

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

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**Present : Shri S. P. Nanda, Chairperson  
Shri S. P. Swain, Member  
Shri A. K. Das, Member**

**CASE NO. 67/2014**

**DATE OF HEARING : 10.02.2015**

**DATE OF ORDER : 23.03.2015**

**IN THE MATTER OF: An application for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2015-16 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 2015-16.**

**AND**

**IN THE MATTER OF: Amended petition of OPTCL as per OERC (Terms and Condition for determination of Transmission Tariff) Regulations, 2014 published in Extra Ordinary Gazette on 04.12.2014.**

**ORDER**

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL) the present petitioner which carries out Intra State transmission business in the State has been notified by Clause-10 of the Government Notification No.6892 dated. 09.06.2005 as the State Transmission Utility (STU) under Section 39(1) of the Act with effect from 01.04.2005. By virtue of the 2nd Proviso to S.14 of the Electricity Act, 2003 (hereinafter referred to as “the Act”) OPTCL has been a deemed Transmission Licensee under the Act. OPTCL is now governed by License Conditions set forth in OERC (Conditions of Business) Regulations, 2004, at Appendix 4B issued u/S.16 of the Act, as modified by Commission’s Order dated. 27<sup>th</sup> October 2006.

2. The OPTCL had submitted an application with respect to its Aggregate Revenue Requirement (ARR) and determination of its Transmission Tariff for the FY 2015-16 on 01.12.2014. The said application after being scrutinized and registered as Case No.67 of 2014 and was admitted for hearing. In the mean time OERC (Terms and

Conditions of Transmission Tariff) Regulations, 2014 was made effective through a notification dated 04.12.2014. The Commission in its query dated 22.12.2014 asked OPTCL to submit its ARR and Tariff application as per the said Regulation. OPTCL accordingly has submitted its amended petition as per OERC (Terms and Condition for determination of Transmission Tariff) Regulations, 2014 on 13.01.2015.

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

3. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for Transmission Tariff) Regulations, 2014, licensees/deemed licensees are required to file their Aggregate Revenue Requirement within 30<sup>th</sup> November in each year in the prescribed formats. OPTCL as a deemed licensee had submitted its ARR application for 2015-16 before the Commission on 01.12.2014 as 30<sup>th</sup> November, 2014 was a holiday and its application was accepted as per the N.I.Act,1881 read with OERC (Conduct of Business) Regulations, 2004. After due scrutiny and admission of the matter, the Commission had directed OPTCL to publish its Aggregate Revenue Requirement (ARR) and Transmission Tariff application for FY 2015-16 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 the OPTCL published the said public notice in the leading daily English and Odia newspaper in one issue each. 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 10 Nos. of objections/suggestions from the following persons/ associations/ institutions/ organizations.

(1) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (2) Sri M.V. Rao, Resident Manager, M/s. Ferro Alloys Corporation Ltd., GD.2/10, Chandrasekharpur, Bhubaneswar-751023, (3) Shri A K Bohra, Chief Executive Officer (Comm),

NESCO, WESCO & SOUTHCO, Regd. Office- Plot No. N-1/22, IRC Village, Nayapalli, Bhubaneswar-15, (4) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB, Plot No.775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (5) Sri G.N. Agrawal, Convenor-cum-Gen. Secy, Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur-768003, (6) M/s. Sesa Sterlite Limited, 1st Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023,(7) M/s. Adhunik Metaliks Limited, IPICOL House, 3rd Floor, Annexe Building, Janapath, Bhubaneswar-751022,(8) M/s. Visa Steel Limited, Kalinganagar Industrial Complex, At/Po. Jakhapura-755026, Dist-Jajpur,(9) M/s. Swain & Sons Power Tech Pvt. Ltd., Swati Villa, Surya Vihar, Link Road, Cuttack-753012,(10) Shri Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Apartment, Telenga Bazar, Cuttack-753009. All the above named objectors along with the representative of Dept. of Energy, GoO were present during tariff hearing except objector No. 10 but the written submission filed by the said Organisation 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 Aggregate Revenue Requirement and tariff proposal. The Consumer Counsel presented his views in the hearing.
8. The date for hearing was fixed as 10.02.2015 at 11 AM and it was duly notified in the leading newspaper 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 10.02.2015 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 25.02.2015 at 3.30 PM at its premises to discuss about the Aggregate Revenue Requirement applications and tariff proposals of licensees for FY 2015-16. 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 2015-16 (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 the Commission 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 2015-16.

#### **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 109 nos. grid sub-stations of different voltage classes and EHT transmission line of 11704.479 ckt. km. as shown in the table below.

**Table-1**

<b>Sub-Station and Line Details</b>	
400/220 kV S/S	2
400/220/132/33 kV S/S	1
220/132/33 kV S/S	14
220/33 kV S/S	5

220/132 kV S/S	2	
132 kV Sw.Stn.	17	
132/33 kV S/S	64	
132/33/25 kV S/S	1	
132/33/11 kV S/S	1	
132/11 kV S/S	2	
Total No. of Sub-Stations	<b>109</b>	
<b>Voltage Level</b>	<b>Lines (ckt. km.)</b>	<b>Bays</b>
400 kV	518.234	32
220 kV	5730.334	253
132 kV	5455.911	714
33 kV		818
25 kV		2
11 kV		18
<b>Total</b>	<b>11704.479</b>	<b>1837</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, 2014 applicable for Transmission Tariff. OPTCL has proposed its ARR & Transmission Tariff Application for FY 2015-16 as per the related provisions pertaining to the conduct of Business and Tariff determination as provided under OERC Regulations, 2004, norms adopted in previous tariff orders and as per the CERC (Terms and Conditions of Tariff) Regulations, 2014.

The costs of the deemed transmission licensee OPTCL for the FY 2015-16 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 2015-16 as Rs.968.19 crore including O & M Expenses of Rs.496.49 crore, Interest on Loan Capital of Rs.131.83 crore, Depreciation of Rs.197.72 crore, Return on Equity of Rs.113.74 crore and Interest on Working Capital of Rs.28.41 crore.

### **Depreciation**

16. OPTCL has projected depreciation at Rs.197.72 crore based on the estimated book value of assets for FY 2015-16 as per CERC Regulations 2014 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.303.07 Cr. (Rs.23.05 Cr. in FY 2008-09 + Rs.5 Cr. in FY 2009-10 + Rs.71.95 Cr. in FY 2010-11 + Rs.43 Cr. in FY 2011-12 + Rs.50 Cr. in FY 2012-13 + Rs.50 Cr. in FY 2013-14) from the State Govt. as equity contribution for setting up transmission projects in remote areas. Further another Rs.337 Cr. is likely to be received by the end of FY 2014-15 and Rs.480 Cr. in FY 2015-16. Therefore, the licensee has projected ROE @19.61% on the equity share capital of Rs.580 crore which amounts to Rs.113.74 crore for FY 2015-16.

### **Interest on Working Capital**

18. Based on CERC norms, OPTCL has calculated its working capital needs at Rs.277.21 crore for the FY 2015-16. Taking 10.25% as the rate of interest, interest on working capital amounts to Rs.28.41 crore for FY 2015-16. 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.19.12 crore has been projected for Contingency Reserve for the FY 2015-16.

### **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.0.71 crore for the FY 2015-16.

### **Incentive for System Availability**

21. The Regulation 38 of CERC Regulations, 2014 specify the “Norms of Operation” applicable for transmission system for recovery of transmission charge and incentive. OPTCL has proposed incentive for being able to make available the Transmission System more than 98.5% for the year 2013-14. The system availability of transmission network of OPTCL for FY 2013-14 has been worked out as 99.96%. OPTCL has proposed the incentive of Rs.7.15 crore for FY 2013-14 to be allowed in the ARR of FY 2015-16.

### **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.13.19 crore.

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

23. OPTCL estimates that it will earn Miscellaneous Receipts of Rs.26 crore during FY 2015-16 in line with the trend of revenue earning during FY 2014-15. The same has been deducted from the gross revenue of OPTCL to arrive at the ARR for FY 2015-16, to be recovered from LTOA customers.

### **Transmission Loss**

24. OPTCL proposes Transmission Loss at 3.75% for FY 2015-16. The actual transmission loss in April 2014 – September 2014 period was 3.76% against Commission’s approval of 3.75% for FY 2014-15.
25. The summary of the proposed Annual Revenue Requirement against different heads for FY 2015-16 is tabulated below.

**Table - 2**  
**Summary of Annual Revenue Requirement of OPTCL for FY 2015-16**  
**(Rs. crore)**

ITEMS	Proposal for OPTCL for FY 2015-16	
<b>A. FIXED COST</b>		
1) O&M Expenses		<b>496.49</b>
(i) Employees Cost including Terminal Benefits	310.02	
(ii) R&M Cost	154.11	
(iii) A&G Cost	32.36	
2) Interest on Loan Capital		131.83
3) Depreciation		197.72
4) Return on Equity		113.74
5) Interest on Working Capital		28.41
<b>Sub-Total (A)</b>		<b>968.19</b>
<b>B. Others</b>		<b>40.17</b>
1) Contingency Reserve	19.12	
2) Rebate	13.19	
3) GCC Expense	0.71	
4) Incentive for system availability	7.15	
<b>Total Trans. Cost (A+B)</b>		<b>1008.36</b>
<b>C. Less Misc. Receipts</b>		26.00
<b>D. OPTCL's Annual Revenue Requirement</b>		<b>982.36</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.662 crore. Revenue to be earned by OPTCL from wheeling of 26006 MU to DISCOMs and other long term open access customers for FY 2015-16 at the existing rate is shown in the table below.

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

Sl. No.	Customer	Commission's approval for FY 2014-15	Energy demand (MU) as per DISCOMs estimation (FY 15-16)	Tr. Loss (%)	Energy handled including 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	9040	9401	0	9401	150	26006 (26156-150)	650.15
2	NESCO	5330	5625	0	5625			
3	WESCO	6820	7500	0	7500			
4	SOUTHCO	3340	3630	0	3630			



	<b>Total DISCOMs</b>	<b>24530</b>	<b>26156</b>		26156		
<b>5</b>	Emergency Sale to CGPs	10	10	0	10		0.25
<b>6</b>	Wheeling to industries from CGPs	450	450	3.75	468		11.69
	<b>Total</b>	<b>24990</b>	<b>26616</b>		<b>26634</b>		<b>662.00</b>

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 2015-16 as follows.

**Proposed Tariff to Meet the Revenue Requirement for FY 2015-16**

**Table – 4  
Computation of Transmission Tariff**

(a) Total Annual Revenue Requirement in Rs. Crore	982.36
(b) Total Million Units proposed for Wheeling in MU	26466
Proposed Transmission Tariff (P/U) = (a/b)	<b>37.12</b>
Existing transmission tariff (P/U)	25.00
Rise over existing transmission tariff	<b>48.48%</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 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 of OERC (Charges for Open Access) Regulations 2004.

**Table - 5**

**Abstract of OA Charges proposed by OPTCL for FY 2015-16**

<b>DETAILS</b>	<b>In Rs./unit approach</b>
Net Annual Revenue Requirement (Rs. crore)	982.36
Proposed Energy to be transmitted in OPTCL Network (MU)	26466
Proposed Transmission Tariff (P/U)	37.12
Power flow (equivalent of 26466 MU) in MW	3021
Long term Open Access Charges in terms of Rs./MW/Day	8908
Short term Open Access Charges in terms of Rs./MW/Day	2227

31. Intra-state STOA transactions have started to gather momentum in Odisha. As per existing OERC Regulations, STOA customers are liable to pay 25% of the long term transmission charge. OPTCL has proposed to consider equating long term and short term rates to enable OPTCL to earn more revenue which would be accounted for under Miscellaneous Receipt so as to relieve the long term open access customers resulting in downward effect on Retail Supply Tariff.

**Reactive Energy Charges:**

32. Regulation 1.7 of OGC Regulations, 2006 (Charge / Payment for Reactive Energy Exchanges) stipulates that the rate for charge / payment of reactive energy exchanges shall be 5.0 Paise / kVARh with effect from the date to be notified by the Commission separately and shall be escalated at 0.25 Paise / kVARh per year thereafter, unless otherwise revised by the OERC. Since a provisional rate (i.e. 6.50 Paise/kVARh) has already been fixed by the Commission for FY 2014-15, OPTCL proposes that in accordance with Regulation 1.7 of said OGC Regulations, the Reactive Energy Charges may be considered at 6.75 Paise / kVARh for the FY 2015-16, i.e. an escalation of 0.25 Paise / kVARh over the approved rate for FY 2014-15.

**Rebate:**

33. 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:**

34. 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:**

35. 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.

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

OPTCL's proposal for FY 2015-16 are:

- (i) Annual Revenue Requirement at Rs.982.36 crore.
- (ii) Recovery of Transmission Charge @ 37.12 P/U.
- (iii) Transmission Loss for wheeling as 3.75% on energy drawal.

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

- (i) By charging the rate applicable on DISCOMs for wheeling of 26006 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.

**Revised submission of OPTCL for ARR of FY 2015-16**

38. As per the provisions given in OERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2014, OPTCL has revised its earlier submission and proposes the revised ARR for FY 2015-16 as Rs.968.85 crore. OPTCL has revised its transmission tariff as 36.61 P/U.

### **New Projects**

39. 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.862.42 crore during FY 2015-16 as capital expenditure on new projects towards O&M, telecom, information technology (IT), construction and civil works. The details of Capital Expenditure for FY 2015-16 are given in Annexure – 1.

### **VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2015-16 (Para 40 to 44)**

40. 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 2015-16. 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**

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

#### **Annual Revenue Requirement**

42. OPTCL has projected its revenue requirement during FY 2015-16 at about 57 per cent more than that approved for FY 2014-15. In last year (FY 2014-15), the total ARR was increased by 7.26% from approved ARR for FY 2013-14.
43. The areas of concern include the increase in , R&M Cost (65.71%), A&G cost (34.78%), interest on loan capital (170.48%), depreciation (113.27%) and incentive (43%). The comparative figures of components of ARR are given in table below. OPTCL has proposed Rs.28.41 cr. and Rs 19.12 cr. as interest on working capital and contingency reserve respectively, which the Commission has not approved in earlier tariff orders.

Table – 6

## Comparative Annual Revenue Requirement of OPTCL

ITEMS	Approved for 2013-14	Approved for 2014-15	OPTCL's Proposal for FY 2015-16	2014-15 vs. 2013-14	2015-16 vs 2014-15
Employees Cost including Terminal Benefits	289.30	318.18	310.02	9.98%	-2.56%
R&M Cost	60.00	93.00	154.11	55.00%	65.71%
A&G Cost	22.39	24.01	32.36	7.24%	34.78%
Interest on Loan Capital	40.04	48.74	131.83	21.73%	170.48%
Depreciation	89.40	92.71	197.72	3.70%	113.27%
Return on Equity	37.40	45.96	113.74	22.89%	147.48%
Interest on Working Capital			28.41		
<b>Sub-Total</b>	538.53	622.60	968.19	15.61%	55.51%
Special Appropriation	53.40		0.00		
Contingency Reserve			19.12		
GCC Expense including SLDC charges	0.94	1.20	0.71	27.66%	-40.83%
Incentive for system availability	5.00	5.00	7.15	0.00%	43.00%
Rebate		12.50	13.19		5.52%
<b>Total</b>	<b>597.87</b>	<b>641.30</b>	<b>1008.36</b>	<b>7.26%</b>	<b>57.24%</b>
<b>Less Misc. Receipts</b>	12.00	16.80	26.00	40.00%	54.76%
<b>Annual Revenue Requirement</b>	585.87	624.50	982.36	6.59%	57.30%
<b>Transmission Charges (paise/unit)</b>	<b>25.00</b>	<b>25.00</b>	<b>37.12</b>	<b>0.00%</b>	<b>48.48%</b>

44. 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 3% from April, 2014 to December, 2014. 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 2015-16. The terminal benefit may be reviewed as per the independent valuation report of the actuary appointed by the Commission. 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 2015-16 (Para 45 to 96)**

**Transmission Loss**

45. After up-gradation of grid substation and commissioning of 220 kV transmission lines there should be reduction of transmission loss. Hence, transmission loss for tariff should be considered as 3%.
46. 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.
47. 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.
48. OPTCL should have under taken energy audit of lines and sub-stations to know the quantum of transmission loss in the system. The Standard of performance of OPTCL transmission system should be monitored by third party auditor to assess the actual performance.

