

**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. 83/2013**

**DATE OF HEARING : 05.02.2014**

**DATE OF ORDER : 22.03.2014**

**IN THE MATTER OF:** An application for approval of Annual Revenue Requirement and determination of Transmission Tariff for FY 2014-15 filed by OPTCL under Sections 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 2014-15.

**ORDER**

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL), a Govt. Company registered on 29<sup>th</sup> 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 31<sup>st</sup> March, 2004. 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 (Conduct of Business) Regulations, 2004, at Appendix 4B issued u/S.16 of the Act, as modified by Commission's Order dated. 27<sup>th</sup> October 2006.

2. OPTCL submitted an application in respect of its Annual Revenue Requirement (ARR) and determination of its Transmission Tariff for the FY 2014-15. The said application was duly scrutinized, registered in Case No.83 of 2013 and admitted for hearing. In the consultative process, the Commission heard the applicant, objectors, Consumer Counsel, representative of the State Government and orders as follows:

**PROCEDURAL MATTERS (Para 3 to 10)**

3. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for determination of Tariff) Regulations, 2004, licensees/deemed licensees are required to file their ARR within 30<sup>th</sup> November every year in the prescribed formats. OPTCL as a deemed licensee submitted its ARR application for 2014-15

before the Commission on 30.11.2013. After due scrutiny and admission of the matter, the Commission directed OPTCL to publish its ARR application in the approved format in the leading and widely circulated in English language in one issue each of a daily English and Odia daily newspaper and in Odia language in one issue of daily Odia newspaper and also the matter was 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 OPTCL published the said public notice in the leading daily English and Oriya newspapers. The Commission issued individual notice to the objectors and 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 11 nos. of objections/suggestions from the following persons/ associations/ institutions/ organisations.
  - (1) Shri G.N. Agrawal, Advocate, Convener-cum-Gen. Secretary, Sambalpur District Consumers Federation, Balajee Mandir Bhawan, Khetrajpur, Sambalpur-768003, (2) M/s Power Tech Consultants, 1-A, /6, Swati Villa, Surya Vihar, Link Road, Cuttack-753012, (3) M/s Facor Power Limited, At/Po. Randia, Dist-Bhadrak-756135, (4) M/s Visa Steel Limited, Kalinganagar Industrial Complex, At/Po. Jakhapura-755026, Dist-Jajpura-755026, (5) M/s Ferro Alloys Corporation Ltd., GD.2/10, Chandrasekharpur, Bhubaneswar-751023, (6) M/s. Utkal Chambar of Commerece Industry, N/6, IRC Village, Nayapalli, Bhubaneswar-15,(7) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012,(8) Shri R.P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB, Plot No.775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013,(9) M/s Adhunik Metaliks Limited, IPICOL House, 3rd Floor, Annexe Building, Janapath, Bhubaneswar-751022,(10) Shri. Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Appartments, Telenga Bazar, Cuttack-753009 and (11) Shri A K Bohra, Chief Executive Officer (Comm), NESCO, WESCO & SOUTHCO, Regd. Office- Plot No. N-1/22, IRC Village, Nayapalli, Bhubaneswar-15.All the above named objectors along with the representative of Dept. of Energy, GoO were present were present during tariff hearing except objector No. 10 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 05.02.2014 at 11 AM and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission also issued individual notice to objectors and 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 05.02.2014 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 15.02.2014 at 3.30 PM at its premises to discuss about the ARR applications and tariff proposals of licensees for FY 2014-15. 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 2014-15 (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 Hon'ble 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 2014-15.

#### **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 106 nos. grid sub-stations of different voltage classes and EHT transmission line of 11527.727 ckt. km. as shown in the table below.

**Table-1**

<b>Sub-Station and Line Details</b>	
400/220 kV S/S	3
220/132/33 kV S/S	14
220/132 kV S/S	1
220/33 kV S/S	5
132 kV Sw.Stn.	17
132/33 kV S/S	62

132/33/25 kV S/S	1	
132/33/11 kV S/S	1	
132/11 kV S/S	2	
<b>Total No. of Sub-Stations</b>	<b>106</b>	
<b>Voltage Level</b>	<b>Lines (ckt. km.)</b>	<b>Bays</b>
400 kV	518.234	32
220 kV	5605.988	250
132 kV	5403.505	699
33 kV		775
25 kV		2
11 kV		18
<b>Total</b>	<b>11527.727</b>	<b>1776</b>

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. FY 2013-14 is the terminal year of the CERC Regulations, 2009 and Hon'ble CERC is in the process of finalizing the CERC Regulations, 2014. In absence of norms for FY 2014-15, OPTCL has proposed its ARR & Transmission Tariff Application for FY 2014-15 as per the related provisions pertaining to the conduct of Business Regulations and Tariff determination as provided under OERC Regulations, 2004 and as per the CERC (Terms and Condition of Tariff) Regulations, 2009 respectively.

The costs of the deemed transmission licensee OPTCL for the FY 2014-15 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
- Rebate

**Details of Fixed Charges**

15. OPTCL proposes **fixed charges for FY 2014-15 as Rs.948.95 crore** including O & M Expenses of Rs.533.61 crore, Interest on Loan Capital of Rs.130.06 crore, Depreciation of Rs.176.02 crore, Return on Equity of Rs.68.42 crore and Interest of Working Capital of Rs.40.85 crore.

### **Depreciation**

16. OPTCL has projected depreciation at **Rs.176.02 crore** based on the estimated book value of assets for FY 2014-15 as per 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 243 crore by end of 2013-14 from State Govt. Further, Rs.50.00 crore is estimated to be received during 2014-15 from State Govt. as equity contribution for setting up transmission projects in remote areas. Thus, the total amount of equities works out to Rs.353.07 crore. Therefore, the licensee has projected ROE @19.38% post-tax basis on the equity share capital of Rs.353.07 crore which amounts to **Rs.68.42 crore** for FY 2014-15.

### **Interest on Working Capital**

18. Based on CERC norms, OPTCL has calculated its working capital needs at Rs.282.67 crore for the FY 2014-15. Taking 14.45% as the rate of interest, interest on working capital amounts to **Rs.40.85 crore for FY 2014-15**. 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.17.03 crore** has been projected for Contingency Reserve for the FY 2014-15.

#### **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.0.52 crore** for the FY 2014-15.

#### **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 2012-13. The system availability of transmission network of OPTCL for FY 2012-13 has been worked out as **99.89%**. OPTCL has proposed the incentive of **Rs.10.47 crore** for FY 2012-13 to be allowed in the ARR of FY 2014-15.

#### **Rebate**

22. OPTCL proposes that for payment of monthly bill, the Open Access Customer shall be entitled to a rebate of 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 1% of the amount if paid within 30 days of the presentation of the bill. OPTCL has projected the rebate amounting to **Rs.11.83 crore**.

**Other Income and Cost/ Miscellaneous Receipts:**

23. OPTCL estimates that it will earn Miscellaneous Receipts of **Rs.12 crore** during FY 2014-15 in line with the trend of revenue earning during FY 2013-14. The same has been deducted from the gross revenue of OPTCL to arrive at the ARR for FY 2014-15, to be recovered from LTOA customers.

**Transmission Loss**

24. OPTCL proposes Transmission Loss at 3.75% for FY 2014-15. The actual transmission loss in April 2013 – September 2013 period was 3.75% against Hon'ble Commission's approval of 3.8% for FY 2013-14.
25. The summary of the proposed Annual Revenue Requirement against different heads for FY 2014-15 is tabulated below.

**Table - 2**  
**Summary of Annual Revenue Requirement of OPTCL for FY 2014-15**  
**(Rs. Crore)**

ITEMS	Proposal for OPTCL for FY 2014-15	
<b>A. FIXED COST</b>		
1) O&M Expenses		<b>533.61</b>
(i) Employees Cost including Terminal Benefits	361.38	
(ii) R&M Cost	146.77	
(iii) A&G Cost	25.46	
2) Interest on Loan Capital		130.06
3) Depreciation		176.02
4) Special Appropriation		0
5) Return on Equity		68.42
6) Interest on Working Capital		40.85
<b>Sub-Total (A)</b>		<b>948.95</b>
<b>B. Additional Expenses</b>		<b>39.85</b>
1) Contingency Reserve	17.03	
2) GCC Expense	0.52	
3) Incentive for system availability	10.47	
4) Rebate	11.83	
<b>Total Trans. Cost (A+B)</b>		<b>988.80</b>
<b>C. Less Misc. Receipts</b>		12.00
<b>D. ARR to be recovered from LTOA Customers i.e. OPTCL's Annual Revenue Requirement</b>		<b>976.80</b>

**Expected Revenue from Transmission Charges**

26. The revenue receipts from various transmission charges at the existing transmission tariff of 25 P/U shall be **Rs.686.61 crore**. Revenue to be earned by OPTCL from wheeling of 26995 MU to DISCOMs and other long term open access customers for FY 2014-15 at the existing rate is shown in the table below.

**Table – 3**  
**Revenue at existing transmission tariff**

Sl. No.	Customer	OERC's approval for FY 13-14	Energy demand as per estimation by DISCOMs for FY 14-15 (MU)	Rate (P/U)	Tr. Loss (%)	Expected part of energy to be handled in DISCOMs' network for which no Trans. Charge to be claimed	MU to be handled by OPTCL including Loss	Amount (Rs. Cr)
1	CESU	7937	9100	25	0	150	<b>26995</b> <b>(27145-150)</b>	674.88
2	NESCO	5269	7080	25				
3	WESCO	6655	7165	25				
4	SOUTHCO	3187	3800	25				
	<b>Total DISCOMs</b>	<b>23048</b>	<b>27145</b>					
5	Emergency Sale to CGPs	100	10	25	3.75		10	0.25
6	Wheeling to industries from CGPs	300	450	25			468	11.69
	<b>Total</b>	<b>23448</b>	<b>27605</b>				<b>27463</b>	<b>686.81</b>

From the above table, it is revealed that OPTCL will land a revenue deficit of Rs.289.99 crore (976.80 – 686.81) at the existing transmission tariff.

27. 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 2014-15 as follows.

**Proposed Tariff to Meet the Revenue Requirement for FY 2014-15**

**Table – 4**  
**Computation of Transmission Tariff**

(a) Total Annual Revenue Requirement in Rs. Crore	976.80
(b) Total Million Units proposed for Wheeling in MU	27455
Proposed Transmission Tariff (P/U) = (a/b)	<b>35.58</b>
Existing transmission tariff (P/U)	25.00
Rise over existing transmission tariff	<b>42.32%</b>

**Open Access Charges**

28. 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.
29. 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. It is submitted that the Short Term Open Access Charges is proposed and that the same will be adjusted in the

revenue as year-end-adjustments at the end of the year on actual basis. Therefore, OPTCL considers Short Term Access Charges as Nil in this Application.

30. 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 2014-15**

<b>DETAILS</b>	<b>In Rs./unit approach</b>
Net Annual Revenue Requirement (Rs. crore)	976.80
Proposed Energy to be transmitted in OPTCL Network (MU)	27455
Proposed Transmission Tariff (P/U)	35.58
Power flow (equivalent of 27455 MU) in MW	3134
Long term Open Access Charges in terms of Rs./MW/Day	8539
Short term Open Access Charges in terms of Rs./MW/Day	2135

**Reactive Energy Charges:**

31. As per Regulation 4 (5) (i) under Chapter-II (CHARGES FOR OPEN ACCESS) of the Regulations 2006, the Hon'ble 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.

**Rebate:**

32. On payment of monthly bill, the Open Access Customer shall be entitled to a rebate of 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 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% 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 2014-15 are:

- (i) Annual Revenue Requirement at Rs.976.80 crore.
- (ii) Recovery of Transmission Charge @ 35.58 P/U.
- (iii) Transmission Loss for wheeling as 3.75% 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 26995 MU from Generating Stations to the supply points of DISCOMs.
- (ii) By charging the rate applicable on CGPs like IMFA & NALCO for supply of 10 MU Emergency Power & Back-up Power to their CGPs and load centres located elsewhere in Odisha.
- (iii) By charging the rate applicable on other LTOA customer like IMFA & NALCO for wheeling of their surplus power of 450 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.779.66 crore** during FY 2014-15 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 2014-15 are given in Annex - A.

#### **VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2014-15 (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 2014-15. 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 2014-15 at about 67 per cent more than that approved for FY 2013-14. In last year (FY 2013-14), the total ARR was reduced by 0.2% from approved ARR for FY 2012-13.
41. The areas of concern include the increase in employee cost (24.92%), R&M Cost (144.62%), A&G cost (13.71%), interest on loan capital (224.83%), depreciation (96.89%) and incentive (109.4%). The comparative figures of components of ARR are given in table below. OPTCL has proposed Rs.31.46 cr. and Rs 11.83 cr. as interest on working capital and rebate respectively, which the Commission has not approved in earlier tariff orders.

**Table – 6**  
**Comparative Annual Revenue Requirement of OPTCL**

ITEMS	Approved for 2012-13	Approved for 2013-14	OPTCL's Proposal for FY 2014-15	13-14 vs. 12-13	14-15 vs 13-14
Employees Cost including Terminal Benefits	318.48	289.30	361.38	-9.16%	24.92%
R&M Cost	95.00	60.00	146.77	-36.84%	144.62%

ITEMS	Approved for 2012-13	Approved for 2013-14	OPTCL's Proposal for FY 2014-15	13-14 vs. 12-13	14-15 vs 13-14
A&G Cost	21.25	22.39	25.46	5.36%	13.71%
Interest on Loan Capital	35.33	40.04	130.06	13.33%	224.83%
Depreciation	78.57	89.40	176.02	13.78%	96.89%
Return on Equity	22.17	37.40	68.42	68.70%	82.94%
Interest on Working Capital			40.85		
<b>Sub-Total</b>	570.80	538.53	948.96	-5.65%	76.21%
Special Appropriation	38.71	53.40	0.00	37.95%	-100.00%
Contingency Reserve			17.03		
GCC Expense including SLDC charges	1.02	0.94	0.52	-7.84%	-44.68%
Incentive for system availability	2	5.00	10.47	150.00%	109.40%
Rebate			11.83		
<b>Total</b>	612.53	597.87	988.81	-2.39%	65.39%
<b>Less Misc. Receipts</b>	25.51	12.00	12.00	-52.96%	0.00%
<b>Annual Revenue Requirement</b>	587.02	585.87	976.81	-0.20%	66.73%
<b>Transmission Charges (paise/unit)</b>	25.00	25.00	35.58	0.00%	42.32%

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 5.56% from April, 2013 to December, 2013. 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 2014-15. The terminal benefit and differential pension may be reviewed as per the independent valuation report of the actuary appointed by the OERC. Incentive and rebate claimed by OPTCL needs review. Transmission loss may be fixed at a reasonable level.

#### **VIEWS OF OBJECTORS ON TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2014-15 (Para 43 to 97)**

##### **Legal Issues**

43. One Objector has the view that the separation of OPTCL from GRIDCO is only cosmetic and both operate as one institution. Hence OPTCL is violating the 3<sup>rd</sup> 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. Any regulation, policy, statutory notifications considered by the Commission to determine the transmission tariff can not be treated as a "Tariff Regulations" of OERC unless these principles are embodied in the Regulations. The Commission has placed in public domain detailed Regulations for determination of

“Generation Tariff” and “Retail Supply Tariff”. However, the Commission has not notified the Draft Regulations for determination of “Transmission Tariff”. In view of above, the Commission may not determine the ARR but allow the present transmission tariff at the rate of 25 P/U to continue.

### **Transmission Loss**

45. OPTCL has failed to arrest the high transmission loss due to non-completion of most of the lines including those entrusted to PGCIL. 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.
46. OPTCL should have under taken energy audit of lines and sub-stations to know the quantum of transmission loss in the system. 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.
47. 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 should have been reduced to the level of commitment of 3%, but OPTCL wants to continue with 3.8% transmission loss and proposed to bring down to 3.75% only. This alone is increasing the power procurement requirement of GRIDCO and adding to the bulk supply price. Hon’ble Commission should not allow transmission losses more than 3% at least from this year onwards.
48. DISCOMs submit that the proposed transmission loss of 3.75% 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.

### **Capital Expenditure**

49. 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.
50. OPTCL should confirm that necessary PLCC and SCADA equipments for online data transmission to SLDC from the EHT feeders of all EHT substations have been provided.
51. 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.
52. OPTCL should confirm the schedule for completion of the works relating to provision of PLCC/SCADA equipments in each 36 substations.

53. 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.
54. Licensee 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 capax by the Hon'ble Commission.

#### **R&M Expenditure**

55. Actual expenditure for a financial year is less than the amount approved by the OERC. Request OPTCL to submit an itemized list of the R&M expenses already carried out in FY 2013-14. The Commission may allow only 4% increase in the earlier actual R&M expenses. R&M expenses may be approved at Rs 61 crore.
56. The actual R&M expenses for FY 2012-13 (upto November 2012) were Rs.37.86 crore against the approved figure of Rs 95.02 crore. The approved R&M expenditure for FY 2013-14 was Rs 60 crore. Even in the absence of fund constraint, the levels of expenditure are low as compared to the approved R&M expenses. The Commission ought to consider a reasonable increment of 6% per annum over the actual cost for FY 2010-11. R&M expenses for FY 2014-15 ought to be Rs 67.20 crore considering 12% increase over the approved expenditure of 2013-14 and that the same can be trued up as and when actual expenditures are submitted after necessary prudence checks.
57. OPTCL has to produce all relevant documents regarding R&M expenses proposed, approved and actual expenditure since 2000-01 till 2013-14.

