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

*** *** ***

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

**Case No.92 of 2011**

**Date of Hearing : 23.02.2012**

**Date of Order : 23.03.2012**

**IN THE MATTER OF** : **An application for approval of Annual Revenue Requirement and determination of Transmission Tariff by OPTCL under Section 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004, and OERC (Conduct of Business) Regulations, 2004, and other Tariff related matters, for the year 2012-13.**

**O R D E R**

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL), a Govt. Company registered on 29th March, 2004 under the Companies Act, 1956, is carrying on the business of transmission of electricity within the State of Odisha. It had commenced the business on 31st March, 2004. The necessity for formation of this Govt. Company arose because, with the enactment of the Electricity Act, 2003 (hereinafter referred to as the Act) GRIDCO which was the Bulk Supply and Transmission Licensee under the Orissa Electricity Reforms Act, 1995 could no longer carry on both supply and transmission businesses by virtue of 3rd Proviso of Sec.41, of the said Act. By virtue of a Transfer Scheme entitled 'Orissa Electricity Reforms (Transfer of Transmission and Related Activities) Scheme,2005, under Sec.131 (4) of the Act, the erstwhile transmission business of GRIDCO with all the assets and liabilities of such business was transferred to and vested with OPTCL with effect from 1.4.2005. By Clause 10 of the Govt. Notification No.6892 dated. 09.06.2005, the OPTCL was notified as the State Transmission Utility (STU) u/s. 39(1) of the Act with effect from 01.04.2005 (i.e, the date on which the same notification came in to force). By virtue of the 2nd Proviso to Sec.14 of the Act, OPTCL has been a deemed Transmission Licensee under the Act. OPTCL is now governed by License Conditions set forth in OERC (Conditions of Business) Regulations, 2004, at Appendix 4.B issued u/S.16 of the Act, as modified by Commission's Order dated. 27th October 2006.

2. The OPTCL submitted an application in respect of its Annual Revenue Requirement (ARR) and determination of its Transmission Tariff for the FY 2012-13. The said application was duly scrutinized, registered as Case No.92/2011 and admitted for hearing. In the consultative process, the Commission heard the applicant, objectors, Consumer Counsel, representative of the State Government and orders as follows:

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

3. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for determination of Tariff) Regulations, 2004, licensees/deemed licensees are required to file their ARR within 30$^{th}$ November in the prescribed formats. OPTCL as a deemed licensee submitted its ARR application for 2012-13 before the Commission on 30.11.2011. After due scrutiny and admission of the matter, the Commission directed OPTCL to publish its ARR application in the approved format in the leading and widely circulated daily newspapers and the matter was also posted in the Commission's website in order to invite objections from the intending objectors. The Commission had also directed the applicant to file its rejoinder to the objections filed by the various objectors and to serve copy to them.

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

5. In response to the aforesaid public notice of the applicant, the Commission received 7 nos. of objections/suggestions from the following persons/ associations/ institutions/ organisations.

(1) Shri G.N. Agrawal, Advocate, Convener-cum-Gen. Secretary, Sambalpur District Consumers Federation, Balajee Mandir Bhawan, Khetrajpur, Sambalpur-768003, (2) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (3) Shri Bibhu Charan Swain, M/s Power Tech Consultants, 1-A, /6, Swati Villa, Surya Vihar, Link Road, Cuttack-753012 (4) Sri M.K.Rajguru,Advocate on behalf of M/s.NALCO, Jaydev Vihar, Bhubaneswar,(5) R.P. Mahapatra,Retd.Chief Engineer& Member(Gen.),OSEB, Plot No.775 (PT), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (6) Shri Anil Kumar Bohra, Chief Executive Officer-CSO, NESCO, WESCO, SOUTHCO, Plot No. N 1/22, IRC Village, Nayapalli, Bhubaneswar; (7) Sri M.V.Rao,Resident Manager & Power of Attorney Holder, M/s Ferro Alloys Corporation Ltd., GD-2/10, Chandrasekharpur, Bhubaneswar and Shri Sukanta Chandra Mohanty, representative of Dept. of Energy, GoO were present. All the above named objectors were present during tariff hearing except objector No. 1 who had earlier explained his submission during hearing of GRIDCO but their written submissions were taken into record and also considered by the Commission.

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

7. In exercise of the power u/S. 94(3) of the Electricity Act, 2003 and to protect the interest of the consumers, the Commission appointed WISE, Pune as Consumer Counsel for objective analysis of the licensee's Annual Revenue Requirement and tariff proposal. The Consumer Counsel presented his views in the hearing.

8. The date for hearing was fixed as 23.02.2012 and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission also issued notice to the Government of Odisha through Department of Energy informing them about the date time of hearing and requesting to send the Government's authorized representative to take part in the proceeding.

9. In its consultative process, the Commission conducted a public hearing at its premises on 23.02.2012 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 29.02.2012 at 11:00 AM at its premises to discuss about the ARR applications and tariff proposals of licensees. The Members of SAC, Special Invitees, the Representative of DoE, Govt. of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

**OPTCL's ARR & TARIFF PROPOSAL FOR FY 2012-13 (Para 11 to 49)**

11. In exercise of powers conferred under Sections 39,131,133 and 134 of the Electricity Act, 2003 read with Sections 23 & 24 of the Orissa Electricity Reform Act, 1995, the State Government published the Orissa Electricity Reform (Transfer of Transmission and Related Activities) Scheme, 2005 ("Transfer Scheme") in the Gazette dated 09.06.2005 which was effective retrospectively from 01.04.2005 wherein the Transmission Undertaking (the Undertaking related to the activities of Transmission, State Transmission Utility and State Load Dispatch Centre and acts incidental and ancillary thereto) of the Grid Corporation of Orissa Limited (Transferor), (now renamed GRIDCO Ltd.- "GRIDCO") has been transferred and vested in Orissa Power Transmission Corporation Limited ("OPTCL").

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

13. As provided under Regulation 53 (1) at Chapter VIII of OERC (Conduct of Business) Regulations, 2004 and under Clause 19.3 of License Conditions of OPTCL approved by OERC vide Order Dated 27.10.2006 in Case No. 22 of 2006, OPTCL is required to submit its Annual Revenue Requirement Application for the ensuing year before Commission for approval. Accordingly, OPTCL has filed an application before the Commission for approval of its Annual Revenue Requirement & Transmission Tariff for FY 2012-13.

**Categorization of Open Access Customers**

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

**(a) Long Term Open Access Customers (LTOA Customers)**

A Long Term Open Access Customer means a person availing or intending to avail access to the Inter-State/Intra-State Transmission System for a period of 25 years or more. Based on such premise, four DISCOMs & Captive Generating Plants (CGPs) happen to be the long term customers of OPTCL.

**(b) 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**

15. Currently, OPTCL owns 100 nos. grid sub-stations of different voltage classes and EHT transmission line of 11293.563 ckt. km. as shown in the table below.

**Table - 1**

| **Sub-Station and Line Details** | | |
|---|---|---|
| 400/220/132/33 kV SS | 1 | |
| 400/220 kV SS | 1 | |
| 220/132/33 kV SS | 14 | |
| 220/132 kV SS | 1 | |
| 220/33 kV SS | 4 | |
| 220 kV Sw.S | 1 | |
| 132 kV Sw.S | 3 | |
| 132 kV Industrial LILO | 13 | |
| 132/33 kV SS | 57 | |
| 132/33/25 kV SS | 1 | |
| 132/33/11 kV SS | 2 | |
| 132/11 kV SS | 2 | |
| **Total No. of Sub-Stations** | **100** | |
| **Voltage Level** | **Lines (ckt. km.)** | **Bays** |
| 400 kV | 521.935 | 32 |
| 220 kV | 5483.925 | 223 |
| 132 kV | 5287.703 | 644 |
| 33 kV | | 719 |
| 25 kV | | 2 |
| 11 kV | | 30 |
| **Total** | **11293.563** | **1650** |

16. In a significant departure from the past, the Tariff Policy, 2006 framed under the Electricity Act 2003, has embodied the National Tariff Framework which provides that the transmission tariff is to be sensitive to distance, direction and related to quantum of power flow in a transmission service network. Para 7(1) (3) of the Tariff Policy provides for transmission charges, to be determined on MW per circuit kilometre 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. Till date, OPTCL has been following the Postage Stamp Method for determination of its Transmission Charges. OERC has not yet framed any separate regulations for determination of Intra-State Transmission Tariff to be charged by a Transmission Licensee. In such a situation, OPTCL, the deemed Transmission Licensee is guided by the Central Electricity Regulatory Commission (CERC) Terms & Conditions of Tariff Regulations, 2009 applicable for Transmission Tariff. In view of the above, OPTCL has proposed its ARR & Transmission Tariff Application for FY 2012-13 as per the related provisions pertaining to the conduct of Business and Tariff determination as provided under OERC Regulations, 2004 and as per the CERC (Terms and Condition of Tariff) Regulation, 2009 respectively.

The costs of the deemed transmission licensee OPTCL for the FY 2012-13 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
- Provision for Bad Doubtful Debt
- Grid Co-ordination Committee (GCC) Expenses
- Incentive for System Availability

**(C) Pass through Expenses**

Other Expenses (Pass through of previous losses & liabilities)

**Details of Fixed Charges**

17. OPTCL proposes **fixed charges for FY 2012-13 as Rs.1117.74 crore** including O & M Expenses of Rs.789.93 crore, Interest on Loan Capital of Rs.102.54 crore, Depreciation of Rs.155.99 crore, Return on Equity of Rs.24.81 crore and Interest of Working Capital of Rs.44.47 crore.

**O&M Expenses**

**Employee Cost including Terminal Benefits**

18. The Employees expenses for FY 2012-13 has been projected by OPTCL at **Rs.655.36 crore** including terminal benefits of Rs.420.62 crore on the basis of (i) employee cost, (ii) terminal benefit liability of employees and existing pensioners and (iii) payment of differential pension and pensionary benefit liability.

19. The employee cost details include salaries, dearness allowance, other allowances, reimbursement of medical expenses and house rent, leave travel concession, honorarium, payment under workmen compensation Act, Ex-gratia and misc. expenses, staff welfare expenses, provision towards 6$^{th}$ Pay Commission & wage revision arrear etc.

**Administrative & General Expenses**

20. The A&G expenses for FY 2012-13 has been projected at **Rs.39.11 rore.**

**Repairs & Maintenance Expenses**

21. OPTCL proposes Repairs and Maintenance (R&M) expenses for FY 2012-13 at **Rs.95.46 crore**. The details are given in the table below.

**Table – 2**
**Repairs and Maintenance Expenses for FY 2012-13 (Rs. crore)**

| Particulars | OERC Approval for FY 2010-11 | OERC Approval for FY 2011-12 | OPTCL Proposal FY 2012-13 |
|---|---|---|---|
| a) O&M | | | 54.03 |
| b) Telecom | | | 13.60 |
| c) Civil Works | | | 3.50 |
| d) Information Technology | | | 4.33 |
| e) Rolling Stock | | | 20.00 |
| **Total R&M Expenses (a+b+c+d+e)** | **60.00** | **75.00** | **95.46** |

**Interest on Loan Capital**

22. Interest on Loan for FY 2012-13 has been projected at **Rs.102.54 crore** by OPTCL.

**New Projects**

23. OPTCL proposes to **spend Rs.936.43 crore during FY 2012-13** as capital expenditure on new projects towards O&M, telecom, information technology (IT),

transmission project & construction (TP & Con.) and civil works. The details of Capital Expenditure for FY 2012-13 are given in the table below.

**Table - 3**
**Projected Capital Expenditure for FY 2012-13**

| Particulars | Amount (Rs. crore) |
|---|---|
| a) Telecom | 91.68 |
| b) O&M | 175.32 |
| c) Information Technology (IT) | 19.74 |
| d) Transmission Project & Construction (Excluding Deposit Works) | 612.50 |
| e) Civil Works | 37.19 |
| **Total Capital Expenditure (a+b+c+d+e)** | **936.43** |

(a) **CAPEX for Telecom related projects**:

In order to have a dependable, safe and effective communication system, OPTCL has implemented its own Telecommunication Network through PLCC between each Grid Sub-station and generating stations and Microwave & Optic Fibre communication between Sub-LDC to SLDC, Bhubaneswar. The PLCC systems adopted in OPTCL are generally considered to be very much economic, reliable and dependable for voice, data and carrier back-up protection facility. Due to limitation of frequency band for PLCC equipment and because of gradual complex grid system, action is also under progress to provide SCADA interface points at all the 220kV Grid S/S of OPTCL through OPGW connectivity as per the provisions made under amended OGC Regulations, 2006 dated 29th August 2008.The CAPEX requirement for Telecom Project (Capital Works) for FY 2012-13 is Rs.91.68 crore, the abstract of which is given in the table below.

**Table – 4**
**CAPEX requirement for Telecommunication works in 2012-13**

| Particulars | Amount (Rs. crore) |
|---|---|
| (i) Integration of 30 nos RTU | 24.63 |
| (ii) Provision of SCADA inter face at 220KV and above S/S | 54.05 |
| (iv) Reframing of Microwave by Optic Fibre | 13.00 |
| **Total** | **91.68** |

(b) **CAPEX for O & M related projects**:

An amount of Rs.175.32 crore has been proposed for the FY 2012-13 under Capital expenditure (CAPEX) basically by way of transformer capacity augmentation / substation capacity enhancement by installing third transformers in the existing Grid-Substations of OPTCL and augmentation of transmission lines. The details of item wise Capital expenditure for O&M related project is shown in the table below.

**Table – 5**
**CAPEX for O&M Projects in FY 2012-13**

| Sl. No. | Line/Equipment details | Unit Rate (in Rs lakh) | Quantity | Total Cost (in Rs.crore) |
|---|---|---|---|---|
| 1 | Power Trf. (Nos.) | | | |
| | i) UPGRADATION & THIRD TRF. | | | |
| | a) 220/132KV,160 MVA | 650.000 | 1 | 6.50 |
| | b)132/33KV,63 MVA | 300.00 | 14 | 42.00 |
| | c)132/33KV,40MVA | 260.00 | 5 | 13.00 |
| | d) 132/33KV,20MVA | 200.00 | 8 | 16.00 |
| 2 | Estimated cost for third transformer Bays (220kV,132kV & 33kV) (Phase-I, II, & III) | | | 15.90 |
| 3 | Installation of Capacitor Bank (Total 275MVAR at 20 Nos. of grid S/S) | | | 6.91 |
| 4 | Augmentation of Lines (in km.) | | | |
| | a) Upgadation of conductor of 220kV Budhipadar-Tarkera DC Line by AAAC Zebra equivalent Conductor | LS | 2 x 109 | 1.06 |
| | b) Upgadation of conductor of 132kV Chandaka-Mancheswar Ckt-II by HTLS Conductor | 100 | 5.56 | 5.56 |
| | c) Upgadation of conductor of 132kV Chandaka-Ranasinghpur Line by HTLS Conductor | 100 | 24.78 | 24.78 |
| | d) Upgadation of conductor of 132kV Tarkera-Chhend DC Line by HTLS Conductor | 100 | 2 x 6.165 | 12.33 |
| | e) Replacement of conductor of 132kV TTPS-Chainpal DC Line by New AAAC ( Panther equivalent ) conductor | LS | 2 x 3.0 | 0.03 |
| | f) Upgadation of conductor of 132kV Burla PH-Budhipadar DC Line by AAAC Conductor | LS | 2 x 59.38 | 0.50 |
| | g) Upgadation of conductor of 132kV Chandaka-Nimapara Line ( Upto Badagada LILO ) by HTLS Conductor | 100 | 30 | 30.00 |
| | h) Upgadation of conductor of 132kV Chandaka-Khurda Line by AAAC Conductor | LS | 36.5 | 0.23 |
| | I) Upgadation of conductor of 132kV Bhanjanagar-Aska DC Line by AAAC Conductor | LS | 2 x 32.93 | 0.28 |
| | j) Upgradation of conductor of 132kV Khurda - Balugaon SC Line by AAAC Conductor | LS | 37 | 0.24 |
| | | | **TOTAL** | **175.32** |

**(c) CAPEX for Information Technology related projecsts:**

Provision for an amount of Rs.19.74 crore is made for FY 2012-13 towards capital expenditure for Infrastructure development of IT and automation related fields etc. as given in the table below:

**Table - 6**

**Capex for IT Projects during FY 2012-13**

| Sl. No. | | Detailed Head | Capax (Rs crore) |
|---|---|---|---|
| **A** | **ERP** | | **3.87** |
| | 1 | ERP-Licenses | 1.04 |
| | 2 | ERP-Implementation | 2.83 |
| **B** | **Portal services** | | **0.15** |
| **C** | **Disaster Recovery** | | **5.00** |
| **D** | **Primary Data Center** | | **6.89** |
| | **1** | Computing Infr.( Servers) | 3.50 |
| | **2** | Office Systems | |
| | a | PCs & Pheripherals | 3.14 |
| | b | Lap Tops (Hqrs) | 0.10 |
| | **3** | Electrical (Power system) | 0.09 |
| | **4** | Furniture | 0.06 |
| **E** | **Other IT** | | **2.45** |
| | 1 | Document Management | 0.10 |
| | 2 | IT Security | 0.50 |
| | 3 | e-Tendering | 0.25 |
| | 4 | Digitization | 0.10 |
| | 5 | SMS based MIS system | 0.02 |
| | 6 | Geographical Information System | 0.50 |
| | 7 | ERP Legacy Data entry | 0.25 |
| | 8 | Digital Logging and Local Display | 0.73 |
| **F** | **Net working** | | **1.01** |
| | 1 | WAN (VSAT) | 0.88 |
| | 2 | LAN | 0.13 |
| **G** | **FMS (Out sourced Services)** | | **0.36** |
| **Total** | | | **19.74** |

**(d) CAPEX for Transmission project & construction:**

It has been planned to spend an amount of **Rs.651.50 crore** on transmission related infrastructure during FY 2012-13 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 - 7**
**CAPEX for Transmission Projects & Construction**

(Rs. crore)

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| 1 | 2 | 3 | 4 | 5=3+4 | 6 |
| | **(A) ONGOING SCHEMES** | | | | |
| 1 | 400/220kV S/S at New Duburi | | 1.00 | 1.00 | - |
| 2 | 400/220kV S/S Mendhasal | | 1.40 | 1.40 | - |
| 3 | 400 kV S/S at Meramundali | | 0.00 | | |
| 4 | 220/132kV S/S at Burla | | 0.50 | 0.50 | |
| 5 | 220/132 kV S/S at IB | | 0.00 | - | |
| 6 | 220/33kV 2nd 20MVA trf. with associated 132 & 33 KV bays at Barkote | | 0.10 | 0.10 | |
| 7 | 220/33kV s/s at Barkote by TPL | | 0.00 | - | |
| 8 | 220/33 kV s/s at Balimela | | 0.00 | - | |
| 9 | 2*100 MVA,220/132 kV S/S at Bhadrak & Associated LILO Line | 0.2 | 0.52 | 0.70 | |
| 10 | Const. of 2Nos. 220 kv feeder bay at Balasore | | 0.00 | - | |
| 11 | Const. of 220/132 kv s/s Paradeep with associated line | | 0.50 | 0.50 | |
| 12 | 220/132kV s/s at Bolangir | 0.2 | 0.77 | 1.00 | |
| 13 | Construction of 4th Auto at Chandaka | 0.0 | 0.27 | 0.30 | |
| 14 | 132/33kV 40MVA trf. With associated 132 & 33 KV bays at Chhend s/s | | 0.00 | - | |
| 15 | 132/33kV,2x20 MVA s/s at Basta with associated 132KV Transmission lines | 0.7 | 0.50 | 1.23 | |
| 16 | Constn. Of 132/33 kV s/s at Karanjia with associated lines | 0.4 | 0.50 | 0.93 | |
| 17 | 132/33kV S/S Badagada | 0.0 | 0.49 | 0.50 | |
| 18 | 132kV feeder bay extn at Hind Metals | - | 0.10 | 0.10 | |
| 19 | 132/33kV s/s at Phulnakhara | | 0.25 | 0.25 | |
| 20 | 132/33kV S/S at Anandpur alongwith Transmission Line (New) | 0.2 | 1.84 | 2.00 | |
| 21 | 132/33 Grid S/s at Kendrapara | | 0.00 | - | |
| 22 | 132/33kV s/s at Barapalli with associated lines | | 0.00 | - | |
| 23 | 2x12.5MVA,132/33 KV S/S at Akhusingh | | 0.28 | 0.28 | |
| 24 | 40 MVA,132/33kV s/s at Bidanasi | 0.0 | 0.78 | 0.80 | |
| 25 | 2x12.5 MVA, 132/33 kv s/s at Nuapada with associated transmission line | 1.1 | 6.92 | 8.00 | 23.00 |
| 26 | 2x12.5 MVA 132/33 kv s/s at Dabugaon with | 0.8 | 7.23 | 8.00 | 11.00 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| 1 | 2 | 3 | 4 | 5=3+4 | 6 |
| | associated transmission line | | | | |
| 27 | 2x12.5 MVA, 132/33 kv s/s at Padampur with associated transmission line | 0.9 | 5.02 | 5.90 | 19.00 |
| 28 | 2x12.5 MVA, 132/33 kv s/s at Kuchinda with associated transmission line | 0.6 | 8.36 | 9.00 | 9.00 |
| 29 | 2x12.5 MVA, 132/33 kv s/s at Bhawanipatna with associated transmission line | 0.6 | 8.87 | 9.50 | 9.00 |
| 30 | 2x12.5 MVA, 132/33 kv s/s at Boudh with associated transmission line | 1.1 | 8.94 | 10.00 | 23.00 |
| 31 | 2x12.5 MVA, 132/33 kv s/s at Purushottampur with associated transmission line | - | 3.00 | 3.00 | 10.00 |
| 32 | 2x12.5 MVA, 132/33 kv s/s at Chandpur with associated transmission line | 0.0 | 3.00 | 3.00 | 10.00 |
| 33 | 2x12.5 MVA, 132/33 kv s/s at Banki with associated transmission line | 0.0 | 2.99 | 3.00 | 10.00 |
| 34 | 2x12.5 MVA, 132/33 kv s/s at Kalunga with associated transmission line | | 3.00 | 3.00 | 11.00 |
| 35 | 2x40 MVA, 220/33 kv s/s at Gopinathpur (Keonjhar) with associated lines | | 3.00 | 3.00 | 24.00 |
| 36 | 2x100 MVA, 220/132/33 kv s/s at Kuanrmunda with LILO arrangement from existing 220 kV Budhipadar-Tarkera dc lines | | 3.00 | 3.00 | 44.00 |
| 37 | 2x160MVA and 2x20MVA 220/132/33kV s/s at Lapanga with associated lines | 2.2 | 5.00 | 7.21 | 48.00 |
| 38 | 2x40 MVA, 220/33 kv s/s at Bonai with associated transmission line | 0.4 | 2.58 | 3.00 | 14.50 |
| 39 | 2x20 MVA, 132/33 kv s/s at Barbil with associated transmission line | 0.7 | 9.25 | 10.00 | 6.00 |
| 40 | 400kV DC line Ib-Meramundali | 9.5 | 5.00 | 14.49 | |
| 41 | 400kV DC Line from Meramundali to Duburi | | 0.10 | 0.10 | |
| 42 | 400kV DC Line from Meramundali to Mendhasal | | 0.02 | 0.02 | |
| 43 | 220kV 2nd line from IB-Budhipadar | | 0.00 | - | |
| 44 | 220 kv line from Padmanvpur to Balasore | | 0.20 | 0.20 | |
| 45 | 220 kv line from Narendrapur-Chandaka with bay at Chandaka | 0.0 | 0.12 | 0.12 | |
| 46 | 220kV line from Mendhasal to Bidanasi | 0.0 | 0.75 | 0.76 | |
| 47 | 220kV DC line Budhipadar-Bolangir | 0.2 | 0.20 | 0.40 | |
| 48 | 220kV DC Line Bidanasi-Cuttack | 0.7 | 4.29 | 5.00 | 8.00 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| 1 | 2 | 3 | 4 | 5=3+4 | 6 |
| 49 | 220kV DC line Bolangir to Kesinga | | 0.00 | | |
| 50 | 132kV line from Mancheswar to Badagada | | 0.10 | 0.10 | |
| 51 | 132kV line from Badagada to Uttara | | 0.10 | 0.10 | |
| 52 | 132kV line from Uttara to Sijua | | 0.10 | 0.10 | |
| 53 | 132KV Line from Jagatsinghpur to Paradeep | 2.5 | 2.47 | 5.00 | 8.00 |
| 54 | 132kV Hirakud LIlO Chipilima-Bergarh | - | 0.10 | 0.10 | |
| 55 | Construction of 2nd Ckt from Loc. No. 116 of 132 kv Chandaka- Nimapada sc line to Nimapada grid with one no 132 kv bay extn. | 0.1 | 1.50 | 1.55 | |
| 56 | Diversion of 132kV Line from Chandaka to Nimapara | 0.1 | 0.32 | 0.39 | |
| | **TOTAL-A** | **23.3** | **105.33** | **128.64** | **287.50** |
| | **(B) PROPOSED SCHEMES** | | | | |
| 1 | Conversion of 132/11 kv grid s/s to 2x40 MVA 132/33 kv s/s 2x40 MVA 132 kv s/s at Sarasmal at Jharsuguda | | 2.00 | 2.00 | 6.00 |
| 2 | 2x12.5 MVA, 132/33 kv s/s at Udala with LILO arrangement of Balasore- Baripada lines | | 4.00 | 4.00 | 12.00 |
| 3 | 132 kv SC line from Salipur to Kendrapara | | 1.00 | 1.00 | 8.00 |
| 4 | Constn. of 2x100 MVA 220/132 kv grid s/s at Cuttack, with 2 nos 220 kv feeder bay extn. at Bidanasi grid with linking arrangement at both ends. | | 3.00 | 3.00 | 10.00 |
| 5 | Constn. of 2x20 MVA 132/33 kv s/s at Olaver and 2 nos 132 kv feeder bay extn. at Pattamundai with 132 kv DC line from Pattamkundai to Olaver | 0.1 | 3.00 | 3.10 | 10.00 |
| 6 | Constn. of 2x40 MVA 132/33 kv s/s at Marshaghai ( Luna) by making LILO arrangement from 1 circuit of existing 132 kv Kendrapara -Paradeep DC line | 0.1 | 1.91 | 2.00 | 6.00 |
| 7 | 2x100 MVA, 220/132/33 kv s/s at Dhamara with connectivity from Bhadrak s/s | 0.1 | 5.88 | 6.00 | 15.00 |
| 8 | 2x160MVA ,220/132kV and 2x20MVA 132/33kV S/s at Karadagadia with associated lines | 0.1 | 7.91 | 8.00 | 20.00 |
| 9 | 2x100MVA,220/132 KV S/s at Kesinga with | | 0.10 | 0.10 | 12.00 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| 1 | 2 | 3 | 4 | 5=3+4 | 6 |
| | 220DC line from Bolangir to Kesinga and one no. 220kV Bay Extension at Bolangir | 0.0 | | | |
| 10 | Construction of 2x40MVA 132/33kV s/s at Khajuriakata near Hindol Road with associated transmission lines | | 3.00 | 3.00 | 10.00 |
| 11 | 132kV LILO arrangement of 132kV SC line from Meramundali to Arati Steel to 132/33kV s/s , Nuapatna alongwith one no. of Feeder bay extension at Nuapatna | | 1.00 | 1.00 | 5.00 |
| 12 | 2x20 MVA ,132/33 KV s/s at Konark with associated lines & 132kV feeder bay extension at Nimapara | | 3.00 | 3.00 | 15.00 |
| 13 | Renovaion of existing 2/12.5 MVA ,132/33KV s/s at Ganjam | | 0.50 | 0.50 | 3.00 |
| 14 | 2x160MVA, 220/132kV s/s at existing 400kV s/s. Mendhasal | | 3.00 | 3.00 | 15.00 |
| 15 | Construction of 2*315MVA 400KV grid s/s at Lapanga with LILO of one circuit of 400kV Bisra -Raipur Line and Both circuit of IB - Thermal Meramundali 400kV Line at Lapanga | | | - | 15.00 |
| 16 | 2nos. 220KV feeders from 220/132/33kV s/s of OPTCL at Jayanagar to 400/220 kV s/s of PGCIL at Jayanagar with 2 nos. of 220kV bay extension at each end | | 2.00 | 2.00 | 10.00 |
| 17 | Conversion of 132kV switching station at Somanathpur, Balasore to 2x20 MVA , 132/33kV S/s. | | 1.00 | 1.00 | 6.00 |
| 18 | Construction of 2*100MVA & 2x40MVA , 220/132/33KV s/s at Puri with associated Line. | | 0.50 | 0.50 | 15.00 |
| 19 | Construction of 2*100MVA , 220/132/33KV s/s at Pratapsasan near Balakati with associated 220KV DC LILO line of Proposed 220 KV Cuttack-Jatani Line.132KV DC line from Pratap Sasan to Phulnakhara with 2 Nos. of Bay at Phulnakhara | | 1.00 | 1.00 | 15.00 |
| 20 | 132kV Dc line fron Baripada PGCIL(Kuchei ) s/s to Jaleswar s/s with 2 nos. 132kv bay extension each at Baripada PGCIL ( Kuchei) & ( Jaleswar) | | 0.10 | 0.10 | 10.00 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| 1 | 2 | 3 | 4 | 5=3+4 | 6 |
| 21 | Construction of 220/ 132/33kV s/s at Lahanda near Joda with construction of 132kV DC line from Lahanda to Barbil and two nos 132kV feeder bay extension at Barbil | | 0.10 | 0.10 | 5.00 |
| 22 | 2x40MVA ,132/33kV s/s at Baliguda with construction of 132kV SC line from Phulbani to Baliguda and one no. 132kV feeder bay extension at Phulbani | | 0.10 | 0.10 | 5.00 |
| 23 | 2x20 MVA, 220/33 kv s/s at Narsinghpur with LILO arrangement of 1 circuit of existing 220kV Bhanjanagar-Meramundali DC Line | | 0.10 | 0.10 | 2.00 |
| 24 | one no. 220kV feeders from proposed 220/132kV s/s of OPTCL at Cuttack to proposed 400/220kV s/s at Uttara ( Jatni) with two nos.of 220kV feeder bay extension at each end | | 0.20 | 0.20 | 4.00 |
| 25 | 132kV SC line to 132KV DC line from PGCIL s/s., Kuchei to 132/33kV s/s, Baripada | | 0.10 | 0.10 | 4.00 |
| 26 | 3x40 MVA 132/33kV s/s at Chhatabara with associated 220kV LILO lines | | 0.20 | 0.20 | 3.00 |
| 27 | 2X315MVA 400/220/33kV , 2x40MVA , 220/33kV s/s at Khuntini with associated transmission lines | | 2.00 | 2.00 | 20.00 |
| 28 | 1x315MVA , 400/220kV , 1X20MVA , 220/33kV s/s at Nisa near Angul with construction of 400KV DC line by LILO of 400kV IB-Meramundali Line | | 1.00 | 1.00 | 9.00 |
| 29 | 2x40MVA, 220/33kV s/s at Chhendipada with 220KV DC Line on Multi Circuit tower from proposed NISA S/S to Chhendipada | | 1.00 | 1.00 | 10.00 |
| 30 | 2x12.5 MVA, 132/33 KV S/S Bangiriposi with LILO 1 Circuit Kuchei-Rairangpur line. (20 Kms.) | | 0.10 | 0.10 | 2.00 |
| 31 | 2x12.5 MVA, 132/33 KV S/S at Potangi with S/C line on D/C tower for Sunabeda. (32 Kms.) | | 0.20 | 0.20 | 2.00 |
| 32 | 2x12.5 MVA, 132/33 KV S/S at Podagada with LILO Rayagada-Jeypore line. (10 Kms.) | | 0.20 | 0.20 | 2.00 |
| 33 | 2x20 MVA, 220/33 KV S/S at Govindpalli with LILO Balimela-Jayanagar line. (15 Kms.) | | 0.20 | 0.20 | 2.50 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| **1** | **2** | **3** | **4** | **5=3+4** | **6** |
| 34 | 2x12.5 MVA, 132/33KV S/S at Umarkote with S/C line on D/C tower from Dabugaon to Umarkote. (30 Kms.) | | 0.20 | 0.20 | 2.00 |
| 35 | 2x12.5 MVA, 220/33 KV S/S at Kasipur with LILO one circuit Indravati-Theruvali 220kv D/C line. (2.0 Kms.) | | 0.20 | 0.20 | 3.00 |
| 36 | 2x20 MVA, 220/33kV S/s at Jaypatna with associated line. (14 Kms.) | | 0.20 | 0.20 | 2.00 |
| 37 | 132kV D/C line from Junagarh to Umerkote (40 Kms.) | | 0.00 | - | 2.00 |
| 38 | 2x12.5 MVA, 132/33kV S/s at Kantabanji with S/C line on D/C tower from Khariar to Kantabanji. (35 Kms.) | | 0.20 | 0.20 | 2.00 |
| 39 | 2x12.5 MVA, 132/33kV S/s at Champua with LILO arrangement of existing Palaspanga-Rairangpur to Champua. | | 0.20 | 0.20 | 2.00 |
| 40 | 2x12.5 MVA, 132/33kV S/s at Ghatagaon with S/C line on D/C tower from Anandapur Grid S/S. (35 KMS.) | | 0.20 | 0.20 | 2.50 |
| 41 | 132kV S/C line on D/C tower from Baliguda to Kesinga (60 Kms.) | | 0.20 | 0.20 | 2.70 |
| 42 | Construction of 132 KV D/C line from proposed 220/132/33 KV S/S at Dhamara to proposed 132/33 KV S/S at Olavar & re-arrangement with proposed 132 KV D/C line from Pattamundai to Olavar to make 132 KV S/C line from Dhamara to Pattamundai & 132 KV S/C line from Olavar to Pattamundai. | | 0.10 | 0.10 | 3.00 |
| 43 | 2X40 MVA 132/33kV Substation at CDA Cuttack with associated LILO line (4KM) | | 2.00 | 2.00 | 5.00 |
| 44 | Construction of 132kV SC line on DC tower for making 2nd Circuit interconnection between Kattapali and Bargarh with associated 132kV bays | | 0.10 | 0.10 | 1.30 |
| 45 | 2X20 MVA 132/33kV Substation at R.Udayagiri with 132kV line from Mohana with 132kV Bay extension at Mohana (40KM) | | 0.10 | 0.10 | 3.00 |
| 46 | 2X20 MVA 132/33kV Substation at Muniguda | | 0.10 | 0.10 | 3.00 |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| **1** | **2** | **3** | **4** | **5=3+4** | **6** |
| | with 132kV line from Vedanta Lanjigarh a with 132kV Bay extension at Lanjigarh (25KM) | | | | |
| 47 | 2X20 MVA 132/33kV Substation at Nandapur with 132kV line from Patangi with 132kV Bay extension at Patangi (35KM) | | 0.10 | 0.10 | 3.00 |
| | **TOTAL-B** | **0.4** | **53.30** | **53.70** | **325.00** |
| **C** | **DEPOSIT WORKS** | | | | |
| 1 | 220 kV DC line from Budhipadar to Basundhara MCL (Deposit Work) | - | 2.00 | 2.00 | |
| 2 | Shifting of 132kV Chandaka SC Line (CKT 1& 4) crossing through P.No.391,392 &4622 under Gadkon Mouza ) ( Deposit Work) | | | - | |
| 3 | Rly traction line from Jagatsingpur to Gorakhnath (Deposit work) | | | - | |
| 4 | Diversion of 132kV Lines from Loc.No.30 to Loc. No.39 PPT line ( Deposit Work) | | | - | |
| 5 | Constn. of Tomka Railway line from B.C. Mohanty & sons Ltd (D.W) | 0.4 | | 0.43 | - |
| 6 | Constn. of 132 kv LILO line from Khurda-Puri for power supply to Samuka Beach near s/s Puri (D.W) | | 3.00 | 3.00 | 10.00 |
| 7 | 132kV s/s at IIT, Argul | | 3.00 | 3.00 | 21.00 |
| 8 | Diversion of 220 kv line from TTPS to Joda 4th crossing (D.W) | | | - | |
| 9 | Diversion of Dhenkanal -Joranda road RTSS for clearance of right canal | | | - | |
| 10 | Construction of 132KV SC line on DC tower from Theruvalli S/S to M/s. Utkal Alumina of Kuchipadar & B.E. At theruvalli ( D.W.) | | | | |
| 11 | Construction of 220KV DC line for Laxmipur S/s to Aditya Alumina kansariguda ( D.W.) | | | - | |
| 12 | Construction of 220KV SC line on DC tower from laxmipur to M/s. Utkal Alumina At Doraguda ( D.W) | | | | |
| 13 | Construction of one no.220kV bay at Paradeep S/s for IOCL alongwith 220 kV transmission lines from Paradeep to IOCL | 1.3 | 7.00 | 8.32 | 8.00 |
| 14 | Power supply to Bansapani RTSS from Joda grid | | | 0.39 | |