**Capital Expenditure**

49. Actual expenditure for first 6 months of FY 2014-15 in Capex for construction wing is Rs.83.94 crore; however, for next 6 months the projection is Rs 220.91 crore. The Commission should see the genuineness and authenticity of the figures and the projection for FY 2015-16 is not justified.
50. 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 Capex by the Commission.
51. One Objector suggested 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.

52. 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.
53. The practice followed for Disaster management in other states (like Tamil Nadu, West Bengal) should be reviewed.
54. 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 not be 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.

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

55. Since a number of EHT Grid Sub-station of 440/220 kV level have been commissioned within last 5-7 years, 67% rise in of R&M expenditure is unjust and non-realistic.
56. The actual R&M expenses for FY 2014-15 (upto Sept 2014) were Rs.43.7 crore against the approved figure of Rs.93 crore. Even in the absence of fund constraint, the levels of expenditure are low as compared to the approved R&M expenses. R&M expenses for FY 2015-16 may be approved as Rs.104.16 crore considering 12% increase over the approved expenditure of 2014-15 and that the same can be tried 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 2014-15.
58. Actual expenditure for a financial year is always less than the amount approved by the Commission. OPTCL may submit an itemized list of the R&M expenses already carried out in FY 2014-15. The Commission may allow only 5.4% increase in the earlier approved R&M expenses. R&M expenses may be approved at Rs.98 crore.
59. Comprehensive R&M is required in case of OPTCL's assets. Remaining life assessment should be done in this regard.

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

60. Substations and lines are not properly maintained by OPTCL due to want of required number of skilled manpower. OPTCL has to produce how Govt is interfering to fulfill skilled manpower in OPTCL.
61. The employee cost, including terminal benefits, of OPTCL may be allowed at Rs.274.55 crore. Regarding terminal benefits, the 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.406.12 Cr may be amortized in 4 years starting from FY 2015-16. Thus Rs.101.53 cr may be allowed for FY 2015-16.
62. Average increase in employee cost for the period FY 2010-11 to FY 2014-15 is around 2%. If OPTCL does not submit adequate justification and action plan for deployment of required manpower, the Commission may allow only 2% increase in the actual employee cost for FY 2014-15. Employee cost may be approved at Rs.236.05 crore.
63. OPTCL may justify why it has always crossed the approved expenses without obtaining necessary consent from the Commission. The Commission may allow 7% increase in the earlier approved A&G expenses and may approve the same at Rs.26 crore.
64. A&G cost proposed, approved and actual expenditure since 2000-01 to 2014-15, may be produced.
65. OPTCL may be allowed an amount of Rs.29.08 crore towards the A&G expenses for FY 2015-16 i.e. escalation of 6.46% (rate of inflation as measured by WPI) is allowed over the approved figure of FY 2014-15 including license fee and inspection fee.
66. OPTCL has to produce all the documents about how much are allowed by the Commission in operation and maintenance head and how much has been spent during that period and what are the improvements in transmission network.

### **Depreciation**

67. As the sector has not yet turned around, the Commission may adopt the same principle for calculation of depreciation as followed for previous year. DISCOMs submitted that the depreciation may be considered at Rs.122.71 crore at pre-92 rate.



68. Proposed huge depreciation if allowed in ARR will increase transmission tariff abruptly. The huge increase in depreciation is due to artificial increase in capital base which is based on proposed expenditure to be made during year 2014-15. Request not to allow any capitalization unless the work is completed and commissioning has been declared. Depreciation may be approved at Rs.94 crore.

#### **Interest on Loan**

69. The interest on new loan of Rs.862.42 crore may not be allowed since this is anticipated and not in hand. Proposed new loan which needs to be serviced may be trued up as per audited account pertaining to that period after due scrutiny and approval of the Commission. Hence, the principal CB as on 31.03.2014 is considered and interest on that (Rs.76.73 crore) has been considered. Interest on State Govt loan and GoO bonds has not been considered.
70. Out of projected interest on loan capital, only State Govt loan (Rs.0.26 crore) and Govt of Odisha Bond (Rs.26 crore) may not be considered as interest on loan as per earlier tariff orders. Interest towards secured loan may be considered and allowed. Interest on new loan during FY 2015-16 as anticipated. The interest component on the same which needs to be serviced may be trued up as per audited accounts pertaining to that period after due scrutiny and approval by the Commission. Interest on loan capital may be approved at Rs.76.73 crore.

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

71. DISCOMs submit that transmission charge of OPTCL is recovered as first charge from monthly BSP bill and rebate allowed by OPTCL has been considered as a part of revenue requirement in the subsequent ARR. So, interest on working capital may not be allowed.

#### **Additional Expenses**

72. In accordance with RST order, transmission system availability should be fixed at a minimum of 99% for incentive. Further as per OERC Transmission Regulations 2014, incentive amount need not be considered in ARR because this is not revenue required by OPTCL rather incentive should be considered in the ARR of DISCOM. Accordingly, additional expenses for FY 2015-16 would be Rs 33.02 crore.

### **Contingency Reserve**

73. The provision for the investment towards contingency reserve is not there in the OERC Tariff Regulations, 2004. Further, the Commission has scrutinized the account of OPTCL for FY 2012-13 and found OPTCL has a balance of Rs.154.66 crore in contingency reserve which has reduced to Rs.148.16 crore during FY 2013-14. Therefore, contingency reserve further claimed by OPTCL should not be allowed. However, provision towards contingency reserve may be allowed as per audited account of 2013-14, wherein OPTCL has quantified the amount invested in different Govt securities.

### **Return on Equity**

74. 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 OPTCL has received as on 31-03-2014. DISCOMs submit that the return @ 15.5% on the equity value of Rs 243 crore may be allowed i.e. Rs 37.67 crore with actual tax expenses booked in audited accounts of FY 2013-14.
75. As per OPTCL, total equity deployed is Rs.303.07 crore only and equity amount Rs.337 crore is yet to be received. Hence return on equity may not be considered for this amount. Further ROE @ 15.5% may be considered. The amount of Rs 46.97 crore may be approved as RoE.

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

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

### **Miscellaneous Income and Income from Wheeling**

77. The Commission should consider an amount of Rs.0.21 crore towards income from interstate Wheeling, which is the same income during 1<sup>st</sup> six months of FY 2014-15. The same can be trued up as per audited account.
78. After examining the audited account of 2013-14, the actual quantum of miscellaneous receipt can be ascertained which after due scrutiny and approval of the Commission may be taken in the ARR.

79. The Commission may consider Rs 30 crore as miscellaneous receipt expecting more numbers of intra-state wheeling, STOA and power trading through exchange during 2015-16.

#### **ARR and Transmission Tariff**

80. DISCOMs submitted that there would be revenue surplus of Rs.29.20 crore during FY 2015-16 instead of the Revenue Gap of Rs.320.36 crore proposed by OPTCL based on existing transmission tariff of 25.00 P/U.
81. ARR for FY 2015-16 may be approved at Rs 580.48 crore. The proposed tariff is abnormally high and will adversely affect the RST and will be huge burden on consumers. Considering energy to be handled as 27473 MU as approved by the Commission in case of LTDF for the period FY 2014-15 to FY 2022-23 vide order dated 1.11.2014, the transmission charges would be 21.13 P/U.
82. OPTCL proposed an increment in transmission tariff without any improvement in the quality of transmission and reduction in the transmission loss. The increase will be a burden on consumers.

#### **Open access charges**

83. OPTCL has given the proposal to consider the LT transmission charges and ST transmission charges considering Net Proposed Transmission Cost (NPTC) which is erroneous; instead this may be corrected as Net Approved Transmission Cost as per OERC (Determination of Open Access Charges) Regulations 2006.

#### **Other Issues**

84. IPPs are not interested to connect with the state network due to inefficiency of OPTCL. OPTCL has to impress them to avail the STU network by which OPTCL will be a profit making unit.
85. Monthwise actual data for the total energy wheeled and financial figures on different heads pertaining to FY 2014-15 are to be provided by OPTCL. OPTCL has to furnish the actual data in respect of energy wheeled to DISCOMS, export and import, and revenue receipt with item-wise break up.
86. DISCOMs are of the view that the truing of exercise may be done by the Commission keeping in view the above data vis-à-vis the approved figure for FY 2014-15 and the

resultant benefit if any may be passed on to the consumers by way of truing up exercise.

87. OPTCL having old lines requires proper up-gradation.
88. 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.
89. 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.
90. As per the annual audit, the inventory is decreasing. 5% of stock material should be kept as inventory.
91. What steps has been taken by OPTCL with respect to collection of due from sundry debtors.
92. 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 2014-15.
93. OPTCL should produce the status report about the two joint venture companies and expenditure incurred till date.
94. OPTCL should produce the status report of up-gradation lines and sub-station till date as per the direction of the Commission.
95. OPTCL has to produce how much fund they have utilized for construction of new lines and substations under Capex programme.
96. 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.

**REJOINDER BY OPTCL TO THE QUERY OF OBJECTORS (Para 97 to 146)**

97. In response to the views of objectors on the ARR and Tariff Application of OPTCL for 2015-16, OPTCL had filed rejoinders for the same. The response of OPTCL has been broadly classified into the following issues.

### Quality of Supply

98. OPTCL has conducted the transmission planning study for its transmission system in coordination and consultation with GRIDCO and DISCOMs. The Commission has approved the intra-state transmission plan for Odisha up to the end of 12th plan period i.e. up to 2016-17 and for 2017-18 (1st year of 13th Plan Period) in order dated 04.06.2014 passed in Case No. 79/2012 and 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 its proposal.

### Transmission Loss

99. The Table below indicates the transmission loss approved by the Commission for the last 7 years vis-à-vis actual transmission loss occurred in OPTCL's EHT network.

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

Year	OERC Approval	Actual
2007-08	5.00%	4.82%
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%
2013-14	3.80%	3.79%

100. The detailed calculation of Transmission Loss of 3.79% for 2013-14 and 3.76% for the period April'14 to September'14 (1st 6 months of FY 2014-15) in OERC approved format have been enclosed to the original 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 2015-16.
101. 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.

102. 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.
103. 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.
104. 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**

105. 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 into 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 2013-14, 533MVA of transformation capacity has been added at 13 nos. of Grid sub-stations. Similarly, in FY 2014-15 (up to Jan'15), 295MVA of transformation capacity has been added at 8 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) conductor.
  - e. Installation of 33kV Capacitor Banks for improvement of voltage profile at identified Grid sub-stations. In FY 2014-15 (up to Jan'15), 55MVAR has been added at 5 nos. Grid sub-stations. 30MVAR are under installation at 3 nos. sub-stations and are scheduled to be commissioned within FY 2014-15. Balance 10 MVAR is scheduled to be commissioned within Oct-2015.
106. 'Transmission System Availability' figures attained by OPTCL over the last 4 years are – 99.84% (2010-11), 99.84% (2011-12), 99.89% (2012-13), 99.96% (2013-14). The Central Electricity Authority (CEA) has declared OPTCL as the Best Performer (GOLD Medal) in the country under 'Transmission System Availability' category for FY 2012-13. OPTCL has recently also bagged the CBIP awards for 'Best Performing Power Utility' in Disaster Management.

### **Transmission Projects**

107. OPTCL has been assigned to execute some specific Govt. schemes like Eletrification of IIT Argul, Samuka Beach Project, Puri Nabakalebar Project, Konark sub-station, Odisha Distribution System Strengthening Projects (ODSSP), Odisha Distribution Agriculture and Fishery Feeder (ODAFF), Odisha Power System Improvement Programme (OPSIP), SMART Grid, State Capital Region Improvement of Power System (SCRIPS) etc. Till Nov'14 OPTCL has spent Rs 141.54 Cr. against the above Govt. scheme projects.

108. 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. Several rounds of meetings have taken place among CEA, PGCIL, GRIDCO, OPTCL and IPPs on evacuation of state share of power.
109. IPPs are not interested to connect with the state transmission network. They are approaching the CTU with appropriate fees and Bank Guarantee for connection to ISTS network but they do not approach OPTCL for connecting to State network except M/s VISA Power and M/s TATA Power. Since, the IPPs were not interested to connect with the STU network for evacuation of State share of power, OPTCL moved to OERC vide Case No. 71/2011 with original on 08.09.2011 and subsequently submitted a revised scheme on 05.10.2012 taking into consideration 29 nos. IPPs.
110. Subsequently, the Commission vide interim order 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.) of the Commission in presence of officials of GRIDCO, OPTCL & representatives of above IPPs. A consolidated connectivity plan of those 7 nos. IPPs indicating the Temporary Plan and Permanent Plan was prepared accordingly.
111. 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 the Commission. OPTCL has nominated 3 Directors on the Board of Directors of KBPNPL in pursuance of the provisions of Shareholder Agreement executed



between OPTCL & POWERGRID. OPTCL as joint venture partner has paid Rs.50,000/- towards equity share capital of the Company and accordingly the shares have been allotted in favour of OPTCL. The pre-operative expenses of the company have been incurred by POWERGRID, the JV partner.

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 the Commission. OPTCL has nominated 3 Directors on the Board of Directors of NPTCL in pursuance of the provisions of Shareholder Agreement executed between OPTCL & MCL. OPTCL being the Joint Venture partner has subscribed Rs.50,000/- towards the share capital of the company at the time of incorporation of the Company. The payment will be made after allotment of shares. The pre-operative expenses have been incurred by MCL, the Joint Venture partner.

112. The State Govt. vide Notification No. 235/R&R-48/2012 / En., dated 05.01.2013 have assigned the transmission projects in favour of Joint Venture Companies for implementing the intra-state transmission system in Odisha.

113. 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: 727.5MVA (2011-12), 911.5MVA (2012-13), 533MVA (2013-14).

114. 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 projects. The details of the Ongoing Projects have been indicated in the original ARR application. There are a number of Projects for which OPTCL will submit application seeking Commission's approval. The Commission approves the Projects after hearing OPTCL, concerned DISCOMs, Govt. of Odisha.

115. OPTCL has a concrete plan of action to complete the projects within the scheduled time period. Due to monsoon season falling in the 1<sup>st</sup> 6 months, it is a fact that

construction works slows down. But during the last 6 months, substantial progress will be made and the target of Capex will be achieved.