#### **Employee and A & G Cost**

58. OPTCL could not touch the actual employee cost figure of Rs 280 crore per annum even though every year OPTCL submits an optimistic employee cost in the range of Rs 340 crore – Rs 360 crore. The major reason for the reduced actual employee cost is due to deployment of less number of manpower. Request OPTCL / Commission to ask for as clarification from the Govt of Odisha when the report of NPC is going to be approved and implemented. Average increase in employee cost is around 2%. The Commission may allow only 2% increase in the present actual employee cost. Employee cost may be approved at Rs 296 crore.
59. The employee cost, including terminal benefits, of OPTCL may be allowed at Rs.288.80 crore subject to due scrutiny by the Commission. Regarding terminal benefits, 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 508.30 Cr may be amortized in 4 years starting from FY 2014-15. Thus Rs 127.08 cr may be allowed for FY 2014-15.
60. Request OPTCL to justify why they have always crossed the approved expenses without obtaining necessary consent from the Commission. Average increase in A&G expenses is around 6%. Expenses may be approved at Rs 24 crore.
61. A&G cost proposed, approved and actual expenditure since 2000-01 to 2013-14 may be produced.

62. OPTCL may be allowed an amount of Rs.23.83 crore towards the A&G expenses for FY 2014-15 i.e. escalation of 7.5% (rate of inflation as measured by WPI) is allowed over the approved figure of FY 2013-14 including license fee and inspection fee.

#### **Depreciation**

63. Request the Commission not to allow any special appropriation in the head of depreciation. 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. Request not to allow any capitalization unless the work is completed and commissioning has been declared. Depreciation may be approved at Rs 94 crore.
64. 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.108.34 crore at pre-92 rate.

#### **Interest on Loan**

65. Interest on loan may be approved at Rs 48.74 crore (central govt loan of Rs 1.01 crore and institutional loan of REC and PFC of Rs 47.73 crore).

#### **Interest on Working Capital**

66. There is no need for working capital as OPTCL has surplus fund available with it. So, interest on working capital may be disallowed.
67. 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.

#### **Additional Expenses**

68. Rebate as proposed by OPTCL may be disallowed. In accordance with RST order, transmission system availability should be fixed at a minimum value of 99% for incentive. According to that incentive for FY 2012-13 would be Rs 4.93 crore.

#### **Contingency Reserve**

69. OPTCL has a balance of Rs 138.93 crore in contingency reserve, therefore contingency reserve further claimed by OPTCL should not be allowed. However, provision towards contingency reserve may be allowed as per audited actual of 2013-14, wherein OPTCL has quantified the amount invested in different Govt securities.

#### **Return on Equity**

70. Request to disallow the return on equity on Rs 60.07 crore (available at the time of de-merger) and Rs 50 crore (yet to be received). The amount of Rs 243 crore may be considered as equity and Rs 47.09 crore may be approved.
71. 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 243 crore by way of equity contribution, which it has received as on 31-03-2014. DISCOMs submit that the return @ 19.38% on the equity value of Rs 243 crore may be allowed i.e. Rs 47.09 crore.

#### **Past Losses/Pass through Expenses**

72. The claim of pass through expenses has no merit as the Commission found a surplus in trueing up exercise based on audited data.

**Special Appropriation:**

73. DISCOMs proposed to exclude the special appropriation in computation of the OPTCL ARR for 2014-15. 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**

74. ARR for FY 2014-15 may be approved at Rs 578.31 crore. Considering energy to be handled as 27463 MU, the transmission charges would be 21.06 P/U.
75. OPTCL proposed an increment in transmission tariff without any improvement in the quality of transmission and reduction in the transmission loss. The Commission may verify the figures proposed by OPTCL critically and reduce the transmission tariff compared to last year.
76. DISCOMs submitted that there will be revenue surplus of Rs.92.53 crore during FY 14-15 instead of the Revenue Gap of Rs.290 crore proposed by OPTCL base on existing transmission tariff of 25.00 P/U.

**Miscellaneous Income and Income from Wheeling**

77. Request the Commission to consider Rs 15 crore as misc receipt considering OPTCL has already received around Rs 7.26 crore.
78. The Commission should consider an amount of Rs.17.50 crore towards income from Inter State Wheeling in line with the order of ATE.

**Other Issues**

79. OPTCL having old lines requires proper up-gradation.
80. Erection of 132/33 kV sub-stations is the responsibility of OPTCL but are to be properly approached by DISCOMs and GRIDCO which is not being done with sincerity.
81. To implement Rajib Jyoti and Biju Gramyajyoti, proper coordination of GRIDCO / OPTCL and DISCOMs are required. For this purpose OPTCL is to provide proper power.
82. OPTCL may clarify the present status of 400/220/132 kV S/S at Chendipada (Nisha) as the IPPs which are supposed to be connected with the substation are in final stage of completion. OPTCL has proposed about construction of 1X315 MVA, 400/220 kV, 1X20 MVA, 220/33 kV S/S at Nisha near Angul with 400 kV DC line by LILO of 400 kV IB-Meramunduli line. Both the above work at Nisha are duplicated and request OPTCL to revise the proposed scheme list.
83. Request OPTCL to clarify the exact status of 2X100 MVA, 3X40 MVA, 220/132/33 kV S/S at Chhendipada. Request to include this work in the list of capital work so that necessary financing will be easier for OPTCL in future.
84. The Commission may direct OPTCL to give an undertaking through Affidavit that they would supply quality power at proper voltage to all the consumers of the State, which has not been supplied during FY 2013-14.
85. 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 to maintain the said lines and substations for quality power supply.

86. 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. The licensee has to produce a status report what steps they have taken for quality power supply to the consumer and meet the needs of the state.
87. 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.
88. 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.
89. OPTCL should produce the status report about the joint venture company.
90. 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.
91. An objector suggests that all 400 / 220/ 132 kV existing line and upcoming lines and existing substations and upcoming substations in coastal area should be build to withheld the wind speed of 300 km / hour with respect to super cyclone and recent Phailine.
92. OPTCL has failed miserably in all 3 key performance indicators: not a single project is commissioned in schedule time (recently PGCIL has commissioned 765 km Solapur–Raichur line 5 months ahead); system loss as per Kanungo Committee recommendation for FY 2014-15 should have crossed 2.5% but OPTCL has asked 3.75%; system availability is not appreciable.
93. Re-structuring of OPTCL is urgent considering that it has lost its core competence and is depending on central agencies for several works.
94. The ARR for 2014-15 seem to have been arrived against fictitious and imaginary figures, as none of the Licensees have ever undertaken an audit by recognized auditors.
95. The ongoing process for determination of ARR is not only beyond the scope of an ordinary consumer, owing to which almost no consumer has ever dared to participate in the public hearings. The so called public hearing process has turned to be a formality only.
96. Month wise actual data for the total energy wheeled and financial figures on different heads pertaining to FY 2013-14 are to be provided by OPTCL.
97. 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 2013-14 and the resultant benefit if any may be passed on to the consumers by way of truing up exercise.

## **REJOINDER BY OPTCL TO THE QUERY OF OBJECTORS (Para 98 to 183)**

98. In response to the views of objectors on the ARR and Tariff Application of OPTCL for 2014-15, OPTCL had filed rejoinders for the same. The response of OPTCL has been broadly classified into the following issues.

### **Legal Issues**

99. OPTCL, a wholly owned Government of Odisha Undertaking, has been incorporated as a separate entity under the Companies Act, 1956. The Corporation is carrying on the business of transmission of electricity as per provisions of the Memorandum of Association of the Corporation and as per licence granted by the OERC. Being a Government Company, the Directors are appointed by the State Govt. in accordance with the provisions of the Articles of Association of the Corporation. The Board of Director of OPTCL is different from that of Board of Director of GRIDCO so far as functional and independent Directors are concerned. The Corporation is not engaged in the business of trading of electricity in any form and not violating the provisions of the Electricity Act, 2003.
100. The Commission has engaged Consultants for assisting the Commission for revision of old Regulations and framing new Regulations. Regulations for determination of “Generation Tariff” and “Retail Supply Tariff” are placed in the public domain. It is expected that for “Transmission Tariff” also, the draft Regulations will be made available inviting public views/suggestions and finalized thereafter.
101. OPTCL has filed the present ARR and Transmission Tariff application before the Commission on 30.11.2013 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. The Commission would dispose of the application following the extant procedure. OPTCL will abide by the norms of the Transmission Tariff Regulations after it is finalized and accordingly file its application for future years.

### **Quality of Supply**

102. 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.

### **Transmission Loss**

103. The Table below indicates the transmission loss approved by the Hon’ble Commission for the last 5 years vis-à-vis actual transmission loss occurred in OPTCL’s EHT network.

**Table - 7**  
**Transmission loss in OPTCL network**

<b>Year</b>	<b>OERC Approval</b>	<b>Actual</b>
2008-09	4.50%	4.52%



2009-10	4.00%	4.11%
2010-11	4.00%	3.93%
2011-12	3.90%	3.88%
2012-13	3.80%	3.84%

104. The detailed calculation of Transmission Loss of 3.84% for 2012-13 and 3.75% for the period April'13 to September'13 (1st 6 months of FY 2013-14) in OERC approved format have been enclosed with the present ARR application. The transmission loss has been estimated on the basis of energy flow data. Based on the present trend, OPTCL has proposed the Transmission Loss of 3.75% for the ensuing year 2014-15.
105. The transmission loss is purely a technical loss and is a function of real time injection of power by a number of generators, system configuration and power flow requirements at different load centres. Thus, OPTCL has no control over the same at any point of time. 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.
106. Over the years OPTCL has been continuously undertaking construction of new lines & sub-stations as well as upgradation of capacity of the existing system for strengthening of the transmission infrastructure with an objective of meeting the future demand, reliability as well as quality of power supply and reduction of transmission loss. As a result, the transmission loss is gradually reducing year over year as evident from the data on transmission loss.
107. The transmission loss in OPTCL system is one of the lowest in the country compared to other transmission utilities. Hence, OPTCL does not agree to the suggestion for reducing the transmission loss significantly.
108. Steps taken by OPTCL for Energy Audit of Transmission Elements are mentioned below:
  - a. 580s. of 0.2s class ABT compliant Meters have been commissioned.
  - b. One Energy Audit (EA) Cell has started functioning under O&M Wing.
  - c. Load Flow Data on monthly basis are being collected from these Audit Meters.
  - d. Discrepancies in respect of Metering Convention & Accuracy Class of Instrument Transformers have been identified at certain locations and are being sorted out.
  - e. The assessment of losses across individual transmission elements like Feeders & Auto / Power Transformers will be made and remedial measures will be taken on priority basis, where required, after the discrepancies mentioned above are addressed.

#### **System Availability**

109. OPTCL is planning and implementing substantial number of projects under the categories outlined below to strengthen its transmission system for ensuring quality, adequacy & reliability of power supply in the State.

- a. Construction of new sub-stations & lines taking in to consideration the loading constraint of the existing system as well as demand projections by the DISCOMs.
  - b. 'Conversion of S/C Lines to D/C Lines' and 'Conversion of Radial System to Ring System' for providing redundancy in the supply system as well as for meeting the future load growth.
  - c. Augmentation of Installed Capacity at existing grid sub-stations keeping in view the additional load requirement projected for different years. The augmentation plan is inclusive of the n-1 contingency condition. In FY 2012-13, 911.5MVA of transformation capacity has been added at 24 nos. of grid sub-stations. Similarly, in FY 2013-14 (till January'14) 421.5MVA transformation capacity has been added at 12 nos. of grid sub-stations.
  - d. Uprating of conductors in the stressed EHT Lines from conventional ACSR to state-of-the-art HTLS (High Temperature Low Sag).
  - e. Installation of 33kV Capacitor Banks for improvement of voltage profile at identified grid sub-stations. In FY 2013-14 (till January'14), 155MVAR has been added at 9 nos. of grid sub-stations. Balance 120MVAR are under installation at 11 nos. of sub-stations and scheduled to be commissioned within March'14.
110. The 'Transmission System Availability' figures attained by OPTCL over the last 3 years are – 99.84% (2010-11), 99.84% (2011-12), 99.89% (2012-13). The Central Electricity Authority (CEA) has recently declared OPTCL as the Best Performer (GOLD Medal) in the country under 'Transmission System Availability' category for FY 2012-13. For the FY 2009-10, OPTCL has earlier been conferred with the Bronze Medal. This shows effort of OPTCL to provide quality supply to DISCOMs at its grid sub-station. DISCOMs are required to supply quality power to end consumers of the State through their distribution network.

### **Transmission Projects**

111. As per Licence Conditions of OPTCL, for any major investment of Rs. 10 Cr. or more, OPTCL is obtaining the Commission's approval justifying the purpose of investment along with the cost-benefit analysis of the respective project. The details of the Ongoing Projects along with OERC approval have been 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. Hence, OPTCL's proposal in respect of new projects is fully justified.
112. 400kV S/S at Chendipada (Nisha)- This project is shown at sl.3 of Table-18 (page 27 of ARR application) and is exclusively the sub-station part while sl.9 (page 30) indicates the 400kV DC line by LILO of 400kV IB-Meramundali line. Required land for the sub-station has not been allotted in favour of OPTCL. 220kV S/S at Chhendipada- Required land for the sub-station has not been allotted in favour of OPTCL. The project is scheduled to be completed in 2015-16.
113. The power evacuation plans from IPPs are being discussed amongst IPPs, GRIDCO, OPTCL, PGCIL and CEA from 2000 onwards. Both GRIDCO and OPTCL have been raising the issues from time to time but PGCIL made an isolated plan without taking into consideration the drawl of state share of power by OPTCL. GRIDCO/OPTCL strongly opposed to the evacuation scheme of PGCIL in the Standing Committee meeting held on 28.12.2010 at New Delhi. Several rounds of meetings have taken

place among CEA, PGCIL, GRIDCO, OPTCL and IPPs on evacuation of state share of power.

114. Since, IPPs were not interested to connect with the state network, OPTCL filed an application before OERC on 08.09.2011 (Case No. 71/2011) with a plan of connectivity of 16 nos. IPPs, OPGC and NTPC in addition to the existing hydro power station seeking approval of the evacuation plan and for direction to Respondent IPPs to have connectivity as envisaged in the evacuation plan and subsequently submitted a revised evacuation plan on 05.10.2012 taking into consideration of 29 nos. IPPs.
115. In the meantime, on the above matter, there was discussion among PGCIL, CEA, OPTCL and GRIDCO on 10.12.2012 at New Delhi and then among PGCIL, OPTCL and GRIDCO on 24.12.2012 at Bhubaneswar. OPTCL planned to connect 1 x 350 MW of M/s. GMR Phase-I and 1 x 660 MW of M/s. LANCO Babandh Phase-I. As per discussion with PGCIL in the Standing Committee Meeting held on 05.01.2013, connectivity of 2270 MW of power to OPTCL network was as detailed below:-
 

a)	M/s. Sterlite	-	1 unit	-	600 MW
b)	M/s. GMR	-	1 unit	-	350 MW
c)	M/s. LANCO	-	1 unit	-	660 MW
d)	M/s. OPGC	-	1 unit	-	660 MW
<b>Total</b>					<b>- 2270 MW</b>
116. Subsequently, OERC vide interim order passed in above stated Case No. 71/2011 directed the Director (Engg.), OERC to deliberate with officials of OPTCL / GRIDCO and 7 nos. IPPs (those who are in advanced stage of commissioning namely M/s. JITPL, M/s. GMR, M/s. Monnet, M/s. Sterlite, M/s. Ind-barath, M/s. Lanco Babandh & M/s. Maa Durga Thermal) regarding issues on connectivity / evacuation arrangement. On 11.04.2013 and 16.04.2013, meetings were conducted by Director (Engg.), OERC in presence of officials of GRIDCO, OPTCL & representatives of above IPPs. A consolidated connectivity plan of those 7 nos. IPPs indicating the Temporary (Short-Term) Plan and Permanent (Long-Term) Plan was prepared accordingly.
117. Further, OPTCL has taken some projects under IPP evacuation plan i.e. 400kV sub-station at Kuanrunda, Khuntuni and Paradeep along with associated 400kV lines to be executed in PPP mode. M/s. PriceWaterhouse Coopers Private Ltd. and M/s. Ernst & Young LLP. Have been engaged to provide Transaction Advisory Services for these projects under Package-A and Package-B respectively. Applications have been filed before Hon'ble OERC for approval of Unitary Charge and Bidding Documents of aforesaid projects under Package-A and B.
118. Out of 29nos. IPPs, M/s Sterlite Energy Ltd. and M/s GMR Kamalanga Energy Ltd. have already commenced generation being connected to OPTCL network with temporary arrangement. OPTCL has prepared a connectivity plan taking into account 7nos. IPPs which are in advanced stage for commencing generation in the year 2013-14 including M/s Sterlite and M/s GMR.
119. OPTCL has filed the revised final report on intra-state transmission plan for the period 2013-14 to 2017-18 before OERC in Case No. 79/2012 for kind approval. The loads considered at different grid sub-stations are as per the demand forecast submitted to OERC vide letter No.CP-LTDF/2010(Vol-I)/ 4268 dated 10.7.2012. The study includes power flow scenario under High Hydro & Low Hydro with peak and

- off peak loading conditions. The plan includes the intra-state transmission plan integrated with inter-state transmission plan of PGCIL.
120. Restoration work of 400kV Ib-Meramundali D/C line (235km) has been assigned to M/s Sterlite Energy Ltd. with scheduled date of completion by November-2012. Subsequently, the completion date was extended upto Dec-2013. Due to theft of tower materials and Court Case at one location, the work got delayed. The line is expected to be commissioned within the current year.
  121. As per approval of the State Govt., the following Joint Venture Companies have been floated for developing the intra-state transmission system in the State of Odisha.
    - i. Kalinga Bidyut Prasaran Nigam (Pvt.) Limited (KBPNL) is a Joint Venture Company promoted by OPTCL and POWERGRID on 50-50 equity participation basis which has been incorporated under the Companies Act, 1956. The State Govt. vide Notification dated 05.01.2013 have assigned the transmission projects to be undertaken by the JV Company. The commercial operation of the JV Company will be started after obtaining necessary transmission licence from Hon'ble OERC. OPTCL has nominated 3 Directors on the Board of Directors of KBPNPL in pursuance of the provisions of Shareholder Agreement executed between OPTCL & POWERGRID.
    - ii. Neelachal Power Transmission Company (Pvt.) Limited (NPTCL) is a Joint Venture Company promoted by OPTCL and MCL on 50-50 equity participation basis which has been incorporated under the Companies Act, 1956. The State Govt. vide Notification dated 05.01.2013 have assigned the transmission projects to be undertaken by the JV Company. The commercial operation of the JV Company will be started after obtaining necessary transmission licence from Hon'ble OERC. OPTCL has nominated 3 Directors on the Board of Directors of NPTCL in pursuance of the provisions of Shareholder Agreement executed between OPTCL & MCL.
  122. To solve capacity constraints of sub-stations, substantial quantum of MVA has been added by OPTCL over the last three years on the basis of demand forecast data furnished by the DISCOMs. The year wise added capacities are: 775MVA (2010-11), 727.5MVA (2011-12), 911.5MVA (2012-13).
  123. Keeping in view the scale of damage to OPTCL network due to cyclone, future lines shall be constructed to withstand wind pressure of 260kgf as per existing HIW tower design. OPTCL is also exploring the possibility of acquiring tower design to withstand wind pressure of 300kgf. The existing towers of coastal belt are of HIW make. However, towers of other make designed as per IS 802/1995 are being strengthened.
  124. The list of projects completed during 2012-13 and 2013-14 (April-Nov'13) and status of ongoing as well as new projects have been submitted. A good number of projects are scheduled to be commissioned during the current year and in 2014-15 within the scheduled time period. In case of very few numbers of projects, OPTCL has taken some more time for completion. This delay was beyond the control of OPTCL and mostly attributable to severe RoW problem and prolonged court cases. It was 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 for any other reason. Constant monitoring, regular review meeting with the Executing Agencies, District Administration as well as field officials are being made to sort out the issue so as to

complete the project as per the schedule. 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.

