Tap Changer of the Power Transformers in healthy condition and all the field engineers should be trained to operate OLTC during peak and low load condition of the day.

Table -17 (a)
Allowable Range (245-198 KV)

Sl. No.	Name of the 220/132 kV Grid Sub-station	Maximum Voltage in kV	Minimum Voltage in kV
1	Jaynagar	258	227
2	Duburi	240	208
3	Joda	238	205
4	Tarkera	236	220
5	Budhipadar	239	219
6	Balasore	240	196
7	Narendrapur	246	203
8	Chandaka	236	173
9	Bhanjanagar	237	194
10	Theruvali	253	207
11	Meramundali	233	210
12	Bidanasi	239	195
13	Katapalli	239	207
14	Bhadrak	240	180
15	Paradeep	232	190
16	Bolangir	243	201
17	Mendhasal	238	175

Table – 17 (b)
Allowable Range (145 -122 KV)

Sl. No.	Name of the 132/33 kV Grid Sub-station	Maximum Voltage in kV	Minimum Voltage in kV
1	Cuttack	138	98
2	Puri	142	98
3	Khurda	140	92
4	Berhampur	143	106
Balance 132/33 kV S/S, the voltage profile is satisfactory i.e. within allowable limits			

198. The Commission also desires that performance standards of OPTCL should be suitably improved adopting the best practices of operation and maintenance for transmission lines and sub-stations.

199. Further, to ensure that the engineers of the Licensees are well versed with various provisions of Electricity Laws, Standards, Codes, Acts etc, the Commission had advised the GoO vide Letter No.1829 dt.17.10.07 to revive the conducting of professional examination for the engineers of the licensee/OHPC/OPGC. However, in view of the provisions contained in Regulation 7 of the CEA(Measures relating to safety and Electric Supply) Regulations, 2010, the licensees should take appropriate actions as regards to safety measures for operation and maintenance of transmission, distribution system. This would ensure adherence of safety parameters and minimize Electrical Accidents.

200. The Commission approved an amount of Rs.95.00 crore towards R&M during 2012-13. But OPTCL spent Rs.37.86 crore upto November, 2012 (as per cash flow). In reply to the querry of the Commission, OPTCL stated that over and above the amount spent i.e. 37.86 crore, OPTCL booked in the account Rs.36.43 crore towards capital

for procurement of 14 Nos. of 132/33KV, 63 KVA transformers. Thus, a total sum of Rs.74.29 crore (37.86+36.43) is to be allowed towards R & M for regulatory purpose. The Commission do not accept the submission of OPTCL for inclusion of capital items such as transformer in R & M. Hence, the amount of 36.43 crore is disallowed by the Commission. For the purpose of determination of R&M, Commission accepts the figures submitted in the cash flow statements by OPTCL. The amount of Rs.37.86 crore as stated above is extrapolated for a period of 12 months. The monthly average of the amount spent comes to Rs.4.73 crore (Rs.37.86/8) or rounding to Rs.5.00 crore. **Thus, for a period of 12 months it works out to Rs.60.00 crore which is approved by the Commission for the FY 2013-14 as against an amount of Rs.108.91 crore proposed by the licensee.** If the licensee spent more during FY 2013-14 than the approved amount the excess amount so spent will be considered in the ARR for the next financial year.

Administration & General (A&G) Expenses

201. OPTCL during FY 2013-14 has proposed Rs.23.09 cr. towards A&G expenses. Break up of expenses for FY 2013-14 along with the figures for 2011-12 and 2012-13 as filed by the licensee is depicted in the table below:

Table -18
Administration and General Expenses

(Rs. Cr.)

Sl. No.	Particulars	FY 11-12 (Prov.)	Estimation for FY 12-13	Estimation/ Projection for FY 13-14
1	Property related expenses	1.20	1.32	1.45
2	Communication	0.96	1.02	1.12
3	Professional Charges	2.05	2.19	2.41
4	Conveyance & Traveling	4.40	4.76	5.24
5	Inspection fees	1.45	1.60	1.75
6	Watch & ward	2.30	2.48	2.72
7	Electricity & Water charges	1.99	1.84	2.02
8	Service tax	1.56	1.56	1.56
5	Other Expenses	3.27	3.28	3.52
6	Material related expenses	0.00	0.05	0.05
7	OERC License Fee	1.00	1.25	1.25
8	Sub-Total (1 to 7)	20.18	21.35	23.09
9	Less: Expenses capitalized	-	0.00	0.00
	Total A&G Expenses	**20.18**	**21.35**	**23.09**

202. The Commission in line with earlier orders allows escalation of 7.50% (Rate of inflation as measured by W.P.I.) over the approved amount of Rs.18.03 cr. for FY 2012-13. **Hence, Rs.19.38 cr. towards normal A&G expenses for FY 2013-14 is allowed.** Over and above the normal A&G, the Commission allows the License Fee to be paid to the Commission amounting Rs.1.25 cr., and Inspection Fees of Rs.1.75 cr. proposed by the Licensee to the Government. **Hence, the Commission allows Rs.22.39 cr. under the head A&G for FY 2013-14 as against OPTCL's proposal of Rs.23.09 cr.**

Interest on Loan

203. OPTCL has proposed Rs.121.11 crore towards interest on long term loan for the FY 2013-14. Loan-wise interest payment schedule as proposed by the licensee is exhibited in table below:

Table – 19
Projection for Interest on loan for FY 2013-14 (Rs. Crore)

	Loan Details	Rate of Interest	Principal CB as on 31.03.13	Loan to be received during 2013-14	Principal repayment for 2013-14	Interest payment for 2013-14	Total Payment for 2013-14
A	**Govt. Loans**						
	State Govt.(Cash Loan)	13.00%	2			0.26	0.26
	State Govt.(CRF)	0.00%	15				0
	Central Govt. Loan	9.00%	11.26			1.01	1.01
	GoO Bonds	13.00%	400			26.00	26
	Sub Total		**428.26**			**27.27**	**27.27**
B	**Institutional Loans**						
	Total REC Loan		162.33		10.83	19.49	30.32
	PFC Loan	11.25%	14.22		1.24	1.54	2.78
	PFC Loan (New)	12.50%	13.45		1.08	1.68	2.76
	Sub Total		**190.00**		**13.15**	**22.71**	**35.86**
C	**Secured Loan**						
	HUDCO	11.00%	17.95		17.95	0.70	18.65
	Oriental Bank of Commerce	11.75%	30.34		28.57	2.01	30.58
	Sub Total		**48.29**		**46.52**	**2.71**	49.23
D	Deposit from EHT Consumers						
	Sub Total of Infrastructure Loan		90.46	2.00	**3.00**		3.00
E	**Loans for New Projects (PFC/REC/Commercial banks)**	**12.25%**	**351.11**	**543.82**		**54.81**	54.81
F	**Other Loans & Finance Charges**						
	Employee Housing Loans	12.00%	0.75		0.02		0.02
	Finance Charge		0			13.61	13.61
	Sub Total		**0.75**		**0.02**	**13.61**	13.63
G	**Grand Total**		**1108.87**	**543.82**	**62.69**	**121.11**	**183.80**

204. It is observed from the above table that during FY 2012-13, OPTCL proposed to avail new loan of Rs.351.11 crore and during FY 2013-14 Rs.543.82 crore. The interest impact on the above new loan at 12.25% is claimed at Rs.54.81 crore. Replying to the query of the Commission OPTCL has submitted the project wise loan to be availed during 2012-13 and 2013-14 which is summarized below:

Table - 20

Additional Loan for New Projects during 2012-13 & 2013-14 to be availed from PFC/REC and other Financial Institution

(Rs. Cr.)

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.12	Loan to be taken during 2012-13 & 2013-14
A	**Loans Sanctioned**					
1	2X12.5 MVA, 132/33 S/s at **BASTA**,	REC	16.99	13.27	**10.88**	2.39
2	2X12.5 MVA, 132/33 S/s at **KARANJIA & BARAPALLI**	REC	40.08	31.33	**24.82**	6.51
3	2X12.5 MVA, 132/33 S/s at **BHADRAK**	REC	33.05	19.12	**17.21**	1.91
4	400 K.V D.C Line Trans. Line from **Meramundali to Duburi**	REC	141.48	79.71	**65.74**	13.97
5	2x12.5 MVA, 132/33 KV S/S at **Purushottampur** with LILO arrangement(2.5 Kms)	REC	15.99	14.66	**-**	14.66
6	Restoration of 220 KV DC Line from Budhipadar to Bolangir	REC	28.88	25.99	**22.26**	3.73
7	220 KV **BIDANASI-CUTTACK** D.C Line(10.42 Kms)	PFC	16.43	15.31	**-**	15.31
8	132 KV S.C. Line from Paradeep to Jagatsingpur	PFC	16.02	11.22	**6.98**	4.24
9	2x40 MVA, 132/33 KV S/S at Udala **with LILO arrangement**	PFC	26.19	22.26	**-**	22.26
10	2X12.5 MVA, 132/33 S/s at **Dabugaon with S.C Line on D.C Tower (40.75kms)**	REC	25.97	23.81	**5.79**	18.02
11	2X12.5 MVA, 132/33 S/s at **Nuapada with S.C line on D.C Tower(72.2 kms)**	REC	34.85	31.95	**8.86**	23.09
12	2X12.5 MVA, 132/33 S/s at **Kuchinda with LILO arrangement(29.35 Kms)**	REC	25.97	23.80	**6.31**	17.49
13	2X12.5 MVA, 132/33 S/s at **Padampur with S.C Line on D.C Tower (45.53kms)**	REC	27.57	25.28	**6.26**	19.02
14	2x12.5 MVA, 132/33 KV S/S at **Chandpur with LILO arrangement(2.31 Kms)**	PFC	16.81	13.00	**2.52**	10.48
15	2x12.5 MVA, 132/33 KV S/S at **Boudh with S.C Line on D.C Tower (50.73kms)**	REC	29.87	27.38	**7.17**	20.21
16	2x12.5 MVA, 132/33 KV S/S at **Bhawanipatna with LILO arrangement(6.61 Kms)**	REC	19.59	17.96	**6.49**	11.47
17	2x20 MVA, 132/33 KV S/S at **Banki with S.C Line on D.C.Tower(19.69 Kms)**	PFC	21.16	16.50	**1.98**	14.52