## **TRANSMISSION COST**

### **Employee cost**

116. OPTCL has projected Rs. 310.02 Cr. towards Employee Cost in the ARR application which is based on actual cost incurred in FY 2013-14 & FY 2014-15, facts and evidential documents.
117. In approved employee expenses for FY 2010-11 to FY 2012-13, Rs.49.04 Cr. has been allowed towards 6th Pay arrear which was accounted for in earlier year. Thus, the actual approval for FY 2010-11 was Rs. 230.53 Cr. (279.56-49.03), for FY 2011-12 was Rs. 289.10 Cr. (338.14-49.04) and for FY 2012-13 was Rs. 269.44 Cr. (318.48-49.04). But OPTCL has incurred Rs. 219.55 Cr., Rs.286.59 Cr. and Rs. 199.44 Cr. in FY 2010-11, 2011-12 and 2012-13 respectively towards Employee Expenses. The provision made in the books of accounts with regard to terminal benefits is different from the amount approved by the Commission. OPTCL does not agree with the projection of Rs.236.05 Cr. with regard to Employee Cost against Rs.310.02 crore proposed by the licensee.
118. As planned, 12 nos. new sub-stations shall be commissioned by March'15. Since 26 nos. 132kV sub-stations and 11 nos. 220kV sub-stations are planned to be commissioned in FY 2015-16. Additional manpower need to be recruited for manning the new sub-stations as per approved manning norms. Due to lack of Government permission, OPTCL is not able to recruit adequate administrative as well technical staff in the recent past thereby leading to large number of vacancies. So, it is proposed to recruit administrative and technical staff in FY 2015-16.
119. As per the manpower planning approved by the Government, OPTCL has drawn its recruitment plans in phases as shown in the Table below.

**Table 8**  
**OPTCL's Recruitment Plan**

<b>Year</b>	<b>Government approval for Recruitment</b>	<b>Tentative Recruitment Plan</b>
2014-15	534	257
2015-16	565	450
<b>Total</b>	1099	707

120. OPTCL does not agree with the projections of Employee Cost of Rs.274.55 Cr. against proposal of OPTCL of Rs. 310.02 Cr. OPTCL does not agree with the projections due to following justifications.
- i. 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 submitted the justification of its claim of Rs.4.68 Cr. towards Reimbursement of Medical Expenses in its ARR application; therefore, proposal to allow only Rs. 3.20 Cr. may not be considered.
  - iii. OPTCL has properly put forth its claim towards terminal liabilities and proposed for allowing the same in three equal installments.
  - iv. 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. The Commission may kindly consider the same since OPTCL has to pay the same from the approved ARR and 90% of this amount will be recovered through depreciation in 25 to 35 years (based on the useful life).

#### **R & M Cost**

121. 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. 154.11 Cr. is proposed towards R&M expenses for FY 2015-16. OPTCL in original 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. 154.11 Cr. The details of procurement of R&M materials already carried out upto Nov-14 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. 98 Cr..
122. 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.

104.16 Cr. towards R&M expenses. For FY 2014-15, the Commission has allowed Rs. 93 Cr. against which OPTCL has already incurred expenditure of Rs.58.39 Cr. up to Dec-2014.

123. 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**

124. The Table given below indicates the A&G expenses for the last 6 years.

**Table - 9  
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
2013-14	22.39	146.17

The actual expenditure as per audited accounts is always higher than the Commission 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 increased. The 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.

125. 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 2013-14, the details of A&G expenses are given below.

**Table - 10**  
**A&G Expenses for FY 2013-14 (Audited)**

<b>Sl. No.</b>	<b>A&amp;G &amp; Other Expenses</b>	<b>Rs. Cr.</b>
1	Rebate to Consumers	10.52
2	Loss on theft material	0.49
3	Insurance	0.02
4	Rates & taxes	4.05
5	Legal & Professional Fees	2.74
6	Office Maintenance	0.90
7	Telephone & Internet Charges	0.60
8	Traveling Expenses	2.36
9	Rent	1.24
10	Watch & Word Expenses	2.70
11	License & related fees	1.25
12	Inspection fees	1.77
13	Power & Fuel	1.62
14	Hire charges on vehicles	3.36
15	Audit Fee	0.05
16	Other professional charges	0.08
17	Miscellaneous Expense	6.87
18	Fees and Subscriptions	0.26
19	Advertisement for Tenders etc.	0.24
20	Advances/ Receivables written off	57.30
21	Provision for bad & doubtful debts	1.62
22	Provision for expenditure on projects	10.53
23	Provision for doubtful receivable	15.56
24	Provision for scrap/obsolete material	20.04
	<b>Total</b>	<b>146.17</b>

**Interest on loan**

126. 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. 862.42 Cr. has been provided as CAPEX for the FY 2015-16. For financing the above CAPEX, OPTCL proposes Rs. 143.80 Cr. towards interest on loan capital for FY 2015-16 based on Regulation 8.24 of OERC Tariff Regulations, 2014. OPTCL does not agree with the projection of Rs. 76.73 Cr. made by the Objector.

**Depreciation**

127. The Commission has allowed depreciation of Rs. 92.71 Cr. for FY 2014-15 computing at Pre-92 rate as per GoI notification dated 31.01.1992. For the FY 2015-16, OPTCL has projected depreciation of Rs. 197.72 Cr. based on the audited accounts for FY 2013-14 considering the depreciation rate as prescribed under OERC

Regulations, 2014 and taking into account up-valued asset base and projected additions thereto during FY 2015-16. OPTCL does not agree that the projected depreciation is high due to artificial increase of capital base. Further, OPTCL has not proposed any Special Appropriation for the FY 2015-16. Similarly, no depreciation has been claimed on any capital assets unless it is completed and put in use.

128. For the FY 2015-16, OPTCL has projected depreciation of Rs. 197.72 Cr. based on the audited accounts for FY 2013-14 considering the depreciation rate as prescribed under OERC Regulations, 2014 and taking into account up-valued asset base and projected additions thereto during FY 2015-16. OPTCL does not agree with the contention for considering Rs. 122.71 Cr. as depreciation.

#### **Return on Equity**

129. The projection towards RoE is based on Regulation 8.38 of OERC Regulations, 2014. OPTCL does not agree with the projection of Rs. 46.97 Cr. as this is contrary to the provisions of said Regulations. OPTCL proposes Rs.89.90 Cr. towards RoE for FY 2015-16, as per revised submission. Hence, the projection towards RoE is very much realistic which needs full consideration.

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

130. Interest on Working Capital may be allowed as per norms specified in Regulation 8.25 of OERC Regulations 2014. OPTCL does not agree that this is contrary to the provisions of OERC Regulations. Hence, the projection towards Interest on Working Capital amounting to Rs. 26.17 Cr. is very much realistic which needs full consideration.

#### **Contingency Reserve**

131. In FY 2013-14, during the severe cyclonic storm “PHAILINE”, OPTCL system was badly affected. For restoration of the damages, OPTCL has already spent Rs. 18.94 Crore during the FY 2013-14 which has been adjusted against the Contingency Reserve Fund.
132. Besides incurring expenses towards unforeseen calamities, the contingency reserve fund serves as an alternative for insurance of the OPTCL assets. Insurance on assets is a normal commercial requirement to safeguard the assets and it is insisted by Banks/FIs. Presently, all the loans availed by OPTCL are against hypothecation of assets. Therefore, the FIs/ Banks are insisting for insurance of these assets to

safeguard their interest as a part of risk management. If OPTCL goes for the insurance of transmission assets, the high cost of the annual premium for entire assets of OPTCL will have substantial impact on the tariff of OPTCL and hence the investment made towards contingency fund is an alternative to insurance cost. This may be considered by the Commission.

133. In the original ARR application OPTCL has proposed Rs.19.12 Cr. towards contingency for the FY 2015-16 which may be allowed in the ARR under O&M Expenses (other miscellaneous expenses) as per OERC Regulations, 2014. This has been proposed in the supplementary submission filed by OPTCL.

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

134. Year wise proposal, approval and actual expenditure towards R&M, A&G, and O&M for the period from 2000-01 to 2014-15 (up to Dec'14) are given in the Table below. The actual figures are as per audited accounts up to the year 2013-14. For the year 2014-15 (up to Dec' 2014), the figures are based on cash flow statement.

**Table - 11**  
**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	70.19	23.09	22.39	146.17	473.20	371.69	411.09
2014-15	146.77	93.00	58.39 (up to Dec'14)	25.46	24.01	18.31 (up to Dec'14)	533.61	435.19	303.99 (up to Dec'14)

### **Incentive**

135. OPTCL has amended its original proposal of Incentive from Rs.7.15 crore to Rs.8.68 crore as per the Regulation 6.5 of OERC Regulations, 2014 in the supplementary submission filed on 13.01.2015. OPTCL does not agree that this is contrary to the provisions of OERC Regulations.

### **Sales projection**

136. 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.

### **Misc Receipt**

137. In the original ARR application OPTCL has clearly explained regarding current status of revenue earnings from inter-state wheeling. For the FY 2015-16, the revenue under this head cannot be correctly assessed as the same is to be determined by the Commission.
138. The Other Income as per audited accounts for FY 2013-14 is Rs.50.89 crore which includes Rs.14.11 crore as deferred income, Rs.1.38 crore as excess provision written back, Interest Rs.8.78 crore from staff & Banks, Sale of Scrap Rs.18.41 crore and miscellaneous income Rs.8.20 crore. The miscellaneous income of Rs.8.20 crore includes Supervision Charges, sale of tender paper, Rents, penalties from Contractors etc.
139. 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. 26.00 Cr. during FY 2015-16. The Objector's contention to consider Rs 30 Cr. under this head is not justified.

### **ARR and Revenue Gap**

140. The projections made by OPTCL in the original ARR application and later amended in the supplementary submission following norms of OERC Regulations, 2014 are very much realistic which need full consideration. OPTCL does not agree with the estimation of ARR of Rs. 580.48 Cr. against OPTCL's amended proposal of Rs. 968.85 Cr.
141. The revenue surplus of Rs. 29.20 Cr. worked out is not acceptable to OPTCL.



### **Open Access charges**

142. The derivation for LT and ST Open Access charges has been done assuming the proposed numbers. The Commission shall determine those charges based on approved figures.

### **Transmission Tariff**

143. OPTCL does not agree with the estimated transmission tariff (21.13 p/u) as OPTCL does not agree with the estimated ARR.
144. The contention to reduce the transmission charge to 23 p/u for FY 2015-16 without proper justification and supporting calculation does not merit consideration.
145. OPTCL has filed the ARR and Transmission Tariff application for FY 2015-16 following the provisions of the Electricity Act, 2003 and following norms of applicable Tariff Regulations. Component wise cost has been projected in the application with full justification. Hence, the contention not to accept the transmission tariff does not merit consideration.
146. OPTCL has published Public Notices in English language in one issue each of a daily English & Odia newspaper on 11.12.2014 and also in Odia language in one issue of daily Odia newspaper on 12.12.2014 for wide circulation regarding its filing of ARR & Transmission Tariff application before the Commission. A copy of the said Public Notice was displayed in the Notice Boards of CGM (RT&C), OPTCL Head Quarters, Bhubaneswar, in the offices of all General Managers in charge of EHT(O&M) Circles of OPTCL & in OPTCL website. Thus, interested persons/objectors are given sufficient opportunity and time to file their suggestions/objections/feedback before the Commission. Hence, the contention that the process of ARR exercise is not at all consumer friendly is not correct.

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

147. The Commission convened the State Advisory Committee (SAC) meeting on 25.02.2015. 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 148 to 259)**

148. The Commission, for approval of ARR and determination of transmission tariff for OPTCL for the FY 2015-16 has followed the principles as laid down in OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 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.
149. OPTCL has inherited a considerable ageing transmission network from GRIDCO. 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.
150. The Tariff Policy, 2006 framed under the Electricity Act 2003, has embedded 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.
151. 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 2015-16**

152. 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’.

153. 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.
154. OPTCL in its submission stated that the actual transmission loss in the OPTCL transmission system from April 2014 to December 2014 works out to be 3.78% and OPTCL proposes transmission loss of 3.75 % for the year FY 2015-16 based on the present trend. The approved and actual transmission loss for the year 2009-10 to 2014-15 is furnished in the table below.

**Table – 12**

<b>FY</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Approved (%)	4.00	4.00	3.90	3.80	3.80	3.75
Actual audited (%)	4.11	3.93	3.88	3.84	3.79	3.78(Apr-Dec-14)

155. 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. In view of the increasing demand for power at an accelerated pace due to on-going 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. OPTCL has been able to reduce the transmission loss year over year by commissioning a number of new transmission projects and adopting innovative schemes under Master Maintenance Plan during last few years. The actual transmission loss in the OPTCL’s transmission system from April’ 14 to December’ 14 is **3.78 %** against Commission’s approval of 3.75% for FY 2014-15. OPTCL expects the loss level to remain around 3.75 % in the current year. Accordingly, OPTCL proposes **3.75%** transmission loss during FY 2015-16 in line with the projection made in the 5-year Business Plan.

156. 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.
157. Based on the submission of OPTCL, the Commission approves 3.75% for FY 2015-16 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. Efforts to reduce the above loss to the best practiced case at national level shall continue.

#### **Execution of Projects**

158. 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. A casual approach is being adopted towards completion of Projects. Responsibility and accountability must be fixed on Project Managers for effecting completion of the Projects as per the schedule with adequate delegation of authorities by the management. The Project Managers must identify the critical paths ahead of schedule. The Commission further direct OPTCL that DISCOMs are to be intimated beforehand so that they should be prepared for receiving power from new/augmented grid s/s and accordingly build their own downstream 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/networks.
159. 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.

160. 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.
161. 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. Further, OPTCL may design some of its training modules to suit the requirement of DISCOM employees so that the resources of OPTCL can be best utilised for the benefit of power sector of the state

**Disaster Management:**

162. The Commission has observed that there is a substantial loss to the OPTCL transmission system due to severe cyclone like ‘PHAILIN’ during October, 2013. Similarly there has been damages to the power system due to the cyclone “HUDHUD” during October, 2014. The Commission is of the opinion that OPTCL may constitute an in-house investigation team to enquire on the possible reasons of tower failure and damage to the power system and take necessary suitable action at planning and design stage 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.

**Efficient Operation of Transmission System:**

163. 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.

## **Finance**

### **Truing up of OPTCL for the FY 2013-14**

164. The Commission vide its letter No.Dir(T)-392/2012/1421 dt.17.10.2014 directed the licensee to file the audited accounts for the year ending 31.03.2014 by 30<sup>th</sup> October, 2014 along with necessary information and data which OPTCL consider relevant to finalizing the truing up exercise and pass necessary orders separately.
165. OPTCL in response to the letter of the Commission submitted that the audited accounts for FY 2013-14 on 02.01.2015. In the ARR filing for the year 2015-16, OPTCL did not mention anything about truing up. However, they file the truing up proposal for the FY 2013-14 in compliance with Regulation 7 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 on 03.02.2015. The analysis of element wise expenditure and income done by OPTCL and its submission for considering in truing up is discussed below:

#### **Employees Cost & Terminal benefits:**

166. As per the audited accounts, the employees cost is Rs.122.48 crore. OPTCL requests Commission to consider the same in truing up. Regarding terminal benefits, OPTCL requests to consider Rs.140.28 (including Rs.23 crore allowed towards differential amendment of pension and pensionary benefit of absorbed Govt. Engineers in OPTCL/GRIDCO).
167. The audited accounts for the FY 2013-14 was examined and it was found that an amount of Rs.123.23 is booked towards employees cost and Rs.87.59 crore towards terminal benefit. The Commission in their truing up order dt.19.03.2012 in Case No.6, 7, 8 of 2012 set the principles for truing up exercise of DISCOMs, GRIDCO as well as OPTCL. Regarding employees cost, the principle followed in case of OPTCL for truing up is given below:

*“Employees cost is allowed on the basis of audited figure except terminal benefit. Terminal benefit is allowed as approved by the Commission in tariff order of the respective years or actual whichever is less”.*

168. From the above para Commission finds that the amount booked in the audited accounts towards terminal benefit is lower than the figures approved by the Commission. Hence, Commission approves the audited figure of Rs.87.59 crore

towards terminal benefit for the purpose of truing up. The Commission therefore allows Rs.210.82 crore under the head employees cost (Rs.123.23 employees+Rs.87.59 crore towards terminal benefit) as trued up amount.