125. On the basis of present load flow profile, years of service and requirement of capacity enhancement in view of future load growth as well as n-1 contingency, OPTCL has planned for Comprehensive Renovation of identified lines with uprating of conventional ACSR Conductors to HTLS Conductors, which involve substantial cost. These projects have been proposed by OPTCL as Capital Works. Similarly, the proposals under 'Conversion of existing S/C Lines to D/C Lines' scheme are also proposed under Capital Works category.
126. As regards Comprehensive Renovation of grid sub-stations, OPTCL has envisaged 'Conversion of AIS (Air Insulated Substation) to GIS (Gas Insulated Substation)' for certain old, but important grid sub-stations. The GIS sub-stations are planned to be constructed in separate sites within same premises with phase wise transfer of loads within minimum shutdown schedules. These GIS projects will be proposed under the Capex Plan in view of substantial cost involvement.
127. Further, proposals like Augmentation of Installed Capacity at existing sub-stations through procurement of New Transformers, Addition of Bays against the requisitions of DISCOMs are also covered under the Capex Plan as assets are to be added in the Transmission System through implementation of these schemes.
128. The Comprehensive Renovation of existing sub-stations with complete replacement of equipment may not be practically feasible in view of non availability of prolonged shutdown of the Switchyard, Lines & Control Room.
129. The 2nd option of constructing New Switchyards & New Control Room, where space is available, with phase wise transfer of loads may not always be feasible technically (re-routing of feeders and RoW issues involved) as well as economically (cost - benefit mismatch).
130. Further, as the replacement of old/defective/obsolete sub-station & Line Equipment is being carried out on regular basis as per requirement, the replacement of the same before expiry of the useful life period for the sake of Comprehensive Renovation of the sub-station, may not be logical.
131. As the cost involvement for the sub-station specific requirement of equipment is not substantial, the same is proposed under the R&M Plan.
132. To ensure quality as well as competitive price for these sophisticated equipment, OPTCL takes the bulk procurement action against the consolidated requirement of the total system and executes installation of the same at different grid sub-stations through separate contracts in order to avoid delay.
133. In order to transfer on-line data to SLDC relating to new EHT sub-stations of OPTCL, necessary PLCC and SCADA Provision is there in accordance with the Odisha Grid Code (OGC) Regulation, 2006. The sub-stations without SCADA provision are included in the project titled "Integration of 30 Grid S/S, Control Centre hardware/software upgradation and establishment of back-up Control Center at Meramundali for SLDC" being executed through consultancy services of PGCIL. The estimated cost of the project is Rs. 36 crore. Rs. 28.83 crore has been projected in the present ARR application for the FY 2014-15.

134. Initial advance was released to PGCIL on 26.02.2011 after investment proposal got approval of the Commission vide order dated 02.11.2010 in Case No. 20/2010. As per the agreement entered into between OPTCL and PGCIL, the project would be completed within a period of 3 years from the date of release of initial advance i.e. within February, 2014. Now the project is running in full swing although some delay has occurred due to RoW problem during OPGW stringing, cyclone Phailine and flood etc. The project is expected to be completed by June-2014.
135. As per the agreement signed by OPTCL with PGCIL, the project was scheduled to be completed by September, 2013. But due to switching over from conventional analogue PLCC to Advanced Digital PLCC (DPLC), the project got delayed. At present most of RTU data have already been integrated and locally displayed in the sub-stations. The on-line data is expected to be at SLDC by June-2014 as soon communication channel is available by installation and commissioning of DPLC.
136. In case of very few numbers of projects, OPTCL has taken some more time for completion. This delay was beyond the control of OPTCL and mostly attributable to severe RoW problem and prolonged court cases. It was 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 for any other reason. Constant monitoring, regular review meeting with the Executing Agencies, District Administration as well as field officials are being made to sort out the issue so as to complete the project as per the schedule.
137. 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. Hence, the Commission may consider the Capital Cost as well as IDC as proposed by OPTCL in its ARR application for FY 2014-15.

### **System Improvement**

138. Under “CAPEX FOR O&M RELATED PROJECTS” of the present ARR application, OPTCL has spelt out its plan for upgradation of existing conductor with HTLS conductor and also conversion of S/C lines in D/C towers to D/C lines with a view to enhance load carrying capacity using the same 132kV corridor. During the current year also, such upgradation work will be completed in respect of critically loaded 132kV Chandaka-Mancheswar ckt. I & II and 132kV Chandaka-Ranasinghpur line.

### **Outsourcing of Works**

139. Outsourcing of jobs is being adopted by almost all the companies in the world. The service sector has improved a lot compared to what was happening 20-30 years back. Outsourcing the job helps in inducting specialized knowledge at a competitive price. Because of acute shortage of manpower, OPTCL had awarded 6 nos. projects namely 132/33 kV sub-stations at Nuapara, Dabugaon, Padmapur, Kuchinda, Bhawanipatna and Boudh to PGCIL on turnkey basis during December 2008. Although delayed due to various reasons, Kuchinda and Bhawanipatna S/S have already been commissioned. Other 4 nos. will be commissioned within the current year. All other projects are being executed by OPTCL.
140. Works such as preparation of specification, tender document, submission of recommendation for vendor selection is being done by OPTCL only. No other work is outsourced to any agency.

## **Income**

141. In the ARR application, OPTCL has clearly explained regarding current status on revenue earnings from inter-state wheeling. For the FY 2014-15, the revenue under this head cannot be correctly assessed as the same is to be determined by Hon'ble CERC. Hence, the contention to consider Rs. 17.50 Cr. as income from inter-state wheeling during 2014-15 is totally misconceived and liable to be rejected.

## **Misc. Receipt**

142. In the present ARR application, OPTCL has clearly explained regarding current status of revenue earnings from inter-state wheeling. For the FY 2014-15, the revenue under this head cannot be correctly assessed as the same is to be determined by Hon'ble CERC.
143. The Other Income as per Audited Accounts for FY 2012-13 is Rs 29.26 Cr. which includes Rs.13.28 Cr. as deferred income, Rs.5.24 Cr. as excess provision written back, Interest Rs. 5.10 Cr. from staff, banks and contractors and Misc. Income Rs. 5.64 Cr. The Misc. Income for the FY 2012-13 is Rs.5.64 Cr. include Supervision Charges, sale of scrap, sale of tender paper etc . In view of reducing revenue trend from Supervision Charges and uncertainty involved in revenue generation from other sources as well, OPTCL expects the Misc. Receipts of Rs 12.00 Cr. during FY 2014-15. Thus the revenue from Misc. Receipts is projected as Rs.12.00 Cr. considering present trend of revenue earning from different sources.

## **TRANSMISSION COST**

### **Employee cost:**

144. OPTCL has projected Rs. 361.38 Cr. towards Employee Cost in the ARR application which is based on actual cost incurred in FY 2012-13 & FY 2013-14, facts and evidential documents.
145. Employee Expenses approved for FY 2012-13 includes Rs.49.04 Cr. towards 6th Pay arrear which was accounted for in earlier year. Thus, the actual approval of FY 2012-13 was Rs. 269.44 Cr. (Rs. 318.48 Cr.-Rs.49.04 Cr.) against which OPTCL has incurred Rs. 271.26 Cr. (as per audited accounts for the FY 2012-13). Hence, the expenditure is more than the amount approved. Similarly, for the FY 2013-14 the expenditure projection of OPTCL towards Employee Expenses is of Rs. 292.03 Cr. This is more than the amount approved by the Commission. The projections made by OPTCL in its application are very much realistic which need full consideration. OPTCL does not agree with the projection of Rs.296 Cr. made by the Objector with regard to Employee Cost against Rs. 361.38 Cr. proposed by OPTCL.
146. Department of Energy, Govt. of Odisha vide letter No. 10919 dated 20.12.2013 has approved the restructuring proposal of OPTCL. It is expected that the same will be implemented by the end of March-14.
147. OPTCL does not agree with the projections of Employee Cost of Rs.288.80 Cr. against proposal of OPTCL of Rs. 361.38 Cr. OPTCL does not agree with the projections due to the following reasons.
- 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 allowing HRA @ 15 % (Basic Pay +GP) is not acceptable.

- ii. OPTCL has already advertised for the recruitment of 167 JMOT and 17 JTTT on 26.12.2013 and as per the schedule the date of written test is on 23.02.2014. Further, steps have been taken to fill up the vacancy within the scheduled timeframe. Hence, the proposal for not allowing stipend towards new recruitment is not acceptable.
- iii. Deptt. of Energy, Govt. of Odisha vide letter No. 10919 dated 20.12.2013 has approved the restructuring proposal of OPTCL. It is expected that the same will be implemented by the end of March-14.
- iv. OPTCL has submitted the justification of its claim of Rs.4.59 Cr. towards Reimbursement of Medical Expenses in its ARR application; therefore, proposal to allow only Rs. 3.34 Cr. may not be considered.
- v. OPTCL has properly put forth its claim towards terminal liabilities and proposed for allowing the same in three equal installments.
- vi. Since all the projects of OPTCL are executed through turnkey basis, OPTCL has calculated the employee cost capitalization as 22% on deposit work only. This is the correct approach as far as accounting standard is concerned. The basis of proposed capitalization by OPTCL is more realistic.

**R & M Cost:**

- 148. OPTCL intends to keep its transmission system available to the highest possible % of time in a year by undertaking preventive and proper maintenance of its lines and grid sub-stations for which Rs. 146.77 Cr. is proposed towards R&M expenses for FY 2014-15.
- 149. OPTCL in its present ARR application has submitted in detail regarding R&M Expenses to be undertaken in different streams of activities. The item wise expenditure has been indicated to arrive at the projected figure of Rs.146.77 Cr. The details of procurement of R&M materials already carried out upto Nov-13 have been submitted to the Commission. Hence, the projection towards R&M expenses is very much realistic as it is based on facts and evidential documents that need full consideration. OPTCL does not agree with the projection of Rs. 61.00 Cr.
- 150. 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.”*

151. The detailed R&M expenditure relating to different wings with item wise quantity and cost involvement have been indicated in the ARR application which needs full consideration by the Commission. OPTCL does not agree with the projection of Rs. 67.20 Cr. towards R&M expenses. For FY 2013-14, OERC has allowed Rs.60 Cr. against which OPTCL has already incurred about Rs.56 Cr. up to Dec-2013.
152. OPTCL has optimised Repair & Maintenance Works to ensure healthiness of sub-stations & lines utilising the available skilled manpower. Maintenance Manual prepared in line with the CBIP Manual as well as the best R&M practices in transmission sector as adopted by the Central as well as State Sector Transmission Utilities has been widely circulated among the field units for strict adherence. Diagnostic Testing Kits are in use to monitor the condition of sub-station & line equipment for taking repair / replacement action in advance as per requirement. Sophisticated T&P including Safety Gadgets have been supplied to field units for smooth maintenance works. Field executives and work men are being given regular exposure to works shops / training programmes for skill enhancement. Awards for Best Maintained sub-stations & transmission lines have been introduced by OPTCL to create motivation and competitiveness among the field staff.

#### **A & G Expenses:**

153. The Table given below indicates the A&G expenses for the last 5 years.

**Table - 8**  
**A&G Expenses of OPTCL**

<b>Year</b>	<b>OERC Approval (Rs. Cr.)</b>	<b>Actual (Audited) (Rs. Cr.)</b>
2008-09	16.57	20.18
2009-10	14.35	26.68
2010-11	18.00	33.81
2011-12	18.00	20.81
2012-13	21.25	22.48

Thus, the actual expenditure as per audited accounts is always higher than the OERC approved figures. This is due to the fact that year over year, new sub-stations and lines are added to the OPTCL network for which the field office establishment expenses increase. The Hon'ble Commission allows A&G expenses considering an escalation (rate of inflation as measured by WPI) over the approved amount of previous year. This is not adequate.

154. The projection towards A&G expenses include communication, professional charges, conveyance, travelling, OERC license fees, watch and ward expenses etc. As per audited accounts for FY 2012-13, the details of A&G expenses are given below.

**Table - 9**  
**A&G Expenses for FY 2012-13 (Audited)**

<b>Sl. No.</b>	<b>Particulars</b>	<b>FY 2012-13 (Rs. Cr.) (Audited)</b>
1	Property related expenses	4.01
2	Communication	0.58
3	Professional Charges	2.49
4	Conveyance & Traveling	5.22

5	Watch and ward Expenses	1.45
6	Inspection fees	1.65
7	Electricity & Water charges	1.85
8	Other Expenses	3.98
9	OERC License Fee	1.25
10	Sub-Total (1 to 9)	22.48
11	Less: Expenses capitalized	-
	<b>Total A&amp;G Expenses</b>	<b>22.48</b>

155. Lack of sufficient funds towards A&G expenses would adversely affect efficient functioning of OPTCL. Therefore, the A&G Expenses of Rs. 25.46 Cr. proposed for FY 2014-15 is very much realistic which need full consideration. OPTCL does not agree with the projection of Rs. 24 Cr. with regard to A&G Expenses.

#### **Interest on loan**

156. The projection towards interest on loan capital is very much realistic as it is based on facts and evidential documents that need full consideration. 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, an amount of Rs. 792.16 Cr. has been provided as CAPEX for the FY 2014-15. For financing the above CAPEX, interest on new loan amounting to Rs 55.06 Cr. has been proposed against new loan of Rs. 179.68 Cr. to be availed during FY 2013-14 and Rs. 662.71 Cr. during FY 2014-15. Hence, the interest of Rs. 169.30 Cr. on loan capital is justified. OPTCL does not agree with the projection of Rs. 48.74 Cr.
157. OPTCL prays the Commission to take a suitable decision on interest cost for FY 2014-15. OPTCL does not agree with the suggestion for allocation of Rs. 70.52 Cr. against OPTCL's claim of Rs. 130.06 Cr.

#### **Depreciation:**

158. OPTCL had claimed depreciation for the FY 2013-14 as per the norms specified under CERC Regulations, 2009. The Commission allowed depreciation of Rs. 89.40 Cr. computing at Pre-92 rate as per GoI notification dated 31.01.1992. Simultaneously, the Commission also allowed Rs. 53.40 Cr. as Special Appropriation with proper justification.
159. For the FY 2014-15, OPTCL has projected depreciation of Rs. 176.02 Cr. based on the Provisional Accounts (now audited) for FY 2012-13 considering the depreciation rate as prescribed under aforesaid CERC Regulations and taking into account up-valued Asset Base and projected additions thereto during FY 2014-15. OPTCL does not agree with the contention that the projected depreciation is high due to artificial increase of Capital Base.
160. OPTCL has not proposed any Special Appropriation for the FY 2014-15. Similarly, no depreciation has been claimed on any capital assets unless it is completed and put in use.

#### **Special Appropriation:**

161. Since OPTCL has claimed Depreciation as per the applicable provision under CERC Regulations 2009, the contention of DISCOMs regarding shortfall of repayment of loan over the allowable depreciation does not arise. Further, the suggestion of DISCOMs for negotiation with the Banks/FIs for availing long tenure loan for

repayment of principal has no merit as OPTCL has not claimed any amount towards principal repayment in the present ARR application. OPTCL prays the Commission to take appropriate decision as per CERC Regulations, 2009.