| Sl. No. | Loan / Scheme / Contract-wise Capital Works | Expenditure During FY 2011-12 | | | Projected Expenditure for FY 2012-13 |
|---|---|---|---|---|---|
| | | Actuals for First Six Months | Projection for balance Six Months | Total | |
| **1** | **2** | **3** | **4** | **5=3+4** | **6** |
| | s/s | 0.4 | | | |
| 15 | Power supply Keonjhar RTSS from Polasponga grid s/s | 0.5 | | 0.49 | |
| 16 | Re-routing of 132kV DC Line from Chandaka to Sijua for AIIMS | | | - | |
| 17 | Diversion of 2 nos line due to proposed Talcher-Bimalgarh Rly Line | | | - | - |
| 18 | Diversion of DC line from Budhipadar to Jorabaga | | | - | |
| 19 | Diversion of Paradeep-Haridaspur line ( Railway deposit ) | 2.9 | 5.00 | 7.87 | |
| 20 | other deposit work & consumer contribution | | | - | |
| | **TOTAL-C** | **5.5** | **20.00** | **25.50** | **39.00** |
| | **TOTAL: (A+B+C)** | **29.2** | **178.63** | **207.84** | **651.50** |

**(e) CAPEX for Civil Works:**

OPTCL proposes capital expenditure of **Rs.37.19 crore on Civil works** during FY 2012-13 for on-going and new projects in its two Divisions i.e. Bhubaneswar and Burla.

**Depreciation**

24. OPTCL has projected Depreciation for FY 2012-13 considering the rate of depreciation prescribed by CERC on the book value of the Assets and additions thereto as per Regulation 17 (Chapter-III) of CERC Regulations, 2009. Accordingly, the transmission licensee has projected depreciation at **Rs.155.99 crore** based on the estimated book value of assets for FY 2012-13 (gross block as on 01-04-2011 plus projected addition during FY 2011-12).

**Special Appropriation**

25. The Commission had allowed Special Appropriation of Rs.33.93 crore to meet Debt Service Obligation for FY 2011-12 as the depreciation was allowed based on the pre-92 rate which was insufficient to meet the repayment of principal. For FY 2012-13, **OPTCL has projected Rs. 155.99 Crore towards depreciation considering CERC Regulations, 2009** which will take care of principal repayment obligation.

**Return on Equity**

26. 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. OPTCL has received Rs 100 crore

(Rs.23.05 crore during FY 2008-09 + Rs. 5.00 crore during FY 2009-10 + Rs. 71.95 crore during FY 2010-11) from State Govt. as equity contribution for setting up transmission projects in remote areas. Therefore, the licensee has projected ROE @15.5% pre-tax basis on the equity share capital of Rs.160.07 crore which amounts to **Rs.24.81 crore** for FY 2012-13.

**Interest on Working Capital**

27. Based on CERC norms, OPTCL has calculated its working capital needs at Rs.370.61 crore for the FY 2012-13. Taking 12% as the rate of interest, interest on working capital amounts to **Rs.44.47 crore for 2012-13.** 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**

28. A sum of **Rs.15.10 crore** has been projected for Contingency Reserve for the FY 2012-13 against Rs.15.16 cr. proposed for FY 2011-12 and Rs.Nil approved for FY 2011-12.

**Provision for Bad & Doubtful Debts**

29. OPTCL proposes **Rs.0.10 crore** towards Bad & Doubtful Debts.

**Grid Co-ordination Committee Expenses**

30. As per provisions in Orissa Grid Code Chapter- 11, OPTCL formed Grid Coordination Committee (GCC) under it. Annual GCC expenses have been estimated at **Rs.0.30 crore** for the FY 2012-13.

**Incentive for System Availability**

31. The Regulation 25 to 29 under Chapter- 4 of CERC Regulations, 2009 specify the "Norms of Operation" applicable for generating stations (thermal and hydro) and transmission system for recovery of capacity charge, energy charge, transmission charge and incentive. OPTCL has proposed incentive for being able to make available the Transmission System more than 98% for the year 2010-11. The system availability of transmission network of OPTCL for FY 2010-11 has been worked out as **99.84%.** OPTCL has proposed the incentive of **Rs.9.41 crore** for FY 2010-11 to be allowed in this ARR for 2012-13.

**Pass through Expenses**

32. OPTCL has proposed a truing-up of the costs and revenue for the last five financial years starting FY 2006-07 based on audited accounts upto FY 2009-10 and provisional accounts for FY 2010-11. Excess net cost incurred over and above the approved cost is **Rs.205.81 crore**, which has been proposed to be recovered in the tariff as a pass through in the ARR of 2012-13.

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

33. OPTCL estimates that it will earn Miscellaneous Receipts of **Rs.18.00 crore** during FY 2012-13. The same has been deducted from the gross revenue of OPTCL to arrive at the ARR for FY 2012-13, to be recovered from LTOA customers.

**Transmission Loss**

34. OPTCL proposes Transmission Loss at 3.80% for FY 2012-13; whereas actual transmission loss in April 2011 – September 2011 period was 3.82%. The Transmission loss of 3.80% in FY 2012-13 has been approved in the Business Plan.

35. The summary of the proposed Annual Revenue Requirement against different heads for FY 2012-13 is tabulated below:

**Table - 8**
**Summary of Annual Revenue Requirement of OPTCL for FY 2012-13**
**(Rs. crore)**

| ITEMS | Proposal for OPTCL 2012-13 | |
|---|---|---|
| **(a) FIXED COST** | | |
| O&M Expenses | | 789.93 |
| (i) Employees Cost including Terminal Benefits | 655.36 | |
| (ii) R&M Cost | 95.46 | |
| (iii) A&G Cost | 39.11 | |
| Interest on Loan Capital | | 102.54 |
| Depreciation | | 155.99 |
| Special Appropriation | | 0 |
| Return on Equity | | 24.81 |
| Interest on Working Capital | | 44.47 |
| **Sub-Total (a)** | | **1117.74** |
| **b) Additional Expenses** | | 24.91 |
| Contingency Reserve | 15.1 | |
| Bad & doubtful debt Debts | 0.10 | |
| GCC Expense | 0.30 | |
| Incentive for system availability | 9.41 | |
| **Total Trans. Cost (a+b)** | | **1142.65** |
| c) Pass Through Expenses | | 205.81 |
| **d) Total Annual Revenue Requirement (a+b+c)** | | **1348.46** |
| e) Less Misc. Receipts | | 18.00 |
| f) ARR to be recovered from LTOA Customers (d-e) | | **1330.46** |
| **OPTCL's Annual Revenue Requirement** | | **1330.46** |

**Expected Revenue from Transmission Charges**

36. The revenue receipts from various transmission charges at the existing transmission tariff of 25 P/U shall be **Rs.608.59 crore**. Revenue to be earned by OPTCL from wheeling of power to DISCOMs and other long term open access customers for FY 2012-13 at the existing rate is shown in the table below.

**Table – 9**
**Revenue at existing tariff**

| Sl. No | Customer | MU to be handled | Rate (P/U) | Transmission Loss (%) | Energy handled including Loss | Amount (in Rs. crore) |
|---|---|---|---|---|---|---|
| **1** | CESU | 8532.67 | 25 | 0 | 8532.67 | 213.32 |
| **2** | NESCO | 5469.18 | 25 | 0 | 5469.18 | 136.73 |
| **3** | WESCO | 6500 | 25 | 0 | 6500 | 162.50 |
| **4** | SOUTHCO | 3430 | 25 | 0 | 3430 | 85.75 |
| | **Total DISTCOs** | **23932** | | | **23932** | **598.30** |
| **5** | Emergency Sale to CGPs | 100 | 25 | 0 | 100 | **2.50** |
| **6** | Wheeling to industries from CGPs | 300 | 25 | 3.8 | 311.85 | **7.80** |
| | **Total** | **24332** | | | **24344** | **608.59** |

**Excess or (Deficit) in the ARR:**

37. OPTCL has submitted that with its present Transmission Tariff structure consisting of Transmission Charge @25 P/U, it would not be able to meet its current costs and it may result in a deficit of **Rs.721.87 crore** as shown in table below.

**Table - 10**

**Excess / Deficit of Revenue Requirement for FY 2012-13 (Rs. crore)**

| | |
|---|---|
| **Total Annual Revenue Requirement** | 1330.46 |
| **Less** : Revenue earned from Long Term Open Access Customers | 608.59 |
| **Deficit of Revenue Requirement for FY 2012-13 at the existing Wheeling Rate @ 25 P/U** | **-721.87** |

38. 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 2012-13

**Proposed Tariff to Meet the Revenue Requirement for FY 2012-13**

39. OPTCL has proposed Transmission tariff recovery in Rs./unit Approach.

40. In Rs. per unit approach the Transmission Tariff is determined by dividing the Total ARR with the Total energy handled /Wheeled in the system in MU. For FY 2012-13 Transmission Tariff is computed as **54.68 P/U** as worked out in the Table below.

**Table – 11**
**Computation of Transmission Tariff**

| | |
|---|---|
| (a) Total Annual Revenue Requirement in Rs. Crore | 1330.46 |
| (b) Total Million Units proposed for Wheeling in MU | 24332 |
| Proposed Transmission Tariff (P/U) = (a/b) | **54.68** |
| Existing transmission tariff (P/U) | 25.00 |
| % Rise over existing transmission tariff | **118%** |

**Open Access Charges**

41. The Hon'ble 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.

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

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

**Table - 12**
**Abstract of OA Charges proposed by OPTCL for FY 2012-13**

| DETAILS | In Rs./unit approach |
|---|---|
| Net Annual Revenue Requirement (Rs. cr.) | 1330.46 |
| Proposed Energy to be transmitted in OPTCL Network (MU) | 24332 |
| Proposed Transmission Tariff (P/U) | 54.68 |
| Power flow (equivalent of 24332 MU) in MW | 2778 |
| Long term Open Access Charges in terms of Rs./MW/Day | 13123 |
| Short term Open Access Charges in terms of Rs./MW/Day | 3281 |

**Reactive Energy Charges:**

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

**Rebate:**

45. On payment of monthly bill, the Open Access Customer shall be entitled to a rebate of Two percent (2%) of the amount of the monthly bill (excluding arrears), if full payment is made within two working days (excluding holidays under N.I. Act) of the presentation of the bill and one percent (1%) of the amount if paid within 30 days of the presentation of the bill.

**Delayed Payment Surcharge:**

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

**Duties and Taxes:**

47. 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.

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

OPTCL's proposal for FY 2012-13 are:

(i) Annual Revenue Requirement at Rs.1330.46 crore.

(ii) Recovery of Transmission Charge @ 54.68 P/U.

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

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

(i) By charging the rate applicable on DISCOMs for wheeling of **23932 MU** from Generating Stations to the supply points of DISCOMs.

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

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

**VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2012-13 (para 50 to 67)**

50. 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 2012-13. 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**

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

**Revenue Gap**

52. OPTCL has given the proposal for revenue requirement of Rs.1330.46 cr. and revenue from long-term open access customers of Rs.608.59 cr. at existing transmission tariff of 25 P/U, leaving a shortfall of Rs.721.87 cr. during the FY 2012-13. OPTCL proposes to recover the total annual revenue required of Rs.1330.46 cr. from the long term open access customers like DISCOMs & CGPs on energy drawl (24332 MU) during FY 2012-13 by levying transmission tariff @ 54.68 P/U considering the transmission loss for wheeling as 3.8% on energy drawl.

**Table - 13**
**Revenue Gap of OPTCL during FY 2012-13**

| Particulars | Amount (Rs. cr.) |
|---|---|
| Total Annual Revenue Requirement | 1330.46 |
| Revenue from long-term open access customer at existing transmission tariff @ 25 P/U | 608.59 |
| Revenue Gap at the existing transmission tariff | (-)721.87 |
| Proposed transmission tariff (P/U) | 54.68 |

**Annual Revenue Requirement**

53. OPTCL has projected its revenue requirement during FY 2012-13 at about 132 per cent more than that approved for FY 2011-12. In last year (for FY 2011-12), the increase in total ARR was 19% from FY 2010-11. The revenue requirement constitutes not only fixed cost and additional expenses but also pass through expenses of Rs. 205.81cr.; these costs were not allowed by the Commission in earlier orders. As per the earlier truing up exercises done by the Commission, OPTCL had surplus fund; so the pass through of previous loss and liabilities may not be allowed.

54. The areas of concern include the pass through cost, increase in employee cost (93.81%), R&M Cost (27.28%), A&G cost (117.28%), interest on loan capital (67.19%) and depreciation (96.41%). The comparative figures of components of ARR are given in table below. OPTCL has proposed Rs.44.47 cr. as interest on working capital, which the Commission has not approved in earlier tariff orders.