**Repair & Maintenance Expenses:**

169. OPTCL submitted to consider the audited figure of Rs.68.27 crore as against the approved amount of Rs.60 crore during 2013-14. The audited accounts for FY 2013-14 reveals that an amount of Rs.70.19 crore is booked towards R&M expenses. The Commission in line with the principle decided in its order dt.19.03.2012 (truing up order) approves the audited figure of Rs.70.19 crore for the purpose of truing up.

**A&G Expenses:**

170. The total amount booked under the head A&G as per audited accounts is Rs.30.10 crore. Besides above, OPTCL booked an amount of Rs.116.07 crore on other head such as rebate to consumer, loss on theft of material, provision for expenditure on projects, provision for scrap/obsolete material, provision for doubtful receivables etc. OPTCL submitted to allow the entire amount as shown in the audited accounts i.e. Rs.146.17 crore (Rs.116.07+Rs.30.10 crore) excluding an amount of Rs.1.13 crore apportioned to SLDC.
171. The Commission in its order dt.19.03.2012 (as stated above) decided that A&G cost is to be allowed as per audited figures or approved by the Commission whichever is less. The Commission therefore allows Rs.22.39 crore as approved by the Commission for FY 2013-14 under the head A&G being lower than the figure as per audited account.
172. Regarding the amount of Rs.116.07 crore as mentioned by OPTCL, it is revealed from the audited accounts that an amount of Rs.57.03 crore of receivable pertaining to OSEB period has been written off. OPTCL submits to consider the same in truing up.
173. The Commission do not agree with the proposal of OPTCL as OPTCL got separated from GRIDCO on 01.04.2005. All the past losses from the financial year 2005-06 onwards based on audited data has been taken into consideration in the transmission tariff order for the year 2007-08 and 2008-09 vide para 5.11.1 and 342 respectively. Hence the Commission is not inclined to allow Rs.57.03 crore in truing up exercise for FY 2013-14. The Commission therefore allows an amount of Rs.59.04 crore (Rs.116.07-Rs.57.03) under miscellaneous head.

### **Depreciation**

174. OPTCL submits to allow an amount of Rs.142.80 crore under the head depreciation and special appropriation, as approved by the Commission for the FY 2013-14. The Commission in line with the principle mentioned in their truing up order dt.19.03.2012 approves an amount of Rs.142.80 crore for the purpose of truing up.

### **Interest on loan liability**

175. OPTCL submits to consider an amount of Rs.85.16 crore (including interest capitalized for amount of Rs.13.85 crore) in truing up as per the audited accounts for 2013-14.
176. On scrutiny of the audited accounts it is revealed that an amount of Rs.85.24 crore has been booked under the head interest (financing cost). After capitalizing an amount of Rs.13.85 crore, net amount transferred to profit and cost amount is Rs.71.39 crore. In response to query OPTCL gave detailed break up of interest. It is found that an amount of Rs.26 crore, which is the interest for Govt. Bond value of Rs.200 crore is included in the total interest. The Commission in line with their truing up order dt.19.03.2012 excludes the amount of Rs.26 crore for the purpose of truing up. Thus, gross interest allowed by the Commission for the purpose of truing up works out to Rs.59.24 crore (Rs.85.24-Rs.26 crore).
177. Regarding interest to be capitalized for an amount of Rs.13.85 crore, OPTCL submitted that although as per accounting standard, interest during construction (IDC) is to be capitalized, OPTCL in reality has paid the interest for the FY 2013-14 out of which 90% will be recovered through depreciation in 25 to 35 years. Hence, OPTCL submits to consider the same in the truing up exercise and not to deduct the same from the gross amount.
178. The Commission do not agree with the contention of OPTCL, for the reason that while approving ARR for 2013-14 the Commission only allowed interest charged to revenue accounts as per commercial principle. The same stand is applicable in case of truing up exercise.
179. As regards other expenses such as GRID Coordination Committee and SLDC charges, incentive for system availability, net prior period expenditure, exceptional item (cyclone repair), Income Tax, Return On Equity, the amount proposed by OPTCL for the purpose of truing up is approved by the Commission, after scrutiny of the audited accounts for the FY 2013-14.



### Other Miscellaneous Income

180. OPTCL submitted that as shown in the audited accounts for the FY 2013-14, an amount of Rs.50.89 crore is shown as miscellaneous receipt. OPTCL in its submission has given the break-up of the above amount as per details below:

**Table – 13**  
**Other Miscellaneous Income**

Interest income (loan to staff)	1.87
Interest income (from Banks)	6.91
Deferred income	14.11
Sale of scrap	18.41
Miscellaneous receipt	8.21
Excess provision with back	1.38
	50.89

181. The above amount includes an amount of Rs.14.11 crore as deferred income, Rs.1.38 crore of write back of excess provision and Rs.0.22 crore towards SLDC, which according to OPTCL are not the items to be considered in truing up. Hence, OPTCL propose to consider an amount of Rs.35.18 crore (Rs.50.89 – Rs.14.11 – Rs.1.38 – Rs.0.22) in truing up. The Commission approves the same and considers an amount of Rs.35.18 crore towards miscellaneous receipt for the purpose of truing up exercise.

### Revenue from transmission charges

182. As per audited figure the revenue from transmission charges for the FY 2013-14 is Rs.598.89 crore. The Commission approves the same for the purpose of truing up. With the above observation, the summary of truing up exercise of OPTCL is depicted in table below:

**Table – 14**  
**Summary of Truing Up Exercise of OPTCL**

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
2013-14	585.87	568.21	585.87	598.89	598.89	17.66	13.02	30.68	474.86

183. It is seen from the above table that OPTCL posted a cumulative surplus of Rs.474.86 crore at the end of FY 2013-14. Hence, OPTCL does not require any regulatory asset to be amortised.

184. The ARR filed by the OPTCL for the year 2015-16 consists of the following:

- A. Fixed Cost
  - 1) O&M Expenses
    - (i) Employees cost including terminal benefit
    - (ii) R&M cost
    - (iii) A&G cost
  - 2) Interest on loan capital
  - 3) Depreciation
  - 4) Return on Equity
  - 5) Interest on working capital
- B. Others
  - 1) Contingency Reserve
  - 2) Rebate
  - 3) GCC expenses
  - 4) Incentive for system availability

The proposal of OPTCL under the heads as stated above and approval of the Commission is discussed below:

**Employees cost including terminal benefit**

185. For the financial year 2015-16 OPTCL estimated an amount of Rs.310.02 crore towards employees cost including terminal benefit. Major components of expenses along with approval of the Commission pertaining to the current year (2014-15) is given below:

**Table: 15  
Components of Employees Cost**

Sl. No.	Particulars	2015-16 (Proposal)	2014-15 (Approval)
1.	Basic pay+GP	63.91	65.00
2.	Dearness allowance	77.33	71.50
3.	House Rent Allowance	12.78	9.80
4.	New recruitment (Stipend)	8.77	11.20
5.	Terminal benefits including NPS	138.65	136.06
6.	Other expenditure	13.86	26.85
	Total	315.30	320.41
7.	Less Employees Cost capitalized	5.28	2.23
8.	Net employees cost to be passed in ARR	310.02	318.18

With the Board analysis as mentioned above, the item wise (major items) analysis of employees cost of OPTCL is discussed as under:

**Basic pay Plus Grade pay**

186. Under this head, OPTCL proposed an amount of Rs.63.91 crore during 2015-16. The comparative picture of last two years i.e. 2013-14 (actual) and 2014-15 (approval) is given below:

**Table - 16**

2013-14 (Audited)	56.38
2014-15 (Approval)	65.00
2015-16 (Proposed)	63.91

187. For a realistic assessment of the Basic Pay+GP, the Commission in its query directed OPTCL to submit the month wise cash outflow of Basic Pay+GP during the current financial year (2014-15). OPTCL submitted the following information as stated below:

**Table: 17**

(Rs. Crore)

Months	Basic Pay	Grade Pay	Dearness Allowance	House Rent Allowance
Apr-14	3.63	0.90	4.50	0.63
May-14	3.76	0.92	4.66	0.65
Jun-14	3.75	0.91	4.64	0.65
Jul-14	3.78	0.92	4.69	0.66
Aug-14	3.79	0.92	4.69	0.66
Sep-14	3.83	0.94	4.74	0.67
Oct-14	3.83	0.94	5.08	0.66
Nov-14	3.74	0.92	4.98	0.66

The basic pay+GP for the first eight months of the current financial year works out to Rs.37.48 crore. The figure is extrapolated for a period of 12 months which works out to Rs.56.22 core.

188. Regarding number of employees, OPTCL in it submission furnished the following information; as mentioned in table-

**Table - 18**  
**Information on number of employees**

Sl. No.	Item	Nos.
1	No of employees as on 01.04.2013:	3138
2	Induction of new employees during 2013-14	235
3	Retired /resigned during 2013-14 (01.04.2013 to 31.03.2014)	283

Sl. No.	Item	Nos.
4	No of employees as on 31.03.2014	3090
5	Induction of new employees during 2014-15 Recruited [12 (Executives) +184 (ITI)] + To be recruited [107 (Executives) + 150 (ITI)]	453
6	Retired/ to be retired during 2014-15	138
7	No of employees as on 31.03.2015	3405
8	Induction of new employees during 2015-16	450
9	To be retired during 2015-16	97
10	No. of employees as on 31.03.2016	3758

189. The basic Pay + GP for FY 2015-16 is determined based on average no. of employees and factoring in 3% of the annual increment over the basic pay + GP determined for FY 2014-15. The approval of basic pay + GP for FY 2015-16 is given in the table below:

**Table – 19**

Average Annual Impact	56.22
Add 3% annual increment	1.69
Pay+GP for 2015-16	57.91
Pay+GP considering the average no. of employees as on 31.03.2016	63.86

The Commission therefore, approves an amount of 63.86 crore towards Basic Pay + GP for FY 2015-16.

**Dearness allowance:**

190. The prevailing rate of DA as on 01.07.2014 is 107%. The incremental DA allowed by Govt. of Odisha last time was 7%. Assuming the same percentage increase on January, 2015, July, 2015 and January, 2016 OPTCL proposed the rate of DA at 121% for FY 2015-16. The Commission approves the same and allows the rate of DA at 121%.

**House Rent Allowance:**

191. For the FY 2015-16 OPTCL proposed the HRA at 20% of basic Pay+GP amounting Rs.12.78 crores. The Commission in line with the order of the previous years; approves the HRA @15% of the basic Pay+GP amounting Rs.9.58 crore.

**Stipend for new recruitment:**

192. Under this head OPTCL has claimed an amount of Rs.8.77 crore for the year 2015-16; supported by the calculation given below:

**Table -20**

<b>YEAR</b>	<b>Post</b>	<b>Proposed No. of candidates to be Recruited</b>	<b>Stipend per person per month (Rs.)</b>	<b>Total stipend per month (Rs. Lakh)</b>
<b>2014-15</b>	ITI Technician	150	6000	9.00
	Jr. Manager	87	12000	10.44
	Asst. Manager	20	18000	3.60
<b>2015-16</b>	ITI Technician	150	6000	9.00
	Administrative	100	8000	8.00
	Jr. Manager	50	12000	6.00
	Asst. Manager	150	18000	27.00
	<b>Total</b>	<b>707</b>		<b>73.04</b>
<b>Total stipend for FY 2015-16 = Rs.8.77 Cr.</b>				

The Commission approves the same as a pass through in the ARR for the FY 2015-16.

**Medical allowance:**

193. In line with the order of the last years, the Commission allows the medical allowance @ 5% as basic pay+GP for the FY 2015-16 and approves an amount of Rs.3.19 crore as against the claim of Rs.4.68 crore by OPTCL.

**Terminal benefit including NPS**

194. For the financial year 2015-16 OPTCL has claimed an amount of Rs.135.37 crore towards terminal benefit and Rs.3.28 crore towards contribution to NPS. OPTCL in its filing has stated that a provision of Rs.1403.43 crore has been made in the books of account towards terminal liability. As against the amount OERC allowed Rs.997.31 crore as at the end of 2014-15; learning a gap of Rs.406.12 crore. For the FY 2015-16 OPTCL claimed 1/3<sup>rd</sup> of the amount of Rs.406.12 crore towards terminal liability for the FY 2015-16, which works out to Rs.135.37 crore. Besides the amount as stated above, OPTCL claimed an amount of Rs.3.28 crore towards NPS. The Commission verified the cash flow statement of OPTCL for the FY 2015-15 (upto January, 2015). The cash out go towards terminal benefit from April, 2014 to January, 2015 amounts to Rs.130.40 crore i.e. for a period of 10 months. For a period of 12 months, the cash

out go for the entire FY 2014-15 would be around Rs.156.48 crore, which is more than the amount claimed by OPTCL.

195. The Commission, therefore, allows the amount of Rs.135.37 crore towards terminal benefit and Rs.3.28 crore towards NPS as claimed by OPTCL for the FY 2015-16. The statement of employees cost for the FY 2015-16 as proposed by OPTCL and as approved by the Commission is given below:

**Table -21**  
**Employee Cost for FY 2015-16**

Sl. No	Particulars	Approved (FY 2014-15)	Proposed (FY 2015-16)	Approved (FY 2015-16)
<b>A</b>	<b>Salary &amp; Allowance</b>			
1	Basic + Grade Pay	65.00	63.91	63.86
2	Dearness Allowance	71.50	77.33	77.27
3	House Rent Allowance	9.80	12.78	9.58
4	Other Allowance	0.82	0.84	0.84
5	Bonus	0.005	0.01	0.01
6	Stipend for New Recruitment	11.20	8.77	8.77
	<b>Sub- Total (A)</b>	<b>158.33</b>	<b>163.63</b>	<b>160.33</b>
<b>B</b>	<b>Additional Employee Cost</b>			
1	Wage/Salary revision if any	3.84		
2	Out Sources Engagement	2.43	1.44	1.44
3	Enhanced in salary (NPC)	8.90		
	<b>Sub- Total (B)</b>	<b>15.17</b>	<b>1.44</b>	<b>1.44</b>
<b>C</b>	<b>Other Employee Cost</b>			
1	Medical Expenses (Allowance +Reimbursement)	3.30	4.68	3.19
2	Leave Travel Concession	0.73	0.67	0.67
3	Honorarium	0.01	0.05	0.05
4	Ex-gratia	1.00	1.00	1.00
5	Staff Welfare Expenses	2.92	2.85	2.85
6	Miscellaneous	2.89	2.32	2.32
	<b>Sub-Total (C)</b>	<b>10.85</b>	<b>11.57</b>	<b>10.08</b>
<b>D</b>	<b>Terminal Benefits</b>			
1	Pension		135.37	135.37
2	Gratuity			
3	Leave Salary			
4	Other (including contribution to NPS)		3.28	3.28
	<b>Sub-Total (D)</b>	<b>136.06</b>	<b>138.65</b>	<b>138.65</b>
<b>E</b>	<b>Total Employee Cost (A+B+C+D)</b>		<b>315.30</b>	<b>310.51</b>
<b>F</b>	Less: Employees Cost Capitalised	2.23	5.28	5.28
<b>G</b>	<b>Net Employee Cost (E- F)</b>	<b>318.18</b>	<b>310.02</b>	<b>305.23</b>

The Commission records that OPTCL shall make continuous endeavours to bring in efficiency in operation and cost of employee from best practices of similar organization.