**Return on Equity:**

162. The projection towards Return on Equity is based on CERC Regulations, 2009. OPTCL does not agree with the projection of Rs. 47.09 Cr. and contention that this is contrary to the provisions of CERC Regulations. OPTCL has explained in details regarding equity base in the present ARR application. Hence, the projection towards Return on Equity is very much realistic which needs full consideration.

**Interest on Working Capital:**

163. Interest on working capital may be allowed as per norms of CERC Regulations 2009. OPTCL does not agree to the suggestion that this is contrary to the provisions of CERC Regulations.
164. 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. The DISCOMs like SOUTHCO are violating the order as first charges and paying the BSP bill to GRIDCO without paying to OPTCL which is first charges. It is submitted that the outstanding of SOUTHCO up to March-2013 is Rs. 45.58 Cr. The receivable of OPTCL as on 31.03.2013 from LTOA, STOA and inter-state customers stands at Rs. 220.15 Cr. As suggested, if OPTCL files petition before the Commission, the realization will be done only after direction of the Commission.
165. 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. Hence, the projection towards Interest on Working Capital is very much realistic which needs full consideration. OPTCL does not agree with the contention for not allowing any amount under this head.

**Contingency Reserve:**

166. 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.*
167. OPTCL, therefore, prays the Commission to take a suitable decision in this regard and allow recovery towards Contingency Reserve in the proposed ARR. The Contingency

Reserve may be created @ 0.5 % on Gross Block subject to Maximum of 5 % of Gross Block of Assets.

168. The Commission has not allowed Contingency Reserve to OPTCL from FY 2011-12 onwards on the ground that OPTCL has not quantified the amount invested in different Govt. Securities. However, OPTCL has already made investment of Rs. 27 Cr. in the SDL Bond of Punjab, Jharkhand, Karnataka, Himachal Pradesh and Haryana. Further, OPTCL is planning to invest another Rs. 3 Cr. by the end of the FY 2013-14. Considering the investment already made, the commission may kindly allow the Contingency Reserve of Rs. 62.06 Cr. from FY 2011-12 to FY 2014-15.

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

169. Year wise proposal, approval and actual expenditure towards R&M, A&G, and O&M for the period from 2000-01 to 2013-14 (up to Nov'13) are given in the Table below. The actual figures are as per audited accounts up to the year 2012-13. For the year 2013-14 (up to Nov' 2013), the figures are based on cash flow statement.

**Table - 10**  
**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	60.25	39.11	21.25	30.50	789.93	434.73	362.01
2013-14	108.01	60.00	50.81 (up to Nov'13)	23.09	22.39	13.87 (up to Nov'13)	473.20	371.69	242.39 (up to Nov'13)

#### **Rebate**

170. The transmission tariff is determined on cost basis. The rebate allowed, if any, towards prompt payment will reduce the cost to that extent. The main purpose of allowing rebate is to encourage the customers for prompt payment and avail the discount by way of rebate. Hence, the claim of OPTCL towards rebate is fully justified and need proper consideration.

#### **Incentive**

171. In present ARR application OPTCL has claimed an amount of Rs. 10.47 Cr towards incentive as per the provisions contained in Regulation 25 to 29 under Chapter-4 of

CERC Regulations, 2009. Regulation 28 of the said Regulations specifies that the Normative Annual Transmission System Availability Factor (NATAF) for the Transmission System (AC System) shall be 98% for the purpose of recovery of Transmission Charge and Incentive by the Transmission Licensee.

172. The System Availability of 99.89% for FY 2012-13 has been worked out following the procedure laid down in Appendix-IV of CERC Regulations, 2009 and it has been duly certified by SLDC. Detailed calculation of Transmission System Availability has been enclosed with the present ARR application.
173. The Reliability Surcharge leviable for individual HT/EHT Consumers of DISCOM availing supply through dedicated feeders is calculated basing on the availability of concerned feeders only whereas the System Availability of OPTCL is calculated taking into account the entire EHT network of the State and all ICTs/Auto-transformers.
174. Hence the proposal to fix the transmission system availability for OPTCL at a minimum value of 99% and above is not justified. Accordingly, calculation of incentive as Rs. 4.92 Cr. against OPTCL proposal of Rs. 17.03 Cr. does not merit consideration.
175. The proposal of considering nil incentive without giving any proper justification may not be considered.

#### **Sales projection**

176. The forecast that actual wheeling of power 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.

#### **ARR and Revenue Gap**

177. The details of actual data for FY 2012-13 and projected data for FY 2013-14 are furnished in the present ARR application. The projections made by OPTCL in its application are very much realistic which need full consideration. OPTCL does not agree with the estimation of ARR of Rs. 578.31 Cr. and Rs.594.30 crore against proposal of OPTCL of Rs. 976.80 Cr.
178. The revenue surplus of Rs. 92.53 Cr. as worked out is not acceptable to OPTCL.
179. One Objector has contended that ARR applications for FY 2014-15 seem to have been arrived against fictitious and imaginary figures as none of the Licensees have ever undertaken an audit by recognized auditor. As far as OPTCL is concerned, the contention of the Objector is not correct. The present ARR and Transmission Tariff application has been prepared and submitted based on OPTCL's Provisional Accounts (now audited) for FY 2012-13.
180. OPTCL is subject to various types of Audit throughout the financial year mentioned as under:
  - i. Transaction Audit / Performance Audit

The Office of the AG (Economic and Revenue Sector Audit) Odisha, Bhubaneswar on behalf of C&AG of India conducts the Transaction / Performance Audit on various activities of OPTCL every year.
  - ii. Internal Audit / Review of Audit Committee
    - a. OPTCL appoints 53 nos. outsourced Chartered Accountants / Cost Accountants firms every year to conduct the Internal Audit of the

- financial transaction, physical verification of stock and fixed assets audit.
- b. The Internal Auditors certify the accounts of all the units / cost centers located all over Odisha.
- c. All the reports along with compliance thereof are reviewed by Audit Committee constituted u/s 292 of the Companies Act, 1956 to see that all the financial reporting system is correct, sufficient and credible.
- iii. Statutory Audit
  - a. The firm of Chartered Accountants are appointed by the Office of the C&AG, India u/s 619 (2) of the Companies Act, 1956.
  - b. The Statutory Auditors conduct the Statutory Audit of the Company's Annual Accounts and report his opinion on true and fair view of the Annual Accounts comprising Balance Sheet, Statement of Profit and Loss, Cash Flow Statement and Notes on Accounts of the Company and report thereon.
- iv. Audit of Cost Accounts
 

The firms of Cost Accountants are appointed by the Board of Directors of OPTCL in accordance with the provision of sub-section [1 B] of Section 224 and with the previous approval of Central Government u/s 233 [b] of the Companies Act, 1956 to conduct the Audit of Cost Accounts of the Company.
- v. Supplementary Audit
  - a. The Office of the AG (Economic and Revenue Sector Audit) Odisha, Bhubaneswar on behalf of C&AG of India conduct the Supplementary Audit u/s 619 (4) of the Companies Act, 1956.
  - b. They examine the Authenticated Annual Accounts of the Company along with Statutory Auditors Reports to offer their views.
- vi. Tax Audit
 

As per requirement of the Income Tax Act, 1961, the Statutory Auditor of OPTCL submit the Tax Audit information prescribed in Form 3 CD and the Audit Report made u/s [44 A,B].

### **Transmission Tariff**

- 181. OPTCL does not agree with the estimated transmission tariff (21.06 p/u) as OPTCL does not agree with the estimated ARR.
- 182. The present ARR and Transmission Tariff application has been prepared and submitted based on OPTCL's Provisional Accounts (now audited) for FY 2012-13, 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 contention to reduce the transmission charge for FY 2014-15 below 25 p/u (approved for FY 2013-14) without proper justification and supporting calculation does not merit consideration.

### **Projected Capital Expenditure for FY 2014-15**

183. OPTCL in its filing has proposed the capital expenditure of Rs.779.66 Cr under the following heads. The details of capex expenditure are given in Annexure-A

**Table - 11**

<b>Particulars</b>	<b>Amount (Rs. crore)</b>
a) Telecom	77.85
b) O&M	121.76
c) Information Technology (IT)	13.77
d) Civil Works	34.18
e) TP & Con. (Excluding Deposit Works)	532.10
<b>Total Capital Expenditure (a+b+c+d+e)</b>	<b>779.66</b>

### **OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (Para 184)**

184. The Commission convened the State Advisory Committee (SAC) meeting on 15.02.2014. 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 relating to Annual Revenue Requirement and Tariff filing of OPTCL.

### **COMMISSION'S VIEWS AND ORDER (Para 185 to 285)**

185. The Commission, for approval of ARR and determination of transmission tariff for OPTCL for the FY 2013-14 continued 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 2014-15.
186. 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.
187. 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.
188. 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 2014-15**

189. 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'.
190. 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.
191. OPTCL in its ARR filing for FY 2014-15 stated that the actual transmission loss in the OPTCL transmission system from April 2013 to November 2013 works out to be 3.78% and OPTCL proposes transmission loss of 3.75 % for the year FY 2014-15 based on the present trend. The approved and actual transmission loss for the year 2008-09 to 2013-14 is furnished in the table below.

**Table – 12**

<b>FY</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Approved (%)	4.50	4.00	4.00	3.90	3.80	3.80
Actual audited (%)	4.52	4.11	3.93	3.88	3.84	3.78(Apr -Nov-13)

192. M/s OPTCL, in its filing 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 centers. 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'.
193. 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.
194. Based on the submission of OPTCL, the Commission approves 3.75% for FY 2014-15 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**

195. 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 ongoing 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 s/s for which the investment is being made should not be left idle due to non-completion of inter linking transmission/ distribution lines.
196. The Commission directs that OPTCL should regularly monitor the progress of all its on-going projects to avoid in-ordinate delay. Projects should be completed within the time schedule to avoid cost and time over-run and overloading of existing system due to growth in demand.
197. It is learnt that large number of projects will be undertaken by OPTCL under the head long term business plan, Smart Grid and disaster resilient power system etc. in next five years, therefore, OPTCL should develop a well designed project organization manned by dedicated project team with expertise in project management and contract administration starting from Corporate Office to field units.
198. Further, as far as safety and proper maintenance of electrical installations are concerned, OPTCL should impart proper training to its staff on the safety provisions and procedures thereto and ensure that all the employees should follow it scrupulously. Further, required safety equipments/gadgets shall be procured immediately and necessary hands-on training should be given to the employees by the selected manufacturers/vendors. Safety officer of OPTCL alongwith the training department should prepare the training module in line with provisions as mentioned in CEA (Measures relating to Safety and Electric Supply) Regulations, 2010.

### **Disaster Management:**

199. The Commission has observed that there is a substantial loss to the OPTCL transmission system due to severe cyclone 'PHAILIN' during October, 2013. As ascertained, 25 nos. of Grid S/S, 49 nos. of lines (4073 Ckt Kms) were affected and 92 nos. of towers were damaged due to the catastrophic cyclone. It is understood that OPTCL requires around Rs.42 Crores for the restoration/repair work. The Commission is of the opinion that since it is a Force Majeure condition, the amount spent by OPTCL for restoration of damaged transmission system may be availed from the State Govt. as a grant from Disaster Mitigation Fund or any other similar fund. Further, the Commission directs OPTCL to constitute an in-house investigation team to enquire on the possible reasons of large scale tower failure in a particular corridor and take necessary suitable action to avoid such type of failures in future. Odisha has

been vulnerable to natural disasters on account of cyclone, flood etc. Transmission system being the backbone of power supply system should be designed and maintained in such a manner that the damage is minimal. The commission feels that there should be an institutional mechanism to develop disaster mitigation strategy, preparedness and early response including manpower deployment.

### **Financial Issues**

200. OPTCL categorized the elements of cost under the following heads:

#### **A. Fixed cost**

- (a) Operation and maintenance expenses
- (b) Interest on loan capital
- (c) Depreciation
- (d) Special appropriation
- (e) Return on Equity
- (f) Interest on working capital

#### **B. Additional Expenses**

#### **Operation and Maintenance expenses**

The O&M expenses of OPTCL includes the following:

- (i) Employees cost including terminal benefits
- (ii) Repair and Maintenance expenses
- (iii) Administrative and General expenses

#### **Employees cost**

201. For the financial year 2014-15, OPTCL has estimated an amount of Rs.361.38 crore towards employees cost. Major components of the expenses for the FY 2013-14 proposed by the licensees along with approval of the Commission for the FY 2014-15 are given in the table as under:

**Table -13**  
**Components of Employees Cost**

<b>Sl. No.</b>	<b>Particulars</b>	<b>2014-15 (proposed)</b>	<b>2013-14 (approved)</b>
1	Basic pay + GP	66.70	66.12
2	Dearness allowance	73.37	56.86
3	Provision towards wage revision of non-executive w.e.f. 1.4.2010	3.84	14.09
4	Enhanced salary due to implementation of NPC	8.90	-
5	Terminal benefits including NPS	171.38	117.18
6	Payment of differential pension and pensionary benefits to the absorbed Govt. Engineers	-	23.00
7	House rent allowance	13.34	9.92
8	Other	26.60	30.41
9	Total	364.13	297.58
10	Less capitalization	2.75	8.28
11	Net employees cost to be passed in ARR	361.38	289.30

202. On scrutiny of the audited data for the financial year 2012-13, the total amount booked under the head employees cost amounts to Rs.271.20 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:

**Basic pay + Grade pay**

203. Under this head, OPTCL proposed an amount of Rs.66.70 crore during 2014-15. A comparative picture of the 2012-13 (Audited) and approved amount during 2013-14 is given below:

**Table - 14**

2012-13 (Audited)	68.69
2013-14 (Approved)	66.12
2014-15 (Proposed)	66.70

204. For a realistic assessment, the Commission in its query directed OPTCL to submit the month wise outflow of Basic pay + GP during the current year i.e. 2013-14. In compliance to the query raised by the Commission, OPTCL submitted the following information as detailed below:

**Table - 15**

(Rs. Lakh)

Month	Basic	Grade Pay	DA (80% from Aprl'13 & 90% from July'13)	HRA	Medical (5%)
April-13	385.08	75.01	368.07	61.58	23.00
May-13	384.26	74.86	367.30	61.49	22.96
June-13	384.04	74.72	367.01	59.44	22.94
July-13	383.70	74.64	412.51	59.16	22.92
Aug-13	383.94	74.68	412.76	51.23	22.93
Sept-13	384.13	74.76	413.00	51.34	22.94
Oct-13	384.06	74.66	412.84	61.24	22.94
Nov-13	384.00	74.90	413.01	61.27	22.95

205. The basic pay plus GP for the first eight months of the current financial year 2013-14 works out to Rs.36.73 crore. Extrapolating the same to a twelve month period with additional increment of 3%, the pay plus GP on the existing employee base works out to Rs.56.75 crore.

OPTCL in its submission has given information on the number of employee as per details below:

**Table - 16**

**Information on number of Employees**

Sl. No.	Particulars	No. of employees
1	No. of employees as on 01.04.2012	3451
2	Induction of new employees during 2012-13	31
3	Retired/ resigned during 2012-13 (30.04.2012 to 31.03.2013)	288
4	No of employees as on 31.03.2013	3194
5	Induction of new employees during 2013-14: 90 (IT) + to be recruited [166 (Executives)+180 (ITI)]	436
6	Retired/ to be retired during 2013-14	282
7	No of employees as on 31.03.2014	3348

Sl. No.	Particulars	No. of employees
8	Induction of new employees during 2014-15	721
9	Retired/ to be retired during 2014-15	232
10	No of employees as on 31.03.2015	3837

206. The no. of employees as at the end of the year and the average no. of employees during the financial year is given as under:

**Table - 17**

	As on 31.03.2013	As on 31.03.2014	As on 31.03.2015
No. of existing employee	3194	3348	3837
Average no. of employees		3271	3593

207. The basic pay plus GP for the FY 2014-15 is determined factoring in average no. of employees approved by the Commission in the above table which works out to Rs.62.33 crore. Besides above, OPTCL in its filing has stated the following:

“The Jr. Class-I scale has already been extended at the entry level degree engineers of Energy Department and the same has to be implemented in OPTCL too. Then the Asst. Managers will come over to PB-3 scale with GP of Rs.5400/-. The financial implication due to this post upgradation to Jr. Class-I has been envisaged as additional burden of Rs.2.67 crore in basic and grade pay.”

The Commission approves the same and includes the amount of Rs.2.67 crore in arriving at the total basic pay plus GP which works out to Rs.65 crore (Rs.62.33+2.67).

**Dearness Allowance:**

208. The prevailing rate of dearness allowance as on 01.07.2013 is 90%. The incremental DA allowed by the Govt. of Odisha last time was 10%. Assuming the same percentage increase on January 2014, July 2014 and January 2015, OPTCL projects the DA rate at 110% for the purpose of computation of DA during the FY 2014-15. The Commission approves the same and allows the DA rate at 110% of basic pay and GP.

**Provision towards wage revision of non-executive w.e.f. 1.4.2010**

209. Under this head, OPTCL claimed an amount of Rs.3.84 crore during 2014-15 towards arrear wage pertaining to the FY 2013-14. The Commission approves the same as a pass through in the ARR as was done the earlier year.