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.12	Loan to be taken during 2012-13 & 2013-14
18	2x160 MVA, 220/132 KV S/S & 2x20 MVA, 132/33 KV S/S at **Karadagadia** , Khurda with LILO arrangement (10 Kms)	REC	80.94	72.84	**-**	72.84
19	2x20 MVA, 132/33 KV S/S at **Kalunga** with LILO arrangement (2.671 Kms)	PFC	17.93	12.34	**1.40**	10.94
20	2x40 MVA, 220/33 KV S/S at **Bonai with LILO arrangement (10kms)**	PFC	28.74	25.68	**1.65**	24.03
21	2x40 MVA, 132/33 KV S/S at **Anandpur with LILO arrangement (10kms)**	PFC	22.41	17.93	**17.93**	0
22	220/33 KV S/S at Gopinath**pur with LILO arrangement**	PFC	25.55	21.72	**-**	21.72
23	220/33 KV S/S at Lapanga **with LILO arrangement**	PFC	60.8	51.68	**-**	51.68
24	Installation of 3rd Bay Transformer in different Grid-Stations	REC	152.75	137.44	**-**	137.44
25	132/33 KV S/S at Barbil **with LILO arrangement**	REC	17.41	15.66	**-**	15.66
26	220/33 KV Grid S/s at Kuarmunda, Sundergarh	HUDCO	62.12	52.80		52.8
27	Installation of Capacitor Bank	HUDCO	18.59	15.80		15.8
28	Integration of 3nos of Grid S/s for SCADA connectivity under ULDC Expansion Scheme	HUDCO	35.86	30.48		30.48
29	132/33KV Grid S/s at Sarasmal, Jharsuguda	HUDCO	13.13	11.16		11.16
30	132/33KV Grid S/s at Olavar, Kendrapada	HUDCO	33.93	28.84		28.84
31	220/132KV Grid S/s at Kesinga, Kalahandi	HUDCO	75.87	64.49		64.49
32	220/132KV Grid S/s ,Cuttack	HUDCO	30.38	25.82		25.82
33	132/33KV Grid S/s Luna Kendrapada	HUDCO	19.59	16.65		16.65
34	SCADA Interface points at all 220/132KV Grid S/s	HUDCO	67.48	57.36		57.36
35	220/132KV Grid S/s at Dhamara, Bhadrak	HUDCO	74.95	63.71		63.71
36	132/33KV Grid S/s at Lapang, Sambalpur	HUDCO	70.19	59.66		59.66
	TOTAL		**1445.52**	**1194.61**	**214.25**	**980.36**

205. During the FY 2008-09 to 2011-12 OPTCL had availed the following loans for capital works after demerger of OPTCL from GRIDCO in 2005. The loan-wise details is given as per table below:

Table – 21
Details of Year-wise Loan availed from FY 2008-09 to FY2011-12

Source (Institution wise/Bankwise)	Purpose	Sanctioned by	Amount Sanctioned	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
F Y 2007-08								
150688-1	Basta	REC	0.57	0.57	28.03.2008	11.50%	10 Year	3 Year
150689-1	Karanjia	REC	0.13	0.13	28.03.2008	11.50%	10 Year	3 Year
150690-1	Barpali	REC	0.22	0.22	28.03.2008	11.50%	10 Year	3 Year
2350001-1	400 Kv DC Line Meramindali Duburi	REC	29.62	29.62	28.03.2008	11.50%	10 Year	3 Year
	Total		30.53	30.53				
F Y 2008-09								
150689-2	Karanjia	REC	4.52	4.52	06.08.2008	12.25%	10 Year	3 Year
2350002-1	Bhadrak	REC	6.07	6.07	06.08.2008	12.25%	10 Year	3 Year
		S Total	10.59	10.59				
150688-2	Basta	REC	2.10	2.10	17.03.2009	12.50%	10 Year	3 Year
150689-3	Karanjia	REC	5.39	5.39	17.03.2009	12.50%	10 Year	3 Year
150690-2	Barpali	REC	3.82	3.82	17.03.2009	12.50%	10 Year	3 Year
2350002-2	Bhadrak	REC	4.02	4.02	17.03.2009	12.50%	10 Year	3 Year
		S Total	15.33	15.33				
	Total		25.92	25.92				
F Y 2009-10								
150688-3	Basta	REC	3.23	3.23	12.08.2009	12.50%	10 Year	3 Year
150689-4	Karanjia	REC	0.67	0.67	12.08.2009	12.50%	10 Year	3 Year
150690-3	Barpali	REC	2.55	2.55	12.08.2009	12.50%	10 Year	3 Year
2350001-2	400 Kv DC Line Meramindali Duburi	REC	17.04	17.04	12.08.2009	12.50%	10 Year	3 Year
2350002-3	Bhadrak	REC	0.68	0.68	12.08.2009	12.50%	10 Year	3 Year
		S Total	24.17	24.17				
150689-5	Karanjia	REC	2.31	2.31	30.03.2010	11.00%	10 Year	3 Year
150690-4	Barpali	REC	1.62	1.62	30.03.2010	11.00%	10 Year	3 Year
2350002-4	Bhadrak	REC	0.67	0.67	30.03.2010	11.00%	10 Year	3 Year
150688-4	Basta	REC	2.19	2.19	31.03.2010	11.00%	10 Year	3 Year
2350008-1	Dabugaon	REC	2.95	2.95	31.03.2010	11.00%	15 Year	3 Year
2350009-1	Nuapada	REC	3.82	3.82	31.03.2010	11.00%	15 Year	3 Year
2350010-1	Bhawanipatana	REC	2.30	2.30	31.03.2010	11.00%	15 Year	3 Year
2350011-1	Boudh	REC	3.29	3.29	31.03.2010	11.00%	15 Year	3 Year
2350012-1	Kuchinda	REC	2.74	2.74	31.03.2010	11.00%	15 Year	3 Year
2350013-1	Padampur	REC	2.99	2.99	31.03.2010	11.00%	15 Year	3 Year
		S Total	24.87	24.87				
48703004	132/33 KV S/S Anandpur	PFC	17.93	17.93	31.03.2010	11.25%	15 Year	3 Year
		S Total	17.93	17.93				
	Total		66.98	66.98				
F Y 2011-12								
150690-5	Barpali	REC	1.40	1.40	05.03.2012	12.50%	15 Year	3 Year
2350002-5	Bhadrak	REC	5.76	5.76	06.03.2012	12.50%	10 Year	3 Year
		S Total	7.16	7.16				
2353194-1	Bhudipadar-	REC	22.26	22.26	07.03.2012	12.50%	15 Year	3 Year

Source (Institution wise/Bankwise)	Purpose	Sanctioned by	Amount Sanctioned	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
	Bolangir							
150688-5	Basta	REC	2.79	2.79	07.03.2012	12.50%	15 Year	3 Year
2350001-3	400 Kv DC Line Meramindali Duburi	REC	19.09	19.09	07.03.2012	12.50%	10 Year	3 Year
		S Total	44.13	44.13				
150689-6	Karanjia	REC	2.18	2.18	14.03.2012	12.50%	15 Year	3 Year
		S Total	2.18	2.18				
48703005	132 KV SC line Paradeep to Jagatsunghpur	PFC	6.98	6.98	29.03.2012	12.50%	15 Year	3 Year
48703007	132/33 KV S/S Chandpur	PFC	2.52	2.52	29.03.2012	12.50%	15 Year	3 Year
48703008	132/33 KV S/S Banki	PFC	1.98	1.98	29.03.2012	12.50%	15 Year	3 Year
487030017	132/33 KV S/S Kalunga	PFC	1.40	1.40	29.03.2012	12.50%	15 Year	3 Year
48703019	132/33 KV S/S Banai	PFC	1.65	1.65	29.03.2012	12.50%	15 Year	3 Year
		S Total	14.53	14.53				
2350008-2	Dabugaon	REC	2.84	2.84	30.03.2012	12.50%	15 Year	3 Year
2350009-2	Nuapada	REC	5.05	5.05	30.03.2012	12.50%	15 Year	3 Year
2350010-2	Bhawanipatana	REC	4.19	4.19	30.03.2012	12.50%	15 Year	3 Year
2350011-2	Boudh	REC	3.88	3.88	30.03.2012	12.50%	15 Year	3 Year
2350012-2	Kuchinda	REC	3.57	3.57	30.03.2012	12.50%	15 Year	3 Year
2350013-2	Padampur	REC	3.27	3.27	30.03.2012	12.50%	15 Year	3 Year
		S Total	22.80	22.80				
	Total		90.81	90.81				
Grand Total			214.25	214.25				

206. Excepting the loans availed upto FY 2011-12, OPTCL has not availed any new loan during 2012-13 and 2013-14. Therefore, Commission feels it justified to allow interest on loan actually received by OPTCL upto 31.3.2012. Hence, the interest claimed by OPTCL for an amount of Rs.54.81 crore on the loan to be availed during 2012-13 and 2013-14 is disallowed by the Commission. From the table given above it is found that OPTCL has availed loan for an amount of Rs.214.25 crore. The interest impact on such loan as furnished by the OPTCL in Form TRF-3 for the FY 2013-14 is shown at Rs.25.42 crore. The Commission allows the same in the ARR for FY 2013-14.

Besides above OPTCL claimed an amount of Rs.27.27 crore towards State Govt. loan, Central govt. loan and bond as per the table below:

State Govt. cash loan	-	0.26 core
Central Govt. loan	-	1.01 croe
GOO Bond	-	26.00 crore
Total	**-**	**27.27 crore**

AS regards the loan and bonds of the State govt. the Commission disallowed the interest impact as a pass through in the ARR for the FY 2013-14 on the following ground:-

Regarding interest on loan due to State Govt., the Govt. of Odisha vide letter No.2404 dtd.21.03.2011 have given the following decision, in response to the suggestion of the Commission vide letter No.4440 dtd.19.07.2010. The extract of the letter is given below:

"i) Moratorium on debt servicing by GRIDCO & OPTCL and OHPC to the State Government till the power sector turns around except the amount in respect of loan from the World Bank to the extent to the State Government is required to pay to Government of India.

ii) Keeping in abeyance the effect of up-valuation of assets of OHPC and GRIDCO/OPTCL till the sector turns around.

iii) The OHPC, GRIDCO & OPTCL shall not be entitled any RoE till the Sector becomes viable on cash basis.