### **Repair and Maintenance Expenses**

196. For FY 2015-16 OPTCL has proposed an amount of Rs.154.11 crore under the head Repair & Maintenance. Item wise details of R&M have been submitted under these four broad heads:-

1. Repair and Maintenance of O&M wing	119.23 crore
2. Telecom	15.66 crore
3. Civil Works	11.00 crore
4. Information Technology	8.22 crore

197. The R&M expenses include day-to-day routine repairs, replacement of worn out equipments, consumables, maintenance surveillance, testing and testing equipments software licenses, data communication and license fees, civil repairs etc. OPTCL submitted the cash flow statement upto January 2015 of the FY 2014-15. The expenditure booked under R&M amounts to Rs.62.59 crore. The anticipated expenditure upto March, 2015 as stated by OPTCL during hearing would be Rs.105.00 crore.

198. 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 proper maintenance of the OPTCL transmission System.

199. 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.

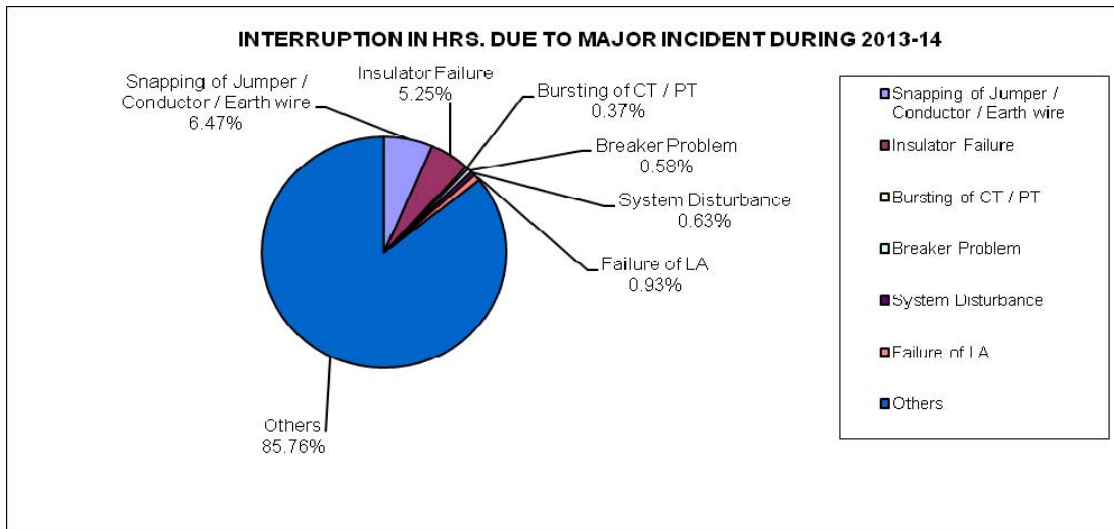
**System Interruptions due to Major Incident:**

200. OPTCL’s system has faced aggregated Annual interruptions varying from 3 hour to 854 hours at different locations on account of conductor/jumper snapping, insulator failure, bursting of Current Transformer/Potential Transformer, breaker problem, system disturbance, Lightning Arrester failures and others. However, OPTCL has claimed that it has arranged to maintain power supply (without resorting to total power failure due to non-availability of transmission capacity) from other nearby transmission facilities. The same effort has been made by OPTCL in maintaining uninterrupted power supply even in the event of generation failures. OPTCL claimed that there was no black out experienced in the State during the FY 2013-14.

**Table 22**  
**Interruption due to Major Incident**

Incident	Duration of Interruption	Percentage	No. of Interruption
Snapping of Jumper / Conductor / Earth wire	64:30:00	6.47	73
Insulator Failure	52:16:00	5.25	55
Bursting of CT / PT	3:44:00	0.37	9
Breaker Problem	5:49:00	0.58	11
System Disturbance	6:19:00	0.63	14
Failure of LA	9:19:00	0.93	35
Others	854:33:00	85.76	98
	996:30:00	100	

The duration of interruption indicated above is the sum total of interruptions occurred at different areas(s/s) during the year. However there was no total blackout experienced for the State during the year 2013-14.





201. It is observed that during FY 2013-14 the daily peak demand touched at 3705 MW maximum on dt.27.03.2014 and a minimum of 1383 MW on dt.12.10.2013. The peak demand of 3705 MW in 2013-14 is about 125 MW above the peak demand experienced during the previous year 2012-13 (of 3580 MW). But the total energy drawl is 23323 MU in FY 2013-14 against 22845 MU in 2012-13, which indicates a growth in electricity consumption of around 478 MU in the state. Further, in the OPTCL system, 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 187 kV minimum and 272 kV maximum in its 220 KV system and 88 KV minimum and 144 KV maximum in its 132 KV system. The Maximum and Minimum Voltage Level at different GRID substations of OPTCL are given below.

**Table - 23**

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	254	229
2	Duburi	245	210
3	Joda	243	205
4	Tarkera	242	223
5	Budhipadar	249	218
6	Balasore	245	210
7	Narendrapur	254	187
8	Chandaka	239	196
9	Bhanjanagar	272	210
10	Theruvalli	261	220
11	Meramundali	240	213
12	Bidanasi	238	204
13	Katapalli	258	216
14	Bhadrak	250	194
15	Paradeep	250	205
16	Bolangir	256	210

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	142	104
2	Puri	133	95
3	Khurda	144	88
4	Berhampur	144	106

202. OPTCL is advised to take suitable remedial measures 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. 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.

**203. Initiatives for Operation and Maintenance and safety**

- (i) 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 up-rating of 132 KV Chandaka-Mancheswar and Chandaka-Ranasinghpur line from ACSR conductor to HTLS conductor. It should submit a detailed report on increase in power transfer capability of the 132 kV lines after the up-rating of the said 132 KV lines from ACSR conductor to HTLS conductor.
- (ii) OPTCL should have a proper procurement, monitoring and execution mechanism in place and regularly monitor the progress of all its on-going projects to avoid inordinate delay. Projects should be completed within the time schedule to avoid cost and time over-run. The equity infusion is required to be balanced and the assets so created should be utilized in a productive manner.
- (iii) OPTCL should take steps for annual audit of the store materials. Ideally there should be zero inventory barring some materials required to attend breakdowns.
- (iv) OPTCL is required to develop appropriate ring system so that power supply to the affected areas can be easily made available from the neighbouring areas fed from other generating stations of the state and Orissa share from Inter State Generating Station of Eastern Region.
- (v) OPTCL should avoid addition of large number of 132 kV s/s when 220 kV ring transmission system is available. OPTCL should find out the latest technical methods for effective utilization of existing/proposed higher level transmission system by upgrading the existing substations/transmission lines etc. to increase power transfer capacity and avoid RoW problem. Strengthening of the existing network, multi voltage level and multi circuit transmission lines may also be considered for the purpose. CEA may be consulted in this regard for introduction of latest technology for improvement in available transmission infrastructure.

204. In reply to query, OPTCL furnished the item wise procurement of materials and its actual execution during 2014-15 (April to November) as per which the expenditure towards R & M incurred in different wings are given below:

- |                 |             |
|-----------------|-------------|
| 1. Telecom wing | 2.01 crore  |
| 2. IT wing      | 1.75 crore  |
| 3. Civil Works  | 4.04 crore  |
| 4. O & M wing   | 57.75 crore |

205. During the FY 2014-15, the Commission approved an amount of Rs.93 crore towards R & M. As stated above OPTCL has spent an amount of Rs.65.55 crore by November, 2014 (i.e. for a period of 8 months) Extrapolating the same over a period of 12 months, the expenditure towards R&M would be Rs.98.33 crore. The Commission during FY 2015-16 approves an amount of Rs.108.00 crore towards R&M which is in excess of 10% of the figure arrived for 2014-15 i.e 10% over Rs.98.33 crore.

#### **Administration & General (A&G) Expenses**

206. For the FY 2015-16, OPTCL has proposed an amount of Rs.32.36 crore towards A&G expenses. Item wise break-up of expenses for the FY 2015-16 is given in the table below:

**Table – 24**

	Actual for previous FY 2013-14	Current FY 2014-15			Estimate for ensuing year 2015-16
		Actual for 1 <sup>st</sup> first 6 months	Proj. for balance 6 months	Total	
<b>PROPERTY RELATED EXPENSES</b>					
Licence Fees	1.25	13.52	16.07	1.25	1.25
Rent	1.02			0.12	0.13
Rates & Taxes	4.27			0.67	0.73
Insurance	0.03			0.08	0.09
Contribution to accident reserve fund	-				
<b>Sub-Total :</b>	<b>6.58</b>				
<b>COMMUNICATION</b>					
Telephone & Trunk Call	0.56			0.94	1.03
Postage & Telegram	0.06			0.08	0.09
Telex, Teleprinter Charges, Telefax	0.00			0.01	0.01
Courier Charges	0.00			0.01	0.01
Other	0.00			0.01	0.01
<b>Sub-Total :</b>	<b>0.62</b>			<b>1.05</b>	<b>1.16</b>
<b>PROFESSIONAL CHARGES</b>					

	Actual for previous FY 2013-14	Current FY 2014-15			Estimate for ensuing year 2015-16
		Actual for 1 <sup>st</sup> first 6 months	Proj. for balance 6 months	Total	
Legal expenses	0.39			1.45	1.60
Consultancy charges	2.27			1.48	1.62
Technical fees	0.13			0.02	0.02
Audit fees	0.56			0.54	0.59
Inspection Fees	1.98			2.07	2.28
Other charges	2.58			3.90	4.29
<b>Sub-Total :</b>	<b>7.92</b>			<b>9.46</b>	<b>10.41</b>
<b>CONVEYANCE &amp; TRAVELLING</b>					
Conveyance expenses	0.03			0.04	0.04
Travelling expenses	2.78			3.08	3.39
Hire charges of vehicle	3.31			4.18	4.60
Others	0.52			0.09	0.10
<b>Sub-Total :</b>	<b>6.65</b>			<b>7.39</b>	<b>8.13</b>
<b>OTHER EXPENSES</b>					
Electricity & Water Charges	1.42			1.90	2.10
Fees & Subscription	0.26			0.40	0.44
Books & Periodicals	0.02			0.03	0.04
Printing & Stationery	0.27			0.54	0.59
Advertisement	0.39			1.38	1.52
Entertainment	0.11			0.09	0.10
Watch & Ward	2.56			1.62	1.78
Miscellaneous	1.27			1.14	1.26
Donation	0.01			0.05	0.06
Training	0.53			0.70	0.77
Office Maintenance	0.94			1.06	1.17
SLDC Charges	0.64			0.64	0.64
<b>Sub-Total :</b>	<b>8.42</b>			<b>9.56</b>	<b>10.45</b>
<b>MATERIAL RELATED EXPENSES</b>					
Demurrage and Wharfage on materials	31.07				
Others	0.14			0.00	0.00
<b>Sub-Total :</b>	<b>31.20</b>			<b>0.00</b>	<b>0.00</b>
<b>TOTAL</b>	<b>61.39</b>	<b>13.52</b>	<b>16.07</b>	<b>29.59</b>	<b>32.36</b>

207. In its supplementary submission dated January 12, 2015 OPTCL proposed an amount of Rs.22.02 crore towards A & G expenses calculated as per OERC Regulation, 2014 (8.14) for OPTCL. The Commission in line with the earlier orders allows escalation of 0.11% (Rate of inflation measures by WPI of December 2014) over the approved amount of Rs.20.57 crore (last year (i.e. 2014-15) and approve an amount of Rs.20.59 crore towards normal A & G expenses for FY 2015-16. Over and above the normal A & G expenses, the Commission allows the license fees of Rs.1.50 crore based on OERC notification dated 28.2.2015 due for the year 2015-16 and inspection fees of

Rs.2.28 crore proposed by the licensee to the Govt. Hence, the Commission allows Rs.24.37 crore under the head A & G for FY 2015-16.

### Interest on Loan

208. OPTCL has proposed Rs.131.83 crore towards interest on long term loan for the FY 2015-16. Subsequently in its supplementary submission OPTCL revised the calculation and proposed an amount of Rs.143.80 crore. Loan-wise interest payment schedule as proposed by the licensee is exhibited in table below:

**Table- 25**

Projection for Interest on loan for FY 2014-15							(Rs. Cr)
		Rate of Interest	Principal CB as on 31.03.15	Loan to be received during 2015-16	Loan redeemed during 2015-16	Interest payment for 2015-16	Total Payment for 2015-16
A	Govt. Loans						
	State Govt.(Cash Loan)	13.00%	2.00			0.26	0.26
	State Govt.(CRF)	0.00%	15.00				0
	GoO Bonds	13.00%	400.00			26.00	26.00
	Sub Total		417.00			26.26	26.26
B	Institutional Loans						
	Total REC Loan		249.12	20.00	24.78	31.49	56.27
	PFC Loan		75.62	4.25	7.13	9.44	16.57
	Sub Total		324.74	24.25	31.91	40.93	72.84
C	Secured Loan						
	New Loan (14-15)	12.15%	349.23			42.43	42.43
	New Loan (15-16)	12.15%		562.64		34.18	34.18
	Sub Total		349.23	562.64		76.61	76.61
D	<b>Grand Total</b>		<b>1090.97</b>	<b>586.89</b>	<b>31.91</b>	<b>143.80</b>	<b>175.71</b>

209. It is observed from the above table that the quantum of new loan to be availed by OPTCL during FY 2014-15 and 2015-16 is Rs.349.23 and Rs.562.64 crore respectively to be spent towards the capital expenditure of Rs.862.42 crore under the following head.