**Enhanced salary due to implementation of NPC**

210. OPTCL has claimed Rs.8.90 Crs. towards enhanced expenditure to be incurred for implementation of NPC recommended Cadre structure for executives and non-executives. In the last tariff order the Commission did not allow the same on the ground that the recommendation of NPC has not been approved by the Govt. by that time. Now OPTCL has submitted the approval of the final report by the State Govt. vide letter No.10919 dtd.20.12.2013 on organizational restructuring and manpower assessment. In the said approval letter it is mentioned that OPTCL is allowed to fill up the vacancy and post so created/ upgraded during the year 2013-14 to 2017-18 as and when the projects will be taken up or grids will be commissioned, as per the approved

norms sanctioned by the Board of Directors of OPTCL and as per the recruitment plan indicated in the letter. In view of the above, the Commission allows Rs.8.90 crore claimed by the OPTCL towards implementation of NPC.

211. In view of organizational restructuring it is imperative to review the employee cost and if necessary revisit the existing HR Policies / System of redeployments of its work force so as to ensure optimization and rationalization of man power. In view of implementation of ERP the corporate office structure shall focus more on planning, monitoring and resource allocation. Therefore, OPTCL is directed to submit a report on the job descriptions of the newly created posts under NPC by 31<sup>st</sup> July, 2014.

#### **House rent allowance & Medical allowance**

212. In line with the order of the last year, the Commission for the FY 2014-15 approves the medical allowance and HRA @5% and 15% of basic pay plus GP respectively as against the claim of 5% and 20% made by OPTCL.

#### **Stipend for new recruitment**

213. Under this head OPTCL has claimed an amount of Rs.11.20 crore for the FY 2014-15. The calculation given in the following table:

**Table - 18**

<b>Year</b>	<b>Post</b>	<b>Proposed no. of candidates to be recruited</b>	<b>Stipend per person per month in Rs.</b>	<b>Total stipend pm in Rs. Lakhs</b>
2013-14	ITI Technician	150	6000	9.00
	Administrative	100	8000	8.00
2014-15	Jr. Manager	141	12000	16.92
	Asst. Manager	330	18000	59.40
	Total	721		93.32
Total stipend per FY 2014-15 = Rs.11.20 crore				

The Commission approves the same as a pass through in the ARR for the FY 2014-15.

#### **Terminal benefits including NPS**

214. For the FY 2014-15, OPTCL has claimed an amount of Rs.169.43 crore towards terminal benefit and Rs.1.95 crore towards contribution to NPS. During the FY 2005-06 to 2012-13 OPTCL has made a provision of Rs.1371.50 crore towards terminal liabilities in the books of accounts. As against the same the Commission has allowed Rs.863.20 crore for the FY 2005-06 to 2013-14 leaving a gap of Rs.508.30 crore (1371.50 – 863.20). For FY 2014-15 OPTCL claimed one third of the gap of Rs.508.30 crore i.e. Rs.169.43 crore towards terminal liability in the ARR.
215. The Commission have already engaged an independent actuary for undertaking the actuarial valuation of the terminal liability of DISCOMs as well as OPTCL upto 31.3.2013 with projections upto 31.3.2015. The final report has not been received yet. Pending such report, the Commission feels it justified to allow the amount of terminal benefit based on the cash outflow of OPTCL. OPTCL in its supplementary submission gave information on disbursement details towards terminal benefits upto January, 2014. As per the submission the total cash outflow upto January (10 months period) amounts to Rs.111.76 crore. This amount has been extrapolated for a period of 12 months which works out to Rs.134.11 crore. The Commission approves the same

amount for the year 2014-15. As regards the claim of Rs.1.95 crore towards contribution for non-pensioner in the new pension scheme, the Commission approves the same as a pass through in the ARR for the FY 2014-15.

**Payment of differential pension and pensionary benefits to the absorbed Govt. Engineers**

216. OPTCL in its submission has stated the Commission in principle has given approval for implementation of differential pension and pensionary benefit in respect of Ex-Govt. absorb engineers and provisionally allowed Rs.36 crore in three years. The provision for the same has been accounted for in the FY 2010-11. For the FY 2012-13 OPTCL has determined the actual liability of the absorbed Ex-Govt. Engineers by an independent actuary as per which the liability as on 31.03.2013 is arrived at Rs.104.37 crore. Accordingly, OPTCL made provision of the differential amount of Rs.68.37 crore (104.37-36.00) in the audited account for FY 2012-13. OPTCL therefore has requested the Commission to allow Rs.68.37 crore in the ARR.
217. The Commission in last year's order has directed OPTCL to pursue the matter with Govt. of Odisha and work out the actual liability on the basis of Govt. of Odisha notification. Since OPTCL has failed to obtain the notification from Govt. of Odisha, the Commission is not inclined to pass the differential amount of rs.68.37 crore in the ARR pending receipt of the notification from Govt. of Odisha in this regard.

The statement of employee cost for FY 2014-15 proposed by OPTCL and approved by the Commission is given as under:

**Table – 19**  
**Employees Cost proposed and approved for FY 2014-15**

(Rs. Cr.)

Sl. No.	Particulars	Approved for FY 13-14	Proposed for FY 14-15	Approved for FY 14-15
1.	Salaries (Basic Pay+ Grade Pay)	66.12	66.70	65.00
2.	Overtime	-	-	-
3.	Dearness Allowance	56.86	73.37	71.5
4.	Other Allowance	0.69	0.82	0.82
5.	Bonus and Overtime	0.01	0.005	0.005
6.	Provision towards Wage revision for non-executive w.e.f. 01.04.2010	14.09	3.84	3.84
7.	Outsource engagement	-	2.43	2.43
7.	Enhanced in Salary (NPC)	-	8.90	8.90
8.	<b>Sub Total (1 to 7)</b>	<b>137.77</b>	<b>156.07</b>	<b>152.50</b>
	<b>Other Staff Cost</b>			
9.	Reimbursement of Medical Expenses	3.31	4.59	3.30
10.	Leave Travel Concession	0.59	0.73	0.73
11.	Reimbursement of House Rent	9.92	13.34	9.80
12.	Interim Relief to Staff/ Premium under GIS	0.26	-	-
13.	Encashment of Earned Leave	-	0.01	0.01
14.	Stipend to Management Trainee (Executive)	1.06	-	-
15.	Stipend for new recruited Non-	1.62	11.20	11.20

Sl. No.	Particulars	Approved for FY 13-14	Proposed for FY 14-15	Approved for FY 14-15
	Executive			
16.	Honorarium	0.01	0.01	0.01
17.	Payment under Workmen compensation Act	0.02	-	-
18.	Ex-gratia	0.01	1.00	1.00
19.	Miscellaneous (CSR)	1.24	0.58	0.58
20.	Uniform and liveries	1.39	2.30	2.30
21.	<b>Sub Total (9 to 20)</b>	<b>19.43</b>	<b>33.76</b>	<b>28.93</b>
22.	Staff Welfare Expenses	0.20	2.92	2.92
23.	Terminal Benefits including NPS	117.18	171.38	136.06
24.	Payment of differential pension and pensionary benefit to the absorbed Govt. Engineer in OPTCL/GRIDCO	23.00	-	-
25.	<b>Total (7+21+22+23+24)</b>	<b>297.58</b>	<b>364.13</b>	<b>320.41</b>
26.	Less : Capitalisation	8.28	2.75	2.13
27.	<b>Net Total</b>	<b>289.30</b>	<b>361.38</b>	<b>318.17</b>
28.	Arrear due to 6 <sup>th</sup> Pay Commission recommendation	-	-	-
	<b>Total</b>	<b>289.30</b>	<b>361.38</b>	<b>318.18</b>

#### Repair and Maintenance Expenses (R&M)

218. OPTCL has proposed an amount of Rs.146.77 crore for the FY 2014-15 under Repair & Maintenance. In the filing, the item-wise details of R&M has been submitted under these four broad heads.

**Table - 20**

1.	R&M of O&M Wing	Rs.111.14 Cr.
2.	Telecom R&M	Rs.15.03 Cr.
3.	Civil Works	Rs.15.34 Cr.
4.	Information Technology	Rs.5.25 Cr.
	<b>Total</b>	<b>Rs.146.77 Cr</b>

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

**Table - 21**  
**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

<b>Year</b>	<b>R&amp;M Expenses approved by OERC</b>	<b>Actual R&amp;M Expenditure</b>
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	60.25
2013-14	60.00	68.61 (as per cash flow statement submitted by OPTCL upto January' 14)

220. 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. However, for the FY 2013-14 (upto January, 2014) OPTCL has spent more than the amount approved by the Commission.
221. 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.
222. 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. The Capacitor Banks should operate in steps so that it will be more effective to achieve the ultimate objective of quality supply to the end consumer of the supply system. OPTCL may also take steps for up-gradation of the existing Capacitor Bank scheme from Fixed to Variable mode to optimise the use of Capacitor Bank against different MVAR demands.
223. OPTCL is required to develop appropriate ring system so that power supply to the affected areas can be easily made available from the neighboring areas fed from other generating stations of the state and Odisha share from Inter State Generating Station of Eastern Region.
224. The O&M as well as project organization should be highly decentralized and adequately manned at the field level as per the approved manning norms with clearly defined role and responsibilities and reasonable delegation of power to enable them to achieve the targets.



225. Though transmission system availability has been more than 98% for last few years still OPTCL is required to benchmark its performance with the best-performing STUs of the country. The O&M manual should be revisited incorporating the best practices prevalent in the country including key performance indicators. An implementation roadmap needs to be worked out with periodic quarterly review so that O&M Circle and Division shall be responsible for and accountable.

**Maximum/ Minimum Voltages of Major Grid Sub-stations**

226. The EHT voltage, as per Regulations 3(1)(b) of Central Electricity Authority(Grid Standards) Regulations, 2010 should be in the range 122-145 kV for voltage at 132 kV, 198-245 kV for voltage at 220 KV and 380-420 kV for 400 kV level. OPTCL has however experienced 165 kV minimum and 270 kV maximum in its 220 KV system and 85 KV minimum and 142 KV maximum in its 132 KV system.

**Table – 22 (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	260	222
2	Duburi	245	212
3	Joda	245	205
4	Tarkera	240	222
5	Budhipadar	241	223
6	Balasore	245	205
7	Narendrapur	248	185
8	Chandaka	270	165
9	Bhanjanagar	268	180
10	Theruvali	253	210
11	Meramundali	235	210
12	Bidanasi	239	206
13	Katapalli	243	214
14	Bhadrak	242	190
15	Paradeep	250	200
16	Bolangir	246	200
17	Mendhasal	242	170

**Table – 22 (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	140	102
2	Puri	138	85
3	Khurda	140	85
4	Berhampur	142	102
Balance 132/33 kV S/S, the voltage profile is satisfactory i.e. within allowable limits			

227. Further, Preventive maintenance of the transmission system should be a routine feature and is required to be monitored by the circle heads in each quarter. OPTCL should take steps for increase in power transfer capability of the 132 kV lines specifically in urban areas by introduction of new technology like the proposed up-rating of 132 KV Chandaka-Mancheswar and Chandaka-Ranasinghpur line from ACSR conductor to HTLS conductor. OPTCL should complete the SCADA provision work in all 220 kV and above S/S for proper monitoring and efficient functioning of the power system. Energy Accounting and Settlement Service Centre (EASSC) should be fully functional under the control of SLDC.
228. 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.
229. The Commission had approved an amount of Rs.60.00 crore towards R&M during 2013-14. However, OPTCL has spent Rs.68.61 crore or say Rs.69 crore upto January, 2014 (as per cash flow). For the purpose of determination of R&M, Commission

accepts the figures submitted in the cash flow statements by OPTCL. From the cash flow statement it is found that during the month of January, 2014 OPTCL has spent Rs.11.88 crore under the head R&M. For the remaining two months i.e. February & March the Commission allows Rs.24 crore @ Rs.12 crore per month to be spent towards R&M. The Commission therefore allows Rs.93 crore (69+24) towards R&M for FY 2014-15 as against an amount of Rs.146.77 crore proposed by the licensee. If the licensee spends more during FY 2014-15 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**

230. OPTCL during FY 2014-15 has proposed Rs.25.46 cr. towards A&G expenses. Break up of expenses for FY 2014-15 along with the figures for 2012-13 and 2013-14 as filed by the licensee is depicted in the table below:

**Table - 23**  
**Administration and General Expenses**

(Rs. Cr.)				
Sl. No.	Particulars	FY 12-13 (Prov.)	Estimation for FY 13-14	Estimation/ Projection for FY 14-15
1	Property related expenses	4.01	0.36	0.39
2	Communication	0.58	1.04	1.15
3	Professional Charges	2.45	3.27	3.60
4	Conveyance & Traveling	5.23	5.59	6.52
5	Inspection fees	1.65	1.98	2.18
6	Watch & ward	1.35	1.64	1.80
7	Electricity & Water charges	1.51	2.01	2.21
8	Service tax	-	-	-
5	Other Expenses	3.47	5.81	6.34
6	Material related expenses	0.10	0.03	0.03
7	OERC License Fee	1.25	1.25	1.25
8	Sub-Total (1 to 7)	21.60	22.99	25.46
9	Less: Expenses capitalized	-	-	-
	<b>Total A&amp;G Expenses</b>	<b>21.60</b>	<b>22.99</b>	<b>25.46</b>

231. The Commission in line with earlier orders allows escalation of 6.16% (Rate of inflation as measured by W.P.I. of December, 2013) over the approved amount of Rs.19.38 crore for FY 2013-14. **Hence, Rs.20.57 crore towards normal A&G expenses for FY 2014-15 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.2.18 cr. proposed by the Licensee to the Government. **Hence, the Commission allows Rs.24 crore under the head A&G for FY 2014-15 as against OPTCL's proposal of Rs.25.46 crore.**
232. Since the implementation of ERP system is an advanced stage of implementation, organizational restructuring, combined with automation of financial and account management system with focus on project finance and working capital management are very essential. Redeployment of qualified finance professional and introduction of well designed accounting and financial management system will result in timely completion / reporting of annual accounts and better management of financial inflows

and outflows. In this regard an RoI analysis of ERP implementation within six months is required.

### Interest on Loan

233. OPTCL has proposed Rs.130.06 crore towards interest on long term loan for the FY 2014-15. Loan-wise interest payment schedule as proposed by the licensee is exhibited in table below:

**Table- 24**

<b>Projection for Interest on loan for FY 2014-15 (Rs. Cr)</b>							
		<b>Rate of Interest</b>	<b>Principal CB as on 31.03.14</b>	<b>Loan to be received during 2014-15</b>	<b>Loan redeemed during 2014-15</b>	<b>Interest payment for 2014-15</b>	<b>Total Payment for 2014-15</b>
<b>A</b>	<b>Govt. Loans</b>						
	State Govt.(Cash Loan)	13.00%	2			0.26	0.26
	State Govt.(CRF)	0.00%	15				0
	Central Govt. Loan	9.00%	11.25			1.01	1.01
	GoO Bonds	13.00%	400			26	26
	Sub Total		428.25			27.27	27.27
<b>B</b>	<b>Institutional Loans</b>						
	Total REC Loan		329.55		28.94	35.48	64.42
	PFC Loan		111.98		8.79	12.25	21.04
	Sub Total		441.53		37.73	47.73	85.46
<b>C</b>	<b>Secured Loan</b>						
	New Loan (13-14)	10.25%	197.68			20.26	20.26
	New Loan (14-15)	10.50%		662.71		34.79	34.79
	Oriental Bank of Commerce	11.75%	1.51		1.51	0.01	1.52
	Sub Total		199.19	662.71	1.51	55.06	56.57
<b>D</b>	<b>Grand Total</b>		<b>1068.97</b>	<b>662.71</b>	<b>39.24</b>	<b>130.06</b>	<b>169.30</b>

234. It is observed from the above table that the quantum of new loan to be availed by OPTCL during FY 2013-14 and 2014-15 is Rs.199.19 and Rs.662.71 crore respectively to be spent towards the capital expenditure of Rs.779.66 crore under the following head.