**Table – 14**

**Comparative Annual Revenue Requirement of OPTCL**

| ITEMS | Approved for 2010-11 | Approved for 2011-12 | Proposal for FY 2012-13 | 11-12 vs. 10-11 | 12-13 vs 11-12 |
|---|---|---|---|---|---|
| Employees Cost including Terminal Benefits | 279.56 | 338.14 | 655.36 | 20.95% | 93.81% |
| R&M Cost | 60.00 | 75.00 | 95.46 | 25.00% | 27.28% |
| A&G Cost | 15.14 | 18.00 | 39.11 | 18.89% | 117.28% |
| Interest on Loan Capital | 53.39 | 61.33 | 102.54 | 14.87% | 67.19% |
| Depreciation | 76.60 | 79.42 | 155.99 | 3.68% | 96.41% |
| Return on Equity | 4.35 | 7.45 | 24.81 | 71.26% | 233.02% |
| Interest on Working Capital | - | | 44.47 | | |
| **Sub-Total** | 489.04 | 579.34 | 1117.74 | 18.46% | 92.93% |
| Special Appropriation | 39.37 | 33.93 | | -13.82% | |
| Pass Through Expenses | - | | 205.81 | | |
| Contingency Reserve | - | | 15.10 | | |
| Bad & doubtful debt Debts | - | | 0.10 | | |
| GCC Expense including SLDC charges | 0.82 | 1.00 | 0.30 | 21.95% | -70.00% |
| Incentive for system availability | | 2.00 | 9.41 | | 370.50% |
| **Total** | **529.23** | **616.27** | **1348.46** | **16.45%** | **118.81%** |
| Less Misc. Receipts | 48.30 | 43.77 | 18.00 | -9.38% | -58.88% |
| **Annual Revenue Requirement** | **480.93** | **572.50** | **1330.46** | **19.04%** | **132.39%** |
| Transmission Charges (paise/unit) | 23.50 | 25.00 | 54.68 | 6.38% | 118.72% |

55. 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. The analysis of expenses related to various components of ARR is given below.

**Employee cost including terminal benefits**

56. The proposed employee cost for FY 2012-13 seems to be on higher side (93% increase over approved cost of FY 11-12), although it includes terminal benefits and payment of differential pension and pensionary benefits of Rs.430.62 cr. In FY 2011-12, the growth in employee cost was 21% over the approved amount in

FY 2010-11. The proposed and approved employee costs in last two transmission tariff orders are given in the table below.

**Table - 15**

**Employee cost including terminal benefits (Rs. cr.)**

| Item | Proposed 2010-11 | Approved 2010-11 | Proposed 2011-12 | Approved 2011-12 | Proposed 2012-13 | Approved 11-12 vs Approved 10-11 | Proposed 12-13 vs Approved 11-12 |
|---|---|---|---|---|---|---|---|
| Gross amount | 875.78 | 290.22 | 961.66 | 347.74 | 664.90 | | |
| Less capitalization | 10.66 | 10.66 | 9.60 | 9.6 | 9.54 | | |
| Net employees cost | 865.12 | 279.56 | 952.06 | 338.14 | 655.36 | 20.95% | 93.81% |

57. The detailed comparison of employee cost including terminal benefits is given in the table below. DA and HRA proposed to be increased by over 60% than approved in FY 2011-12. Increment proposed in terminal benefits and differential pension is very high, 138% and 233% respectively. So, overall employee cost is proposed to be higher by 93.81%.

**Table - 16**
**Comparison of employee cost (Rs cr.)**

| Item | 11-12 approved | 12-13 proposed | % increase |
|---|---|---|---|
| Basic pay +GP | 62.58 | 79.27 | 26.67% |
| DA | 34.42 | 56.28 | 63.51% |
| HRA | 9.39 | 15.85 | 68.80% |
| Medical Expenses | 3.13 | 3.96 | 26.52% |
| Stipend | 3.91 | 3.39 | -13.30% |
| Provision towards arrear pay revision | 49.04 | 49.04 | 0.00% |
| Terminal benefit | 176.36 | 420.62 | 138.50% |
| Differential pension | 3.00 | 10.00 | 233.33% |
| Others | 5.91 | 26.48 | 348.05% |
| Less capitalization | 9.60 | 9.54 | -0.63% |
| **Total** | 338.14 | 655.35 | 93.81% |

58. Order on OPTCL's Business Plan had fixed some criteria regarding employee cost. According to that Basic pay + GP can be increased by 3% yearly, DA has to be given at the prevailing Govt. rate and HRA has to be calculated at 15% of Basic pay + GP. While proposing the employee cost for FY 2012-13, licensee has taken the Basic pay + GP of FY 2010-11 (provisional) as the basis and calculated it for FY 2011-12 and FY 2012-13 by escalating it 3% annually. The approved figure of Basic pay + GP for FY 2011-12 (Rs.62.58 cr.) or actual figure for FY 2011-12 may be considered for calculating the Basic pay + GP figure for FY 2012-13. The DA rate considered by licensee is also high (71% of basic + GP). In line with earlier Orders of Commission, 10% more than approved DA rate for FY 2011-12 (58%) can be considered as DA rate for FY 2012-13. The HRA is also

assumed as 20% of Basic pay + GP instead of 15% as given in business plan. The HRA rate may be reviewed according to norms and audited data. Provision towards wage revision (Sl No 6 of Table 1 given in OPTCL's ARR Proposal), enhanced in salary (Sl No 7) and stipend to new recruited (Sl No 14) may be reviewed. The terminal benefits may be reviewed as per the independent valuation report of the Independent actuary appointed by OERC. For payment towards differential pension, the Govt directives can be considered.

**A&G Cost**

59. Proposed A&G cost seems to be too high (117.28% increase over FY 2011-12 approved). The yearly escalation in A&G is linked with inflation measured in WPI. The average inflation of April 2011- Jan 2012 period is 8.28% measured by WPI. Considering the approved A&G cost of FY 2011-12 (Rs.18 cr.), the allowable cost may be Rs.19.49 cr. against proposed Rs.39.11 cr by the licensee.

**R&M Cost**

60. Repair and Maintenance is required in order to operate the system effectively. R&M expenses for FY 2012-13 proposed to be increased by 27.25% over approved in FY 2011-12. Further, it is to mention that the actual R&M expenditure for each financial year was always less than the approved expenditure given by the Commission in respective transmission order (see table below). Therefore, consumer should not be burdened with excessive projected R&M expenses. Actual cash flow can be considered for deciding the appropriate R&M cost amount. The licensee has proposed Rs 20 cr. as rolling stock requirement, this component of R&M may be reviewed.

**Table – 17**
**R&M Expenses (Rs cr.)**

| Year | R&M Expenses approved by OERC | Actual R&M Expenditure |
|---|---|---|
| 2005-06 | 14.80 | 6.94 |
| 2006-07 | 36.00 | 11.31 |
| 2007-08 | 47.00 | 16.52 |
| 2008-09 | 53.88 | 15.66 |
| 2009-10 | 47.00 | 26.14 |
| 2010-11 | 60.00 | 28.31 |
| 2011-12 | 75.00 | 20.34 (April –Nov)<br>93.89 (Estimated) |
| 2012-13 | | 95.46 (Proposed) |

**Interest on loan**

61. OPTCL has proposed new loans of Rs. 275.19 cr. and Rs. 795.96 cr. @12.5% to be availed in FY 11-12 and FY 12-13 respectively. The interest burden of the new loan to the tune of Rs.66.95 cr. should not be allowed in the ARR. The interest related to loan that already have been taken by the licensee can only be considered in the ARR of FY 2012-13. Hon. Commission in FY 2011-12 order allowed

interest on the loan amount of Rs.349.69 cr. proposed to be availed during FY 2010-11, but loan statement of OPTCL shows no loan has been availed during FY 2010-11. Therefore, the interest payment related to that loan may be adjusted. Also interest burden of State Govt. cash loan of Rs.0.26 cr. should be kept in abeyance as per Govt. directives.

**Depreciation**

62. The licensee has claimed Rs.155.99 cr. as depreciation according to the Gross Fixed Asset (GFA) of Rs.3020.88 cr. (provisional as on 01.04.2012). The Commission in the earlier transmission tariff order (of FY 2011-12) had finalized the GFA as Rs.2112.35 cr. (actual as on 01.04.2010) and approved Rs.453.74 cr. addition in fixed assets during FY 2011-12. If the yearly additional asset figures, as given in ARR of FY 2012-13, have been taken into consideration, then GFA amount (as on 01.4.2012) does not match with the claim of licensee. On similar line, considering the approved addition in FY 10-11 and proposed addition in FY 11-12 by licensee, the GFA is not matching with GFA proposed by licensee as on 1.04.2012. The detailed calculation based on two different options is given below. Commission may review the actual yearly addition figure and finalize the GFA for determining the depreciation for FY 2012-13.

**Table – 18**
**Calculation of Gross Fixed Asset (Rs cr.)**

| Options | As on 01.4.10 (approved) | Addition in 10-11 | As on 01.4.11 | Addition in 11-12 (given in ARR 12-13) | As on 01.4.12 |
|---|---|---|---|---|---|
| Option 1 | 2112.35 | 189.80 (Given in ARR 12-13) | 2302.15 | 227.34 | 2529.49 |
| **Or** | | | | | |
| Option 2 | 2112.35 | 453.74 (approved in FY 11-12 order) | 2566.09 | 227.34 | 2793.43 |

**Return on equity**

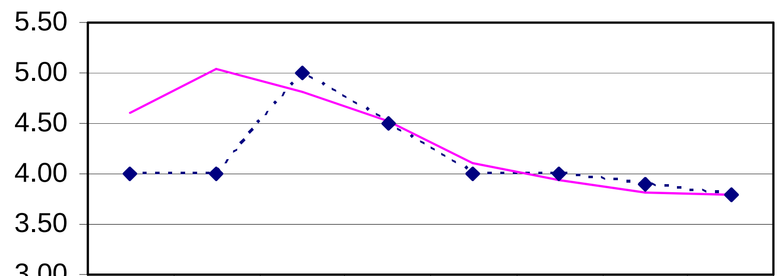
63. Return on equity has been claimed as Rs.24.81 cr. on equity base of Rs.160.07 cr. This equity consists of old equity available at the time of de-merger (Rs.60.07 cr.) and already received equity during FY 08-09, 09-10 and 10-11 (Rs.100 cr.). The Commission should not allow return on old equity base of Rs 60.07 cr. So, the reasonable return on equity is Rs.15.5 cr. (15.5% of received equity of Rs.100 cr.) which should be considered in ARR for FY 2012-13.

**Others**

64. According to earlier decision taken by Commission, the claim for further contingency reserve should be disallowed. Interest on working capital, provision towards bad debts and pass through expenses shall not be considered in ARR calculation.

## Transmission Loss

65. OPTCL has proposed a transmission loss of 3.8% for the FY 2012-13. The Commission had approved 3.9% transmission loss for FY 2011-12. The Kanungo Committee had recommended for a stepwise reduction of transmission loss so that the same is brought to a level at par with that of Central Power Grid by 2007. However, this has never been achieved. The actual audited loss is higher than approved by Commission (See chart1). OPTCL has failed to arrest the high transmission loss due to its inefficiency and hence, positive outcome of power sector reform is yet to be felt in the State. In conformity with the power sector reform, therefore, OPTCL needs to reduce the transmission loss significantly. Therefore, the transmission loss may be fixed at reasonable level for the FY 2012-13.




| | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|---|---|
| Approved (%) | 4.00 | 4.00 | 5.00 | 4.50 | 4.00 | 4.00 | 3.90 | 3.80 |
| Actual audited (%) | 4.60 | 5.04 | 4.82 | 4.52 | 4.11 | 3.93 | 3.82 | 3.80 |

(2011-12 (actual) is for April – Sept 2011)

**Chart 1: Transmission loss of OPTCL**

## Tariff proposal

66. OPTCL claims that with the existing Tariff structure, consisting of Transmission Charge @ 25 P/U and Transmission Loss @3.9 %, it is not able to meet current costs, which would result in a deficit of Rs.721.87 cr. OPTCL, therefore, proposes to recover the annual fixed cost in full from DISCOMs and CGPs through the rate of 54.68 P/U from 01.4.2012 with transmission loss for wheeling as 3.8% on energy drawl. This tariff proposal may be reviewed as it would impose more burdens on the general consumers. Therefore, for the benefit of the consumers there is a need to reduce the current costs of OPTCL which has been projected at a much higher side.

## Summing Up

67. OPTCL has projected its revenue requirement of Rs.1330.46 cr. during FY 2012-13, which is 132 per cent higher than the approved figure of Rs.572.50for FY 2011-12. The areas of concern are the pass through of past loss and higher

increase in employee cost, A&G cost, repair and maintenance cost and interest on loan capital. This high increase in costs proposed for FY 2012-13 may not be allowed for the best interest of the consumers.

**VIEWS OF OBJECTORS ON TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2010-11 (Para 68 to 118 )**

**Issues**

68. One Objector has expressed the view that the separation of OPTCL from GRIDCO is only cosmetic. Hence the Commission may direct to function as an independent Engineering Organization with independent Board of Directors.

**Transmission Loss**

69. An objector has submitted that the proposed transmission loss of 3.8% may be considered after checking the findings of the latest load flow study.

70. OPTCL needs to reduce the transmission loss significantly.

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

72. The reduction of transmission loss from existing 3.9% to 3.8% is not sufficient and proposed rate (54.68 p/u) is also quite high as there is no significant reduction. This needs to be reduced further.

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

74. The Commission should not allow transmission loss more than 3% at least from this year onwards (2012-13).

**Capital Expenditure**

75. The OPTCL application for award of contract to PGCIL should not be approved and the Commission is requested not to consider such approval as this will result in additional financial burden on the consumers.

76. OPTCL should confirm that equipments for online data transmission to SLDC from the EHT feeders of all EHT substations have been provided. If not what is the present status.

77. 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 (Interest during Construction) for the schedule period of completion may be treated as capital cost of the works.

78. One objector submitted that the charges payable to PGCIL should not form part of the ARR. OPTCL has recently been off loading the work of preparation of specifications, tender documents, submission of recommendations for Vendor selection, on outside agencies. Similarly a lot of other works are also being entrusted to the outside agencies. Such action is seriously reducing the core competency of the licensee and should be avoided.

79. OPTCL is depending on PGCIL to execute not only the 400 KV system but even 132 KV lines and substations and telecom works. The charges payable to PGCIL should not form part of the ARR.

80. NESCO submitted that the Capital Expenditure Schemes ought to be filed separately and should be detailed in nature and should include the Cost Benefit Analysis so that the same can be scrutinized.

**Quality of supply**

81. An objector held that OERC may direct OPTCL to give an undertaking through Affidavit that it would supply quality power at proper voltage to all the consumers of the State, which has not been supplied during FY 2010-11 and 2011-12 till date.

82. The erection of 132/33 KV substations is the responsibility of OPTCL but this should be properly done after consultation with DISCOMs and GRIDCO.

83. Govt. of India and the State Govt. have announced to give electricity to all through Rajib Gandhi Gramin Bidyut Yojana & Biju Jyoti Yojana programme. Biju Jyoti funds can only be utilized if suitable transformer is in existence in nearby area so also Rajib Jyoti. For this purpose OPTCL is to provide proper power without which it can not work. OPTCL should produce a status report as to what steps have been taken for providing quality power supply to the consumer.

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

85. The Standard of performance of OPTCL transmission system should be monitored by third party auditor.

**Evacuation Plan of Power Generated by IPPs**

86. OPTCL should produce a status report regarding the directions given by Hon OERC in the ARR orders for FY 2009-10, 2010-11 and 2011-12 particularly action plan for evacuation of power from 21 nos. of Mega Thermal Power Plants coming up in Odisha for which 13 nos. of IPPs and 8 nos. MPPs have signed MoUs with Govt. of Odisha for installation of about 28000 MW.

87. OPTCL should ensure adequate transmission corridors for both drawal of power for State use and evacuation of power for the consumers outside the State from the proposed IPPs, which needs to be addressed by OPTCL in its submission of prospective action plan.

88. OPTCL should produce the status report of overloaded lines and sub-stations of the state.

**Harassment to the EHT consumers**

89. One Objector submitted that OPTCL is complacent to carry out the order of the Commission dated 26.04.2011 in case No. 63/2006 wherein the Commission has directed as follows:

- That for extension of EHT system upto the consumer premises, OPTCL shall calculate the remunerativeness and bear the cost of the same if remunerative.
- That in case the construction of the EHT system is done by the consumer under OPTCL supervision, the supervision charges shall be only 6% in place of 16%.
- That no infrastructure loan is payable by the EHT consumer.