**Table- 26**

Projected CAPEX for FY 2015-16	
Particulars	Amount (Rs. Cr)
a) Telecom	36.53
b) O&M	81.70
c) Information Technology (IT)	19.49
d) Civil Works	41.00
e) TP & Con. (Excluding Deposit Works)	683.70
<b>Total Capital Expenditure (a+b+c+d+e)</b>	<b>Rs. 862.42 Cr</b>

210. The interest impact on the above new loan is claimed at Rs.76.61 crore. Replying to the query of the Commission OPTCL has submitted the position of drawl of additional loan for new project during 2014-15 and 2015-16 to be availed from PFC/ REC and other financial institutions which is summarised below:

**Table – 27**  
**Additional Loan for New Projects during 2014-15 & 2015-16 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 31.03.14	Loan to be taken during 2014-15 & 2015-16
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	14.13	<b>9.92</b>	4.21
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>9.58</b>	5.73
8	132 KV S.C. Line from Paradeep to Jagatsingpur	PFC	16.02	11.22	<b>11.22</b>	-
9	2x40 MVA, 132/33 KV S/S at Udala with <b>LILO arrangement</b>	PFC	26.19	22.26	-	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	22.38	<b>11.40</b>	10.98
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	31.36	<b>18.94</b>	12.42
12	2X12.5 MVA, 132/33 S/s at <b>Kuchinda with LILO arrangement(29.35 Kms)</b>	REC	25.97	23.80	<b>14.28</b>	9.52

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.14	Loan to be taken during 2014-15 & 2015-16
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	24.82	<b>12.95</b>	11.87
14	2x12.5 MVA, 132/33 KV S/S at <b>Chandpur with LILO arrangement(2.31 Kms)</b>	PFC	16.81	13.00	<b>9.14</b>	3.86
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	26.89	<b>14.87</b>	12.02
16	2x12.5 MVA, 132/33 KV S/S at <b>Bhawanipatna with LILO arrangement (6.61 Kms)</b>	REC	19.59	17.63	<b>12.57</b>	5.06
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	16.50	<b>10.06</b>	6.44
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	72.85	<b>7.18</b>	65.67
19	2x20 MVA, 132/33 KV S/S at <b>Kalunga with LILO arrangement (2.671 Kms)</b>	PFC	17.93	12.34	<b>6.96</b>	5.38
20	2x40 MVA, 220/33 KV S/S at <b>Bonai with LILO arrangement (10kms)</b>	PFC	28.74	25.68	<b>5.28</b>	20.40
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>	-
22	220/33 KV S/S at <b>Gopinathpur with LILO arrangement</b>	PFC	25.55	21.72	-	21.72
23	220/33 KV S/S at <b>Lapanga with LILO arrangement</b>	PFC	60.80	51.68	-	51.68
24	Installation of 3rd Bay Transformer in different Grid-Stations	REC	152.75	137.44	-	137.44
25	132/33 KV S/S at <b>Barbil with LILO arrangement</b>	REC	17.41	15.66	-	15.66
26	220/33 KV Grid S/s at <b>Kuarmunda, Sundergarh</b>	Union Bank of India	62.12	52.80		52.80
27	220/132/33 KV Grid S/s at <b>Kesinga, Kalahandi.</b>	Union Bank of India	75.87	45.52		45.52

Sl No	Name of the Project	Sanctioned by	Project Cost	Loan Amount Sanctioned	Loan Received as on 31.03.14	Loan to be taken during 2014-15 & 2015-16
28	Integration of 3nos of Grid S/s for SCADA connectivity under ULDC Expansion Scheme	Bank of India	35.86	30.00		30.00
29	SCADA Interface points at all 220/132KV Grid S/s	Bank of India	67.48	57.00		57.00
30	220/132KV Grid S/s at Dhamara, Bhadrak	Bank of India	74.95	63.00		63.00
31	132/33KV Grid S/s at Lapang, Sambalpur	Bank of India	70.19	59.00		59.00
32	132/33KV Grid S/s at Khajuriakata	Bank of India	26.12	22.00		22.00
33	220/132/33 KV Grid S/s at Pratap Sasan, Khurda	Bank of India	69.35	59.00		59.00
	<b>TOTAL</b>		<b>1,425.37</b>	<b>1,152.34</b>	<b>313.19</b>	<b>839.15</b>

211. The position of loan availed as an 31.03.2014 and the amount sanctioned during FY 2014-15 is given below:

**Table – 28**

**Details of Year-wise Loan availed from FY 2008-09 to FY 2013-14**

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	Karanja	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	Karanja	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	2.10	17.03.2009	12.50%	10 Year	3 Year
150689-3	Karanja	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
150689-4	Karanja	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	Karanja	REC	2.31	2.31	30.03.2010	11.00%	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
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	2.30	31.03.2010	11.00%	15 Year	3 Year
2350011-1	Boudh	REC	3.29	3.29	31.03.2010	11.00%	15 Year	3 Year
2350012-1	Kuchinda	REC	2.74	2.74	31.03.2010	11.00%	15 Year	3 Year
2350013-1	Padampur	REC	2.99	2.99	31.03.2010	11.00%	15 Year	3 Year
		<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	1.40	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	1.40	29.03.2012	12.50%	15 Year	3 Year
48703019	132/33 KV S/S Banai	PFC	1.65	1.65	29.03.2012	12.50%	15 Year	3 Year
		<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 from Bidanshsi	PFC	8.13	8.13	26.03.2013	12.50%	13 Year	0
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>					

Source (Institution- wise/ Bank- wise)	Purpose	Sanctioned by	Amount Sanctioned	Amount of Drawal	Date of Drawal	Interest Rate (%)	Tenure of Loan	Moratorium period
				<b>30.09</b>				
<b>F Y 2013-14</b>								
2350008-3	Dabugaon	REC	5.61	5.61	27/03/2014	12.00%	12 Year	0
2350009-3	Nuapada	REC	10.08	10.08	29/03/2014	12.00%	12 Year	0
2350010-3	Bhawanipatana	REC	6.08	6.08	27/03/2014	12.00%	12 Year	0
2350011-3	Boudh	REC	7.70	7.70	27/03/2014	12.00%	12 Year	0
2350012-3	Kuchinda	REC	7.97	7.97	27/03/2014	12.00%	12 Year	0
2350013-3	Padampur	REC	6.69	6.69	27/03/2014	12.00%	12 Year	0
2350004-2	Purusottampur	REC	4.71	4.71	27/03/2014	12.00%	10 Year	2 Year
2350015-1	Karadagadia	REC	7.18	7.18	27/03/2014	12.00%	10 Year	2 Year
	<b>Sub Total</b>		<b>56.02</b>	<b>56.02</b>				
48703007-3	132/33 KV S/S Chandpur	PFC	3.09	3.09	21/03/2014	12.50%	12 Year	0
48703008-3	132/33 KV S/S Banki	PFC	2.73	2.73	21/03/2014	12.50%	11 Year	0
48703017-3	132/33 KV S/S Kalunga	PFC	2.79	2.79	19/03/2014	12.50%	11 Year	0
48703019-3	132/33 KV S/S Banai	PFC	2.77	2.77	19/03/2014	12.50%	12 Year	0
48703018-2	220 kV DC Line from Bidanshsi	PFC	1.45	1.45	19/03/2014	12.50%	12 Year	0
	<b>Sub Total</b>		<b>12.83</b>	<b>12.83</b>				
	<b>Total</b>		<b>68.85</b>	<b>68.85</b>				
	<b>Grand Total</b>		<b>313.19</b>	<b>313.19</b>				
<b>F Y 2014-15</b>	<b>To be avail during FY14-15 and in the 1st Qtr of 2015-16(form REC &amp; PFC)</b>							
2350001-4	400 Kv DC Line Meramindali Duburi	REC		13.97	Mar-15 to Jun-15	12.25%	10 Year	0
2350008-4	Dabugaon	REC		4.40	Mar-15 to Jun-15	12.25%	11 Year	0
2350009-4	Nuapada	REC		3.19	Mar-15 to Jun-15	12.25%	11 Year	0
2350011-4	Boudh	REC		4.11	Mar-15 to Jun-15	12.25%	11 Year	0
2350012-4	Kuchinda	REC		2.21	Mar-15 to Jun-15	12.00%	11 Year	0
2350013-4	Padampur	REC		4.56	Mar-15 to Jun-15	12.25%	11 Year	0
2353194-2	Bhudipadar-	REC		3.73	Mar-15 to Jun-15	12.25%	10 Year	1 Year
2350004-3	Purusottampur	REC		4.20	Mar-15 to Jun-15	12.25%	10 Year	2 Year
2350015-2	Karadagadia	REC		41.94	Mar-15 to Jun-15	12.25%	10 Year	1 Year
	<b>Sub Total</b>			<b>82.33</b>				
48703007-4	132/33 KV S/S Chandpur	PFC		1.09	28/08/2014	12.25%	11 Year	0
48703008-4	132/33 KV S/S Banki	PFC		6.44	Mar-15 to Jun-15	12.50%	11 Year	0
48703017-4	132/33 KV S/S Kalunga	PFC		5.38	Mar-15 to Jun-15	12.50%	11 Year	0
48703019-4	132/33 KV S/S Banai	PFC		5.55	Mar-15 to Jun-15	12.50%	12 Year	0
48703018-3	220 kV DC Line from Bidanshsi	PFC		5.73	Mar-15 to Jun-15	12.25%	12 Year	0
	<b>Sub Total</b>			<b>24.19</b>				

212. As seen from the above table OPTCL has already availed Rs.313.19 crore upto the FY 2013-14. The outstanding balance as on 31.3.2014 after repayment is 266.85 crore. During 2014-15 the OPTCL proposed to draw an amount of Rs.19.94 crore and Rs.62.33 crore from PFC and REC respectively and during 2015-16 OPTCL proposed to borrow Rs.4.25 crore and 20 crore from PFC and REC respectively. The loan from PFC and REC are the sanctioned loans the details of which (such as purpose of loan, loan number etc.,) has been furnished by OPTCL in Form F-13. The Commission in their previous order has given approval to the loans obtained/to be obtained from PFC/REC. The interest impact on such loan for the financial year 2015-16 as claimed by OPTCL amounts to Rs.40.93 crore. The Commission approves the same i.e. Rs.40.93 crore as a pass through in the ARR for 2015-16. Regarding the new loan of Rs.349.23 crore and Rs.562.64 crore proposed to be availed during 2014-15 and 2015-16 respectively, the Commission will consider the same after the amount is actually availed by OPTCL. Hence, the interest claimed on new loan is not allowed by the Commission at present.

213. Besides above OPTCL has claimed an amount of Rs.26.26 crore towards State Govt. loan and bond as per the table below:

State Govt. cash loan	-	0.26 crore
GOO Bond	-	<u>26.00 crore</u>
<b>Total</b>	-	<b>26.26 crore</b>

214. 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.

Based on the above, the interest liability works out to Rs.40.93 crore as per details below:

**Table - 29**

	<b>Proposal</b>	<b>Approval</b>
i. Govt. Loan (State Govt. + Central Govt.)	26.26	0
ii. Institutional loan	40.93	40.93
iii. Loan for new project (to be received during 2014-15 and 2015-16)	76.61	0
<b>Total</b>	<b>143.80</b>	<b>40.93</b>

The Commission therefore allows an amount of Rs.40.93 crore towards interest due for the FY 2015-16.

## Depreciation

215. OPTCL has claimed an amount of Rs.197.72 crore towards depreciation for the year 2015-16. The computation is based on CERC (Terms and Conditions of Tariff) Regulation, 2014. A detailed statement of fixed assets and block-wise computation of depreciation is given in the table below:

**Table – 30**

<b>Block-wise computation of Depreciation (Rs. Cr.)</b>						
<b>Particulars</b>	<b>Depreciation Rate prescribed by CERC Reg., 2014</b>	<b>Depreciation @ Pre-92 Rate as per GoI Notification</b>	<b>Gross Block (01.04.14) (Prov.)</b>	<b>Gross Block (01-04-15) (Projected)</b>	<b>Deprcn. For FY 15-16 as per CERC Reg.</b>	<b>Deprcn. for FY 15-16 @ Pre-92 Rate</b>
Land and Rights	0.00%	0.00%	43.34	49.79	0	0.00
Buildings	3.34%	1.80%	82.38	94.64	3.16	1.70
Plant & Machinery (Other Civil works)	3.34%	1.80%	5.86	6.73	0.22	0.12
Plant & Machinery	5.28%	3.80%	1716.95	1972.40	104.14	74.95
Plant & Machinery (Lines, Cables & Network Assets)	5.28%	2.57%	1448.59	1664.11	87.87	42.77
Vehicles	9.50%	12.86%	1.63	1.87	0.18	0.24
Furniture, Fixture	6.33%	4.55%	2.49	2.86	0.18	0.13
Office Equipment	6.33%	9.00%	27.00	31.02	1.96	2.79
<b>TOTAL</b>			<b>3328.24</b>	<b>3823.42</b>	<b>197.72</b>	<b>122.71</b>

216. From the above statement it is found that OPTCL has added an amount of Rs.495.18 crore towards the gross fixed asset during the FY 2014-15. After scrutiny of the audited account it is found that the work- in-progress as on 31.03.2014 amounts to Rs.817.41 crore which is more than the additions of asset considered during 2014-15. The Commission therefore accepts the figures of the gross fixed asset addition of Rs.495.18 crore during 2014-15 since the opening WIP is more than the asset addition. The Gross fixed asset as on 31.03.2014 reflected in the audited accounts of OPTCL is upvalued one.
217. 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 with the assets of transmission, distribution after revaluation by State Govt. OHPC was vested with 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 - 31**

(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.

218. 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.

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

- (i) The bonds issued by GRIDCO and OHPC, to the State Govt. consequent upon revaluation of assets shall not carry any interest for a further period of five years from FY 2006-07 to FY 2010-11.
- (ii) The additional equity share, allotted to the State Govt. based on revaluation of assets, should not earn any Return on Equity for a further period of five years from FY 2006-07 to FY 2010-11.

- (iii) Both GRIDCO/OPTCL and OHPC would be entitled to depreciation on the revalued (pre-92) assets.
- (iv) Both GRIDCO/OPTCL and OHPC shall repay the principal amount of the loan amount actually taken from the State Govt. along with the interest as per the terms and conditions of loan other than those attributable to the revaluation of assets.
- (v) The State Govt. investment actually made in Upper Indravati Project, excluding the normative equity, should yield return to the State Govt. with effect from FY 2010-11 after clearance of loan liabilities of PFC. However, interest at the rate of 7% should be charged and paid on this investment from FY 2006-07 onwards.
- (vi) Return on Equity on the old Hydro Power Plants may be allowed to OHPC, in respect of new projects commissioned after 01.04.1996.

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.

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.
219. The above concessions/Govt. supports, 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.
220. 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.
221. Government in Finance Department, after careful examination of the issues, has observed that “an open ended commitment by the State Government to extend these supportive measures would be undesirable. At the first stage these supports may be continued till 2012-13 after which a review should be made by the State Government

and on that basis a view could be taken on the need for further extension of these measures”.

222. The Commission in his letter. 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.”*

223. 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.

224. 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 upvaluaition 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.”*

225. 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. The Govt. of Odisha vide letter No.4323 dated 31.5.2014 gave its reply and sought information from the Commission on the impact of upvaluation of assets on tariff which has been kept in abeyance. The Commission gave the supporting details i.e. summary sheet of upvaluation impact vide letter No.862 dated 12.6.2014. The Commission vide letter No.51 dated 13.1.2015 (item 2) wanted the decision of the Govt. on this matter. Although Govt. Vide letter 1808 dated 28.2.2015 gave an item wise reply to the letter of the Commission, the issue regarding upvaluation of assets of OPTCL has not been addressed. In other words reply from State Govt. is still awaited.
226. In line with the tariff orders of the last year, Commission assumed that 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.
227. 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.
- A Table showing gross fixed assets as on 01.4.96 and year-wise asset addition thereafter till 2014-15 is depicted below.

**Table – 32****(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 (audited)	196.74
2014-15 (Approved)	495.18
<b>Total</b>	<b>3349.13</b>

228. 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).