(a) Government in Finance Department, after careful examination of the issues, has observed that "an open ended commitment by the State Government to extend these supportive measures would be undesirable. At the first stage these supports may be continued till 2012-13 after which a review should be made by the State Government and on that basis a view could be taken on the need for further extension of these measures".

207. The Commission vide letter No.JT(FN-175/02/2502 dtd.06.01.2012 requested the State Govt. to issue the amended notification as suggested by the Commission vide their letter No.4440 dtd.19.07.2010, so that this would appropriately be reflected while determining the annual revenue requirement of the DISCOMs for the year 2012-13. In absence of specific communication in this regard by 31.01.2012, the Commission would assume the extension of the benefit notified on 29.01.2003 and 06.05.2003 till the sector as a whole turn around.

However, in the meantime the State Govt. in Energy Department vide letter No.LC-34/2012-2261 dtd.19.03.2012 has communicated as follows:

"The suggestions of the Hon'ble Commission to keep the support of Govt. in the matter of keeping the effect of upvaluation of assets of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around and not allowing ROE to GRIDCO/OPTCL and OHPC till the sector becomes viable on cash basis has not been agreed to by the Govt. in Finance Deptt. However steps have been taken in regard to other recommendations of the Hon'ble Commission in their letter No.4440 dt.19.07.2010 and the proposal will be placed before the cabinet for approval after which required notification will be issued."

208. The State Govt. vide their letter No.2404 dtd.21.03.2011 have extended the benefits/concession as stipulated in the Notification No.1068 dtd.29.01.2003 read with Notification No.5302 dtd.06.05.2003 till 2012-13. Accordingly, Commission did not consider the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond in determining the ARR for FY 2012-13. Now that year is over. The Commission again in their letter vide No.JD(FN)-175/2002/4617 dated 28.12.2012 requested the Govt. to continue the same concession for FY 2013-14 and onwards so that the effect of upvaluation is not factored while determining the ARR for 2013-14. Reply from the State Govt. on this issue is awaited. However, the Commission in the said letter mentioned that pending receipt of reply /notification from Govt., Commission could assume the extension of benefits

notified by the Govt. on 29.1.2003 and 6.5.2003 shall continue till the sector as a whole turns around.

In view of above, Commission does not consider interest on state Govt. loan and bond as a pass through in the revenue requirement of GRIDCO for the financial year 2013-14.

As regards interest on Central Govt. loan, the same was availed by erstwhile OSEB for construction of transmission lines which was ultimately transferred to OPTCL. The loan balance as on 31.03.2012 is shown at Rs.11.26 cr. Every year the Commission in the annual revenue requirement considers the interest impact on the above loan. **The Commission therefore allows Rs.1.01 crore towards interest for the FY 2013-14 as proposed by the licensee.**

Finance Charges

209. OPTCL claimed the finance charges of Rs.13.61 crore during FY 2013-14 which is allowed by the Commission.

Based on the above, the total interest liability along with the finance charges works out to Rs.40.04 crore given as under:-

Table -22

	Proposal	Approval
A. Govt. Loan(State govt. + Central govt.)	27.27	1.01
B. Institutional loan	25.42	25.42
C. Loan for new project (to be received during 2012-13 and 2013-14)	54.81	Nil
D. Finance charges	13.61	13.61
Total	**121.11**	**40.04**

Commission therefore allows an amount of Rs.40.04 crore towards interest due for the FY 2013-14.

Depreciation

210. OPTCL has claimed an amount of Rs.172.85 crore towards depreciation for the year 2013-14. The computation is based on CERC (Terms and Conditions of Tariff) Regulation, 2009. A detailed statement of fixed assets and block-wise computation of depreciation is given in the table below:

Table- 23

Block-wise computation of Depreciation (Rs. Crore)

Particulars	Depreciation Rate prescribed by CERC Regln. 2009	Depreciation @ Pre-92 Rate as per GoI Notification	Gross Block (01.04.12) (Prov.)	Gross Block (01-04-13) (Projected)	Deprcn. for FY 13-14 as per CERC Regln.	Deprcn. for FY 13-14 @Pre-92 Rate
Land and Rights	0.00%	0.00%	36.48	41.67	0	0.00
Buildings	3.34%	1.80%	78.64	89.82	3.00	1.62
Plant & Machinery (Other Civil works)	3.34%	1.80%	4.79	5.47	0.18	0.10

Particulars	Depreciation Rate prescribed by CERC Regln. 2009	Depreciation @ Pre-92 Rate as per GoI Notification	Gross Block (01.04.12) (Prov.)	Gross Block (01-04-13) (Projected)	Deprcn. for FY 13-14 as per CERC Regln.	Deprcn. for FY 13-14 @Pre-92 Rate
Plant & Machinery	5.28%	3.80%	1387.20	1584.48	83.66	60.21
Plant & Machinery (Lines, Cables & Network Assets)	5.28%	2.57%	1405.92	1605.87	84.79	41.27
Vehicles	9.50%	12.86%	1.50	1.71	0.16	0.22
Furniture, Fixture	6.33%	4.55%	2.57	2.94	0.19	0.13
Office Equipment	6.33%	9.00%	12.02	13.73	0.87	1.24
TOTAL			**2929.12**	**3345.69**	**172.85**	**104.79**

From the above statement it is found that OPTCL has added an amount of Rs.416.57 crore towards the gross fixed asset during the FY 2012-13. After scrutiny of the audited account it is found that the work- in- progress as on 31.3.2012 amounts to Rs.702.06 crore. Commission therefore accepts the figures of the gross fixed asset addition of Rs.416.57 crore during 2012-13 since the opening WIP is more than the asset addition. Gross fixed asset as on 31.3.2012 reflected in the audited accounts of OPTCL is upvalued one.

211. The State Govt. revalued the assets of erstwhile OSEB and vested the revalued assets with OHPC and GRIDCO vide Govt. notification SRO No.256/96 and SRO No.257/96 dtd.01.04.1996 respectively. GRIDCO was vested the assets of transmission, distribution after revaluation by State Govt. OHPC was vested the assets of hydro power station after revaluation. GRIDCO again divested its distribution business to four DISTCOMs vide transfer scheme notification No.SRO750/98 dtd.25.11.1998 and transferred the distribution assets to them on the same date. A table showing pre up- valued cost of gross fixed asset of transmission and distribution as per transfer notification apportioned on the basis of audited accounts and transfer notification and up-valued cost of fixed asset is given below:

Table - 24

(Rs. Cr.)

	Pre up-valued	Up-valued (apportioned)	Impact of up-valuation
GRIDCO	514.32	1036.47	522.15 *
WESCO	139.87	281.87	142.00
NESCO	137.9	277.90	140.00
SOUTHCO	122.41	246.68	124.27
CESU	188.70	380.27	191.57
Total DISCOM	**588.88**	**1186.73**	**597.85**
Total	**1103.20**	**2223.20**	**1120.00**

* Relates to OPTCL with effect from 01.04.2005 after separation of OPTCL from GRIDCO.

212. The State Govt. reviewed the power sector reforms in Odisha and after careful consideration and recommendation of the Committee of Independent Expert (Kanungo Committee) and the correctives suggested by OERC, the State Govt. vide notification No.1068 dtd.29.01.2003 have decided to keep in abeyance of the effect of up-valuation of assets of OHPC and GRIDCO from the FY 2001-02 till 2005-06 or the sector turns around whichever is earlier to avoid re-determination of tariff for past years and also redetermination of assets of various DISCOMs. For this purpose, depreciation would be calculated at pre-92 norms notified by Govt. of India. After the expiry of the FY 2005-06 the Commission have recommended to keep in abeyance the effect of up-valuation for a further period of five years.

213. Based on the recommendation of the Commission as suggested above, State Govt. in their notification No.R&R-I-15/2009/81, En, dt.06.01.2010 have extended the concession and stipulations as indicated below:-

(i) The bonds issued by GRIDCO and OHPC, to the State Govt. consequent upon revaluation of assets shall not carry any interest for a further period of five years from FY 2006-07 to FY 2010-11.

(ii) The additional equity share, allotted to the State Govt. based on revaluation of assets, should not earn any Return on Equity for a further period of five years from FY 2006-07 to FY 2010-11.

(iii) Both GRIDCO/OPTCL and OHPC would be entitled to depreciation on the revalued (pre-92) assets.

(iv) Both GRIDCO/OPTCL and OHPC shall repay the principal amount of the loan amount actually taken from the State Govt. along with the interest as per the terms and conditions of loan other than those attributable to the revaluation of assets.

(v) The State Govt. investment actually made in Upper Indravati Project, excluding the normative equity, should yield return to the State Govt. with effect from FY 2010-11 after clearance of loan liabilities of PFC. However, interest at the rate of 7% should be charged and paid on this investment from FY 2006-07 onwards.

(vi) Return on Equity on the old Hydro Power Plants may be allowed to OHPC, in respect of new projects commissioned after 01.04.1996.

214. Since there was some omissions and commission and addition of new stipulations in the notification dt.06.01.2010, in deviation of the notification dt.29.01.2003 read with notification dt.06.05.2003, the Commission in their letter No.3235 dt.27.01.2010 has suggested for amendment of the notification dt.06.01.2010 of the State Govt.

215. Since the Kanungo Committee had recommended keeping in abeyance the up-valuation of assets, moratorium on debt servicing etc. till the sector as a whole turns around and since the benefits of proposed investment by State Govt. and DISCOMs would be felt only after few years, the Commission have already advised the State Govt. to take the following steps vide their letter No. DIR(T)-344 / 2008 (Vol-III) - 4440 dated 19.7.2010.

(i) GRIDCO/OPTCL and OHPC would be entitled to depreciation on the assets prior to revaluation, calculated at pre-92 norms notified by Govt. of India, as per the direction of Hon’ble High Court of Orissa.

(ii) Moratorium on debt servicing by GRIDCO and OHPC to the State Govt. would be allowed till the power sector turns-around except the amount in respect of loan from the World Bank to the extent the State Govt. is required to pay to the Govt. of India.