Instead of carrying out the order of the Commission OPTCL is complicating the matter by raising un-necessary litigations.

90. One Objector has pointed out that many industries in the State availing power at 132 KV since long, will terminate their speech and data communication links at the 220 KV Sub-station. OPTCL should indicate the date of commissioning of SCADA interface equipments in each of the 220 KV Sub-stations as per the order of the Commission (Total time is 3 years for all sub-stations) so that the industries can plan their work accordingly. No useful purpose will be served by installation of equipment by the industries/generators unless the OPTCL SCADA interface is in place.

**Transmission Charges from CGPs**

91. Some objectors submitted that there is no justification as regards the imposition of transmission charges for the emergency / back up power delivered at CPP. All cost in purchasing and transmitting such energy to the consumer’s premises should be borne by the supplier (GRIDCO) and no additional transmission cost be imposed to the CPP.

**Transmission Tariff**

92. The proposed transmission tariff of 54.68 paise/unit for the FY 2012-13 against approved rate of 25.0 P/U is totally illegal and arbitrary. This is not acceptable and needs to be further examined.

93. OPTCL should plan for submitting the ARR and transmission tariff in MYT principle.

94. The transmission charge proposed by OPTCL is 400% higher than other STU in neighbouring States. The transmission charges and losses should be at par with neighbouring states.

95. OPTCL was repeating their proposal based on their application for the FY 2011-12 to misguide the Commission as well as the Objectors. Therefore, the objector

requests the Commission to scrutinize the Transmission cost proposed by OPTCL critically and reduce the transmission tariff compared to the last year.

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

**Income from Wheeling**

97. In absence of any audited figure, DISCOMs project the misc. receipt of 43.77 crore as approved by the Commission for FY 2011-12.

98. OPTCL has indicated the charges for open access, both for long term and short term, and charges towards the meters but revenue receipts against these items has not been estimated.

99. The Commission should consider an amount of Rs.17.50 crore towards income from Inter State Wheeling for FY 2012-13 in line with the order of ATE.]

**R&M Expenditure**

100. One objector pointed out that R&M cost for various projects of lines and substations is too high. Further, actual expenditure is always less than approved expenditure, indicating that OPTCL has not taken any action to spend the required amount on R&M as approved by the Commission.

101. One objector suggested that OPTCL should prepare a Comprehensive Renovation Scheme (CRS) for sub-stations which are more than 20 years old and arrange funding from Financial Institutions (FIs).

102. Some objectors submitted that most of the R&M expenditure like circuit breakers, station batteries, CTs, PTs/ CVTs, Las, energy meters, station transformers, CR panels, DG sets, restoration of 132 KV feeders envisaged in the ARR of OPTCL is in nature of the Capital Expenditure which should not be treated as R&M expenses.

103. The actual R&M expenses for FY 2010-11 were Rs.28.31 crore against the approved figure of Rs 60 crore. Hon Commission ought to consider a reasonable increment of 6% per annum over the actual cost, and that the same can be trued up as and when actual expenditures are submitted after necessary prudence checks.

**Employee and A & G Cost**

104. The Reliance-managed DISCOMs submitted that the employee cost, including terminal benefits, of OPTCL may be allowed at Rs.320.11 crore subject to due scrutiny by the Hon commission. Regarding terminal benefits, Hon Commission may determine the amount of deficit funding, if any, and may be amortized over several years, starting from FY 2012-13 @ Rs 105.16 crore per year.

105. OPTCL may be allowed an amount of Rs.19.69 crore towards the A&G expenses for FY 2012-13 i.e. escalation of 9.4% allowed over the approved figure of current year.

**Depreciation**

106. 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.93.82 crore.

**Interest on Loan**

107. Some objectors submitted that OPTCL should explain significant increase in interest component. Is there any abnormal delay in the completion of ongoing projects, which has added to the interest? M/s OPTCL may prevail upon the delaying agencies like PGCIL not to pass on cost over run and thereby the interest burden.

108. The finance charge projected by OPTCL is Rs.11.73 crore which is unreasonably high and without any details. Hence, the same may not be allowed.

109. The interest on new project loan of Rs.795.96 crore may not be allowed since the details of which are not available for scrutiny. Hence, the principal CB as on 31.03.2012 is considered and interest on that (Rs 34.40 crore) may be considered.

**Interest on Working Capital**

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

**Contingency Reserve**

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

**Return on Equity**

112. The State Govt. had agreed to finance transmission projects in remote areas to the extent of Rs.100 Crores by way of equity contribution. Since OPTCL has not given the proof or submitted the audited balance sheet for the receipt of balance amount of Rs.71.94 crore, the return on the same should be allowed after prudent checks. Therefore DISCOMs submit that the return @ 15.5% on the equity value of Rs.28.50 crore may be allowed i.e. Rs.4.35 crore.

**Bad and Doubtful Debts**

113. An objector stated that the 100% transmission charges is the first charge recovered from monthly BSP bill through Escrow. Therefore, the provision for bad and doubtful debt has no merit and the claim of OPTCL for Rs.0.10 crore should not be allowed.

**Past Losses/Pass through Expenses**

114. The claim of OPTCL for Rs.205.81 crore as past through in the ARR has no merit and should not be allowed as there is surplus in OPTCL’s audited account.

**Special Appropriation:**

115. DISCOMs proposed to exclude the special appropriation in computation of the OPTCL ARR for 2012-13 as per Hon ATE order. Regarding shortfall of

repayment of loan over and above the allowed depreciation, OPTCL may negotiate with the Banks/FIs for a longer tenure or moratorium in repayment of Principal.

**Truing Up**

116. 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 2011-12 and the resultant benefit if any may be passed on to the consumers.

117. DISCOMs submitted that there would be revenue surplus of Rs.126.07 crore during FY 12-13 instead of the Revenue Gap of Rs.721.85 crore proposed by OPTCL base on existing transmission tariff of 25.00 paise per unit.

118. Month wise actual data for the total energy wheeled and financial figures on different heads pertaining to FY 2011-12 are to be provided by OPTCL.

**REJOINDER BY OPTCL TO THE QUERY OF OBJECTORS (Para 119 to 198)**

119. In response to the views of objectors on the ARR and Tariff Application of OPTCL for 2012-13, OPTCL had filed rejoinders for the same. The response of OPTCL has been broadly classified into the following issues.

**Legal Issues**

120. The present ARR and Transmission Tariff application has been prepared and submitted based on OPTCL's Provisional Accounts for FY 2010-11, all relevant data/information and materials. OPTCL had furnished all requisite information and details as per the prescribed formats of the Hon'ble Commission with full justifications. Hence, the question of misguiding does not arise.

121. OPTCL has submitted its ARR & Transmission Tariff application under Section 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and OERC (Conduct of Business) Regulations, 2004 and other tariff related matters. Till date there is no such directives of the Hon'ble Commission for making application based on Multi Year Tariff (MYT) principle for OPTCL.

122. Both OPTCL and GRIDCO have been incorporated under the Companies Act, 1956 as two separate Companies wholly owned by the Government of Odisha. The Corporations are carrying on the business as prescribed in the 'Object Clause' of their respective Memorandum of Association and as per terms and conditions of the licences granted by the Hon'ble OERC. Both the Corporations have separate BoD. The BoD of OPTCL consists of 11 nos. of Directors (4 Functional/Whole time Directors and 7 Non-functional/Independent Directors). This composition is as per the guidelines prescribed under the Corporate Governance Manual issued by the Government of Odisha for State PSUs.

123. The BoD of OPTCL are independently exercising all such powers and discharging the duties and responsibilities as conferred under the provisions of the

Article of the Association and in accordance with the provisions of the Companies Act, 1956.

**Transmission Loss**

124. The transmission loss approved by the Hon'ble Commission for the 5 years vis-à-vis actual transmission loss occurred in OPTCL's EHT network is given below.

**Table – 19**

**OPTCL's Transmission loss approved and actual**

| Year | OERC Approval | Actual |
|---|---|---|
| 2007-08 | 5% | 4.82% |
| 2008-09 | 4.5% | 4.52% |
| 2009-10 | 4% | 4.11% |
| 2010-11 | 4% | 3.93% |
| 2011-12 | 3.9% | 3.82% (Apr-Sept'11) |

125. Transmission loss is purely a technical loss and is dependent on generation sources, system configuration and power flow requirements at different load centres. OPTCL has no control over the same due to several factors. The transmission system of OPTCL operates as an integral part of the Eastern Regional Grid to serve the internal demand of the State as well as to carry out import and export of power depending upon the system demand. In view of the increasing demand for power at an accelerated pace due to ongoing industrialization and implementation of central & state sponsored schemes like RGGVY, BGJY etc. in Odisha, there will be increased flow of power in the OPTCL transmission network contributing to increased transmission loss. Hence, the transmission loss is being computed on the basis of 'As the System Operates' adopting OERC Gross Method.

126. 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 year wise approved figures indicated in the above Table disproves the contention of the Objectors that the Hon'ble Commission has been allowing increased transmission loss to OPTCL .

127. The transmission loss of 3.8% for FY 2012-13 has been approved by the Hon'ble Commission in OPTCL's 5- year Business Plan order taking into account inter alia the views of the Objectors on acceptance of recommendations of the Kanungo Committee for reduction of transmission loss @ 0.3% per annum. OPTCL would like to further add that the transmission loss in OPTCL system is one of the lowest in the country compared to other states. Hence, OPTCL does not agree to the suggestion of the Objector for not allowing transmission loss more than 3%.

**Delay in completion of projects**

128. In response to the allegations from some objectors regarding delay in completion of some projects OPTCL submitted that in case of very few numbers of projects, OPTCL has taken more than 10 years time for completion. This delay was beyond the control of OPTCL and mostly attributable to severe RoW problem and prolonged court cases. It is neither under the control of OPTCL nor Executing Agencies. Efforts are being made at various levels to sort out the constraint caused due to RoW or any other reason. Constant monitoring, regular review meeting with the Executing Agencies as well as field officials are being made to sort out the issue so as to complete the project as per the schedule. This is evident from the fact that during last year i.e. FY 2010-11, OPTCL has been able to complete record number of projects including long delayed projects. OPTCL is putting maximum efforts in planning the project execution, regular monitoring of work and review of progress of projects to complete the projects as per the schedule.

**Quality of Supply**

129. OPTCL has conducted the transmission planning study for its transmission system in coordination and consultation with GRIDCO and DISCOMs. Accordingly OPTCL is taking all effort to renovate / modernize and strengthen its infrastructure to cater to the future load. OPTCL endeavors to the maximum for successful implementation of the Central and State sponsored schemes like RGGVY, BGJY in coordination with GRIDCO & DISCOMs. For each investment proposal submitted before the Hon'ble Commission seeking approval, OPTCL is making concerned DISCOMs as Respondents for obtaining their views for consideration by the Commission before disposing of the OPTCL's proposal.

130. To address low voltage problems and for reactive energy compensation, OPTCL is in the process of installing 33kV Capacitor Banks with an aggregate capacity of 275 MVAR at 20 nos. of grid sub-stations. The project is scheduled for completion during FY 2012-13.

131. During last few years, OPTCL has considerably enhanced its performance level and has completed large number of projects which were pending for a quite long period. OPTCL has completed 10 nos. projects during 2008-09, 14 nos. projects during 2009-10, 12 nos. projects during 2010-11 and 1 no. new project during 2011-12 along with additional 3rd transformer in existing grid sub-stations and other deposit works. Completion of these projects has added to the improvement of quality of supply at various areas of the State.

132. The above amply shows effort of OPTCL to provide quality supply to DISCOMs at its grid sub-station end. OPTCL is not responsible for failure of DISCOMs to supply quality power to end consumers of the State through their distribution network. Hence, giving undertaking through affidavit as has been urged by the Objector is not appropriate nor necessary.

133. OPTCL is taking all effort to renovate / modernize and strengthen its infrastructure to cater to the future load. OPTCL endeavors its best for successful

implementation of the Central and State sponsored schemes like RGGVY, BGJY etc. in close coordination with GRIDCO & DISCOMs. The existing transmission network of OPTCL is capable enough to cater to the State demand as well as load growth due to implementation of schemes like RGGVY, BGJY etc. In the transmission planning of OPTCL for the 11th & 12th Five Year Plan periods conducted through M/s PRDC, Bangalore, the expected load growth due to RGGVY and BGJY schemes, as projected by the respective DISCOMs, have been factored. In order to take care of the future load growth in the State as a whole, OPTCL is planning to complete about 81 nos. projects during the 12th Plan period out of which 30 nos. projects are under execution stage and 51 nos. projects are at various stages of implementation.

**System Availability**

134. OPTCL is making all out efforts to supply the power requirement of the State through its transmission system comprising 100 grid sub-stations and more than 11293 ckt. km. long transmission lines of different voltage classes spread across the geographical area of the State. One of the key performance indicators i.e. Availability of Transmission System of OPTCL is more than 98% in all the previous years since 2005-06 i.e. the year OPTCL commenced its business. For the year 2009-10 and 2010-11, the availability of the system has been worked out as 99.86% and 99.84 %t respectively. It indicates that last year the transmission system was kept available for 99.84% of the time.

**System Improvement**

135. It is difficult to maintain sub-stations and lines with the available skilled manpower. OPTCL is a State Public Sector Undertaking with 100% shareholding of Government of Odisha. Proposal for filling up of technical skilled manpower for field units is under process, in response to which, Deptt. of Public Enterprises during a meeting of the Screening Committee in December 2011 have agreed in principle for filling up of vacancy for skilled technicians (ITI qualified) in a phased manner. Permission from Government for filling up of the same is awaited.

136. In spite of shortage of manpower, OPTCL is putting in its best effort to keep in place a healthy transmission system with the available manpower. OPTCL has issued a Maintenance Manual during August, 2009 meant for its lines and grid sub-stations including the equipments. This is followed by sub-station Engineers and Employees.

137. OPTCL has already completed 58 sub-stations/power stations under ULDC Project for on-line data transmission to SLDC. Balance 30 sub-stations not covered under ULDC scheme are presently taken up by PGCIL under consultancy service. The above project is likely to be completed by 24.09.2013. Tender evaluation is under progress by PGCIL. However, the said project does not involve generation and inter-state tie line data transmission to SLDC. The feeder flow to the above sub-stations are being monitored from the other end RTU for which SLDC does not face any operational problem.

138. The details regarding ongoing capacity augmentation projects relating to EHT grid sub-stations of OPTCL scheduled for commissioning during FY 2011-12 and FY 2012-13 have already been presented before the Hon'ble Commission on 20.12.2011 during half yearly performance review of OPTCL (1st half of FY 2011-12). The works completed by OPTCL during FY 2010-11 and FY 2011-12 at different EHT grid sub-stations and transformation capacity added thereto is also given. Besides, OPTCL has also taken up the works for up-gradation of 10 nos. of existing EHT lines to enhance power transmission capabilities of those identified lines. The details are given below.

- 220kV Budhipadar-Tarker D/C, 109 kms (AAAC)
- 132kV Bhanajanagar-Aska D/C, 32.93 kms (AAAC)
- 132kV Burla PH-Budhipadar D/C, 59.38 kms (AAAC)
- 132kV Chandaka-Khurda S/C, 36.5 kms (AAAC)
- 132kV Khurda-Balugaon S/C, 37 kms (AAAC)
- 132kV TTPS-Chainpal D/C, 3 kms (AAAC)
- 132kV Chandaka-Mancheswar Ckt-II, 5.66 kms (HTLS)
- 132kV Chandaka-Ranasinghpur S/C, 24.78 kms (HTLS)
- 132kV Chandaka-Nimapara S/C, 30 kms (HTLS)
- 132kV Tarkera-Chhend DC, 6.165 kms (HTLS)

139. OPTCL has formulated action plan by identifying the low voltage pockets in the state and undertaken system improvement and strengthening in those areas. These activities are aimed at system strengthening and also to reduce the transmission loss.

140. OPTCL is in the process of procuring 0.2s accuracy class Energy Meters which shall be utilised for Energy Audit Purpose. The 1st consignment of these Meters is expected to be delivered by end of February 2012. About 600 metering points covering the ICTs, Auto transformers. Power Transformers and EHT Lines of OPTCL have already been identified for installation of such Meters. After installation and commissioning of the Audit Energy Meters, the individual transmission element wise loss can be assessed / identified and corrective action can be taken as per necessity. After commissioning of the audit Meters, OPTCL shall go for energy audit through independent and professional / certified energy auditors in accordance with the directives of Hon’ble OERC.

141. In order to achieve desired performance standards, OPTCL has already planned (through Business Plan/Master Maintenance Plan) for phase wise/gradual replacement of the old, obsolete and defective equipment like CB,CT,PT,LA, Station Batteries and Chargers etc. and also to keep necessary spares to meet possible network exigencies and failure of equipments. The existing network has to be renovated in order to ensure quality power supply and to meet the growing load demand.