229. The classification of assets has been done proportionately based on the audited account for 2013-14 submitted by OPTCL. Accordingly, the Commission approves an amount of Rs.107.48 crore towards depreciation for the FY 2015-16 as per the details shown in Table below:

**Table – 33****(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 01.04.2014</b>	<b>Depreciation for the year 2015-16</b>
Land and Rights		8.07	43.61	0.00
Building	1.80%	13.09	82.90	1.49
Plant & Machinery (other civil works)	1.80%	-	5.90	0.11
Plant & Machinery	3.80%	-	1727.73	65.65
Plant & Machinery (line, cables and	2.57%	492.71	1457.68	37.46

Particulars	Pre-92 rate of depreciation as per GOI notification dated 31.01.92	Book Value of asset as on 01.04.1996	Book Value of asset as on 01.04.2014	Depreciation for the year 2015-16
network)				
Vehicles	12.86%	0.02	1.64	0.21
Furniture, Fixture	4.55%	0.19	2.51	0.11
Office equipment	9.00%	0.25	27.16	2.45
<b>Grand Total</b>		<b>514.32</b>	<b>3349.13</b>	<b>107.48</b>

Accordingly, Commission allows an amount of Rs.107.48 crore towards depreciation for the FY 2015-16.

### Return on Equity

230. OPTCL has claimed an amount of Rs.113.74 crore for FY 2015-16 towards return on equity on a share capital of Rs.580.00 crore at the rate of 19.61% post tax basis as per clause (2) of Regulation 25 of CERC Regulation, 2014. Subsequently in its supplementary submission dated 12.1.2015 OPTCL revised the figure to 89.90 crore. 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. During the year 2014-15, OPTCL received an amount of Rs.50.00 crore from the State Govt. Thus, a total amount of Rs.293.00 crore has been received by OPTCL. The sanctioned order and date of the Govt. fund is given below:-

**Table – 34**

Sl. No.	Sanction Order No. and Date	Amount (Rs. in cr.)
1.	R&R-I-01/2009-3560 dt.25.03.09	23.04
2.	R&R-I-01/2009-2003 dt.24.02.09	0.01
3.	R&R-I-01/2009-9464 dt.11.09.09	5.0
4.	R&R-I-01/2009-4826 dt.01.06.10	20.0
5.	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6.	R&R-6/12-685 dt.31.01.2012	1.00
7.	R&R-6/12-690 dt.31.01.2012	39.00
8.	R&R-6/12-695 dt.31.01.2012	3.00
9.	R&R-6/12-629 dt.22.01.2013	25.76
10.	R&R-6/12-634 dt.22.01.2013	16.60
11.	R&R-6/12-624 dt.22.01.2013	7.64
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
15.	R&R-69/14-10445 dt.29.12.2014	10.50

Sl. No.	Sanction Order No. and Date	Amount (Rs. in cr.)
16.	R&R-69/14-10450 dt.29.12.2014	27.50
17.	R&R-69/14-10455 dt.29.12.2014	12.00
	<b>Total</b>	<b>293.00</b>

231. The Commission feels that OPTCL is entitled to get return on equity value of Rs.293 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 2015-16.
232. As per Regulation 8.28 of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014 Return on Equity shall be computed on pre-tax basis @ 15.5% to be grossed up as per clause (2) of this Regulation. In view of the above, the Commission allows return @ 15.5% on the equity value of Rs.293 crore as stated above which works out to Rs.45.41 crore. Over and above this amount, the Commission allows the actual tax expenses of Rs.6.68 crore booked in the audited accounts of OPTCL for FY 2013-14 as per OERC Regulation 2014 (8.31). Hence the total amount of Rs.52.09 crore is allowed as pass through in the ARR for FY 2015-16 under the head RoE.

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

233. OPTCL has proposed an amount of Rs.28.41 crore towards interest on working capital as per CERC Regulation, 2014. The table showing calculation of Interest on working capital proposed by OPTCL is given below:

**Table- 35**

<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	151.37
(ii) Maintenance Spares @ 15% of O&M expenses	74.47
(iii) Operation & Maintenance expenses for one month	41.37
<b>Total Working Capital</b>	<b>277.21</b>
<b>Interest on Working Capital @ 10.25% per annum</b>	<b>28.41</b>

Subsequently, OPTCL in its supplementary submission dated 12.1.2015 revised the figure to Rs.26.17 crore.

234. As per the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014 read with para 8.26 it has been mentioned that in case of STU (OPTCL) the Commission shall determine the quantum of working capital if needed depending upon the cash flow position of the licensee and shall allow interest on the same. OPTCL furnished the cash flow statement upto January 2015 as per which revenue receipt upto January is shown at Rs.528.85 crore whereas the revenue expenditure including repayment of principal is Rs.504.69 crore. Thus, OPTCL posted a surplus of Rs.24.16 crore during the FY 2014-15 (upto January 2015). The Commission therefore does not feel it justified to allow the same in the revenue requirement. Further, the Transmission Charge is the first charge being recovered from monthly BSP bill of DISCOMs. Hence, the interest on working capital as claimed by OPTCL is disallowed by the Commission.

### **Contingency Reserve**

235. For the year 2015-16, OPTCL has proposed Rs.19.12 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. Further, OPTCL has stated that the Commission has not allowed any contingency reserve to OPTCL for the last four years starting 2011-12 on the ground that OPTCL has not quantified the amount invested in different Govt. securities. In this regard it is submitted that the present investment of OPTCL is Rs.86.86 crore in SDL Bond of different state. In OPTCL's tariff order for FY 2014-15 at Para 199, Commission has directed as follows with respect to Disaster Management.

*“ 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 crore 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 ”.*

236. OPTCL in its reply stated that sector such as Telecommunication and power (except immediate restoration of power supply) are not eligible to get assistance from SDRF and NDRF and they will undertake immediate repair and restoration work from their own fund. During 2013-14 OPTCL spend around Rs.18.94 crore from the contingency reserve fund for restoration of the damages caused due to “Phailin”.
237. The Commission is of the view that OPTCL should spend the amount towards the natural calamities from the contingency reserve fund which is subsequently allowed by the Commission in the truing up. In fact the amount of Rs.18.94 crore has been allowed by the Commission while undertaking the truing up exercise for the FY 2013-14. From the audited account of 2013-14 it is revealed that the balance towards contingency reserve fund after adjustment of Rs.18.94 crore is shown at Rs.148.17 crore. The Commission will allow the actual expenditure in the truing up as and when it is spent by OPTCL. In view of the above, Commission do not approve the amount claim towards contingency reserve fund for an amount of Rs.19.12 crore for the FY 2015-16.

**Other Miscellaneous Expenses including Income Tax**

238. OPTCL in its supplementary submission dated 12.01.2015 claimed that an amount of Rs.9.41 crore under the following heads:

<b>Rs. In Crore</b>	
1. License Fees	1.25
2. Inspection Fees	2.28
3. SLDC Charges	0.64
4. Corporate Social responsibility	0.50
5. Income Tax	4.74
	-----
	<b>9.41</b>

239. The Commission considered the licensee fees of Rs.1.50 crore based on OERC notification dated 28.2.2015 and inspection fees of Rs.2.28 crore under the head Administration and General Expenses. Regarding SLDC charges the Commission as discussed in para below has allowed Rs.0.70 crore payable by OPTCL. As regards Corporate Social responsibility of 0.50 crore the Commission is not inclined to approve the same separately. The amount can be spent from A & G expenses approved by the Commission. OPTCL claimed an amount of Rs.4.74 crore towards income tax as pass through in the ARR for 2015-16. The Commission addressed the issue and already allowed an amount of Rs.6.68 crore towards income tax on actual

basis booked in the audited account for FY 2013-14 under the head Return on Equity. This has been discussed in the para above.

**Grid Co-ordination Committee Expenses**

240. OPTCL claimed an amount of Rs.0.71 crore under this head for the FY 2015-16. The Commission approves an amount of Rs.0.52 crore for the year 2015-16.

**Payment of SLDC Charges**

241. 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 2015-16 wherein it has been computed that OPTCL has to Pay 10% of SOC to SLDC. Accordingly, OPTCL will pay an amount of Rs.0.70 cr. per annum to SLDC towards System Operation Charges for FY 2015-16. The details of SOC are available in the ARR of SLDC approved in Case No.66/2014. The said amount of Rs. 0.70 cr. is allowed in the ARR of OPTCL to be recovered through its Transmission Tariff.

**Incentive for system availability**

242. OPTCL in its submission has claimed for an incentive of Rs.7.15 crore to be passed on the ARR of FY 2015-16 as the system availability of OPTCL Transmission Network for FY 2013-14 was 99.96%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98.5%. The OPTCL Incentive Claim of Rs.7.15 crore has been certified by SLDC. A calculation of incentive claimed by OPTCL is given below:

**Table- 36**

<b>Calculation of Incentive claimed by OPTCL</b>	
Energy transmitted by OPTCL in FY 2013-14 for intra-state LTOA customers (MU)	22865.31
Transmission Charge @ 25 P/U during FY 2013-14 (Rs. Cr.)	571.63
Transmission System availability during FY 2013-14 for calculation of incentive (%)	99.96
Transmission System availability above 98.50 % (No incentive beyond 99.75%)	1.25
<b>Incentive claimed by OPTCL for FY 2013-14 (Rs. Cr.)</b>	<b>Rs. 7.15 cr.</b>

243. Subsequently, OPTCL in its supplementary submission dated 12.01.2015 revised the figure to Rs.8.68 crore. 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.
244. 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 99.96% during FY 2013-14 and is expected to maintain NATAF more than 98.5% during FY 2014-15, pending verification, the Commission approves an amount of Rs.5.00 Cr. as an incentive in the ARR of OPTCL for FY 2015-16 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. OPTCL is directed to submit the brake up of the amount spent under this head .

**Rebate**

245. 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.13.19 crore which is calculated based on the projected unit at current transmission charge i.e. 25 p/u. The Commission approves the same and allowed an amount of Rs.12.61 crore towards rebate as a pass through in the ARR.

**Miscellaneous Receipts**

246. OPTCL has proposed an amount of Rs.26 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 2014-15, Miscellaneous Receipt of OPTCL from different sources is about Rs.11.62 crore, the details are given in the table below:

**Table- 37**  
**Miscellaneous Receipt during 1st six months of FY 2014-15**

Source	Rs. Cr.
Inter-State Wheeling	0.21
Short-Term Open Access	2.40
STU charges received from Energy Exchange	5.49
Supervision Charge	3.52
<b>Total</b>	<b>Rs. 11.62 Cr.</b>

For the Financial Year 2015-16, the Commission takes of the amount of Rs.26 crore towards Miscellaneous Receipt as proposed by OPTCL into consideration.



### Transmission Cost

247. The total energy to be transmitted in the OPTCL system is estimated at 25260 MU for FY 2015-16, the details of which are mentioned in the table below:

**Table – 38**

<b>Details of Energy for Transmission</b>	<b>Proposed by OPTCL (MU)</b>	<b>Approved by OERC (MU)</b>
Sale to DISCOMs	26006	24800
Wheeling to industries from CGPs	450	450
Sale to CGPs by GRIDCO	10	10
<b>Total</b>	<b>26466</b>	<b>25260</b>

248. The details of expenses proposed by OPTCL and approved by the Commission for FY 2015-16 towards transmission charges are depicted in the Table below:

**Table – 39**  
**ARR Proposed and Approved for OPTCL for 2015-16**

<b>ITEMS</b>	<b>Approved for 2014-15</b>	<b>Proposed for 2015-16</b>	<b>Proposed for 2015-16 (supplementary submission )</b>	<b>Approved for 2015-16</b>
Employees Cost including Terminal Benefits	318.18	310.02	310.02	305.23
R&M Cost	93.00	154.11	154.11	108.00
A&G Cost	24.01	32.36	22.02	24.37
Interest on Loan Capital	48.74	131.83	143.80	40.93
Depreciation	92.71	197.72	197.72	107.48
Return on Equity	45.96	113.74	89.90	52.10
Interest on Working Capital	-	28.41	26.17	-
<b>Sub-Total</b>	<b>622.60</b>	<b>968.19</b>	<b>943.74</b>	<b>638.11</b>
Special Appropriation	-			
<b>Pass Through Expenses</b>				
Contingency Reserve	-	19.12	19.12	-
Other miscellaneous expenses including Income Tax	-	-	9.41	
GCC Expense including SLDC charges	1.20	0.71	0.71	1.22
Incentive for system availability	5.00	7.15	8.68	5.00
Rebate	12.50	13.19	13.19	12.61
<b>Total</b>	<b>641.30</b>	<b>1008.36</b>	<b>994.85</b>	<b>656.94</b>
<b>Less Misc. Receipts</b>	<b>16.80</b>	<b>26.00</b>	<b>26.00</b>	<b>26.00</b>
<b>Annual Revenue Requirement to be recovered from LTOA Consumers (i.e. DISCOMs &amp; CGPs)</b>	<b>624.50</b>	<b>982.36</b>	<b>968.85</b>	<b>630.94</b>
<b>Transmission Charges (Paise/Unit) (Rounded)</b>	<b>25.00</b>	<b>37.12</b>	<b>36.61</b>	<b>25.00</b>

## **TARIFF DESIGN**

### **Transmission Charges**

249. OPTCL in its ARR Application for FY 2015-16 has proposed Transmission Charges @ 36.61 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.
250. 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 **25260** MU with an average demand of **2884** MW. The net transmission cost as indicated in the table above is **Rs.630.95** crore. Accordingly, the LTOA charges work out to a sum of Rs.6000.00/MW/day rounded to Rs.6000.00/MW/day or **Rs.250.00/MWh**. The long term open access customer availing Open Access under relevant Regulations of OERC shall pay Rs.6000.00/MW/Day (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 (Rs.62.5 / MWh) for STOA customers. This will be in addition to other charges in accordance with Open Access Regulations, 2005 & 2006.

### **Transmission Loss for Wheeling**

251. 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 2015-16. However, the Commission

expects that OPTCL shall strive to reduce the loss further by 0.20% by adopting best practices by end of 2015-16.

**Reactive Energy Charges:**

252. OPTCL in its ARR application for FY 2015-16 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.
253. The Commission in order dated.22.03.2014 had approved Reactive energy charges provisionally @ 6.50 Paise /KVArh as per Clause 1.7 of OGC for FY 2014-15 and directed OPTCL to file the calculation of Reactive Energy Charges afresh with full justification thereof at earliest vide para 276 of the said order. OPTCL has not yet responded to the order of the Commission ostensibly due to non receipt of feedback from DISCOMS/Stakeholders regarding details procedure for preparation of Mock Reactive Energy Bills. So, the Commission directs that the same rate also be applicable provisionally for FY 2015-16 also. Further, the Commission directs the licensee to discuss the matter in the Grid Co-ordination Committee meeting afresh and file the detailed procedure and billing of Reactive Energy Charges with full justification thereof within 30<sup>th</sup> June, 2015.

**Transmission Charge Payment Mechanism**

254. 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 past Financial Years for payment of monthly SLDC Charges to SLDC & Transmission Charge to OPTCL shall also to be followed for the Year 2015-16.