(iii) GRIDCO & OHPC shall not be entitled to any RoE till the sector becomes viable on cash basis. The State Govt. investment actually made in Upper Indravati Project, excluding the normative equity, should yield return to the State Govt. with effect from FY 2010-11 after clearance of loan liabilities of PFC. However, interest at the rate of 7% should be charged and paid on this investment from FY 2006-07 onwards. Return on Equity on the old Hydro Power Plants may be allowed to OHPC, in respect of new projects commissioned after 01.04.1996.

216. The above concessions/Govt. support, indicated above are subject to the following stipulations:

(i) The State owned utilities viz. OHPC, GRIDCO and OPTCL earning accounting/book profit are made to utilize the same for capital investment, servicing of Govt. loan and payment of dividend.

(ii) The Private Distribution Companies are to service the State Govt. loan relating to World Bank and APDRP assistance passed on to them through an enforceable mechanism approved by OERC.

217. The State Govt. in response to the letter of Commission vide No.4440 dtd.19.07.2010 have extended the following concession in their letter No.2404 dtd.21.03.2011. The extract of the letter is given below:

i) Moratorium on debt servicing by GRIDCO & OPTCL and OHPC to the State Government till the power sector turns around except the amount in respect of loan from the World Bank to the extent to the State Government is required to pay to Government of India.

ii) Keeping in abeyance the effect of up-valuation of assets of OHPC and GRIDCO/OPTCL till the sector turns around.

iii) The OHPC, GRIDCO & OPTCL shall not be entitled any RoE till the Sector becomes viable on cash basis.

218. Government in Finance Department, after careful examination of the issues, have observed that “an open ended commitment by the State Government to extend this supportive measures would be undesirable. At the first stage these supports may be continued till 2012-13 after which a review should be made by the State Government and on that basis a view could be taken on the need for further extension of these measures”.

219. The Commission in his Lr. No. 2502 dtd. 06.01.2012 suggested the State Govt. to issue the amended notification as suggested by the Commission vide their letter No.4440 dtd.19.07.2010, so that this would appropriately be reflected while determining the annual revenue requirement of the distribution licensees for the year 2012-13. In absence of specific communication in this regard by 31.01.2012, the Commission would assume the extension of the benefit notified on 29.01.2003 & 06.05.2003 till the sector as a whole turns around. However, in the meantime the State Govt. in Energy Department vide letter No.LC-34/2012-2261 dtd.19.03.2012 has communicated as follows:

"The suggestions of the Hon'ble Commission to keep the support of Govt. in the matter of keeping the effect of upvaluation of assets of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around and not allowing ROE to GRIDCO/OPTCL and OHPC till the sector becomes viable on cash basis has not been agreed to by the Govt. in Finance Deptt. However steps have been taken in regard to other recommendations of the Hon'ble Commission in their letter No.4440 dt.19.07.2010 and the proposal will be placed before the cabinet for approval after which required notification will be issued."

220. The State Govt. vide their letter No.2404 dtd.21.03.2011 have extended the benefits/concession as stipulated in the Notification No.1068 dtd.29.01.2003 read with Notification No.5302 dtd.06.05.2003 till 2012-13. Accordingly, Commission did not consider the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond in determining the ARR for FY 2012-13. Now that year is over. The Commission again in their letter vide No.JD(FN)-175/2002/4617 dated 28.12.2012 requested the Govt. to allow continuance of the same concession for FY 2013-14 and onwards so that the effect of upvaluation is not factored while determining the ARR for 2013-14. Reply from the State Govt. on this issue is awaited. However, the Commission in the said letter mentioned that pending receipt of reply /notification from Govt., Commission could assume the extension of benefits notified by the Govt. on 29.1.2003 and 6.5.2003 shall continue in the sector as a whole till the sector turns around. Accordingly, the Commission has approved calculation of depreciation based on historical cost of assets and not considering the effect of upvaluation.

221. 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 23.6.2003 and treated transmission asset base of undivided GRIDCO at Rs.514.32 crore as on 01.4.1996.

222. A Table showing gross fixed assets as on 01.4.96 and year-wise asset addition thereafter till 2012-13 is depicted below.

Table – 25

(Rs. cr.)

Year	**OPTCL**
GFA as on 1.4.1996	514.32 (Pre upvalued)
1996-97	49.46
1997-98	39.94
1998-99	62.50
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	144.23
2007-08	206.10
2008-09	142.72
2009-10	188.49
2010-11	189.80
2011-12	135.58
Approved for 2012-13	416.57
Total	**2854.30**

In view of the directions and order of the High Court of Odisha, the Commission is bound to compute deprecation for the purpose of determination of ARR and Tariff on the basis of Pre-92 rates on the original book value of assets (i.e. after rolling back the effect of revaluation of 1996 from the value of the assets).

223. The classification of assets has been done proportionately based on the audited account for 2011-12 submitted by OPTCL. Accordingly, the Commission approves an amount of Rs.89.40 crore towards depreciation for the FY 2012-13 as per the details shown in Table below:

Table – 26

(Rs. cr.)

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 01.04.2013**	**Depreciation for the year 2013-14**
Land and Rights		8.07	35.55	0.00
Building	1.80%	13.09	76.63	1.38
Plant & Machinery (other civil works)	1.80%	-	4.67	0.08
Plant & Machinery	3.80%	-	1351.77	51.37
Plant & Machinery (line, cables and network)	2.57%	492.71	1370.01	35.21
Vehicles	12.86%	0.02	1.46	0.19
Furniture, Fixture	4.55%	0.19	2.50	0.11
Office equipment	9.00%	0.25	11.71	1.05
Grand Total		**514.32**	**2854.30**	**89.40**

As per National Tariff Policy the depreciation rate are to be notified by CERC. The CERC under the Regulation, 2009 has allowed the depreciation at a higher rate to cover up debt repayment in a situation where depreciation is inadequate. In view of the above Commission feel that it is necessary to allow depreciation in line with the CERC Tariff Regulation of 20.1.2009.

Therefore, the Commission has calculated the depreciation in accordance with the rates prescribed in Appendix-3 of the CERC Tariff Regulation of 20.1.2009 as shown in table below and arrived at a figure of 147.46 crore

224. In earlier paragraph the Commission has allowed Rs.89.40 crore towards depreciation based on Pre-92 rates. The balance amount is allowed as special appropriation. A table showing computation of depreciation at Pre-92 rate and as per CERC Notification is exhibited below:-

Table – 27

(Rs. cr.)

Particulars	**Pre-92 rate of depreciation as per GOI notification dated 31.01.92**	**Depreciation rate prescribed by CERC Regulation**	**Book Value of asset as on 01.4.2013**	**Depreciation for the year 2013-14 as per Pre-92 rate**	**Depreciation for the year 2013-14 as per CERC Regn.**
Land and Rights			35.55	0.00	0.00
Building	1.80%	3.34%	76.63	1.38	2.56
Plant & Machinery (other civil works	1.80%	3.34%	4.67	0.08	0.16

Particulars	Pre-92 rate of depreciation as per GOI notification dated 31.01.92	Depreciation rate prescribed by CERC Regulation	Book Value of asset as on 01.4.2013	Depreciation for the year 2013-14 as per Pre-92 rate	Depreciation for the year 2013-14 as per CERC Regn.
Plant & Machinery	3.80%	5.28%	1351.77	51.37	71.37
Plant & Machinery (line, cables and network)	2.57%	5.28%	1370.01	35.21	72.34
Vehicles	12.86%	9.50%	1.46	0.19	0.14
Furniture, Fixture	4.55%	6.33%	2.50	0.11	0.16
Office equipment	9.00%	6.33%	11.71	1.05	0.74
Grand Total			**2854.30**	**89.40**	**147.46**

During 2012-13 the commission had allowed deprecation to OPTCL on an asset base of Rs.2529.49 crore as on 31.3.2012. After the audited figures for 2011-12 are available the asset base stands reduced to Rs.2437.73 crore. Thus, during 2012-13 the Commission allowed excess depreciation on asset value of Rs.91.76 crore (2525.49-2437.73). The impact of depreciation on the above amount works out to Rs.4.66 crore. **Accordingly, Commission allow an amount of Rs.142.80 (147.46-4.66) crore towards depreciation and special appropriation for the FY 2013-14. Out of the above amount Rs.89.40 crore is allowed as depreciation and balance 53.40 crore towards as special appropriation.**

Return on Equity

225. OPTCL has claimed an amount of Rs.49.04 crore towards return on equity on a share capital of Rs.253.07 crore at the rate of 9.38% post tax basis as per clause 3 of Regulation 15 of CERC Regulation, 2009. OPTCL in its filing had stated that at the time of de-merger of GRIDCO effective from 01.04.2005, the equity share capital of OPTCL was Rs.60.07 crore leaving the balance equity share capital with GRIDCO. In addition the State Govt. has agreed to part finance transmission projects being set up in remote areas. Under this head Govt. has paid an amount of Rs.193.00 crore upto the financial year 2012-13. The sanctioned order and date of the Govt. fund is given below:-

Table – 28

Sl. No.	Sanction Order No. and Date	Amount (Rs. in cr.)
1.	R&R-I-01/2009-3560 dt.25.03.09	23.04
2.	R&R-I-01/2009-2003 dt.24.02.09	0.01
3.	R&R-I-01/2009-9464 dt.11.09.09	5.0
4.	R&R-I-01/2009-4826 dt.01.06.10	20.0
5.	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6.	R&R-6/12-685 dt.31.01.2012	1.00
7.	R&R-6/12-690 dt.31.01.2012	39.00
8.	R&R-6/12-695 dt.31.01.2012	3.00
9.	R&R-6/12-629 dt.22.01.2013	25.76
10.	R&R-6/12-634 dt.22.01.2013	16.60
11.	R&R-6/12-624 dt.22.01.2013	7.64
	Total	**193.00**

226. Commission feels that OPTCL is entitled to get return on equity value of Rs.193 cr. being infused by State Govt. to be utilized for the transmission project being set up in

remote areas. This is in the nature of viability gap funding which is to be utilized for implementation of transmission projects in backward areas.