142. It is practically not possible to prepare feasibility reports and search for financing agencies to avail small amount of loans against individual category of equipment which have outlived their useful life and may be needed in case of exigencies and failure.

**Transmission Projects/ Capex**

143. As per clause 10.1 of Licence Conditions of OPTCL, unless otherwise directed by the Commission, the licensee shall obtain prior approval of the Commission for making investment in the licensed business, if such investment is above the limits laid down at licence condition 23.1.

144. At licence condition 23.1, the Hon'ble Commission has specified the term "Major Investment" as any planned investment in or acquisition of transmission facilities, the cost of which, when aggregated with all other investments or acquisitions (if any) forming part of the same overall transaction, equals or exceeds Rs.10 Crore.

145. Hence, for any major investment of Rs. 10 Crore or more, OPTCL is obtaining Hon'ble Commission's approval justifying the purpose of investment along with the cost-benefit analysis of the respective project. The DISCOMs are made Respondents in the investment proposal of OPTCL for giving their views which are considered by the Hon'ble Commission while approving the proposal.

146. In order to meet the growing load demand of the State, for steady power supply and to overcome low voltage problems, OPTCL has augmented the transformer capacity in a number of EHT grid sub-stations. The DISCOM Zone wise details for the Years 2010-11 and 2011-12 are given below.

**Table – 20**

**Upgradation of substations completed during 2010-11 and 2011-12**

| Sl. No. | Sub-station | Initial Capacity (MVA) | Final Capacity (MVA) | Capacity Addition (MVA) |
|---|---|---|---|---|
| **CENTRAL ZONE** | | | | |
| ***2010 – 11*** | | | | |
| 1 | Angul | 2x20, 132/33kV | 1x40+1x20, 132/33kV | 20 |
| 2 | Badagada | 1x20, 132/33kV | 1x40+1x20, 132/33kV | 40 |
| 3 | Balugaon | 2x20, 132/33kV | 1x40+1x20, 132/33kV | 20 |
| 4 | Bidanasi | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 5 | Chainpal | 2x20+1x12.5, 132/33kV | 1x40+2x20, 132/33kV | 27.5 |
| 6 | Nimapara | 3x12.5, 132/33kV | 1x40+2x12.5, 132/33kV | 27.5 |
| 7 | Nuapatna | 1x20+1x12.5, 132/33kV | 1x40+1x20, 132/33kV | 27.5 |
| 8 | Pattamundai | 1x20+1x12.5, 132/33kV | 2x20, 132/33kV | 7.5 |
| 9 | Salipur | 2x12.5, 132/33kV | 1x20+1x12.5, 132/33kV | 7.5 |
| | | | **Total** | **217.5** |
| ***2011 – 12*** | | | | |

| Sl. No. | Sub-station | Initial Capacity (MVA) | Final Capacity (MVA) | Capacity Addition (MVA) |
|---|---|---|---|---|
| 1 | Chandaka | 4x100, 220/132kV | 1x160+3x100, 220/132kV | 60 |
| | | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 2 | Choudwar | 1x40+1x20, 132/33kV 1x10, 132/11kV | 2x40+1x20, 132/33kV | 30 |
| 3 | Jagatsinghpur | 2x20, 132/33kV | 3x20, 132/33kV | 20 |
| 4 | Kendrapara | 1x40+1x20+1x12.5, 132/33kV | 2x40+1x12.5, 132/33kV | 20 |
| 5 | Nayagarh | 3x20, 220/33kV | 1x40+2x20, 220/33kV | 20 |
| 6 | Nuapatna | 1x40+1x20, 132/33kV | 1x40+1x20+1x12.5, 132/33kV | 12.5 |
| 7 | Paradeep | 1x100+1x50, 220/132kV | 1x160+1x100, 220/132kV | 110 |
| | | 2x20, 132/33kV | 2x20+1x12.5, 132/33kV | 12.5 |
| 8 | Puri | 2x31.5, 132/33kV | 1x40+2x31.5, 132/33kV | 40 |
| 9 | Ranasingpur | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 10 | Salipur | 1x20+1x12.5, 132/33kV | 1x20+2x12.5, 132/33kV | 12.5 |
| | | | **Total** | **417.5** |
| **NORTH ZONE** | | | | |
| ***2010 – 11*** | | | | |
| 1 | Baripada | 2x31.5, 132/33kV | 1x40+2x31.5, 132/33kV | 40 |
| 2 | Basta | 1x12.5, 132/33kV | 2x12.5, 132/33kV | 12.5 |
| 3 | Bhadrak | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 4 | Joda | 3x20+1x12.5, 132/33kV | 1x40+2x20+1x12.5, 132/33kV | 20 |
| 5 | Palasponga | 3x20, 132/33kV | 1x40+2x20, 132/33kV | 20 |
| 6 | Soro | 2x20, 132/33kV | 1x40+2x20, 132/33kV | 40 |
| | | | **Total** | **172.5** |
| ***2011 – 12*** | | | | |
| 1 | Jajpur Town | 1x40+1x20, 132/33kV | 2x40+1x20, 132/33kV | 40 |
| | | | **Total** | **40** |
| **SOUTH ZONE** | | | | |
| ***2010 – 11*** | | | | |
| 1 | Bhanjanagar | 1x16+1x12.5, 132/33kV | 1x40+1x16, 132/33kV | 27.5 |
| | | | **Total** | **27.5** |
| ***2011 – 12*** | | | | |
| 1 | Digapahandi | 1x20+1x12.5, 132/33kV | 2x20, 132/33kV | 7.5 |
| 2 | Phulbani | 1x12.5+2x7.5, 132/33kV | 2x12.5+1x7.5, 132/33kV | 5 |
| 3 | Sunabeda | 2x12.5, 132/33kV | 3x12.5, 132/33kV | 12.5 |

| Sl. No. | Sub-station | Initial Capacity (MVA) | Final Capacity (MVA) | Capacity Addition (MVA) |
|---|---|---|---|---|
| 4 | Tentulikhunti | 2x12.5, 132/33kV | 3x12.5, 132/33kV | 12.5 |
| 5 | Jayanagar | 1x20+1x12.5, 132/33kV | 2x20+1x12.5, 132/33kV | 20 |
| | | | **Total** | **57.5** |
| **WEST ZONE** | | | | |
| ***2010 – 11*** | | | | |
| 1 | Chhend | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 2 | Junagarh | 2x12.5, 132/33kV | 1x20+1x12.5, 132/33kV | 7.5 |
| 3 | Kesinga | 2x20, 132/33kV | 1x40+1x20, 132/33kV | 20 |
| 4 | Khariar | 2x20, 132/33kV | 1x40+1x20, 132/33kV | 20 |
| 5 | Sundargarh | 2x20, 132/33kV | 1x40+1x20, 132/33kV | 20 |
| | | | **Total** | **107.5** |
| ***2011 – 12*** | | | | |
| 1 | Bargarh | 2x40, 132/33kV | 3x40, 132/33kV | 40 |
| 2 | Junagarh | 1x20+1x12.5, 132/33kV | 2x20, 132/33kV | 7.5 |
| 3 | Patnagarh | 1x20+1x12.5, 132/33kV | 1x20+2x12.5, 132/33kV | 12.5 |
| 4 | Sonepur | 2x12.5, 132/33kV | 1x20+2x12.5, 132/33kV | 20 |
| | | | **Total** | **80** |

147. OPTCL had submitted the draft report on Long Term Demand Forecast for the period 2009-10 to 2018-19 to Hon’ble OERC for kind approval. Hon’ble Commission has approved the same vide order dated 30.09.2010 passed in Case No. 121/2010.

148. As per the instruction of CEA for the publication of 18th EPS, OPTCL has collected the forecast data from DISCOMs up to the year ending 2021-22 (terminal year of 13th plan period), extrapolated it up to 2026-27 (terminal year of 14th plan period ) and submitted it to CEA. The preliminary forecast for Odisha State as considered by CEA up to 2021-22 has been received by OPTCL from CEA.

149. Pursuant to the direction of Hon’ble OERC, OPTCL has submitted the Intra-State Transmission Plan up to the end of 12th plan i.e. 2016-17 by taking the demand forecast for the 10-year period (FY 2009-10 to FY 2018-19) approved by the Commission in Case No. 121/2010. The compliance report to kind observations of the Commission along with the final study report taking the FY 2010-11 as base year considering full evacuation of Odisha State share of power and year wise investment plan have been submitted to the Commission on 02.02.2012. The proposed Intra-State plan is subject to change when situation arises and also subject to approval of IPP evacuation scheme filed by OPTCL before Hon’ble OERC (Case No. 71/2011).

150. The Board of Directors of OPTCL in their 25th meeting held on 19.06.2008 approved the proposal for execution of 6 nos. projects (132/33 KV, 2X12.5 MVA, new sub-stations at Bhawanipatna, Nuapada, Dabugaon, Boudh, Padampur & Kuchinda along with 4 nos. 132 kV bay extension and associated lines) through PGCIL (Govt. of India Undertaking) as deposit work on cost plus basis. The total estimated cost was Rs.162.27 Crore.

**Evacuation of IPP power**

151. OPTCL proposes to evacuate Odisha State share power from the upcoming IPPs through identification of certain individual IPPs & pooling its entire power rather than pooling network for each individual IPP by connecting the IPPs to the pooling stations in the near vicinity. OPTCL has filed an application before Hon'ble OERC on 08.09.2011 (Case No. 71/2011) seeking approval of the Evacuation Plan and for directions to Respondent IPPs to have connectivity as envisaged in the evacuation plan. Out of 29nos. of IPPs, OPTCL has considered 16nos. of IPPs and OPGC, NTPC and Odisha UMPP having installed capacity of 34,310MW in Evacuation Plan since substantial progress have been made by those IPPs in land acquisition activities. In the mean time OPTCL has filed its rejoinders before Hon'ble OERC in response to counters filed by Respondents. Order on admissibility of the case is awaited. OPTCL has conducted a meeting on 04.01.2012 with representatives of those 16nos. IPPs and OPGC in presence of senior officials of ERPC, ERLDC and PGCIL and discussed the proposed Evacuation Plan. The response of IPPs is awaited.

152. The projects required for evacuation of IPP power will be executed on Design, Build, Finance Operate and Transfer (DBFOT) basis for 25 years. After 25 years it will be handed over to OPTCL for operation and maintenance. The proposal was invited from 14 nos. selected Transaction Advisors of Govt. of India for selection of consultant. After evaluation of the proposals received from 3nos. Transaction Advisors, the Letter of Award is under process.

153. Restoration work of 400 kV Ib-Meramundali D/C line (235 km) has been assigned to M/s Sterlite Energy Ltd. The schedule date of completion is November -2012. This line will be made LILO to 400 kV Grid S/S at Lapanga which will connect the generating pool to load center at Meramundali. Out of 625 nos. of locations, 574 nos. stub setting, 343 nos. tower erection and stringing of 24.5 km line have been completed by end of December 2011. Also one 400 kV D/C line will be constructed connecting 765/400 kV sub-station at Sundargarh to 400/220 kV S/S at Lapanga. These will help in availing the State share power as well as evacuation of surplus power from Mega projects.

**Outsourcing of Works**

154. OPTCL is outsourcing the works to PGCIL due to the following reasons.

- PGCIL is having good experience for execution of projects in hilly and difficult areas.
- PGCIL have their authorized vendors for supply of materials and follow a flexible approach in solving RoW problem.

- PGCIL have better technically skilled manpower especially in project management which will help in timely completion of the work.
- Acute shortage of technical manpower in OPTCL.
- Timely completion and in turn improving power supply condition in the remote areas.

155. Outsourcing the job helps in inducting specialized knowledge at a competitive price. Because of acute shortage of man power, OPTCL had awarded 6 number of projects namely 132/33 KV S/S at Nuapara in Nuapara district, 132/33 KV S/S at Dabugaon in Nawarangpur district, 132/33 KV S/S at Padmapur in Bargarh district, 132/33 KV S/S at Kuchinda in Sambalpur district, 132/33 KV S/S at Bhawanipatna in Kalahandi district and 132/33 KV S/S at Boudh in Boudh district to PGCIL on turnkey bases during December 2008. All these projects are likely to be completed by June 2012. Presently no work is being off-loaded to any agency outright. Out of 31 projects under execution by OPTCL, only six number of projects are being executed through PGCIL. All other projects including 400 kV S/S and lines are being executed by OPTCL.

156. OPTCL had outsourced few projects to NTPC-ESCL for floating of tender, evaluation and finalisation of lowest bidder. All other works such as preparation of specification, tender document, submission of recommendation for vendor selection was/is done by OPTCL only. No other work is outsourced to any agency. Hence the question of reducing the core competency of OPTCL does not arise.

157. PGCIL has completed data integration work in the total Eastern region under ULDC project for which OPTCL is one constituent member. The projects of Telecom cover expansion of ULDC scheme and BoD of OPTCL has recommended to take up the Telecom works through consultancy service of PGCIL.

**Service to the EHT Consumers**

158. In compliance with the OGC Regulation 4.13 (i) (d) as amended on 29th August, 2008, action has already been initiated by OPTCL to provide SCADA interface point at all 220 kV grid sub-stations under the consultancy support of PGCIL. Agreement was signed between OPTCL & PGCIL on 08.02.2010 to take up the work "Provision of SCADA interface points at all 220 kV sub-stations of OPTCL by laying OPGW". As per the agreement, the work shall be completed within 36 months from the date of release of initial advance. The initial advance has been released to PGCIL on 26.02.2011 by OPTCL Therefore, the project is likely to be completed within February,2014.

159. With regard to collection of infrastructure loan and supervision charge by OPTCL, it has submitted that OPTCL being aggrieved with the orders passed by the Hon'ble OERC in Case No. 36/2005 and No. 63/2006 has filed an appeal before the Appellate Tribunal for Electricity, New Delhi. The said appeal is presently under subjudice.

**Transmission Charges to the CGPs**

160. In response to the issue of transmission charges for emergency power supply to CGPs OPTCL submitted that the issue regarding payment of monthly transmission charge by NALCO to OPTCL for drawal of emergency/back-up power has already been addressed by GRIDCO in its letter No. 228(7) dated 13.01.2012 addressed to the Executive Director (Production), NALCO. It is evident from the aforesaid letter that NALCO has to pay the transmission charges directly to OPTCL against the monthly emergency/back-up drawl deducting the same from the cost of emergency/back-up power payable to GRIDCO.

**Transmission Tariff**

161. OPTCL has indicated the transmission charge and transmission loss for both LTOA & STOA customers in the ARR application. But there is no such medium term open access as per existing OERC Open Access Regulations.

**Income**

162. The income from inter-state wheeling cannot be assessed correctly for FY 2012-13 due to dispute raised by MPPTCL and the matter is subjudice before Hon'ble Supreme Court. The contention of the Objectors that it should be scaled up to Rs.17.50 Crore as per the Impugned ATE Order which is also pending before Hon'ble Supreme Court for disposal is totally misconceived and hence liable to be rejected.

163. OPTCL has projected revenue receipt from LTOA Customers in the ARR application. For intra-state as well as inter-state STOA customers, the revenue receipt has been indicated under the heading "OTHER INCOME AND COST / MISCELLANEOUS RECEIPT" while making a projection for FY 2012-13.

**Misc. Receipt**

164. The Misc. Income as per Audited Accounts for FY 2010-11 is Rs 25.50 Crore. In view of reducing revenue trend from short-term open access charges, Supervision Charges and uncertainty involved in revenue generation from other sources as well, OPTCL expects the Misc. Receipts of Rs 18.00 Cr during FY 2012-13. Thus the revenue from Misc. Receipts is projected as Rs.18.00 Crore considering present trend of revenue earning from different sources.

**TRANSMISSION COST**

**Employee cost:**

165. OPTCL's projection of Employee Cost for FY 2012-13 is based on actual cost incurred for 2010-11, facts and evidential documents.

166. OPTCL appointed the independent actuary M/s. Bhudev Chatterjee, Kolkata to assess the terminal liabilities for FY 2010-11 with projections for next two years. As per valuation made by the actuary, the terminal liabilities as on 31.03.2013 is Rs.1425.02 Crore. The figures have been arrived at on the basis of the data available as at 31.03.2011 considering the funding of Rs. 1015.86 Crore already allowed in the past tariff orders. The additional fund requirement has been

calculated as Rs. 420.62 Crore for FY 2012-13. The proposal of amortization of the required fund of Rs. 420.62 Crore in 4 years starting FY 2012-13 is without any basis and hence not acceptable.