**Rebate**

255. For payment of bills through a letter of credit or NEFT/RTGS 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**

256. In case payment of bills by the licensees is delayed beyond a period of 30days from the date of receipt of bill, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL on the unpaid amount.
257. The transmission tariff approved as above in respect of OPTCL will become effective from 1st April, 2015 and shall continue until further order.
258. The Tariff Order shall be made effective from 01.04.2015.
259. The application of OPTCL in Case No.67 of 2014 is disposed of accordingly.

Sd/-  
**(A.K. DAS)**  
**MEMBER**

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

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

**Annexure - I**

**Table - 1**  
**Projected Capital Expenditure for FY 2015-16**

Particulars	Amount (Rs. crore)
a) Telecom	36.53
b) O&M	81.70
c) Information Technology (IT)	19.49
d) Civil Works	41.00
e) Construction	683.70
<b>Total Capital Expenditure (a+b+c+d+e)</b>	<b>862.42</b>

Some of the important CAPEX expenditures are given below:

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

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

**Table – 2**  
**CAPEX for O&M Projects in FY 2015-16**

Sl. No.	Description	Unit Rate (Rs. Lakh)	Quantity	Amount (Rs. Lakh)
<b>1</b>	<b>PROCUREMENT OF TRANSFORMERS WITH COST OF ERECTION</b>			
(i)	Procurement of 160 MVA, 220/132kV	650.00	2	1,300.00
(ii)	Procurement of 63 MVA, 132/33kV	330.00	3	990.00
(iii)	Procurement of 40 MVA, 132/33kV	273.00	4	1,092.00
(iv)	Procurement of 40 MVA, 220/33kV	305.00	1	305.00
(v)	Procurement of 20 MVA, 132/33kV	150.00	10	1,500.00
(vi)	Cost of construction of Bays	LS		547.62
<b>2</b>	<b>PROCUREMENT OF NEW 400kV ERS TOWERS</b>	150.00	8	1,200.00
<b>3</b>	<b>CONVERSION OF S/C LINES IN D/C TOWERS TO D/C LINES</b>			
(i)	132kV Cuttack - Jagatsinghpur (35.112 RKM)	LS		230.00
<b>4</b>	<b>ON GOING PROJECTS</b>			
(i)	Conversion of 132kV Jajpur Road - Anandpur S/C line to D/C line with const. of 132kV bays at both Grid S/Ss.	LS		130.00
(ii)	Conversion of 132kV Sonapur - Bolangir S/C line to 132kV Sonapur - New Bolangir D/C line with const. of 132kV bays at both Grid S/Ss.	LS		255.00
(iii)	Conversion of 132kV Patnagarh - New Bolangir S/C line to D/C line with const. of 132kV bays at both Grid S/Ss.	LS		170.00
(iv)	Up-gradation of panther conductor by HTLS higher current carrying conductor in 132 kV Joda - Badbil Line	LS		200.00
(v)	Up-gradation of panther conductor by HTLS higher current carrying conductor in 132 kV Mendhasal - Khurda Line	LS		250.00
	<b>TOTAL O&amp;M CAPEX</b>			<b>Rs. 8169.62 lakh = Rs.81.70 Cr.</b>

**(b) CAPEX FOR CIVIL WORKS:**

OPTCL proposes capital expenditure of Rs.41 crore relating to civil works during FY 2015-16 for new up-coming projects.

**(c) CAPEX FOR CONSTRUCTION WING:**

It has been planned to spend an amount of Rs.683.70 crore on transmission related infrastructure during FY 2015-16 to increase the overall system capacity and to strengthen the transmission system network of the state, the details of which are shown in the table below.

**Table- 3  
CAPEX FOR CONSTRUCTION WING in FY 2015-16 (Rs. Crore)**

		Expenditure during FY 2014-15			Projected Expenditure (FY 2015-16)
		Actual For First Six Months	Projection For Balance Six Months	Total	
1	2	3	4	5=3+4	6
<b>A</b>	<b>ONGOING SCHEME</b>				
1	2x20MVA,132/33kV <b>Barbil</b> S/S & associated LILO		5.00	5.00	
2	220/33kV S/S <b>Gopinathpur</b> (Keonjhar) & associated lines		2.00	2.00	
3	400kV <b>Meramundali - Duburi</b> D/C line		7.00	7.00	5.00
4	132/33kV <b>Khajuriakata</b> (Hindol Road) S/S & associated line	2.33	4.50	6.83	10.00
5	132kV <b>Sonepur- Boudh</b> S/C Line		3.00	3.00	3.00
6	400kV <b>IB- Meramundali</b> D/C line	1.10	1.20	2.30	
7	220/132kV <b>Dhamara</b> (Balimunda) S/S & associated LILO			-	10.00
8	132/33 kV <b>Somanathpur</b> Sw-Stn to S/S	0.40	1.60	2.00	1.80
9	2x12.5MVA ,132/33kV <b>Udala</b> S/S & associated LILO	0.30	2.00	2.30	10.00
10	132kV <b>Bhadrak-Anandpur</b> S/C line on DC tower	2.24	3.00	5.24	10.00
11	132/33kV <b>Olavar</b> S/S & 132kV <b>Pattamundai-Olavar</b> line with Bay Extention at <b>Pattamundai</b>	9.25	1.53	10.78	15.00
12	132kV <b>Dhamara</b> (proposed)- <b>Olavar</b> (proposed) D/C line		-	-	5.00
13	132/33kV <b>Agarpada</b> S/S with LILO		3.00	3.00	10.00
14	2x20MVA <b>Bhograi</b> S/S & associated LILO of 132kV <b>Kuchei-Jaleswar</b> D/C line	0.91	4.48	5.39	15.00
15	132kV <b>Kuchei-Jaleswar</b> D/C line	2.96	3.98	6.94	15.00
16	220/132kV <b>Puri</b> (Samangara) S/S	6.22	28.00	34.22	20.00
17	132/33kV S/S at <b>Chandpur</b> with line		2.00	2.00	

		Expenditure during FY 2014-15			Projected Expenditure (FY 2015-16)
		Actual For First Six Months	Projection For Balance Six Months	Total	
1	2	3	4	5=3+4	6
18	220/132kV <b>Karadagadia</b> (Atri) S/S with line	10.01	6.93	16.94	20.00
19	132/33kV <b>Banki</b> S/S with line	3.65	3.38	7.03	
20	2x160MVA Transformers at 220/132kV <b>Mendhasal</b> S/S with 132kV line	1.62	4.78	6.40	10.00
21	220/132/33kV <b>Pratapsasan</b> S/S & 132kV <b>Pratapsasan-Phulnakhara</b> D/C line	4.33	3.00	7.33	10.00
22	3rd ICT at 400/220kV <b>Mendhasal</b> S/S	1.20	6.00	7.20	15.00
23	132/33kV <b>Padampur</b> S/S with line		2.00	2.00	
24	220/132kV <b>Kesinga</b> S/S	0.69	5.00	5.69	10.00
25	132/33kV <b>Kantabanji</b> S/S & 132kV <b>Khariar-Kantabanji</b> line	0.66	2.34	3.00	10.00
26	3x315MVA ICT at <b>Bolangir</b>		2.50	2.50	
27	220/132/33kV <b>Baragarh</b> (New) S/S		5.00	5.00	10.00
28	400kV <b>Meramundali-New Duburi</b> line		5.00	5.00	
29	220kV <b>Bidanasi-Cuttack</b> D/C line	1.53	3.00	4.53	
30	Const. Of 220/132 kV Grid S/s at <b>Cuttack(Nuapada)</b>	2.02	5.50	7.52	4.40
31	132/33kV <b>Marshaghai</b> S/S	1.00	4.00	5.00	8.00
32	132kV Bay Extension at <b>Salipur , Kendrapara &amp; Nuaptana</b> S/S with lines	2.29	3.69	5.98	1.00
33	220kV <b>Duburi-Paradeep</b> D/C line	2.45	-	2.45	
34	132kV <b>Pottangi</b> S/S	3.42	7.37	10.79	14.00
35	132kV <b>Umerkote</b> S/S	9.79	7.91	17.70	10.00
36	2x12.5MVA ,132/33kV <b>Dabugaon</b> S/S & 132kV <b>Tentulikhunti-Dabugaon</b> S/C line on D/C tower		5.00	5.00	
37	2nd 220kV <b>Indravati-Therubali</b> D/C line		2.00	2.00	10.00
38	132kV <b>Junagarh-Dabugaon</b> S/C line			-	5.00
39	132kV <b>Rayagada-RTSS</b> S/C line		1.00	1.00	5.00
40	132/33kV <b>Podagada</b> S/S with line	5.84	2.61	8.45	10.00
41	220kV <b>Jayanagar-PGCIL</b> D/C line & 2 nos. 220kV feeder bays at both ends	1.31	4.38	5.69	9.00
42	Conversion of existing <b>Jaynagar-Sunabeda</b> S/C line to D/C line	1.08	3.78	4.86	3.00
43	132kV <b>Parlakhamundi-R.Udaygiri</b> S/C line on D/C Tower		-	-	15.00
44	220/33kV <b>Malkanagiri</b> S/S with line	0.01	2.99	3.00	10.00
45	132kV <b>Umarkote-Junagarh</b> S/C line on D/C tower with one no. feeder Bay Extension at each end			-	10.00
46	2x20MVA ,132/33kV <b>Muniguda</b> S/S with LILO	0.13	2.00	2.13	10.00
47	132/33kV <b>Kuchinda</b> S/S		1.00	1.00	

		Expenditure during FY 2014-15			Projected Expenditure (FY 2015-16)
		Actual For First Six Months	Projection For Balance Six Months	Total	
1	2	3	4	5=3+4	6
48	2x20MVA, 220/33kV <b>Kalunga</b> S/S with LILO	0.15	5.00	5.15	
49	2x40MVA, 220/33kV <b>Bonai</b> S/S with LILO	0.10	2.00	2.10	5.00
50	220/132kV <b>Lapanga</b> S/S	0.13	10.00	10.13	
51	2x100MVA, 220/132kV <b>Kuanarmunda</b> S/S with LILO	0.55	1.84	2.39	10.00
52	2x40MVA Trf. at <b>Jharsuguda</b> and diversion of extn. of 132kV line inside the S/S at <b>Sarasmal</b>	0.31	4.78	5.09	
53	132kV <b>Nuapatna-Banki</b> S/C line	1.83	4.00	5.83	12.00
54	Trf. bay at <b>Laxmipur</b> S/S	0.42	2.00	2.42	3.00
55	2x12.5MVA, 220/33kV <b>Kasipur</b> S/S with LILO of one circuit of 220kV <b>Indravati-Therubali</b> D/C line	0.03	5.00	5.03	10.00
56	2X20MVA, 132/33kV <b>R.Udayagiri</b> S/S with 132kV line from Mohana with 132kV Bay Extension at Mohana	0.09	4.91	5.00	10.00
57	Conversion of existing 132kV <b>Balasore- Somathpur</b> S/C line to D/C line & 132kV Bay Extension at both ends	1.52	2.00	3.52	-
58	220/33kV <b>Narasinghpur</b> S/S with LILO		4.00	4.00	10.00
59	132/33 kV <b>Bangiriposhi</b> S/S with line	0.00	3.00	3.00	9.50
	<b>TOTAL - A</b>	<b>83.94</b>	<b>222.91</b>	<b>306.85</b>	<b>408.70</b>
<b>B</b>	<b>NEW PROJECTS</b>				
1	220/132/33kV <b>Goda Chhak</b> S/S & associated line		-	-	8.00
2	132kV <b>Junagarh-Kesinga</b> D/C line				8.00
3	132/33kV <b>Dhenikote</b> S/S with line		5.00	5.00	12.00
4	2x20MVA,132/33kV <b>Brajabiharipur, Cuttack</b> (old site CDA) S/S		-	-	5.00
5	132/33kV <b>Boriguma</b> S/S with LILO of existing 132kV <b>Jayanagar-Tentulikhunti</b> S/C line (in-principle approval by the BoD)		3.00	3.00	8.00
6	220/33kV <b>Baliguda</b> S/S	0.01	8.00	8.01	10.00
7	2x20MVA, 220/33kV <b>Jaypatna</b> S/S with line	0.03	4.97	5.00	7.00
8	2x20MVA, 132/33kV <b>Satasankha (puri)</b> S/S with line		5.00	5.00	8.00
9	2x20 MVA, 132/33kV <b>Maneswar</b> S/S with LILO		-	-	5.00
10	132/33kV <b>Kalimela</b> S/S with line		3.00	3.00	7.00
11	132/33kV <b>Tirtol</b> S/S with LILO		4.00	4.00	6.00
12	132/33kV <b>Chikiti</b> S/S with line		3.00	3.00	6.00
13	132kV <b>Jayanagar -Tentulikhunti</b> line		3.00	3.00	8.00



		Expenditure during FY 2014-15			Projected Expenditure (FY 2015-16)
		Actual For First Six Months	Projection For Balance Six Months	Total	
1	2	3	4	5=3+4	6
14	132/33kV <b>Birmaharajpur</b> S/S with line		4.00	4.00	7.00
15	132/33kV <b>Betonati</b> S/S with line		4.00	4.00	5.00
16	132/33kV <b>Tusura</b> S/S with line				7.00
17	132kV <b>Nuapada-Padampur</b> line		3.00	3.00	5.00
18	220/132/33kV <b>Aska</b> S/S with line		5.00	5.00	12.00
19	220/132/33kV <b>Chandaka-B</b> (Bhubaneswar) GIS S/S		-	-	25.00
20	400/220kV <b>Lapanga</b> S/S with line		-	-	15.00
21	220kV <b>Atri-Pandiabil</b> D/C line		12.00	12.00	5.00
22	132/33kV <b>Unit-8</b> (Bhubaneswar) GIS S/S with line		-	-	25.00
23	132/33kV <b>Rasulgarh</b> (Bhubaneswar) GIS S/S with line		-	-	25.00
24	132kV <b>Phulbani-Boudh</b> S/C line		-	-	7.00
25	132/33kV <b>Ghens</b> S/S with line			-	15.00
	<b>TOTAL - B</b>	<b>0.04</b>	<b>66.97</b>	<b>67.01</b>	<b>251.00</b>
	<b>TOTAL-(A+B)</b>	<b>83.98</b>	<b>289.88</b>	<b>373.86</b>	<b>659.70</b>
<b>C</b>	<b>DEPOSIT WORK</b>				
1	RTSS at <b>Bimalagarh &amp; Belpahar</b>	4.71	4.83	9.54	
2	132kV LILO of <b>Khurda-Puri</b> line for power supply to Samuka (Puri) S/S	1.41	4.60	6.01	
3	132/33kV <b>Konark</b> S/S with line	3.66	5.00	8.66	
4	3x40 MVA, 132/33kV <b>Arugul</b> S/S for power supply to IIT & associated at Karadagadia	3.38	0.46	3.84	
5	<b>Infocity-II</b> (IDCO)	3.56	10.00	13.56	20.00
6	Underground cabling at <b>Chandaka</b>	3.14	2.55	5.69	
7	132/33kV <b>Mania</b> (Tangi) S/S	1.35	12.00	13.35	
8	RTSS at <b>Boinda</b>		1.00	1.00	2.00
9	RTSS at <b>Rairakhol</b>		1.00	1.00	2.00
	<b>TOTAL - C</b>	<b>21.21</b>	<b>41.44</b>	<b>62.65</b>	<b>24.00</b>
	<b>TOTAL - D = A+B+C</b>	<b>105.19</b>	<b>331.32</b>	<b>436.51</b>	<b>683.70</b>