Regarding equity of Rs.60.07 cr. which is inherited by OPTCL at the time of de-merger of GRIDCO into GRIDCO and OPTCL, Commission in their order vide Para 292 of the tariff order for FY 2009-10 disallowed Return on Equity on the above amount. In line with earlier order, the Commission also disallows Return on Equity on above amount of Rs.60.07 crore for the year 2012-13.

The Commission, therefore, allows return @ 19.38% on the equity value of Rs.193 cr. as stated above. Thus, the Commission approves Return on Equity for an amount of Rs.37.40 cr. during FY 2013-14 as against OPTCL's claim of Rs.49.04 crore.

Interest on Working Capital

227. OPTCL has proposed an amount of Rs.31.46 crore towards interest on working capital as per CERC Regulation, 2009. The table showing calculation of Interest on working capital proposed by OPTCL is given below:

Table – 29
Calculation of Interest on Working Capital

Parameters	Amount (Rs.Cr.)
(i) Receivables equivalent to two months of fixed cost.	141.28
(ii) Maintenance Spares @ 15% of O&M expenses	70.98
(iii) Operation & Maintenance expenses for one month	39.43
Total Working Capital	251.69
Interest on Working Capital @ 12.5% per annum	**31.46**

228. The Commission does not feel it justified to allow the same in the revenue requirement, since the Transmission Charge is the first charge being recovered from monthly BSP bill of DISCOMs. There may not be any need for working capital in case of OPTCL as OPTCL has surplus fund available with it at any point of time to take up day to day repair and maintenance work as verified from the cash flow statement submitted by OPTCL in reply to the query of the Commission. **Hence, the interest on working capital as claimed by OPTCL amounting Rs.31.46 cr. is disallowed by the Commission.**

Contingency Reserve

229. For the year 2013-14, OPTCL has proposed Rs.16.73 crore towards contribution to contingency reserve to be passed on to tariff. OPTCL has stated that requirement of contingency reserve in a natural calamity-prone state like Odisha needs no over emphasis. 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 specified securities. The Commission scrutinized the audited account of OPTCL for 2011-12. From Note-2 of the Balance-sheet, it is found that OPTCL has a balance of Rs.138.93 crore in Contingency Reserve. On a query regarding utilization of contingency reserve OPTCL has stated that OPTCL is in the process of opening of Constitutes 'Subsidiary General Ledger (CSGL) A/C, which is maintained with Reserve Bank of India for holding government Securities and T-Bills in paperless form (demat account for G-secs) and will invest the approved tariff amount for FY 2012-13 in Govt. securities for

meeting eventualities in future. The Commission in line with the orders of the last year does not allow the claim of OPTCL towards contingency reserve since OPTCL has not quantified the amount invested in different Government securities.

Grid Co-ordination Committee Expenses

230. OPTCL claimed an amount of Rs.0.30 crore towards Grid Coordination Committee expenses for FY 2013-14. The Commission hereby approves the same in line with the tariff orders of previous years.

Payment of SLDC Charges

231. Based on CERC (Fees and Charges of Regional Load Despatch and Other related matters) Regulations, 2009 and OERC (Fees and Charges of SLDC and other Matters) Regulation, 2010, the Commission has approved the ARR for SLDC for FY 2013-14 wherein it has been computed that OPTCL has to Pay 10% of SOC to SLDC. Accordingly, OPTCL will pay an amount of Rs. 0.64 cr. per annum to SLDC towards System Operation Charges for FY 2013-14. The details of SOC are available in the ARR of SLDC approved in Case No.150/2010.The said amount of Rs. 0.64 cr. is allowed in the ARR of OPTCL to be recovered through its Transmission Tariff.

Truing up

232. The Commission has undertaken the truing up exercise of OPTCL based on audited actuals from 2006-07 to 2010-11 and passed order vide case No. 7/2012 dtd.19.03.2012 according to which OPTCL posted a positive gap of Rs.371.03Cr as on 31.03.2011. For the FY 2011-12 the Commission carried up the truing up exercise based on the audited accounts. The Summary of the Truing up exercise is given in table below:

Table – 30

(Rs. cr.)

FY	Cost of Trans. Charges approved in the ARR	Cost of Trans. Charges (audited) considered for true up	Revenue from Wheeling Charges approved in ARR	Revenue from Wheeling Charges (audited)	Revenue from Wheeling Charges (True up)	Difference in Trans. Charges (Col 2-3)	Difference in Revenue (Col 6-4)	Total Difference Considered for True up	Cumulative True up
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2006-07	333.27	323.01	333.27	355.34	355.34	10.26	22.07	32.33	32.33
2007-08	373.73	334.70	373.73	399.76	399.76	39.03	26.03	65.06	97.39
2008-09	376.57	308.07	376.57	678.93	413.15	68.50	36.58	105.08	202.47
2009-10	394.15	375.68	394.15	305.16	438.06	18.47	43.91	62.38	264.85
2010-11	480.93	431.90	480.93	405.19	538.08	49.03	57.15	106.18	371.03
2011-12	572.50	541.02	572.5	570.54	570.54	31.48	-1.96	29.52	400.55

It is clear from the above table that OPTCL posted a cumulative surplus of Rs.400.55 cr. at the end of FY 2011-12. Hence, OPTCL does not require any regulatory asset to be amortized.

Incentive to OPTCL for System Availability

233. OPTCL in its submission has claimed for an incentive of Rs.10.05 Cr. to be passed on the ARR of FY 2013-14 as the system availability of OPTCL Transmission Network for FY 2011-12 was 99.84%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98%. The OPTCL Incentive Claim of

Rs.10.05 Cr. has been certified by SLDC and counter signed by Member Secretary, GCC. A calculation of incentive claimed by OPTCL is given below:

Table – 31
Calculation of Incentive Claimed by OPTCL

Name of the long-term customer	Energy Wheeled by OPTCL During 2011-12 (MU)	Transmission Charge @ 25.00 P/U during 2011-12 (Rs. in Crore)	Transmission System Availability during 2010-11 for calculation of incentive	Transmission System Availability above 98%	Incentive claimed by OPTCL for 2010-11 (Rs. in Crore)
(1)	**(2)**	**(3)**	**(4)**	**(5)=(4)- 98%**	**(6)=(3) x (5)**
CESU	7229.90	180.75	99.84%	1.84%	3.33
NESCO	5026.35	125.66	99.84%	1.84%	2.31
WESCO	6177.24	154.43	99.84%	1.84%	2.84
SOUTHCO	2823.96	70.60	99.84%	1.84%	1.30
NALCO	385.39	9.63	99.84%	1.84%	0.18
IMFA	194.53	4.86	99.84%	1.84%	0.09
Total Incentive Claimed (Rs. in Crore)					**10.05**

234. Further, in replies to Commission queries, OPTCL submitted that OPTCL has initiated a number of steps for avoiding interruptions to ensure quick restoration and to maintain steady supply. Some of the remedial measures under taken/to be under taken are mentioned below.

- Replacement of old obsolete and defective equipment such as CBs, CTs and PTs and LAs.
- Predictive maintenance of equipments using sophisticated testing kits like Capacitance and Tan delta kits, moisture content measurement kit, CB analyzer etc.
- Replacement of old and defective insulators including provision of Long Rod insulators in saline prone areas.
- Identification of hotspots in Switchyard and Lines by utilizing Thermo vision Camera and necessary follow up maintenance work.
- Double Jumpering at angle points in EHT Lines.
- Provision of additional Transformers taking into consideration the N-1 contingency criteria.
- Maintaining stock of ERS to towers as well as Restoration Gangs at strategic locations to meet exigency conditions

235. The Commission examined the relevant provision of Act & Regulations with regard to payment of incentive to OPTCL. As OPTCL has attained the System Availability of 99.84% during FY 2011-12 and is expected to maintain NATAF more than 98% during FY 2012-13, pending the verification, the Commission approves an amount of Rs.5.00 Cr. as an incentive in the ARR of OPTCL for FY 2013-14 with a rider that this incentive amount approved by the Commission should be spent in the Grid sub-stations where the EHT voltage is not within (-)12.5% of the normative voltage level at 220 KV /132 KV and continuously suffer from low voltage . The Commission

desires that this incentive amount of Rs.5.00Cr. should be spent in such a way that its secondary side 33 KV supply to DISCOMs should be at (+) 33 KV.

Miscellaneous Receipts

236. OPTCL has proposed Rs.12 crore towards miscellaneous receipt from inter-state wheeling, Intra-State short term Open Access, Inter-State short term Open Access STU charges received from Energy Exchange and supervision charges. OPTCL in its submission stated the following:

During 1st six months of FY 2012-13, Miscellaneous Receipt of OPTCL from different sources is about **Rs. 4.78 Crore,** the details are given in the table below:

Table- 32
Miscellaneous Receipt during 1st six months of FY 2012-13

Source	Amount Received (Rs. Crore)
Inter-State Wheeling	0.00
Intra-state Short Term Open Access	1.11
Inter-state Short Term Open Access	0.16
STU charges received from Energy Exchange	0.55
Supervision Charge	2.96
TOTAL	**4.78**

Current status on revenue earnings from Inter-State Wheeling:

237. As per direction of Hon'ble CERC in Suo-Motu Petition No. 15 of 2012, OPTCL has filed its application for determination of Point of Connection (PoC) transmission charges for a number of natural and deemed ISTS lines for FY 2012-13. The bills on inter-state customers would be raised only after the determination of the transmission charges by CERC.

Further, some State entities including GRIDCO have filed cases in their High Courts challenging the modality of determination of PoC transmission charges which are now taken up by Delhi High Court for dealing all similar cases. OPTCL has not raised any invoices pertaining to wheeling charges upon inter-state customers since April'2012 due to PoC regime effective from 01.07.2011. In view of the position explained, revenue from inter-state wheeling during FY 2013-14 cannot be correctly assessed.

Current status on revenue earnings from Supervision Charge:

238. Compared to previous years, the earning from Supervision Charge during 1st six months of FY 2012-13 has drastically reduced. The number of applicant industries are very less for which revenue from Supervision Charge during the balance period of FY 2012-13 would not be appreciable.

For the above reasons, revenue generation from other sources is not certain. Hence, in line with the trend of revenue earning during FY 2012-13, OPTCL expects the Miscellaneous Receipt of **Rs. 12.00 Crore** during FY 2013-14.