167. The draft version of final report of NPC has been examined by the Board of Director (BoD) of OPTCL during last meeting held on 02.12.2011. It is expected that the final report will be approved by the BoD in the next meeting. The number of additional posts to be created in the proposed structure of NPC is Executive: 325 Posts and Non- Executive (Technical): 429 Posts. The financial implication of new posts and recruitment as per NPC report in the Employee Cost of OPTCL is Rs. 14.80 Crore per annum. Expenses on this head may be considered under Employee Cost in the ARR of OPTCL for FY 2012-13.

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

169. As a matter of better working environment and staff welfare, the BoD of OPTCL has approved for providing two pairs of dresses and one pair of shoes to all the employees per year. The yearly budget on this count is Rs. 1.33 Crore which may kindly be allowed by the Hon'ble Commission in the ARR for FY 2012-13.

170. The projections related with employee cost made by OPTCL in its application are very much realistic which need full consideration. OPTCL does not agree to the projections of Rs.320.11 Crore towards Employee Cost against proposal of OPTCL of Rs. 655.36 Crore.

**R & M Cost:**

171. OPTCL intends to undertake preventive and proper maintenance of its lines and grid sub-stations for which Rs.95.46 Crore is proposed towards R&M expenses for FY 2012-13.

172. From FY 2009 -10 onwards there has been a marked increase in the R&M expenditure due to expeditious action taken by OPTCL and timely review / monitoring of expenditure.

173. Utilization of the materials have already started against various works pertaining to R&M of EHT grid sub-stations and transmission lines after receipt of materials for which the expenditure of Rs.28.32 Crore incurred during FY 2010-11 (as per Audited Accounts). As per Cash Flow statement, the expenditure incurred towards R&M during FY 2011-12 up to January 2012 is Rs.26.39 Crore. Hon'ble ATE in order dated 08.11.2010 in Appeal No.55, 56 & 57 of 2007 with regard to Transmission Tariff order of OPTCL for FY 2007-08 had confirmed the findings given by the State Commission with the following observations.

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

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

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

174. R&M Expenses of Rs 95.46 Crore proposed in the ARR application for FY 2012-13 does not contain any Capital Expenditure. The expenditure for replacement of assets is capitalized in the accounts and actual R&M expenditure considered as a revenue item in the audited accounts. The audited R&M expenses are considered in truing-up exercise.

175. Hence, OPTCL does not agree to the Objectors projection of Rs. 30 Crore towards R&M expenses.

**A & G Expenses:**

176. The actual expenditure towards A&G Expenses as per audited accounts was Rs.18.24 Crore for FY 2008-09 as against OERC approval of Rs.16.57 Crore; during FY 2009-10 the actual expenditure was Rs. 26.68 Crore as against the OERC approval of Rs. 14.35 Crore; during FY 2010-11 the actual expenditure was Rs. 33.81 Crore as against the OERC approval of Rs. 18.00 Crore. Thus, the actual expenditure as per audited accounts is always higher than the OERC approved figures in the last 3 years.

177. 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 2010-11, the details of A&G expenses are as under:

**Table - 21**

**Audited A&G Expenses of OPTCL for FY 2010-11 (Rs. in Crore)**

| Sl. No. | Particulars | FY 10-11 (Audited) |
|---|---|---|
| 1 | Property related expenses | 0.17 |
| 2 | Communication | 0.44 |
| 3 | Professional Charges | 1.82 |
| 4 | Conveyance & Travelling | 3.90 |
| 5 | Watch and ward Expenses | 10.63 |
| 6 | Inspection fees | 1.55 |
| 7 | Electricity charges | 1.40 |

| Sl. No. | Particulars | FY 10-11 (Audited) |
|---|---|---|
| 8 | Other Expenses | 12.89 |
| 9 | Material related expenses | 0.01 |
| 10 | OERC License Fee | 1.00 |
| 11 | Sub-Total (1 to 10) | 33.81 |
| 12 | Less: Expenses capitalized | - |
| | **Total A&G Expenses** | **33.81** |

178. Also, lack of sufficient funds towards A&G expenses would adversely affect efficient functioning of OPTCL. Therefore, the A&G Expenses of Rs.39.11 Crore proposed for FY 2012-13 is very much realistic which need full consideration.

**Interest on loan**

179. The loans proposed to be availed from REC/PFC/Commercial Banks are in respect of various projects which have been approved by the Hon'ble Commission. Accordingly, the amount of Rs. 936.43 Crore has been provided as CAPEX for the FY 2012-13. For financing the above CAPEX, interest on new loan amounting to Rs 66.95 Crore has been proposed against new loan of Rs. 795.96 Crore proposed to be availed during FY 2012-13.

180. Out of the estimated sanctioned loan of Rs.767.84 Crore, OPTCL has availed Rs.123.44 Crore only till date and balance of Rs.644.40 Crore is yet to be drawn. Proposals for financing of new projects have been given to various Commercial Banks and Financial Institutions. The interest on Rs.795.96 Crore has been taken as Rs. 66.95 Crore out of the total projected interest of Rs.102.54 Crore.

181. The Finance Charges of Rs.11.73 Crore has been proposed to meet the expenses towards Payment of Guarantee Commission, Rebate to consumer for timely payment, Bank Commission and Bank Charges etc.

182. OPTCL does not agree to the Objectors suggestion for allocation of Rs 58.04 Crore against OPTCL's claim of Rs. 102.54 Crore.

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

184. However, during last year i.e. FY 2010-11, OPTCL has been able to complete record number of projects including long delayed projects. OPTCL is giving maximum efforts in planning the project execution, regular monitoring of work and review of progress of projects to complete the projects as per the schedule. For FY 2012-13, IDC of Rs.6.69 Crore is calculated on loan taken for ongoing

and new projects. The IDC for a project is capitalized and treated as Capital Cost of the works as per the normal accounting principle.

**Depreciation:**

185. OPTCL has projected depreciation of Rs. 155.99 Crore for FY 2012-13 based on the Provisional Accounts of OPTCL for FY 2010-11 considering the depreciation rate as prescribed in CERC Regulations 2009 on up valued Assets and additions thereto.

**Special Appropriation:**

186. For FY 2012-13, OPTCL has projected Rs 155.99 Crore towards depreciation as per CERC Regulations 2009 which will take care of the principal repayment obligation. Hon'ble ATE in order dated 08.11.2010 in Appeal No. 55, 56 & 57 of 2007 with regard to Transmission Tariff order of OPTCL for FY 2007-08 had confirmed the findings given by the State Commission regarding Advance Against Depreciation with the following observations.

> *"(a) The conjoint reading of the relevant Regulation, namely, Regulation 56 (ii) (b) of the Central Commission, Regulation 3 (a) of the State Commission, Tariff Policy and the provision of the Electricity Act, 2003 would make it clear that the National Tariff policy provides with regard to Depreciation that the Central Commission shall notify the rate of Depreciation in such a manner that there should be no need for any Advance Against Depreciation. This means that unless the Central Commission notifies such a rate of Depreciation, the Advance Against Depreciation cannot be denied on the basis of policy.*
>
> *(b) In the present case, the Orissa State Commission computed the Depreciation on the basis of the pre-1992 rate of Depreciation and allowed the special appropriation to ensure the financial viability and also to ensure that the Transmission companies, namely, OPTCL meets its principal repayment obligation.*
>
> *(c) While allowing the Special appropriation, the State Commission has given all the reasons which are in consonance with the Regulations of the Central Commission as well as the State Commission."*

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

**Return on Equity:**

188. Return on Equity is projected based on CERC Regulations, 2009. OPTCL does not agree to the suggestion given by Objectors as this is contrary to the provisions of CERC Regulations.

**Interest on Working Capital:**

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

190. Even though Transmission Charges of OPTCL are recovered as first charge from monthly revenue earning of DISCOMs through Escrow Mechanism, the bills are not paid immediately by DISCOMs. At present, CESU is making payment within two days and other three DISCOMs are making payments within 30 days of submission of Bills by OPTCL. The wheeling charges are also not paid immediately to OPTCL. As such, OPTCL requires minimum cash balance to meet the expenses towards Employee Cost, R&M expenses, A & G expenses and Interest expenses.

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

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

**Contingency Reserve:**

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

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

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

194. OPTCL prays the Commission to take a suitable decision in this regard.

**Pass through Expenses**:

195. The proposal for pass through submitted by OPTCL was based on the Audited Accounts from FY 2006-07 up to FY 2009-10 and Provisional Accounts of FY 2010-11. The losses have arisen due to low tariff allowed by Hon'ble Commission in past years which need to be serviced by way of recovery through tariff only. Under the provisions of the Act, any reasonable expenditure incurred by the licensee would be allowed as a pass through and recovered through tariff. Survival of OPTCL will be doubtful if past losses are not allowed to pass through. Accordingly, a sum of Rs. 205.81 Crore has been proposed to be recovered from the tariff as a pass through in the ARR of FY 2012-13 based on the provisional accounts for FY 2010-11.

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

196. Year wise proposal, approval and actual expenditure towards R&M, A&G, and O&M for the period from 2000-01 to 2011-12 (up to Jan' 12) are given below. The actual figures are as per audited accounts up to the year 2010-11. For the year 2011-12 (up to January 2012), the actual figures are based on cash flow statement.

**Table - 22**

| **Year** | **R&M cost (Rs in Cr.)** | | | **A&G cost (Rs in Cr.)** | | | **O&M cost (Rs in 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 | 26.39 (up to Jan'12) | 38.34 | 18.00 | 19.60 (up to Jan'12) | 1084.29 | 431.14 | 260.53 (up to Jan'12) |

**Sales projection**

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

**Revenue Gap**

198. The revenue surplus of Rs. 126.07 Crore worked out by the Objectors is not acceptable to OPTCL.

**VIEWS OF THE GOVT. OF ORISSA (Para 199 to 201)**

199. The representative of the State Govt. who participated during the public hearing on 23.02.2012 submitted that the views of the Govt. would be filed before the Commission very soon. The Govt. of Orissa, Department of Energy vide letter No.2261 dated 19.03.2012 informed the Commission the following points those are quite relevant to OPTCL.

**Keeping in abeyance the up valuation of assets, moratorium of debt services etc.**

200. 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.

**Viability Gap funding for OPTCL**

201. A budget provision of Rs.300 crore in a period of 5 years is being provided to OPTCL from 2011-12 in the form of equity funding for construction of grid substation and associate transmission lines in backward and inaccessible areas to improve the quality of supply of power.

**OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (Para 202 to 206 )**

202. The State Advisory Committee (SAC) constituted under Section 87 of Electricity Act, 2003 met on 29th February, 2012 to debate and deliberate on the Annual Revenue Requirement and Tariff application for the FY 2012-13 of the utilities namely OHPC, GRIDCO, OPTCL, SLDC, CESU, NESCO, WESCO and SOUTHCO. The Committee inter alia discussed the following issues.

203. At the beginning of the meet Shri Surendra P. Khedkar, Consumer Counsel & representative of WISE, Pune, presented the following summary of the ARR & Tariff filing by the Licensees for FY 2012-13 :

**Table - 23**

Summary of ARR & Tariff Proposals for FY 2012-13

| Name of Licensee/Generator | OHPC* | GRIDCO** | OPTCL | SLDC | DISCOMs *** |
|---|---|---|---|---|---|
| Appr. ARR for 11-12 (Rs. Cr) | 382.18 (387.97) | 5952.92 | 572.50 | 8.8031 | 7056.53 |
| Props. ARR for 12-13 (Rs. Cr) | 404.22 (412.23) | 9835.54 | 1330.46 | 10.474 | 9775.25 |
| % Rise Proposed | 5.77 (6.25) | 65.22 | 132.39 | 18.98 | 38.53 |
| Approved Tariff (P/U) for 11-12 | 68.01 (65.96) | 231.65 | 25.00 | 0.39 | 404.31 |
| Proposed Tariff for 2012-13 (P/U) | 71.93 (70.09) | 410.98 | 54.68 | 0.43 | 619.96 |
| % Rise Proposed | 5.76 (6.26) | 77.41 | 118.72 | 10.26 | 53.45 |

Note : * Figurtes in the bracket are including the Odisha share of expenses of Machhkund H.E.Project (Joint project of AP & Odisha)

** The proposed ARR of GRIDCO for FY 2012-13 is based on existing tariff of OHPC for FY 2011-12.

***The proposed ARR of DISCOMs is based on existing BSP of 231.15 P/U, for FY 2011-12 Tr. Tariff of 25 P/U & SLDC Charges of 0.18 P/U.

204. Outlining the ARR proposal of OPTCL for 2012-13 which is pegged at Rs.1330.46 crore he pointed out that the proposed transmission tariff of the power utility for the year is 54.68 p/u. Similarly the SLDC proposes ARR of 10.47 crore. The Major issues relating to OPTCL are cost and time overruns of projects, inability to spend R&M funds and rising employee cost. As far as the SLDC is concerned the executive and staff position had not been increased by OPTCL in the lines of ERLDC since the last 3 years inspite of the Commission's orders.

**Need for Cost Control**

205. GRIDCO and OPTCL as well as DISCOMs have asked for abnormal price hike and are trying to pass on all costs to the consumer without increasing their operational efficiency. He pointed out that in many case licensees have exceeded approved quantum of expenditure without approval of the Commission and such unauthorized purchase should be not be passed on to the consumers. Regarding GRIDCO's energy cost, he agreed that due to poor rainfall the costly thermal power is being purchased and this will add to the power purchase cost. GRIDCO is also purchasing extra energy over and above that approved by the Commission at a higher cost but billing DISCOMs at a lower rate of BST fixed by the Commission. This extra expenditure is due to higher loss because of higher demand by the DISCOMs. It is the result of higher distribution loss than that is approved for DISCOMs by the Commission. This extra cost should be borne by the DISCOMs, he added. Similarly, interest paid by GRIDCO on the arrear energy charge of REL to NTPC should not be passed on to consumers. UI Charge, DPS should be collected from DISCOMs.

**Evacuation Plan of OPTCL**

206. OPTCL should outline their perspective action plan for evacuation of power from all CGPs, IPPs and Mega Power Stations for proper utilization of Odisha share of power. The OPTCL has proposed a transmission loss of 3.8% and this can be brought down further by installation of capacitor banks at required places and completion of pending EHT lines within targeted time. Consumers are paying huge amount towards interest charges on capital investment of OPTCL to strengthen transmission system but are not benefiting from the same. OPTCL should take up works upto 220KV instead of outsourcing the same and paying extra supervision charges. Further SLDC had not been ring fenced and is not operating independently. A wholly owned corporation should be setup for this purpose but should not be a subsidiary to OPTCL.

**COMMISSION'S OBSERVATIONS (Para 207 to 225)**

**ISSUES ADDRESSED**

207. The Commission, for approval of ARR and determination of transmission tariff for OPTCL for the FY 2012-13 continues to follow the same principles as laid down in CERC Tariff Regulations, and guided by the provisions of the National Tariff Policy as well as other statutory Notifications and directives, while giving due considerations to the ground realities of the Odisha Power Sector. The same principle has also been followed by the Commission for this ARR determination of OPTCL for FY 2012-13.

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

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

210. 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 2012-13**

211. 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'.

212. 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.

213. OPTCL in its ARR filing for FY 2012-13 stated that the actual transmission loss in the OPTCL transmission system from April 2011to September 2011 works out to be 3.82% and OPTCL proposes transmission loss of 3.80 % for the year FY 2012-13 based on the approval in the Business Plan of OPTCL as well as on the present trend.

214. OPTCL submitted that the Commission had approved 5% loss for 2007-08, 4.5% loss for 2008-09, 4% loss for 2009-10 & 4% loss for 2010-11. The actual transmission loss for 2006-07, 2007-08, 2008-09, 2009-10 & 2010-11 is computed as 5.04%, 4.82%, 4.52 %, 4.11% and 3.93% respectively. Based on the present trend which is about 3.82% during the period Apr-Sept 2011-12, OPTCL has proposed the Transmission Loss of 3.8 % for 2012-13.

215. The approved and actual transmission loss for the year 2005-06 to 2011-12 is furnished in the table below.

**Table – 24**

| FY | **2006-07** | **2007-08** | **2008-09** | **2009-10** | **2010-11** | **2011-12** |
|---|---|---|---|---|---|---|
| Approved (%) | 4.00 | 5.00 | 4.50 | 4.00 | 4.00 | 3.90 |
| Actual audited (%) | 5.04 | 4.82 | 4.52 | 4.11 | 3.93 | 3.82(Apr -Sept-11) |

216. The Commission observes that the transmission loss is dependent on system configuration and power flow requirements at different load centers. The Commission vide Order dated 19.07.2010 in Business Plan of OPTCL had approved the Transmission loss of OPTCL system as 3.80% for FY 2012-13. The Commission has also found that system loss in OPTCL Network during first six months of FY 2011-12 i.e. from April to September, 2011 is about 3.82%. The Commission therefore approves 3.80% for FY 2012-13 as transmission loss for wheeling.