**Table- 25**

<b>Projected CAPEX for FY 2014-15</b>	
<b>Particulars</b>	<b>Amount (Rs. Cr)</b>
a) Telecom	<b>77.85</b>
b) O&M	<b>121.76</b>
c) Information Technology (IT)	<b>13.77</b>
d) Civil Works	<b>34.18</b>
e) TP & Con. (Excluding Deposit Works)	<b>532.10</b>
<b>Total Capital Expenditure (a+b+c+d+e)</b>	<b>Rs. 779.66 Cr</b>

235. The interest impact on the above new loan is claimed at Rs.55.06 crore. Replying to the query of the Commission OPTCL has submitted the position of drawl of additional loan for new project during 2013-14 and 2014-15 to be availed from PFC/ REC and other financial institutions which is summarised below:

**Table – 26**  
**Additional Loan for New Projects during 2013-14 & 2014-15 to be availed**  
**from PFC/REC and other Financial Institution**

(Rs. in Crore)

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.13	Loan to be taken during 2013-14 & 2014-15
A	<b>Loans Sanctioned</b>					
1	2X12.5 MVA, 132/33 S/s at <b>BASTA</b> ,	REC	16.99	13.27	<b>10.88</b>	2.39
2	2X12.5 MVA, 132/33 S/s at <b>KARANJIA &amp; BARAPALLI</b>	REC	40.08	31.33	<b>24.82</b>	6.51
3	2X12.5 MVA, 132/33 S/s at <b>BHADRAK</b>	REC	33.05	19.12	<b>17.21</b>	1.91
4	400 K.V D.C Line Trans. Line from <b>Meramundali to Duburi</b>	REC	141.48	79.71	<b>65.74</b>	13.97
5	2x12.5 MVA, 132/33 KV S/S at <b>Purushottampur</b> with LILO arrangement(2.5 Kms)	REC	15.99	14.66	<b>5.21</b>	9.45
6	Restoration of 220 KV DC Line from Budhipadar to Bolangir	REC	28.88	25.99	<b>22.26</b>	3.73
7	220 KV <b>BIDANASI-CUTTACK</b> D.C Line(10.42 Kms)	PFC	16.43	15.31	<b>8.13</b>	7.18
8	132 KV S.C. Line from Paradeep to Jagatsingpur	PFC	16.02	11.22	<b>11.22</b>	0
9	2x40 MVA, 132/33 KV S/S at Udala <b>with LILO arrangement</b>	PFC	26.19	22.26	<b>0</b>	22.26
10	2X12.5 MVA, 132/33 S/s at <b>Dabugaon with S.C Line on D.C Tower (40.75kms)</b>	REC	25.97	23.81	<b>5.79</b>	18.02
11	2X12.5 MVA, 132/33 S/s at <b>Nuapada with S.C line on D.C Tower(72.2 kms)</b>	REC	34.85	31.95	<b>8.86</b>	23.09
12	2X12.5 MVA, 132/33 S/s at <b>Kuchinda with LILO arrangement(29.35 Kms)</b>	REC	25.97	23.8	<b>6.31</b>	17.49
13	2X12.5 MVA, 132/33 S/s at <b>Padampur with S.C Line on D.C Tower (45.53kms)</b>	REC	27.57	25.28	<b>6.26</b>	19.02

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.13	Loan to be taken during 2013-14 & 2014-15
14	2x12.5 MVA, 132/33 KV S/S at <b>Chandpur with LILO arrangement(2.31 Kms)</b>	PFC	16.81	13	<b>6.05</b>	6.95
15	2x12.5 MVA, 132/33 KV S/S at <b>Boudh with S.C Line on D.C Tower (50.73kms)</b>	REC	29.87	27.38	<b>7.17</b>	20.21
16	2x12.5 MVA, 132/33 KV S/S at <b>Bhawanipatna with LILO arrangement(6.61 Kms)</b>	REC	19.59	17.96	<b>6.49</b>	11.47
17	2x20 MVA, 132/33 KV S/S at <b>Banki with S.C Line on D.C.Tower(19.69 Kms)</b>	PFC	21.16	16.5	<b>7.33</b>	9.17
18	2x160 MVA, 220/132 KV S/S & 2x20 MVA, 132/33 KV S/S at <b>Karadagadia , Khurda with LILO arrangement (10 Kms)</b>	REC	80.94	72.84	<b>0</b>	72.84
19	2x20 MVA, 132/33 KV S/S at <b>Kalunga with LILO arrangement (2.671 Kms)</b>	PFC	17.93	12.34	<b>4.16</b>	8.18
20	2x40 MVA, 220/33 KV S/S at <b>Bonai with LILO arrangement (10kms)</b>	PFC	28.74	25.68	<b>2.51</b>	23.17
21	2x40 MVA, 132/33 KV S/S at <b>Anandpur with LILO arrangement (10kms)</b>	PFC	22.41	17.93	<b>17.93</b>	0
22	220/33 KV S/S at <b>Gopinathpur with LILO arrangement</b>	PFC	25.55	21.72	<b>0</b>	21.72
23	220/33 KV S/S at <b>Lapanga with LILO arrangement</b>	PFC	60.8	51.68	<b>0</b>	51.68
24	Installation of 3rd Bay Transformer in different Grid-Stations	REC	152.75	137.44	<b>0</b>	137.44
25	132/33 KV S/S at <b>Barbil with LILO arrangement</b>	REC	17.41	15.66	<b>0</b>	15.66
26	220/33 KV Grid S/s at Kuarmunda, Sundergarh	HUDCO	62.12	52.8		52.8
27	Installation of Capacitor	HUDCO	18.59	15.8		15.8

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.13	Loan to be taken during 2013-14 & 2014-15
	Bank					
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
	<b>TOTAL</b>		<b>1445.52</b>	<b>1194.61</b>	<b>244.33</b>	<b>950.28</b>

236. The position of loan availed as an 31.03.2013 and the amount sanctioned during FY 2013-14 is given below:

**Table – 27**  
**Details of Year-wise Loan availed from FY 2008-09 to FY 2012-13**

Source (Institution-wise/ Bank-wise)	Purpose	Sanctioned by	Amount Sanctioned	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
<b>F Y 2007-08</b>								
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
	<b>Total</b>		<b>30.54</b>	<b>30.54</b>				
<b>F Y 2008-09</b>								
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
	<b>S Total</b>		<b>10.59</b>	<b>10.59</b>				
150688-2	Basta	REC	2.1	2.1	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
	<b>S Total</b>		<b>15.33</b>	<b>15.33</b>				
	<b>Total</b>		<b>25.92</b>	<b>25.92</b>				
<b>F Y 2009-10</b>								
150688-3	Basta	REC	3.23	3.23	12.08.2009	12.50%	10 Year	3 Year

Source (Institution- wise/ Bank- wise)	Purpose	Sanctioned by	Amount Sanctioned	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
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
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	2 Year
2350009-1	Nuapada	REC	3.82	3.82	31.03.2010	11.00%	15 Year	3 Year
2350010-1	Bhawanipatana	REC	2.3	2.3	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
		<b>S Total</b>	<b>49.05</b>	<b>49.05</b>				
48703004	132/33 KV S/S Anandpur	PFC	17.93	17.93	31.03.2010	11.25%	15 Year	3 Year
		<b>S Total</b>	<b>17.93</b>	<b>17.93</b>				
	<b>Total</b>		<b>66.98</b>	<b>66.98</b>				
<b>F Y 2011-12</b>								
150690-5	Barpali	REC	1.4	1.4	05.03.2012	12.50%	10 Year	0
2350002-5	Bhadrak	REC	5.76	5.76	06.03.2012	12.50%	10 Year	0
2353194-1	Bhudipadar- Bolangir	REC	22.26	22.26	07.03.2012	12.50%	15 Year	3 Year
150688-	Basta	REC	2.79	2.79	07.03.2012	12.50%	10 Year	0
2350001-3	400 Kv DC Line Meramindali Duburi	REC	19.09	19.09	07.03.2012	12.50%	10 Year	0
150689-	Karanjia	REC	2.18	2.18	14.03.2012	12.50%	10 Year	0
2350008-2	Dabugaon	REC	2.84	2.84	30.03.2012	12.50%	15 Year	1 Year
2350009-2	Nuapada	REC	5.05	5.05	30.03.2012	12.50%	15 Year	1 Year
2350010-2	Bhawanipatana	REC	4.19	4.19	30.03.2012	12.50%	15 Year	1 Year
2350011-2	Boudh	REC	3.88	3.88	30.03.2012	12.50%	15 Year	1 Year
2350012-2	Kuchinda	REC	3.57	3.57	30.03.2012	12.50%	15 Year	1 Year
2350013-2	Padampur	REC	3.27	3.27	30.03.2012	12.50%	15 Year	1 Year
		<b>S Total</b>	<b>76.28</b>	<b>76.28</b>				
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	1.4	1.4	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
		<b>S Total</b>	<b>14.53</b>	<b>14.53</b>				
	<b>Total</b>		<b>90.81</b>	<b>90.81</b>				
<b>F Y 2012-13</b>								
48703005-2	132 KV SC line Paradeep to Jagatsunghpur	PFC	4.24	4.24	26-03.2013	12.50%	13 Year	0
48703007-2	132/33 KV S/S Chandpur	PFC	3.53	3.53	26-03.2013	12.50%	13 Year	0
48703008-2	132/33 KV S/S Banki	PFC	5.35	5.35	26-03.2013	12.50%	13 Year	0
48703017-2	132/33 KV S/S Kalunga	PFC	2.78	2.78	26-03.2013	12.50%	14 Year	0
48703018-1	220 kV DC Line	PFC			26-03.2013	12.50%	13 Year	0

Source (Institution- wise/ Bank- wise)	Purpose	Sanctioned by	Amount Sanction ed	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
	from Bidanshsi		8.13	8.13				
48703019-2	132/33 KV S/S Banai	PFC	0.86	0.86	26-03.2013	12.50%	15 Year	0
		<b>S Total</b>	<b>24.88</b>	<b>24.88</b>				
2350004-1	Purusottampur	REC	5.21	5.21	3/30/2013	12.25%	15 Year	3 Year
	<b>Total</b>		<b>30.09</b>	<b>30.09</b>				
<b>Grand Total</b>			<b>244.34</b>	<b>244.34</b>				
<b>F Y 2013-14</b>	<b>To be avail during March-14 and FY14-15</b>							
150688-6	Basta	REC		2.26	Mar-14 to Apr-14	11.50%	10 Year	0
150689-7	Karanjia	REC		3.60	Mar-14 to Apr-14	11.50%	10 Year	0
150690-6	Barpali	REC		2.60	Mar-14 to Apr-14	11.50%	10 Year	0
2350001-4	400 Kv DC Line Meramindali Duburi	REC		13.97	Mar-14 to Apr-14	11.50%	10 Year	0
2350002-6	Bhadrak	REC		1.91	Mar-14 to Apr-14	12.50%	15 Year	0
2350008-3	Dabugaon	REC		16.59	Mar-14 to Apr-14	12.50%	15 Year	0
2350009-3	Nuapada	REC		22.50	Mar-14 to Apr-14	12.50%	15 Year	0
2350010-3	Bhawanipatana	REC		11.15	Mar-14 to Apr-14	12.50%	15 Year	0
2350011-3	Boudh	REC		19.72	Mar-14 to Apr-14	12.50%	15 Year	0
2350012-3	Kuchinda	REC		17.06	Mar-14 to Apr-14	12.50%	15 Year	0
2350013-3	Padampur	REC		18.55	Mar-14 to Apr-14	12.50%	15 Year	0
2353194-2	Bhudipadar-	REC		3.73	Mar-14 to Apr-14	12.50%	15 Year	2 Year
2350004-2	Purusottampur	REC		8.91	Mar-14 to Apr-14	12.25%	15 Year	3 Year
	<b>Sub Total</b>			<b>142.55</b>				
48703007-3	132/33 KV S/S Chandpur	PFC		6.95	Mar-14 to Apr-14	12.50%	12 Year	0
48703008-3	132/33 KV S/S Banki	PFC		9.17	Mar-14 to Apr-14	12.50%	12 Year	0
48703017-3	132/33 KV S/S Kalunga	PFC		8.17	Mar-14 to Apr-14	12.50%	13 Year	0
48703019-3	132/33 KV S/S Banai	PFC		23.17	Mar-14 to Apr-14	12.50%	14 Year	0
48703018-2	220 kv DC Line from Bidanshsi	PFC		7.18	Mar-14 to Apr-14	12.50%	12 Year	0
	<b>Sub Total</b>			<b>54.64</b>				
	<b>Grand Total</b>			<b>441.53</b>				

237. As seen from the above table OPTCL has already availed Rs.244.34 crore during the FY 2012-13 as against the sanctioned amount of Rs.441.53 crore. The balance sanctioned amount of Rs.197.19 crore is likely availed from REC by April, 2014. The interest impact on the loan works out to Rs.47.73 crore during FY 2014.15. The Commission approves the same amount as a pass through in the ARR for FY 2014-15.
238. Besides above OPTCL has 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	-	<u>26.00 crore</u>
<b>Total</b>	-	<b>27.27 crore</b>

239. In line with the order the last year the Commission does not consider the interest on State Govt. loan and bond as pass through in the revenue requirement of OPTCL for FY 2014-15 and allows only Rs.1.01 crore i.e. interest on Central Govt.
240. Based on the above, the interest liability works out to Rs.48.74 crore as per details below:

**Table - 28**

	<b>Proposal</b>	<b>Approval</b>
i. Govt. Loan(State Govt. + Central Govt.)	27.27	1.01
ii. Institutional loan	47.73	47.73
iii. Loan for new project (to be received during 2012-13 and 2013-14)	55.06	Nil
<b>Total</b>	<b>130.06</b>	<b>48.74</b>

Commission therefore allows an amount of Rs.48.74 crore towards interest due for the FY 2014-15.

### **Depreciation**

241. OPTCL has claimed an amount of Rs.176.02 crore towards depreciation for the year 2014-15. 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 - 29**

<b>Block-wise computation of Depreciation (Rs. Cr.)</b>						
<b>Particulars</b>	<b>Depreciation Rate prescribed by CERC Reg., 2009</b>	<b>Depreciation @ Pre-92 Rate as per GoI Notification</b>	<b>Gross Block (01.04.13) (Prov.)</b>	<b>Gross Block (01-04-14) (Projected)</b>	<b>Deprcn. For FY 14-15 as per CERC Reg.</b>	<b>Deprcn. for FY 14-15 @ Pre-92 Rate</b>
Land and Rights	0.00%	0.00%	40.10	43.37	0	0.00
Buildings	3.34%	1.80%	80.90	87.50	2.92	1.57
Plant & Machinery (Other Civil works)	3.34%	1.80%	5.22	5.65	0.19	0.10
Plant & Machinery	5.28%	3.80%	1591.22	1,720.96	90.87	65.40
Plant & Machinery (Lines, Cables & Network Assets)	5.28%	2.57%	1408.72	1,523.58	80.45	39.16
Vehicles	9.50%	12.86%	1.68	1.82	0.17	0.23
Furniture, Fixture	6.33%	4.55%	2.89	3.13	0.20	0.14
Office Equipment	6.33%	9.00%	17.87	19.33	1.22	1.74
<b>TOTAL</b>			<b>3148.60</b>	<b>3405.32</b>	<b>176.02</b>	<b>108.34</b>

From the above statement it is found that OPTCL has added an amount of Rs.256.72 crore towards the gross fixed asset during the FY 2013-14. After scrutiny of the audited account it is found that the work- in-progress as on 31.03.2013 amounts to Rs.661.37 crore which is more than the additions of asset considered during 2013-14.

The Commission therefore accepts the figures of the gross fixed asset addition of Rs.256.72 crore during 2013-14 since the opening WIP is more than the asset addition. Gross fixed asset as on 31.03.2013 reflected in the audited accounts of OPTCL is upvalued one.

242. 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 - 30**

(Rs. Cr.)

	<b>Pre up- valued</b>	<b>Up-valued (apportioned)</b>	<b>Impact of up-valuation</b>
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
<b>Total DISCOM</b>	<b>588.88</b>	<b>1186.73</b>	<b>597.85</b>
<b>Total</b>	<b>1103.20</b>	<b>2223.20</b>	<b>1120.00</b>

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

243. 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.
244. 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:-
- 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.
  - 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.
245. Since there were 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.
246. 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.
247. 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.
248. 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 to any RoE till the Sector becomes viable on cash basis.
249. 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”.
250. 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.”*
251. 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.

In reply to the Commission's letter No.4617 dated 28.12.2012 the Department of Energy in their letter No.R&R-25/2013/94 dated 23.03.2013 has stated the following:-

- (i) *"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 & OHPC, allowing the moratorium on debt services to the State Govt.'s till the sector turn 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 Department. However, steps have been taken in regard to other recommendations of the Hon'ble Commission in their letter No.4440 dated 19.7.2010 and the proposal will be placed before the Cabinet for approval after which required notification will be issued."*

The Commission vide letter No. Dir(T)-175/02/77 dtd.16.01.2014 has intimated the Govt. that the Commission has not yet received the detailed notification of the State Govt. The concession was given only upto the financial year 2012-13. The same concession may be continued for FY 2014-15 and onwards so that the effect of upvaluation is not considered while determining the tariff for the ensuing year.

252. 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 29.01.2003 and 06.05.2003 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.
253. 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.
254. A Table showing gross fixed assets as on 01.4.96 and year-wise asset addition thereafter till 2013-14 is depicted below.

**Table – 31**

**(Rs. cr.)**

<b>Year</b>	<b>OPTCL</b>
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
2012-13	219.48
2013-14 (Approved)	256.72
<b>Total</b>	<b>2913.93</b>

In view of the directions and order of the High Court of Odisha, the Commission is bound to compute depreciation 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).

255. The classification of assets has been done proportionately based on the audited account for 2012-13 submitted by OPTCL. Accordingly, the Commission approves an amount of Rs.92.71 crore towards depreciation for the FY 2014-15 as per the details shown in Table below:

**Table – 32**

(Rs. cr.)

<b>Particulars</b>	<b>Pre-92 rate of depreciation as per GOI notification dated 31.01.92</b>	<b>Book Value of asset as on 01.04.1996</b>	<b>Book Value of asset as on 01.04.2013</b>	<b>Depreciation for the year 2014-15</b>
Land and Rights		8.07	37.11	0.00
Building	1.80%	13.09	74.87	1.35
Plant & Machinery (other civil works)	1.80%	-	4.83	0.09
Plant & Machinery	3.80%	-	1472.63	55.96
Plant & Machinery (line, cables and network)	2.57%	492.71	1303.73	33.51
Vehicles	12.86%	0.02	1.55	0.20
Furniture, Fixture	4.55%	0.19	2.67	0.12
Office equipment	9.00%	0.25	16.54	1.49
<b>Grand Total</b>		<b>514.32</b>	<b>2913.93</b>	<b>92.71</b>

Accordingly, Commission allow an amount of Rs.92.71 crore towards depreciation for the FY 2014-15.