239. The Commission examined the audited accounts of 2011-12 submitted by OPTCL. It is revealed that OPTCL had earned Rs.21.44 crore from interest income, other miscellaneous receipt and deferred income transferred from capital reserve. Like other years OPTCL earned nothing towards supervision charges during FY 2011-12 which

forms substantial part of miscellaneous income in previous year. The details are given below:

	Rs. In crore
Interest Income (loan to staff)	0.85
Interest income (from banks)	6.42
Interest on advance to supplier	1.71
Supervision charges	0.00
Deferred Income (transfer from capital reserve)	7.06
Miscellaneous receipt	5.40
Total	**21.44**

240. It is revealed from the above that deferred income and interest income which forms a major share of the miscellaneous income are fluctuating in nature and difficult to estimate. In view of above, the Commission agrees with the contention of OPTCL and approves an amount of Rs.12.00 crore towards miscellaneous receipt for the FY 2013-14.

Transmission Cost

241. The total energy to be transmitted in the OPTCL system is estimated at 23448 MU for FY 2013-14, the details of which are mentioned in the Table below:

Table – 33

Details of Energy for Transmission	Proposed by OPTCL (MU)	Approved by OERC (MU)
Sale to DISCOMs	25125	23,048.00
Wheeling to industries from CGPs	300.00	300.00
Sale to CGPs by GRIDCO	100.00	100.00
Total	**25525**	**23,448.00**

242. The details of expenses proposed by OPTCL and approved by the Commission for FY 2013-14 towards transmission charges are depicted in the Table below:

Table – 34
ARR Proposed and Approved for OPTCL for FY 2013-14 (Rs. in cr.)

ITEMS	Approved for 2012-13	Proposed for 2013-14	Approved for 2013-14
Employees Cost including Terminal Benefits	318.48	341.20	289.30
R&M Cost	95.00	108.91	60.00
A&G Cost	21.25	23.09	22.39
Interest on Loan Capital	35.33	121.11	40.04
Depreciation	78.57	172.85	89.40
Return on Equity	22.17	49.04	37.40
Interest on Working Capital	-	31.46	-
Sub-Total	**570.80**	**847.66**	**538.53**
Special Appropriation	**38.71**	**0.00**	**53.40**
Pass Through Expenses	-		-
Contingency Reserve	-	16.73	-
Bad & doubtful debt Debts	-	0.00	-
GCC Expense including SLDC charges	1.02	0.30	0.94
Incentive for system availability	2.00	10.05	5.00

ITEMS	Approved for 2012-13	Proposed for 2013-14	Approved for 2013-14
Total	**612.53**	**874.74**	**597.87**
Less Misc. Receipts	**25.51**	**12.00**	**12.00**
Annual Revenue Requirement to be recovered from LTOA Consumers (i.e. DISCOMs & CGPs)	**587.02**	**862.74**	**585.87**
Transmission Charges (Paise/Unit) (Rounded)	**25.00 paise**	**33.80 paise**	**25.00 paise**

TARIFF DESIGN (Para 243 to 253)

Transmission Charges

243. OPTCL in its ARR Application for FY 2013-14 has proposed Transmission Charges @ 33.80 P/Kwh for transmission of power at 400/220/132 KV only over OPTCL's EHT transmission system. The Commission has followed the same principle of Postage Stamp Method as in earlier years for determination of Transmission Charges of OPTCL system. Accordingly, the Transmission Charges have been worked out **at 25.00 paise per unit** which shall be applicable for transmission of power at 400 KV/220 KV/132 KV over OPTCL's EHT Transmission Lines and Sub-stations and shall be payable by the DISCOMs. 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.

244. The Commission has notified the Intra-state Open Access Regulations, 2005 under Section 42 (2) of the Electricity Act, 2003.Consumers availing both long term & short term 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 **23,448** MU with an average demand of **2677** MW. The net transmission cost as indicated in the table above is Rs. **585.87** crore. **With 25 Paise per Unit the LTOA charges, works out to a sum of Rs.6000.00/MW/day or Rs.250/MWh. The long term open access customer availing Open Access under relevant Regulations of OERC shall pay Rs.6000.00/MW/Day or Rs.250.00/MWh towards transmission charges. In accordance with OERC Regulation, 2005, the short term open access customers shall pay at the rate of 25% of the long-term open access charges. Accordingly the Commission approves the rate of Rs.1500.00/MW/day or Rs.62.5 / MWh for STOA customers as transmission charge.** This will be in addition to other charges in accordance with OERC Open Access Regulations, 2005 & 2006.

Transmission Loss for Wheeling

245. OPTCL had proposed that out of the energy supplied to transmission licensee, 3.80% shall be deducted towards transmission loss and balance is liable to be delivered at delivery point at 400KV/220KV/132KV. The Commission has approved the transmission loss of 3.80% for wheeling for FY 2013-14.

Reactive Energy Charges:

246. OPTCL in its ARR application for FY 2013-14 has submitted that the Reactive Energy Charges shall be separately determined by the Commission as per Regulation 4 (5) of OERC (Determination of Open Access Charges) Regulations, 2006 and the Open Access Customers shall pay the same.

247. The Commission in order dated 06.04.2009 in Case No. 22/2009 had approved for preparation and billing of weekly Reactive Energy Charges (both provisional and final) for FY 2009-10 @ 5.75 paise/KVArh by SLDC as per Clause 1.7 of OGC during the interim period till the Commission finally approves an appropriate Reactive Energy Charges. Further, the Commission in order dated.23.03.2012 had approved Reactive energy charges provisionally @ 6.50 Paise /KVArh as per Clause 1.7 of OGC for FY 2013-14 and directs OPTCL to file the calculation of Reactive Energy Charges afresh with full justification thereof at earliest vide para 345 of the said order. OPTCL has not yet responded to the order of the Commission. So, the Commission directs that the same rate also be applicable provisionally for FY 2013-14. Further, the Commission directs the licensee to discuss the matter in the Grid Co-ordination Committee meeting and file the calculation of Reactive Energy Charges afresh with full justification thereof at the earliest.

Implementation of Intra-State ABT

248. The Commission vide its Order dated 07.02.2012 in Case No. 2 of 2012 has fixed the date of implementation of Intra-State ABT (Phase-I) in real time mode with commercial implication in the State of Odisha w.e.f 01.04.2012. The Intra-State ABT (Phase-I) is in operation since 01.04.2012.

The Intra-State ABT (Phase-II) including Generators & Captive & Co-generation plants will be implemented shortly.

Transmission Charge Payment Mechanism

249. The Commission vide Para 372&373 in Transmission Tariff order 2010-11 had stated the principle to be followed for payment of Transmission Charges of OPTCL. The said principle followed for the Financial Year 2010-11, 2011-12 & 2013-14 for payment of monthly SLDC Charges to SLDC & Transmission Charge to OPTCL shall also to be followed for the Year 2013-14.

Rebate

250. For payment of bills through a letter of credit or by payment in cash within two working days (except holidays under N.I. Act) from the presentation of bill, 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

251. 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 on the unpaid amount.

252. The transmission tariff approved as above in respect of OPTCL will become effective from 1st April, 2013 and shall continue until further order.

253. The application of OPTCL in Case No.102 of 2012 is disposed of accordingly.

Sd/-	**Sd/-**	**Sd/-**
(S.P.SWAIN) **MEMBER**	**(B. K. MISRA)** **MEMBER**	**(S. P. NANDA)** **CHAIRPERSON**

Annex - I

Table - 1
Projected Capital Expenditure for FY 2013-14

Particulars	Amount (Rs. crore)
a) Telecom	48.05
b) O&M	67.96
c) Information Technology (IT)	14.51
d) Transmission Project & Construction (Excluding Deposit Works)	485.11
e) Civil Works	24.16
Total Capital Expenditures **(a+b+c+d+e)**	**639.79**

Some of the important CAPEX expenditure s are given below:

(a) **CAPEX FOR O & M RELATED PROJECTS**:

The details of item wise capital expenditure for O&M related project are shown in the table below.

Table – 2
CAPEX for O&M Projects in FY 2013-14

Sl. No.	Line/Equipment details	Unit Rate (Rs. Lakh)	Quantity	Total Cost (Rs. Cr)
1	**PROCUREMENT OF TRANSFORMERS WITH COST OF ERECTION**			
(i)	Procurement of 160 MVA, 220/132kV transformers	715.00	1	7.15
(ii)	Procurement of 20 MVA, 132/33kV transformers	185.90	16	29.74
(iii)	Erection cost of available transformers	LS		2.20
2	**CONDUCTOR UP-GRADATION WITH HTLS**			
(i)	132kV Chandaka - Mancheswar Ckt. - II (5.88 Rkm)	LS		2.34
(ii)	132kV Chandaka - Mancheswar Ckt. - I (5.5 Rkm)	LS		2.19
(iii)	132kV Chandaka - Ranasinghpur (24.25 Rkm)	LS		9.65
3	**CONVERSION OF S/C LINES IN D/C TOWERS TO D/C LINES**			
(i)	132kV Akhusingh - Paralakhemundi (76.9 Rkm)	LS		5.39
(ii)	132kV Jajpur Road - Anandpur (30 Rkm)	LS		2.19
(iii)	132kV New Bolangir - Patnagarh (40.2 Rkm)	LS		3.12
(iv)	132kV New Bolangir - Sonepur (53.845 Rkm)	LS		4.00
TOTAL				**67.96**

(b) **CAPEX FOR TRANSMISSION PROJECT & CONSTRUCTION WING:**

It has been planned to spend an amount of **Rs.522.73 crore** on transmission related infrastructure during FY 2013-14 to increase the overall system capacity and to strengthen the transmission system network of the state, the details of which are shown in the table below.

Table- 3

CAPEX FOR TRANSMISSION PROJECTS & CONSTRUCTION in FY 2013-14

(Rs. Crore)

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
	(A) ONGOING SCHEMES				
1	400/220kV S/S at **New Duburi**	0.35	0.50	0.85	-
2	132/33kV S/S at **Anandpur** with associated line (New)	0.37	0.10	0.47	-
3	2x12.5 MVA, 132/33 kV S/S at **Nuapada** with associated line	3.23	2.77	6.00	17.16
4	2x12.5 MVA, 132/33 kV S/S at **Dabugaon** with associated line	2.31	3.69	6.00	11.11
5	2x12.5 MVA, 132/33 kV S/S at **Padampur** with associated line	2.56	2.44	5.00	14.55
6	2x12.5 MVA, 132/33 kV S/S at **Kuchinda** with associated line	1.91	3.09	5.00	5.80
7	2x12.5 MVA, 132/33 kV S/S at **Bhawanipatna** with associated line	1.89	1.50	3.39	-
8	2x12.5 MVA, 132/33 kV S/S at **Boudh** with associated line	3.10	6.00	9.10	24.43
9	2x12.5 MVA, 132/33 kV S/S at **Purushottampur** with associated line	1.12	3.27	4.39	-
10	2x12.5 MVA, 132/33 kV S/S at **Chandpur** with associated line	1.41	2.91	4.32	-
11	2x12.5 MVA, 132/33 kV S/S at **Banki** with associated line	1.27	3.47	4.74	-
12	2x12.5 MVA, 132/33 kV S/S at **Kalunga** with associated line	1.49	4.00	5.49	5.50
13	2x40 MVA, 220/33 kV S/S at **Gopinathpur** (Keonjhar) with associated line	1.14	9.22	10.36	5.21
14	2x100 MVA, 220/132/33 kV S/S at **Kuanrmunda** with LILO arrangement from existing 220 kV Budhipadar-Tarkera D/C line	3.60	15.00	18.60	0.16
15	2x160MVA and 2x20MVA 220/132/33 kV S/S at **Lapanga** with associated line	5.97	5.17	11.14	15.88
16	2x40 MVA, 220/33 kV S/S at **Bonai** with associated line		5.50	5.50	10.65
17	2x20 MVA, 132/33 kV S/S at **Barbil** with associated line	-	3.00	3.00	-
18	400kV **Ib-Meramundali** D/C line	-	0.05	0.05	-
19	400kV **Meramundali-Duburi** D/C line	-	0.50	0.50	-
20	220 kV **Padmanvpur-Balasore** line	0.03	-	0.03	-
21	220kV **Mendhasal-Bidanasi** line	0.65	-	0.65	-

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
22	220kV **Duburi old-Duburi new** D/C line	0.35	-	0.35	-
23	220kV **Bidanasi-Cuttack** D/C line	2.23	2.75	4.98	8.07
24	220kV **Bolangir-Kesinga** D/C line		6.00	6.00	51.26
25	132kV **Jagatsinghpur-Paradeep** line	2.02	2.50	4.52	4.47
26	2nd Ckt. from Loc. No. 116 of 132 kV **Chandaka- Nimapada** S/C line to Nimapada grid with one no 132 kV bay extn.	0.08	0.30	0.38	-
27	Conversion of 132/11 kV Grid S/S to 2*40 MVA, 132/33 kV S/S at **Sarasama**l (Jharsuguda)	-	2.00	2.00	6.00
28	2x12.5 MVA, 132/33 kV S/S at **Udala** with LILO arrangement of Balasore **-** Baripada line	-	4.00	4.00	12.00
29	132 kV **Salipur - Kendrapara** S/C line	-	7.90	7.90	4.36
30	2x100 MVA, 220/132 kV grid S/S at **Cuttack** with 2 nos. 220 kV feeder bay extn. at Bidanasi grid with linking arrangement at both ends	1.95	14.57	16.52	12.75
31	2x100MVA, 220/132 kV S/S at **Kesinga** with 220kV D/C line from Bolangir to Kesinga and one no. 220kV Bay extension at Bolangir	-	13.83	13.83	-
32	2x40MVA, 132/33kV S/S at **Khajuriakata** near Hindol Road with associated line	1.67	3.00	4.67	13.01
33	132kV LILO arrangement of 132kV S/C line from Meramundali to Arati Steel to 132/33kV S/S Nuapatna along with one no. of feeder bay extension at **Nuapatna**	-	2.00	2.00	2.00
34	2x20 MVA ,132/33 kV S/S at **Konark** with associated lines & 132kV feeder bay extension at Nimapara	1.91	13.65	15.56	3.92
35	Renovaion of existing 2x12.5 MVA, 132/33 kV S/S at **Ganjam**	-	2.90	2.90	-
36	2x160MVA, 220/132kV S/S at existing 400 kV S/S **Mendhasal**	-	9.47	9.47	3.88
37	2nos. 220 kV feeders from 220/132/33 kV S/S of OPTCL at **Jayanagar** to 400/220 kV S/S of PGCIL at Jayanagar with 2 nos. of 220kV bay extension at each end	-	4.00	4.00	10.29
	TOTAL (A)	**42.61**	**161.05**	**203.66**	**242.46**
(B) PROPOSED SCHEMES					

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
1	2x20 MVA, 132/33 kV S/S at **Olaver** and 2 nos. 132 kV feeder bay extn. at **Pattamundai** with 132 kV DC line from Pattamkundai to Olaver	-	-	-	10.00
2	2x40 MVA 132/33 kV S/S at **Marshaghai** (Luna) by making LILO arrangement from one ckt. of existing 132 kV Kendrapara -Paradeep D/C line	0.02	-	0.02	3.00
3	2x100 MVA, 220/132/33 kV S/S at **Dhamara** with connectivity from Bhadrak S/S	-	-	-	15.00
4	2x160MVA ,220/132 kV and 2x20MVA 132/33 kV S/S at **Karadagadia** with associated line	0.16	-	0.16	20.00
5	2x315MVA, 400kV S/S at **Lapanga** with LILO of one circuit of 400kV Bisra-Raipur line and both ckts of IB - Meramundali 400kV line at Lapanga	-	6.50	6.50	25.00
6	2x100MVA & 2x40MVA , 220/132/33 kV S/S at **Puri** with associated line	-	-	-	12.00
7	2x100MVA , 220/132/33 kV S/S at **Pratapsasan** near Balakati with associated 220 kV D/C LILO of proposed 220 kV Cuttack-Jatani line.132 kV D/C line from Pratap Sasan to Phulnakhara with 2 nos. bay at Phulnakhara	-	-	-	10.00
8	132kV D/C line from **Baripada PGCIL (Kuchei) S/S to Jaleswar** S/S with 2 nos. 132kV bay extension each at Baripada PGCIL (Kuchei) & Jaleswar	-	-	-	2.00
9	220/132/33 kV S/S at **Lahanda** near Joda with 132 kV D/C line from Lahanda to Barbil and two nos. 132kV feeder bay extension at Barbil	-	-	-	0.50
10	2x40MVA ,132/33 kV S/S at **Baliguda** with 132 kV S/C line from Phulbani to Baliguda and one no. 132kV feeder bay extension at Phulbani	-	-	-	8.00
11	2x20 MVA, 220/33 kV S/S at **Narsinghpur** with LILO arrangement of 1 ckt. of existing 220 kV Bhanjanagar-Meramundali D/C line	-	-	-	8.00

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
12	one no. 220kV feeder from proposed 220/132kV S/S of OPTCL at **Cuttack** to proposed 400/220 kV S/S at **Uttara (Jatni)** with two nos. 220kV feeder bay extension at each end	-	-	-	-
13	132kV S/C line to 132kV D/C line from PGCIL S/S **Kuchei** to 132/33 kV S/S **Baripada**	-	-	-	1.50
14	2X315MVA, 400/220/33 kV , 2x40MVA , 220/33 kV S/S at **Khuntini** with associated line	-	0.35	0.35	0.15
15	1x315MVA , 400/220kV , 1X20MVA , 220/33 kV S/S at **Nisa** near Angul with 400kV D/C line by LILO of 400kV IB-Meramundali line	-	0.35	0.35	0.20
16	400 kV S/S at **Paradeep**	-	0.35	0.35	0.20
17	400 kV S/S at **Kuarnmunda**	-	0.35	0.35	0.20
18	400 kV S/S at **Joda**	-	0.35	0.35	0.20
19	400 kV D/C line from **Paradeep** to **Utara**	-	0.35	0.35	0.20
20	2x40MVA, 220/33 kV S/S at **Chhendipada** with 220 kV D/C line on Multi Circuit tower from proposed NISA S/S to Chhendipada	-	-	-	-
21	2x12.5 MVA, 132/33 kV S/S at **Bangiriposi** with LILO of 1 ckt of Kuchei-Rairangpur line	0.25	0.50	0.75	6.00
22	2x12.5 MVA, 132/33 kV S/S at **Potangi** with S/C line on D/C tower for Sunabeda	-	0.40	0.40	6.00
23	2x12.5 MVA, 132/33 kV S/S at **Podagada** with LILO of Rayagada-Jeypore line	-	0.20	0.20	10.00
24	2x20 MVA, 220/33 kV S/S at **Malkanagiri** with LILO of Balimela-Jayanagar line	-	0.50	0.50	10.00
25	2x12.5 MVA, 132/33 kV S/S at **Umarkote** with S/C line on D/C tower from Dabugaon to Umarkote	-	0.60	0.60	5.00
26	2x12.5 MVA, 220/33 kV S/S at **Kasipur** with LILO of one ckt. of Indravati-Therubali 220 kV D/C line	-	-	-	3.50
27	2x20 MVA, 220/33 kV S/S at **Jaypatna** with associated line	-	0.05	0.05	4.00
28	132 kV D/C line from **Junagarh to Umerkote**	-	0.15	0.15	-