### **Return on Equity**

256. OPTCL has claimed an amount of Rs.68.42 crore towards return on equity on a share capital of Rs.353.07 crore at the rate of 19.38% 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.243 crore upto the financial year 2013-14. The sanctioned order and date of the Govt. fund is given below:-

**Table – 33**

<b>Sl. No.</b>	<b>Sanction Order No. and Date</b>	<b>Amount (Rs. in cr.)</b>
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

Sl. No.	Sanction Order No. and Date	Amount (Rs. in cr.)
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
12.	R&R-6/12-5693 dt.18.07.2013	29.19
13.	R&R-6/12-5698 dt.18.07.2013	11.97
14.	R&R-6/12-5703 dt.18.07.2013	8.84
	<b>Total</b>	<b>243.00</b>

257. Commission feels that OPTCL is entitled to get return on equity value of Rs.243 crore 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 crore 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 CERC Regulation 2009 was applicable upto FY 2014-15. In the mean time the CERC has issued the Draft Terms and Conditions of Tariff Regulation, 2014 applicable from 01.04.2014 to 31.03.2019. As per the said draft Regulation RoE has been computed at the base rate of 15.5% for transmission system including communication system on the equity base. However, the said Regulation stipulates that tax on RoE shall be directly recovered from the beneficiary or the long term transmission customers/DICs as per the actual tax paid by the transmission licensee.

**In view of the above, the Commission, therefore, allows return @ 15.5% on the equity value of Rs.243 crore as stated above which works out to Rs.37.67 crore. Over and above, this amount the Commission allows the actual tax expenses of Rs.8.29 crore booked in the audited accounts of OPTCL for FY 2012-13. Hence the total amount of Rs.45.96 crore is allowed as pass through in the ARR for FY 2014-15 under the head RoE.**

#### **Interest on Working Capital**

258. OPTCL has proposed an amount of Rs.40.85 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- 34**

<b>Calculation of Interest on Working Capital</b>	
<b>Parameters</b>	<b>Amount (Rs.Cr.)</b>
(I) Receivables equivalent to two months of Fixed Cost	158.16
(ii) Maintenance Spares @ 15% of O&M expenses	80.04
(iii) Operation & Maintenance expenses for one month	44.47
<b>Total Working Capital</b>	<b>282.67</b>
<b>Interest on Working Capital @ 14.45% per annum</b>	<b>40.85</b>

The interest rate is considered as the PLR of SBI w.e.f. 04.02.2013.

259. 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.40.85 crore is disallowed by the Commission.

#### **Contingency Reserve**

260. For the year 2014-15, OPTCL has proposed Rs.17.03 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.154.66 crore in Contingency Reserve. OPTCL in its submission stated that they have already invested an amount of Rs.20 crore in SDL, bond of different States. Further OPTCL would invest another Rs.10 crore in the current year. The Commission is of the view that the investment made by OPTCL in bonds and SDL is negligible compared to the balance shown in the audited accounts. Moreover as per the cashflow statement submitted by the licensee the closing balance figure for the current year 2013-14 (as at the end of January 2014) is shown at Rs.38.89 crore as surplus. In view of the above, the Commission is not inclined to allow the claim of the contingency reserve amounting Rs.17.03 crore.

#### **Grid Co-ordination Committee Expenses**

261. OPTCL claimed an amount of Rs.0.52 crore towards Grid Coordination Committee expenses for FY 2014-15. The Commission hereby approves the same in line with the tariff orders of previous years.

#### **Payment of SLDC Charges**

262. 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 2014-15 wherein it has been computed that OPTCL has to Pay 10% of SOC to SLDC. Accordingly, OPTCL will pay an amount of Rs. 0.68 cr. per annum to SLDC towards System Operation Charges for FY 2014-15. The details of SOC are available in the ARR of SLDC approved in Case No.82/2013. The said amount of Rs. 0.68 cr. is allowed in the ARR of OPTCL to be recovered through its Transmission Tariff.

#### **Truing up**

263. For the FY 2012-13 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 – 35

(Rs. cr.)

FY	Cost of Trans. Charges approved in the ARR	Cost of Trans. Charges (audited) considered for true up	Revenue from LTOA charges approved in ARR	Revenue from LTOA Charges (audited)	Revenue from LTOA Charges (True up)	Difference in Trans. Charges (Col 2-3)	Difference in Revenue from LTOA charges (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
2012-13	587.02	506.10	587.02	549.73	549.73	80.92	-37.29	43.63	444.18

It is clear from the above table that OPTCL posted a cumulative surplus of Rs.444.18 cr. at the end of FY 2012-13. Hence, OPTCL does not require any regulatory asset to be amortized.

#### Incentive to OPTCL for System Availability

264. OPTCL in its submission has claimed for an incentive of Rs.10.47 Cr. to be passed on the ARR of FY 2014-15 as the system availability of OPTCL Transmission Network for FY 2012-13 was 99.89%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98%. The OPTCL Incentive Claim of Rs.10.47 Cr. has been certified by SLDC and counter signed by Member Secretary, GCC. A calculation of incentive claimed by OPTCL is given below:

Table-36

CALCULATION OF INCENTIVE CLAIMED BY OPTCL	
Energy transmitted by OPTCL in FY 2012-13 for intra-state LTOA customers (MU)	22155.32
Transmission Charge @ 25 P/U during FY 2012-13 (Rs. Cr)	553.88
Transmission System Availability during FY 2012-13 for calculation of incentive (%)	99.89
Transmission System Availability above 98%	1.89
<b>Incentive claimed by OPTCL for FY 2012-13 (Rs. Cr)</b>	<b>10.47</b>

It is further submitted that the incentive approved by the Hon'ble Commission would be utilised for enhancing motivation of employees of OPTCL in the manner as would be decided by OPTCL management.

265. 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 99.89% during FY 2012-13 and is expected to maintain NATAF more than 98% during FY 2013-14, pending the verification, the Commission approves an amount of Rs.5.00 Cr. as an incentive in the ARR of OPTCL for FY 2014-15 with a rider that this incentive amount approved by the Commission should be spent in the Grid substations 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 permissible range of 33 KV.

### **Rebate**

266. OPTCL has proposed that for 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 1% of the amount if paid within 30 days of the presentation of the bill. Accordingly, OPTCL has projected 2% rebate amounting to Rs.11.83 Cr which is calculated based on the projected unit at current transmission charge i.e. 25 p/u with the anticipation that except SOUTHCO, other LTOA customers shall pay within two working days and avail the rebate. The Commission approves the same and allowed an amount of Rs.12.50 crore towards rebate as a pass through in the ARR.

### **Miscellaneous Receipts**

267. OPTCL has proposed an amount of 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 1<sup>st</sup> six months of FY 2013-14, Miscellaneous Receipt of OPTCL from different sources is about **Rs.7.26 Crore**, the details are given in the table below:

**Table- 37**  
**Miscellaneous Receipt during 1<sup>st</sup> six months of FY 2013-14**

Source	Amount Received ( Rs. Crore)
Inter-State Wheeling	0.92
Inter-state Short Term Open Access	3.46
STU charges received from Energy Exchange	1.38
Supervision Charge	1.50
<b>TOTAL</b>	<b>7.26</b>

### **Current status on revenue earnings from Inter-State Wheeling:**

268. OPTCL has filed an application before Hon'ble CERC for determination of wheeling charges for the period 2009-10 to 2013-14 in respect of its inter-state corridor for wheeling of power to WR constituents. The same is yet to be heard and disposed of. Further, 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. This application has also not been disposed of. However, OPTCL has been raising the bills to WR constituents based on Fixed Cost determined by CERC for the FY 2003-04 as per REA published by WRPC. But, some of the constituents are not paying any amount citing pendency of the above cases in CERC. In view of the position explained, revenue from inter-state wheeling during FY 2014-15 cannot be correctly assessed.

### **Current status on revenue earnings from Supervision Charge:**

269. Compared to previous years, the earning from Supervision Charge during 1st six months of FY 2013-14 has drastically reduced. The number of applicant industries are very less for which revenue from Supervision Charge during the balance period of FY 2013-14 would not be appreciable. For the above reasons, revenue generation from other sources is not certain.

The Commission scrutinize the cash flow statement furnished by OPTCL upto January, 2014 and found that OPTCL has received the amount of Rs.18.94 crore under the following heads.

**Table-38**

<b>Miscellaneous Receipt during 1st six months of FY 2013-14</b>		<b>Upto January, 2014 of FY 2013-14</b>
<b>Source</b>	<b>Rs. Cr</b>	<b>Rs. Cr</b>
Inter-State Wheeling	0.92	4.58
Short-Term Open Access	3.46	5.19
STU charges received from Energy Exchange	1.38	7.09
Supervision Charge	1.50	2.08
<b>Total</b>	<b>7.26</b>	<b>18.94</b>

For the purpose of estimation of the miscellaneous receipt during FY 2014-15 the Commission has not considered the revenue from inter-state wheeling in view of the reasons stated in the above para. Further as per the cash flow it is seen that the supervision charges collected by the licensee is negligible during FY 2013-14 and almost nil in the month of December, 2013 and January, 2014. Hence the Commission feels it justified to consider revenue for short-term open access and STU charges received by the energy exchange as miscellaneous receipt. The revenue in respect of the above two heads comes to Rs.12.28 crore for a period of 10 months. Extrapolating the same for a period of 12 months it works out to Rs.14.73 crore. The Commission assumes the supervision charges at the same level of Rs.2.08 crore. Thus the total miscellaneous receipt approved by the Commission works out to Rs.16.81 crore (14.73+2.08).

#### **Transmission Cost**

270. The total energy to be transmitted in the OPTCL system is estimated at 27455 MU for FY 2014-15, the details of which are mentioned in the table below:

**Table – 39**

<b>Details of Energy for Transmission</b>	<b>Proposed by OPTCL (MU)</b>	<b>Approved by OERC (MU)</b>
Sale to DISCOMs	26995	24530
Wheeling to industries from CGPs	450	450
Sale to CGPs by GRIDCO	10	10
<b>Total</b>	<b>27455</b>	<b>24990</b>

271. The details of expenses proposed by OPTCL and approved by the Commission for FY 2014-15 towards transmission charges are depicted in the Table below:

**Table – 40**

#### **ARR Proposed and Approved for OPTCL for FY 2014-15 (Rs. in cr.)**

<b>ITEMS</b>	<b>Approved for 2013-14</b>	<b>Proposed for 2014-15</b>	<b>Approved for 2014-15</b>
Employees Cost including Terminal Benefits	289.30	361.38	318.18
R&M Cost	60.00	146.77	93.00
A&G Cost	22.39	25.46	24.01
Interest on Loan Capital	40.04	130.06	48.74
Depreciation	89.40	176.02	92.71
Return on Equity	37.40	68.42	45.96
Interest on Working Capital	-	40.85	-

ITEMS	Approved for 2013-14	Proposed for 2014-15	Approved for 2014-15
<b>Sub-Total</b>	<b>538.53</b>	<b>948.95</b>	<b>622.60</b>
Special Appropriation	<b>53.40</b>	-	-
<b>Pass Through Expenses</b>			
Contingency Reserve	-	17.03	-
Bad & doubtful debt Debts	-	-	-
GCC Expense including SLDC charges	0.94	0.52	1.20
Incentive for system availability	5.00	10.47	5.00
Rebate		11.83	12.50
<b>Total</b>	<b>597.87</b>	<b>988.80</b>	<b>641.30</b>
<b>Less Misc. Receipts</b>	<b>12.00</b>	<b>12.00</b>	<b>16.80</b>
<b>Annual Revenue Requirement to be recovered from LTOA Consumers (i.e. DISCOMs &amp; CGPs)</b>	<b>585.87</b>	<b>976.80</b>	<b>624.50</b>
<b>Transmission Charges (Paise/Unit) (Rounded)</b>	<b>25.00</b>	<b>35.58</b>	<b>25.00</b>

## TARIFF DESIGN

### Transmission Charges

272. OPTCL in its ARR Application for FY 2014-15 has proposed Transmission Charges @ 35.58 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.
273. 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 **24,990 MU** with an average demand of **2853 MW**. The net transmission cost as indicated in the table above is **Rs.624.50 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

274. OPTCL had proposed that out of the energy supplied to transmission licensee, 3.75% 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 3.75% for wheeling for FY 2014-15.

**Reactive Energy Charges:**

275. OPTCL in its ARR application for FY 2014-15 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.
276. The Commission in order dated 20.03.2013 had approved Reactive energy charges provisionally @ 6.50 Paise /KVarh as per Clause 1.7 of OGC for FY 2013-14 and directed OPTCL to file the calculation of Reactive Energy Charges afresh with full justification thereof at earliest vide para 247 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 2014-15. 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 within 30<sup>th</sup> June, 2014.

**Transmission Charge Payment Mechanism**

277. 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, 2012-13 and 2013-14 for payment of monthly SLDC Charges to SLDC & Transmission Charge to OPTCL shall also to be followed for the Year 2014-15.

**Rebate**

278. 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**

279. 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.
280. The transmission tariff approved as above in respect of OPTCL will become effective from 1st April, 2014 and shall continue until further order.
281. In Appeal No.186 of 2011 the Appellate Tribunal for electricity in their Order dated 07.12.2012 in respect of Transmission Tariff for the FY 2011-12 of OPTCL have given the following observation.

*“11. As regards payment of DA is concerned, it is to be noted that the Commission approves ARR and tariff for licensee on certain assumptions and the Commission is expected to carry out true up filling in the gaps between the assumptions and the actual after prudence check. In case payment of DA for FY 2011-12, the Commission has taken weighted average of 55% as against actual of 58% which could be determined only after the end of the year. The Commission would consider the difference in approved DA and actual DA at the time of next true up.”*

*26. In view of the above, the State Commission to consider the actual interest on the loan taken by the Appellant on the new projects capitalized during the FY 2011-12 in true up.*

*42. We have carefully examined the findings of the State Commission given in paragraph 340 of the impugned order. We do not find any infirmity in the methodology adopted by the State Commission. The Commission in its reply has confirmed that every year truing up exercise is undertaken based on audited accounts. Thus, the actual Miscellaneous Receipts shall be considered by the State Commission while truing up the accounts for the FY 2011-12.*

*47. We, therefore, reiterate the direction given by this Tribunal in its judgment in Appeal No.110 of 2010 delivered on 19.4.2012 to take immediate steps to formulate specific Tariff Regulations for transmission of electricity in accordance with Section 181(zd) read with Section 61 of the Act.”*

The Commission would like to clarify that the truing up exercise have been carried out upto the FY 2012-13 based on the audited accounts submitted by the licensee. Hence, the observation given by the Appellate Tribunal in para 11, 26 & 42 has been complied with. Regarding the direction in para 47, the Commission would like to clarify that the Commission has already made draft transmission tariff regulation and published in the website for views and suggestions. The same will be finalized shortly.

282. In view of the coming general election to Lok Sabha and State Legislative Assembly it was decided in the 39<sup>th</sup> Meeting of FOR held at Chandigarh on 18.01.2014 that a reference shall be made on behalf of all SERCs and CERC to the Election Commission regarding the release of Tariff Order during the currency of Model Code of Conduct. Accordingly a reference in this regard had been made by Chairman FOR on 20.01.2014 to the Election Commission of India. The Election Commission of India in their reply dtd. 17.02.2014 stated that Model Code of Conduct is applicable to Electricity Regulatory Commission as has been done during last Lok Sabha Election in the year 2009. In case any Commission requires relaxation then the matter may be referred to the Election Commission.
283. In view of the above the Commission decides as follows:  
Since the last date of election in Odisha is 17<sup>th</sup> April, 2014 and this may get extended by a day or two in case of re-polling the Commission decide to pass the Order on 22.03.2014 but it will be kept under sealed cover for release to the general public on the day following the last day of election in Odisha (including day re-polling). The Secretary, OERC shall take appropriate action to release the order as directed above.
284. The Tariff Order shall be made effective from 01.04.2014.
285. The application of OPTCL in Case No.83 of 2013 is disposed of accordingly.

Sd/-  
**(S.P.SWAIN)**  
**MEMBER**

Sd/-  
**(B. K. MISRA)**  
**MEMBER**

Sd/-  
**(S. P. NANDA)**  
**CHAIRPERSON**

## Annexure -A

### (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 – 1**  
**CAPEX for O&M Projects in FY 2014-15**

Sl. No.	Descriptions	Unit Rate (Rs. Lakh)	Quantity	Total Cost (Rs. Lakh)
<b>1</b>	<b>PROCUREMENT OF TRANSFORMERS WITH COST OF ERECTION</b>			
(i)	Procurement of 160 MVA, 220/132kV	650.00	5	3250.00
(ii)	Procurement of 40 MVA, 132/33kV	260.00	13	3380.00
(iii)	Procurement of 40 MVA, 220/33kV	290.00	2	580.00
(iv)	Procurement of 20 MVA, 132/33kV	129.75	12	1557.00
(iii)	Cost of Erection with Bays	LS		876.70
<b>2</b>	<b>CONDUCTOR UPGRADATION WITH HTLS</b>			
(i)	132kV Joda-Barbil S/C (12 Rkm)	LS		444.00
(ii)	132kV Mendhasala-Khurda S/C (17 Rkm)	LS		629.00
<b>3</b>	<b>CONVERSION OF S/C LINES IN D/C TOWERS TO D/C LINES</b>			
(i)	132kV Akhusingh - Paralakhemundi (76.9 Rkm)	LS		198.78
(ii)	132kV Jajpur Road - Anandpur (30 Rkm)	LS		169.49
(iii)	132kV New Bolangir - Patnagarh (40.2 Rkm)	LS		463.61
(iv)	132kV New Bolangir - Sonapur (53.845 Rkm)	LS		627.03
<b>TOTAL</b>				<b>Rs. 12175.61Lakh ~ Rs. 121.76 crore</b>

### (b) CAPEX FOR CIVIL WORKS:

OPTCL proposes capital expenditure of **Rs.34.18 crore** relating to civil works during FY 2014-15 for on-going and new projects in its two Divisions i.e. Bhubaneswar and Burla.

### (c) CAPEX FOR TRANSMISSION PROJECT & CONSTRUCTION WING:

It has been planned to spend an amount of **Rs.532.10 crore** on transmission related infrastructure during FY 2014-15 to increase the overall system capacity and to strengthen the transmission system network of the state, the details of which are shown in Annexure-A

**Table - 2**  
**CAPEX FOR TRANSMISSION PROJECTS & CONSTRUCTION in FY 2014-15**  
**(Rs. Crore)**

Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5=3+4</b>	<b>6</b>
	<b>A - ONGOING SCHEMES</b>				
1	2X 20 MVA, 132/33 kV S/S at Barbil with associated LILO	1.98	1.50	3.48	2.00

Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
2	220/33kV S/S along with associated lines at <b>Gopinathpur</b> (Keonjhar)	0.00	2.00	2.00	0.00
3	400/220/132kV S/S at <b>Chendipada</b> (Nisha)	0.00	0.00	0.00	10.00
4	400 kv dc line from Meramundali to Duburi	0.54	0.30	0.84	5.00
5	132/33kV S/S at <b>Khajuriakata</b> (Hindol Road) and its associated lines	3.02	8.00	11.02	10.00
6	132kV SC line from <b>Sonepur</b> to <b>Boudh</b>	0.00	0.00	0.00	24.60
7	400kV DC line from <b>IB</b> to <b>Meramundali</b>	0.00	24.00	24.00	0.00
8	Arrangement of 2x20 MVA proposed constn. Of 132/33 kV Grid S/S at <b>Bangiriposi</b> along with associated LILO line	0.00	2.00	2.00	6.00
9	2 Nos. 220 kV feeder bay of 220/132 kV Grid S/S at <b>Balasore</b> for 220 kV DC line from 400 kV POWERGRID Grid S/S <b>Kuchei</b> low gantry work at <b>Balasore</b> S/S (220 kV Bay extension & Birla Tyre	3.54	0.00	3.54	0.00
10	220/132kV S/S <b>Dhamra</b> along with associated LILO line tapping from existing 220kV new Duburi-Bhadrak line	0.00	5.00	5.00	15.00
11	132/33kV S/S at <b>Karanjia</b> alongwith associated LILO line	0.15	0.00	0.15	0.00
12	Conversion of 132kV Switching S/S at <b>Somnathpur</b> to 2x20 MVA, 132/33kV S/S <b>Balasore</b>	0.46	3.00	3.46	5.00
13	2x12.5 MVA, 132/33kV S/S at <b>Udala</b> along with associated LILO line tapping from existing 132kV Balasore-Baripada 132kV SC line	0.31	3.00	3.31	12.00
14	132/33kV S/S at <b>Olavar</b> with <b>132 KV Line from Pattamundai to Olavar</b> & bay extention at Pattamundai	3.43	8.00	11.43	15.00
15	132kV DC line from proposed <b>Dhamara</b> S/S to <b>Olavar</b> S/S	0.00	0.00	0.00	10.00
16	132/33kV S/S at <b>Agarpada</b> along with associated LILO line of one ckt. Of proposed Bhadrak-Anandpur line	0.00	1.00	1.00	0.00
17	2x20MVA S/S <b>Bhograi</b> with associated 132kV DC line from Kuchei to Jaleswar	0.00	5.00	5.00	8.00
18	132kV SC line from 400/220kV S/S at <b>Kuchei</b> to 132/33kV S/S at <b>Takatpur</b> (Baripada)	0.00	0.00	0.00	1.00
19	220/132kV S/S <b>Puri</b> (Samangara)	0.00	5.00	5.00	30.00
20	132/33kV S/S <b>Chandpur</b> (Tangi) with line	1.37	3.00	4.37	0.00
21	220/132kV S/S <b>Narasinghpur</b> with line	0.00	0.00	0.00	8.00
22	220/132kV S/S <b>Karadagadia</b> with line	4.83	5.00	9.83	15.00
23	132/33kV S/S <b>Banki</b> with line	1.01	5.00	6.01	3.00
24	132/33kV S/S <b>Purushottampur</b> with line	1.22	4.00	5.22	0.00
25	1 No. 132kV bay extension at S/S <b>Nimapara</b>	0.10	0.00	0.10	0.00
26	2nd hot line stringing from <b>Chandaka</b> to <b>Nimapara</b>	0.18	0.00	0.18	0.00
27	2nd Circuit stringing from <b>Badagada-Ranasinghpur</b>	0.00	1.00	1.00	0.00



Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
28	132kV DC line from S/S <b>Pratapsasan</b> to <b>Phulnakhara</b>	0.00	0.00	0.00	0.00
29	400/220kV S/S <b>Mendhasal (Third ICT)</b>	1.81	1.00	2.81	5.00
30	220kV line from <b>Bidanasi-Mendhasal</b>	0.40	2.00	2.40	2.00
31	132/33kV S/S <b>Nuapada</b> with associated line	0.00	0.00	0.00	0.00
32	132/33kV S/S <b>Bhawanipatna</b> with associated line	2.60	2.00	4.60	0.00
33	132/33kV S/S <b>Padampur</b> with associated line	0.00	4.00	4.00	0.00
34	220/132kV S/S <b>Kesinga</b>	2.53	5.00	7.53	10.00
35	220kV DC line from <b>Bolangir</b> to <b>Kesinga</b>	0.00	0.00	0.00	15.00
36	400kV S/S at <b>New Duburi</b>	0.17	0.50	0.67	0.00
37	220kV DC line from 220/33kV S/S at <b>Bidanasi</b> to 132/33kV S/S <b>Cuttack</b>	1.37	4.00	5.37	2.00
38	132/33kV S/S at <b>Marshaghai</b>	0.00	4.00	4.00	8.00
39	132/33kV <b>Anandpur</b> S/S	0.05		0.05	0.00
40	132kV bay extension at 132/33kV S/S at <b>Salipur, Kendrapara</b> and <b>Nuaptana</b> with associated lines	3.28	4.00	7.28	10.00
41	132/33kV S/S at <b>Nuapada</b> (Cuttack) or 2x100MVA, 220kV S/S at <b>Nuapara</b> (Cuttack) with bay extension at <b>Bidanasi</b> S/S	1.84	3.00	4.84	25.00
42	220kV bay extn. work at <b>Bidanasi-Cuttack</b> DC line	0.00	1.00	1.00	0.00
43	132kV DC line from <b>Jagatsinghpur</b> to <b>Paradeep</b>	2.59	3.00	5.59	0.00
44	220kV DC line from <b>Duburi</b> to <b>Paradeep</b>	0.17	0.00	0.17	0.00
45	132/33kV S/S at <b>Pottangi</b>	2.30	5.00	7.30	10.00
46	132/33kV S/S at <b>Umerkote</b>	3.64	5.00	8.64	15.00
47	2x12.5MVA, 132/33kV S/S at <b>Dabugaon</b> along with associated 132kV SC line on DC tower from Tentulikhunti to Dabugaon	0.00	0.00	0.00	14.00
48	2x 20MVA, 132/33kV S/S at <b>Podagada</b> with associated 132kV LILO line from 132 kV Jayanagar to Rayagada SC line in principle approved by BoD	0.00	5.00	5.00	15.00
49	2x20 MVA, 220/33kV S/S near <b>Govindapalli</b> with associated 220kV LILO Line from 220 kV Balimela-Jayanagar SC line in principle approved by BoD	0.00	2.00	2.00	15.00
50	220kV DC line from 220/132/33kV S/S <b>Jayanagar</b> to 400/220kV <b>POWERGRID</b> along with 2 nos. 220kV feeder bays at both ends	0.55	2.00	2.55	2.00
51	Conversion of existing <b>Jaynagar-Sunabeda</b> SC line to DC line	2.18	5.00	7.18	3.00
52	220kV DC Line diversion at Loc. No.64 (DB-0) of <b>Indravati-Therubali</b> Ckt -III & IV near village Rebatiguda	0.00	1.00	1.00	0.00

Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
53	2x20MVA, 132/33kV S/S at <b>Muniguda</b> along with LILO line in principle approved by BoD	0.00	1.00	1.00	10.00
54	132/33kV S/S at <b>Kuchinda</b>	0.00	3.00	3.00	0.00
55	2x20MVA, 220/33kV S/S Transformer and LILO line at <b>Kalunga</b>	1.49	5.00	6.49	5.00
56	2x40MVA, 220/33kV S/S at <b>Bonai</b> along with 5 km LILO line	1.43	5.00	6.43	5.00
57	400kV S/S at <b>Lapanga</b>	9.17	5.00	14.17	20.00
58	220/132kV S/S <b>Lapanga</b>	3.68	25.00	28.68	5.00
59	2x100MVA, 220/132kV S/S at <b>Kuanarmunda</b> with LILO line	1.86	5.00	6.86	15.00
60	Installation of 2x40 MVA Transformer at <b>Jharsuguda</b> and diversion of extn. of 132kV line inside the S/S at <b>Sarasmal</b>	0.33	2.00	2.33	2.00
61	220kV DC line from existing 220 kV <b>Budhipadar-Tarkera</b> line to <b>Kuanramunda</b>	0.00	4.00	4.00	5.00
<b>TOTAL - A</b>		<b>65.58</b>	<b>199.30</b>	<b>264.88</b>	<b>397.60</b>
<b>B - PROPOSED SCHEMES</b>					
1	2*100MVA, 220/132/33kV S/S at <b>Pratapsasan</b> near Balakati with associated 220kV DC LILO line of proposed 220kV Cuttack-Jatani line. 132kV DC line from Pratapsasan to Phulnakhara with 2 Nos. of Bay at Phulnakhara	0.00	5.00	5.00	30.00
2	132kV DC line from <b>Baripada</b> POWERGRID (Kuchei ) S/S to <b>Jaleswar</b> S/S with 2 nos. 132kV bay extension each at Kuchei & Jaleswar	0.00	0.00	0.00	10.00
3	220/132/33kV S/S at <b>Lahanda</b> near Joda with 132kV DC line from Lahanda to Barbil and two nos 132kV feeder bay extension at Barbil	0.00	0.00	0.00	2.00
4	2x40MVA, 132/33kV S/S at <b>Baliguda</b> with 132kV SC line from Phulbani to Baliguda and one no. 132kV feeder bay extension at Phulbani	0.00	0.00	0.00	10.00
5	2x20 MVA, 220/33kV S/S at <b>Narsinghpur</b> with LILO arrangement of 1 circuit of existing 220kV Bhanjanagar-Meramundali DC Line	0.00	0.00	0.00	10.00
6	One no. 220kV feeder from proposed 220/132kV S/S at <b>Cuttack</b> to proposed 400/220kV S/S at <b>Uttara</b> (Jatni) with two nos. 220kV feeder bay extension at each end	0.00	0.00	0.00	2.00
7	Conversion of 132kV SC line to 132kV DC line from POWERGRID S/S <b>Kuchei</b> to 132/33kV S/S <b>Baripada</b>	0.00	0.00	0.00	2.00
8	2X315MVA, 400/220/33kV, 2x40MVA, 220/33kV S/S at <b>Khuntini</b> with associated transmission lines	0.00	0.00	0.00	2.00

Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
9	1x315MVA, 400/220kV, 1X20MVA, 220/33kV S/S at <b>Nisha</b> near Angul with 400kV DC line by LILO of 400kV IB-Meramundali Line	0.00	0.00	0.00	2.00
10	400kV S/S at <b>Paradeep</b>	0.00	0.00	0.00	2.00
11	400kV S/S at <b>Kuanrmunda</b>	0.00	0.00	0.00	2.00
12	400kV S/S at <b>Joda</b>	0.00	0.00	0.00	2.00
13	400kV DC line from <b>Paradeep</b> to <b>Uttara</b>	0.00	0.00	0.00	2.00
14	2x12.5MVA, 220/33kV S/S at <b>Kasipur</b> with LILO of one circuit of Indravati-Therubali 220kV D/C line (2.0 km)	0.00	0.00	0.00	4.00
15	2X20MVA, 132/33kV S/S at <b>R.Udayagiri</b> with 132kV line from Mohana with 132kV Bay extension at Mohana (40km)	0.00	0.00	0.00	5.00
16	2X20MVA, 132/33kV S/S at <b>Muniguda</b> with 132kV line from Vedanta Lanjigarh and 132kV Bay extension at Lanjigarh (25km)	0.00	0.00	0.00	10.00
17	2X20MVA, 132/33kV S/S at <b>Nandapur</b> with 132kV line from Potangi and 132kV Bay extension at Potangi (35km)	0.00	0.00	0.00	3.00
18	2*20MVA, 132/33kV S/S at <b>Satasankha</b> (Puri district) with associated 132kV DC line from proposed 220/132kV Puri S/S to proposed 132/33kV S/S at Satasankha	0.00	0.00	0.00	3.00
19	2*20MVA, 132/33kV S/S at <b>Bhograi</b> (Balasore district) with associated 132 kV LILO line from one circuit of proposed 132 kV Kuche (POWERGRID)- Jaleswar DC line	0.00	0.00	0.00	10.00
20	220/33 kV 2x20 MVA Grid S/S at <b>Deogarh</b> with associated LILO line from LOC No. 330 of 220 kV Rengali-Tarekera DC line.	0.00	0.00	0.00	7.00
21	132/33 kV 2*20 MVA Grid S/S at <b>Maneswar</b> with associated LILO line from 132 kV Sambalpur - Rairakhol SC line.	0.00	0.00	0.00	5.00
22	Conversion of 132kV switching station at <b>Somanthpur</b> (Balasore) to 2x20 MVA 132/33 kV S/S	0.00	0.00	0.00	3.40
23	Conversion of 132kV SC line from <b>Balasore</b> to <b>Somathpur</b> to DC line by stringing 2nd circuit with one no. 132kV Bay extension at both ends	0.00	0.00	0.00	3.50
24	Renovation of existing 132/33kV S/S at <b>Ganjam</b> (construction of 2x12.5 MVA, 132/33kV S/S )	0.00	0.00	0.00	2.60
<b>TOTAL – B</b>		<b>0.00</b>	<b>5.00</b>	<b>5.00</b>	<b>134.50</b>
<b>TOTAL: (A+B)</b>		<b>65.58</b>	<b>204.30</b>	<b>269.88</b>	<b>532.10</b>
<b>C- DEPOSIT WORK</b>					
1	EHT line diversion work for <b>Haridaspur-Paradeep</b> Rly line	0.00	2.00	2.00	2.00
2	Power Supply to MCL at <b>Kaniha</b>	0.00	1.00	1.00	0.00

Sl. No.	Loan / Scheme / Contract wise Capital Works	Expenditure during FY 2013-14			Projected Expenditure (FY 2014-15)
		Actual for 1 <sup>st</sup> six months	Projection for balance six months	Total	
3	220/33 kV S/S. <b>Basundhara</b> (MCL, DW)& 220 kV SC line from Budhipadar to Basundhara &	0.54	3.00	3.54	0.00
4	132 kV line for <b>Polasponga</b> to proposed grid S/S <b>Keonjhar</b>	0.00	1.00	1.00	0.00
5	132kV power supply to <b>Banspani</b> (Railway Deposit)	0.16	1.00	1.16	0.00
6	33kV Bay extension at <b>Sambalpur</b> Grid S/S for supply to IOCL <b>Naxpalli</b> , Sambalpur	0.00	1.00	1.00	0.00
7	132kV LILO line from <b>Khurda-Puri</b> for P/S to Samuka Beach near S/S <b>Puri</b>	0.00	5.00	5.00	0.00
8	1 no. 33kV Bay Extn., <b>Ranasinghpur</b> for P/S to IOCL <b>Jatni</b>	0.00	1.00	1.00	0.00
9	132/33kV S/S <b>Konark</b> with line	2.12	5.00	7.12	10.00
10	220kV DC line for <b>Laxmipur</b> S/S to <b>Aditya Alumina, Kansariguda</b>	0.00	0.50	0.50	0.00
11	220kV SC line on DC tower from <b>Laxmipur</b> S/S to M/s <b>Utkal Alumina</b> at Doraguda	0.00	0.50	0.50	0.00
12	3x40 MVA, 132/33kV S/S <b>Arugul</b> for P/S to IIT & associated at <b>Karadagadia</b>	2.64	5.00	7.64	0.00
13	220kV DC Line from <b>Paradeep</b> to IOCL	2.44	5.00	7.44	0.00
14	P/S to Railway traction <b>Badabandh</b> to <b>Kandarpur</b>	0.00	0.50	0.50	0.00
15	33kV Bay at <b>Paradeep</b> S/S	0.00	0.50	0.50	0.00
16	Diversion of DC line from <b>Budhipadar</b> to <b>Jorabaga</b>	0.00	0.50	0.50	0.00
17	Survey for 132kV <b>Chandaka- Nimapara</b> line for diversion from premises of IMS & Sum Hospital	0.00	0.50	0.50	0.00
18	Diversion of 220kV <b>Kaniha-Meramundali</b> DC line deposited by NTPC	0.21	1.00	1.21	0.50
19	Tomka railway line from M/s B.C. Mohanty switchyard to Tomka RTSS. (D.W.)	0.42	1.00	1.42	0.00
20	<b>Other Deposit work</b>	0.95	0.00	0.95	0.00
<b>TOTAL - C</b>		<b>9.48</b>	<b>35.00</b>	<b>44.48</b>	<b>12.50</b>
<b>GRAND TOTAL : D = A+B+C</b>		<b>75.06</b>	<b>239.30</b>	<b>314.36</b>	<b>544.60</b>