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
29	2x12.5 MVA, 132/33 kV S/S at **Kantabanji** with S/C line on D/C tower from Khariar to Kantabanji	-	2.50	2.50	10.00
30	2x20 MVA, 132/33 kV S/S at **Champua** with LILO arrangement of existing Palaspanga- Rairangpur to Champua	-	0.20	0.20	5.00
31	2x20 MVA, 132/33 kV S/S at **Ghatagaon** in Keonjhar distrct with associated 132 kV S/C line on D/C tower from 132/33 kV S/S Anandpur to proposed S/S at Ghatagaon and one no. 132 kV bay extention at Anandapur S/S	-	0.40	0.40	8.50
32	132 kV D/C line from proposed 220/132/33 kV S/S at **Dhamara** to proposed 132/33 kV S/S at **Olavar** & rearrangement with proposed 132 kV D/C line from Pattamundai to Olavar to make 132 kV S/C line from Dhamara to Pattamundai & 132 kV S/C line from Olavar to Pattamundai	0.11	-	0.11	5.00
33	2X40 MVA, 132/33 kV S/S at **CDA Cuttack** with associated LILO line	-	0.15	0.15	4.00
34	2X20 MVA, 132/33 kV S/S at **R.Udayagiri** with 132 kV line from Mohana with 132kV bay extension at Mohana	-	0.15	0.15	5.00
35	2X20 MVA, 132/33 kV S/S at **Muniguda** with 132kV line from Vedanta Lanjigarh an 132 kV bay extension at Lanjigarh	-	2.00	2.00	10.00
36	2X20 MVA,132/33kV S/S at **Nandapur** with 132kV line from Patangi with 132 kV bay extension at Patangi	-	-	-	-
37	2x20 MVA, 132/33 kV S/S at **Satasankha** in Puri district with associated 132 kV D/C line from proposed 220/132 kV Puri S/S to proposed 132/33 kV S/S at Satasankha	-	0.15	0.15	3.00
38	2x20 MVA, 132/33 kV S/S at **Bhograin** in Balasore district with associated 132 kV LILO line from one ckt. of proposed 132 kV Kuchei (PGCIL) - Jaleswar D/C line	-	0.10	0.10	10.00
39	220/33 kV, 2x20 MVA S/S at **Deogarh** with associated LILO line from LOC No. 330 of 220 kV Rengali-Tarekera D/C line	-	0.05	0.05	7.00

Sl. No	Loan/ Scheme/ Contract-wise Capital Works	Expenditure During FY 2012-13			Projected Expenditure during FY 2013-14
		Actuals for 1st Six Months	Projection for balance Six Months	Total	
1	2	3	4	5=3+4	6
40	132/33 kV, 2x20 MVA S/S at **Maneswar** with associated LILO line from 132 kV Sambalpur **-** Rairakhol S/C line	-	0.10	0.10	5.00
41	Conversion of 132 kV switching station at **Somanthpur** (Balasore) to 2x20 MVA, 132/33 kV S/S	-	0.50	0.50	3.40
42	Conversion of existing 132 kV S/C line from **Balasore to Somathpur** D/C line by stringing 2nd ckt. with one no. 132 kV bay extension at both ends	-	0.45	0.45	3.50
43	Renovation of existing 132/33 kV S/S at **Ganjam** (construction of 2x12.5 MVA, 132/33 kV S/S)	-	0.30	0.30	2.60
	TOTAL: (B)=	**0.54**	**18.05**	**18.59**	**242.65**
	TOTAL: (A+B) =	**43.15**	**179.10**	**222.25**	**485.11**
(C) DEPOSIT WORKS					
1	220 kV D/C line from **Budhipadar** to **Basundhara MCL**	0.82	0.10	0.92	-
2	Rly. traction line from **Jagatsingpur** to **Gorakhnath**	0.14	-	0.14	-
3	**Chandaka-Nimapara** cabling (IDCO)	1.26	6.5	7.76	5.95
4	**Tomka Railway line** from B.C. Mohanty & Sons Ltd.	0.51	-	0.51	-
5	132 kV LILO from **Khurda-Puri** for power supply to Samuka Beach near Puri S/S	0.64	5.01	5.65	6.84
6	132kV S/S at **IIT, Argul**	1.76	5.23	6.99	1.83
7	One no.220 kV bay at **Paradeep** S/S for IOCL along with 220 kV transmission line from Paradeep to IOCL	2.23	10.10	12.33	-
8	Diversion of **Paradeep-Haridaspur** line	0.05	-	0.05	-
9	132/33 kV S/S at **Mania** (Tangi) for IDCO and associated 132 kV LILO line from 132 kV ICCL-Salipur LILO at OCL to proposed 132/33 kV S/S at Mania (Tangi)	-	0.02	0.02	8.00
10	2x40 MVA, 220/33 kV Gas Insulated S/S at **infocity-II** and associated 220 kV LILO line from one ckt. of 220 kV Narendrapur -Mendhasal D/C line	-	0.05	0.05	15.00
	TOTAL: (C)=	**7.41**	**27.01**	**34.42**	**37.62**
	GRAND TOTAL: (A+B)+C=	**50.56**	**206.11**	**256.67**	**522.73**

(c) CAPEX FOR CIVIL WORKS:

OPTCL proposes capital expenditure of **Rs.24.16 crore** relating to civil works during FY 2013-14 for on-going and new projects in its two Divisions i.e. Bhubaneswar and Burla.

Annex-II

Table – 4

Upgradaion of substation completed during 2011-12 and 2012-13

Sl. No.	Sub-Station	Initial Capacity (MVA)	Final Capacity (MVA)	Capacity Addition (MVA)
CENTRAL ZONE				
2011-12				
1	Balugaon	1x40+1x20, 132/33kV	1x40+1x20+1x12.5, 132/33kV	12.5
2	Chandaka	2x40, 132/33kV	3x40, 132/33kV	40
		4x100, 220/132kV	1x160+3x100, 220/132kV	60
3	Choudwar	1x40+1x20, 132/33kV 1x10, 132/11kV	2x40+1x20, 132/33kV	30
4	Jagatsinghpur	2x20, 132/33kV	3x20, 132/33kV	20
5	Kendrapara	1x40+1x20+1x12.5, 132/33kV	2x40+1x12.5, 132/33kV	20
6	Nayagarh	3x20, 220/33kV	1x40+2x20, 220/33kV	20
7	Nuapatna	1x40+1x20, 132/33kV	1x40+1x20+1x12.5, 132/33kV	12.5
8	Paradeep	1x100+1x50, 220/132kV	1x160+1x100, 220/132kV	110
		2x20, 132/33kV	2x20+1x12.5, 132/33kV	12.5
9	Pattamundai	2x20, 132/33kV	2x20+1x12.5, 132/33kV	12.5
10	Puri	2x31.5, 132/33kV	1x40+2x31.5, 132/33kV	40
11	Ranasinghpur	2x40, 132/33kV	3x40, 132/33kV	40
12	Salipur	1x20+1x12.5, 132/33kV	1x20+2x12.5, 132/33kV	12.5
			Total	**442.5**
2012-13				
1	Bhubaneswar	3x40, 132/33kV	3x63, 132/33kV	69
2	Bidanasi	3x40, 132/33kV	1x63+2x40, 132/33kV	23
3	Chandaka	3x40, 132/33kV	1x63+2x40, 132/33kV	23
4	Dhenkanal	2x40, 132/33kV	3x40, 132/33kV	40
5	Kamakhyanagar	2x12.5, 132/33kV	1x20+1x12.5, 132/33kV	7.5
6	Paradeep	1x160+1x100, 220/132kV	1x160+1x100+1x50, 220/132kV	50
7	Phulnakhara	1x20, 132/33kV	2x20, 132/33kV	20
8	Salipur	1x20+2x12.5, 132/33kV	2x20+1x12.5, 132/33kV	7.5
			Total	**240**
NORTH ZONE				
2011-12				
1	Balasore	2x100, 220/132kV	1x160+1x100, 220/132kV	60
2	Jajpur Town	1x40+1x20, 132/33kV	2x40+1x20, 132/33kV	40
3	Joda	1x40+2x20+1x12.5, 132/33kV	1x40+3x20, 132/33kV	7.5
			Total	**107.5**
2012-13				
1	Balasore	1x160+1x100, 220/132kV	2x160, 220/132kV	60
		2x40+1x12.5, 132/33kV	1x63+2x40, 132/33kV	50.5
2	Bhadrak	3x40,132/33kV	1x63+2x40,132/33kV	23
			Total	**133.5**
SOUTH ZONE				
2011-12				

Sl. No.	Sub-Station	Initial Capacity (MVA)	Final Capacity (MVA)	Capacity Addition (MVA)
1	Digapahandi	1x20+1x12.5, 132/33kV	2x20, 132/33kV	7.5
2	Jayanagar	1x20+1x12.5, 132/33kV	2x20+1x12.5, 132/33kV	20
3	Phulbani	1x12.5+2x7.5, 132/33kV	2x12.5+1x7.5, 132/33kV	5
4	Sunabeda	2x12.5, 132/33kV	3x12.5, 132/33kV	12.5
5	Tentulikhunti	2x12.5, 132/33kV	3x12.5, 132/33kV	12.5
			Total	**57.5**
2012-13				
1	Aska	2x40, 132/33kV	2x40+1x20, 132/33kV	20
2	Berhampur	1x40+1x20, 132/33kV 1x12.5, 132/11kV	2x40+1x20, 132/33kV	27.5
3	Chhatrapur	2x20, 132/33kV	3x20, 132/33kV	20
4	Digapahandi	2x20, 132/33kV	2x20+1x12.5, 132/33kV	12.5
5	Mohana	1x12.5+1x5, 132/33kV	2x12.5, 132/33kV	7.5
6	Narendrapur	2x160, 220/132kV	2x160+1x100, 220/132kV	100
7	Phulbani	2x12.5+1x7.5, 132/33kV	1x40+2x12.5, 132/33kV	32.5
			Total	**220**
WEST ZONE				
2011-12				
1	Bargarh	2x40, 132/33kV	3x40, 132/33kV	40
2	Barkote	2x20, 220/33kV	1x40+1x20, 220/33kV	20
3	Junagarh	1x20+1x12.5, 132/33kV	2x20, 132/33kV	7.5
4	Kesinga	1x40+1x20, 132/33kV	1x40+2x20, 132/33kV	20
5	Patnagarh	1x20+1x12.5, 132/33kV	1x20+2x12.5, 132/33kV	12.5
6	Sonepur	2x12.5, 132/33kV	1x20+2x12.5, 132/33kV	20
			Total	**120**
2012-13				
1	Bolangir Old	2x40, 132/33kV	2x40+1x12.5, 132/33kV	12.5
2	Katapali	2x20, 132/33kV	1x40+2x20, 132/33kV	40
3	Sambalpur	2x31.5+1x20, 132/33kV	1x40+2x31.5, 132/33kV	20
			Total	**72.5**

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