217. The Commission directs that OPTCL shall continuously monitor the operation of the transmission system, prevent overloading wherever possible by load diversion and take up innovative measures for improving system loading of the existing network. Effective utilization of new lines and their impact on transmission loss need to be intimated to the Commission periodically and kept in the website of OPTCL for information of all stakeholders.

**Execution of Projects**

218. Many objectors pointed out that the strategy of OPTCL in execution of Projects is not matching to the downstream network planning of the State. Commission is not able to appreciate the reason cited by the OPTCL as regard to inordinate delay in

completion of its on going projects. The Licensee is adopting a casual approach towards completion of Projects. Responsibility and accountability must be fixed on Project Managers for effecting completion of the Projects as per the schedule. The Project Managers must identify the critical paths ahead of schedule. The Commission further direct OPTCL that DISCOMs are to be intimated before hand so that they should be prepared for receiving power from new/augmented grid s/s and accordingly build their down stream distribution lines for evacuation of power. OPTCL should discuss with the DISCOMs before submission of transmission project for approval of OERC, so that the investment s/s should not be left idle due to non-completion inter linking transmission lines.

219. It is regretted that the delegation of the power as advised by the Commission vide letter No.OERC/4967 dtd.21.09.2009 at various level of execution has not yet been finalized by OPTCL. This is of greater importance in the present context in view of the evacuation of IPP power and met the increase of demand due to massive Rural Electrification in the State. Delegation of the administrative, technical and financial power should be finalised latest by 30.04.2012.

**Evacuation of IPP power**

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

**Incentives to the Employees**

221. As per OPTCL filing the transmission system availability has been more than 99% for last two years. However the computation of the data needs to be verified. OPTCL is directed to submit the soft copy of the availability calculation sheet before the Commission before 30$^{th}$ April for verification of the same. Pending the verification, the Commission has allowed some amount of incentive to be recovered in the tariff. It is worthwhile to note that the incentive so generated is nothing but a part of the revenue. In case OPTCL shows higher availability the incentive passed on to the licensee need not necessarily be spent towards incentivising the employees. The additional amount should be utilized for expansion and up-gradation of OPTCL network to improve the voltage profile in the state. **In this context the Commission is of opinion that the system availability Computation Sheet of OPTCL should be approved by the Member Secretary Grid Co ordination Committee in each month to qualify to get such incentive. Based on the actual system availability, the incentive quantum shall be trued up. However, under this head the Commission had allowed Rs.2.0 cr. for FY 2011-12 and kept it constant at Rs.2.0 cr. For FY 2012-13.**

**Service to the EHT consumers**

222. Regarding supervision charges and remunerative methods the Commission reiterates its order already passed on 26.04.2011 in Case No.63 of 2006.

223. Regarding connectivity and SCADA at 220 KV Grid S/S OPTCL should stick to its time-frame as assured in its rejoinder and complete the task within 36 months.

**Transmission charges from CGPs having Captive load at a separate place in side the state.**

224. The Commission while approving the ARR of OPTCL for FY 2011-12 had allowed the transmission charges for transmission of 300 MU for wheeling and 100 MU for back up power of the CGPs. NALCO has opposed for collection of separate transmission charges for back up/ wheeling power. GRIDCO in its letter No.PP-COM-VIII-6/95 (Vol.VI)/1228(7) dtd.13.01.2012 has given clearance to OPTCL to raise bill for separate transmission charges towards cost of emergency/back up power availed by NALCO. Hence the objection of NALCO to pay separate transmission charges to OPTCL has already been settled. In view of this the Commission allows OPTCL to raise monthly transmission charges on such CGPs like NALCO and IMFA during FY 2012-13.

225. Commission has approved various Investment Plans proposed by OPTCL from time to time. The details of proposed Investment Plan and their schedule date of completion is given under table below:

**Table – 25**

**INVESTMENT PLAN APPROVED BY OERC**

| Sl. No. | Name of the Project | Case No. | Date of Order | Estimated Amount (Rs. Cr.) | Schedule date of completion |
|---|---|---|---|---|---|
| 1 | 400 KV Meramundali – Duburi D.C. line | 01/2007 | Dt.02.05.07 | 131.47 | June-09 |
| 2 | 220/132 KV S/S at Bhadrak alongwith associated transmission line | 01/2007 | Dt.02.05.07 | 27.64 | June-09 |
| 3 | 132/33 KV S/S at Basta along with associated transmission line | 01/2007 | Dt.02.05.07 | 16.98 | June-09 |
| 4 | 132/33 KV S/S at Karanjia along with associated transmission line | 01/2007 | Dt.02.05.07 | 24.20 | June-09 |
| 5 | 132/33 KV S/S Barapalli along with associated transmission line | 01/2007 | Dt.02.05.07 | 15.86 | June-09 |
| 6 | 132/33 KV S/S at Anandpur along with associated transmission line | 58/2007 | Dt.26.12.07 | 23.68 | June-10 |
| 7 | 132/33 KV S/S at Purushottampur along with associated transmission line | 04/2007 | Dt.04.04.08 | 15.99 | Sep,09 |
| 8 | 132 KV Paradeep-Jagatsinghpur S.C. line with feeder bay extension at both ends. | 04/2007 | Dt.04.04.08 | 18.19 | 24 months from the date of award. |
| 9 | * 132/33 KV S/S at Nuapada along with associated transmission line | 15/2008 | Dt.05.08.08 | 34.84 | June, 2010 |

| Sl. No. | Name of the Project | Case No. | Date of Order | Estimated Amount (Rs. Cr.) | Schedule date of completion |
|---|---|---|---|---|---|
| 10 | * 132/33 KV S/S at Dabugaon along with associated transmission line | 15/2008 | Dt.05.08.08 | 25.97 | Dec,09 |
| 11 | * 132/33 KV S/S at Chandpur along with associated transmission line. | 15/2008 | Dt.05.08.08 | 16.81 | Dec, 09 |
| 12 | * 132/33 KV S/S at Padampur along with associated transmission line | 19/2008 | Dt.05.08.08 | 27.57 | 24 months from the date of award. |
| 13 | * 132/33 KV S/S at Kuchinda along with associated transmission line | 19/2008 | Dt.05.08.08 | 25.96 | 24 months from the date of award. |
| 14 | * 132/33 KV S/S at Bhawanipatna along with associated transmission line | 20/2008 | Dt.05.08.08 | 19.59 | 24 months from the date of award. |
| 15 | * 132/33 KV S/S at Boudh along with associated transmission line | 20/2008 | Dt.05.08.08 | 29.87 | 24 months from the date of award. |
| 16 | 132/33 KV S/S at Banki along with associated transmission line | 24/2008 | Dt.18.05.09 | 21.16 | 24 months from the date of award. |
| 17 | 220/132 KV S/S & 132/33 KV S/S at Karadagadia along with associated transmission line | 31/2008 | Dt.18.05.09 | 80.94 | 24 months from the date of award. |
| 18 | 132/33 KV S/S at Kalunga along with associated transmission line. | 74/2008 | Dt.27.08.09 | 17.93 | Dec, 2010 |
| 19 | 132/33 KV S/S at Barbil along with associated transmission line | 74/2008 | Dt.27.08.09 | 17.40 | Dec,2010 |
| 20 | 220/33 KV S/S at Bonai along with associated transmission line | 74/2008 | Dt.27.08.09 | 28.74 | Dec,2010 |
| 21 | 220 KV Bidanasi – Cuttack D.C.line | 74/2008 | Dt.27.08.09 | 9.43 | Oct,2010 |
| 22 | Restoration of 220 KV Budhipadar-Burla-Bolangir D.C. line | 74/2008 | Dt.27.08.09 | 28.88 | July,09 |
| 23 | Provision of 3rd transformer bays with capacity up-gradation in different S/Ss. | 39/2008 | Dt.30.12.08 ( interim order) | 152.30 | 2008-09 |
| | | | | 125.82 | 2009-10 |
| 24 | 2X12.5 MVA, 132/33 kV substation at Udala along with associated Transmission line | 86/2009 | Dt.15.09.09 | 29.92 | June-11 |
| 25 | 2X40 MVA, 220/33 kV S/S at Gopinathpur, Keonjhar along with associated Transmission line | 86/2009 | Dt.15.09.09 | 25.68 | April-11 |
| 26 | 2X160 MVA, 220/132 kV & 2X20MVA, 132/33 kV S/S at Lapanga along with associated Transmission line | 86/2009 | Dt.15.09.09 | 70.19 | December-11 |
| 27 | Conversion of existing 32.5 (20 +12.5) MVA, 132/11 KV S/s to 2 x 40 MVA, 132/33 KV S/s at Sarasmal, Jharsuguda. | 22/2010 | Dt.30.09.10 | 13.14 | Mar-12 |

| Sl. No. | Name of the Project | Case No. | Date of Order | Estimated Amount (Rs. Cr.) | Schedule date of completion |
|---|---|---|---|---|---|
| 28 | 2 x 100 MVA, 220/132 KV and 2 x 40 MVA, 132/33 KV S/s at Kuanramunda alongwith associted transmission line. | 22/2010 | Dt.30.09.10 | 62.12 | Mar-13 |
| 29 | 2 x 100 MVA S/s at Cuttack alongwith associated transmission line. | 22/2010 | Dt.30.09.10 | 30.39 | Mar-13 |
| 30 | 2 x 40 MVA, 132/33 KV s/s at Luna in Kendrapada alongwith associated transmission line. | 78/2010 | Dt.05.08.10 | 19.59 | Mar-13 |
| 31 | Installation of Capacitor Banks(275 MVAr) in 23 nos. of Grid S/S. | 23/2010 | Dt.20.05.10 | 18.59 | 31.03.11 |
| 32 | 2 x 100 MVA, 220/132 KV and 2 x 40 MVA, 132/33 KV S/s at Dhamara in Bhadrak alongwith associted transmission line. | 78/2010 | Dt.5.08.10 | 74.96 | Mar-13 |
| 33 | Implementation of Enterprise Resources Planning(ERP) system, Wide Area Network(WAN) and Data Center.(Capital Expend. 17.796 Cr. and R&M-10.377 Cr.) | 33/2009 | Dt.13.11.09 | 28.17 | 2012-13 |
| 34 | Integration of 30 existing grid S/S under ULDC expansion scheme. | 124/2009 | Dt.16.07.10 | 36.00 | 2012-13 |
| 35 | Provision of SCADA interface points at all 220 kV Grid S/S of OPTCL. | 48/2008 | Dt. 02.11.10 | 67.48 | Progressively 24 to 36 months from the date of release of advance payment by OPTCL. |
| 36 | Restoration of Ib-Meramundali | 127/2010 | Order reserved | 138.28 | |
| 37 | Replacement of ACSR Conductor by ACCR in 132 KV Chandaka-Ransingpur Procurement of transformers by OPTCL | 130/2010 | 18.12.2010 | 30.30 | Chandaka - Mancheswar by 31.03.2011 & Chandaka - Ranasinghpur by 30.09.2011 |
| 38 | Procurement of Transformers by OPTCL | 48/2008 | 27.06.09 | 151.00 | |
| 39 | 2X20 MVA, 132/33 KV S/s at Olavar alongiwth associated tranmission line | 27/2011 | 25.06.11 | 33.94 | Dec-13 |
| 40 | 2X160 MVA, 220/132 KV, S/s at Kesinga in Kalchandi Dist. With associated transmission line. | 27/2011 | 25.06.11 | 75.88 | Dec-13 |
| | | | **Total** | **1,842.85** | |
| | * Agreement made with PGCIL on 19.12.2008 | | | | |

**FINANCIAL ISSUES (Para 226 to 335)**

**Annual Revenue Requirement of OPTCL**
**Operation and Maintenance expenses**

226. The operation and maintenance expenses of OPTCL are considered under the following heads:

- Employees Cost
- Administration and General expenses
- Repair and Maintenance expenses

**Employees Cost**

227. For the financial year 2012-13, OPTCL has estimated an amount of Rs.655.36 cr. towards employees cost. Major components of the expenses for FY 2012-13 are depicted in the table below:

**Table – 26**

**Components of Employee Cost**

**(Rs. cr.)**

| | |
|---|---|
| Basic pay + Grade Pay | 79.27 |
| DA | 56.28 |
| HRA | 15.85 |
| Provision towards arrear pay revision | 49.04 |
| Terminal benefit | 420.62 |
| Payment of differential pension to Govt. Employees | 10.00 |
| Others | 33.84 |
| Less capitalization | 9.54 |
| **Total** | **655.36** |

228. The Commission in its transmission tariff order for FY 2011-12 had approved the following expenses towards employees cost and now a hike of 93.81% over the approved figure of FY 2011-12 has been proposed for FY 2012-13 as mentioned hereunder: -

**Table – 27**

**Employee Cost approved for FY 2011-12 and proposed for FY 2012-13**

**(Rs. cr.)**

| Item | Proposed for 2011-12 | Approved for 2011-12 | Proposed for 2012-13 | Percentage rise over the approved amount |
|---|---|---|---|---|
| Gross amount | 961.66 | 347.74 | 664.90 | |
| Less capitalization | 9.60 | 9.60 | 9.54 | |
| Net employees cost | 952.06 | 338.14 | 655.36 | 93.81 |

229. On scrutiny of the data provided by OPTCL, it is ascertained that the following factors are attributed to abnormal rise in employees cost.

- Provision towards arrear pay due for implementation of 6th Pay Commission Recommendations - Rs.49.04 cr.
- Provision towards terminal liability - Rs.430.62 cr.

230. With the broad analysis of employees cost as mentioned in above Para, the item-wise (major item) analysis of employees cost of OPTCL is discussed as under:

**Salaries (Basic and Grade Pay):** Under the head OPTCL estimates an amount of Rs.79.27 cr. during FY 2012-13 as against an amount of Rs.62.58 cr. approved by the Commission during FY 2011-12. While estimating the amount, the licensee has relied upon the audited data for FY 2010-11, which shows an amount of Rs.74.72 crore towards basic pay and grade pay. Over the figure of 2010-11 the licensee has assumed 3% escalation annually to determine the figure of Basic Pay + Grade pay.

231. Like earlier year for a realistic assessment of Basic Pay + G.P for 2012-13, the Commission called for the data of break-up of salary drawn during last 5 months (i.e. July, 2011 to Nov., 2011) of the current financial year. OPTCL in compliance to query submitted this data shown in table below:

**Table - 28**

**(Rs. Cr.)**

| Month | Basic Pay | GP | DA | HRA | Total |
|---|---|---|---|---|---|
| July, 2011 | 4.02 | 0.89 | 2.42 | 0.64 | 7.97 |
| August, 2011 | 4.02 | 0.90 | 2.42 | 0.64 | 7.98 |
| September, 2011 | 4.03 | 0.92 | 2.42 | 0.64 | 8.01 |
| October, 2011 | 4.05 | 0.91 | 2.53 | 0.66 | 8.15 |
| November, 2011 | 4.03 | 0.91 | 2.57 | 0.65 | 8.16 |
| Average for five months | 4.03 | 0.91 | | | |
| Extrapolated for 12 months for FY 2011-12 | 48.38 | 10.87 | | | |

Thus Pay + GP for the year 2011-12 worked out at Rs.59.25 cr. (Rs.48.38 cr. + Rs.10.97 cr.). In reply to query OPTCL has mentioned that the number of employees as on 01.04.2011 and 01.04.2012 are 3601 and 3488 respectively.

In addition to the above information OPTCL submitted that the draft version of the final report of National Productivity Council (NPC) has been examined by the Board of Directors of OPTCL during last meeting held on 02.12.2011. The number of additional post to be created in the proposed structure of NPC is given as under:

- Executive - 325 posts
- Non-Executive- 429 posts

232. The Commission has been examining the number of existing employees of OPTCL from the data submitted by them every year. During 1998-99 GRIDCO carried out an actuarial valuation for quantification of terminal liabilities of employees of transmission as well as the distribution business before separation as mandated in the Transfer Notification dtd. 28.11.1998. As per the actuarial report as on 31.03.1999 and as per the audited report of 2010-11 the position of regular employees existing on the date is given below:

**Table – 29**

| Particulars | OPTCL | WESCO | NESCO | SOUTHCO | CESU |
|---|---|---|---|---|---|
| No. of Employees as on 31.03.1999 | 5974 | 5562 | 4599 | 4674 | 8608 |
| No. of Employees as on 31.03.2011 | 3671 | | | | |
| Reduction of regular employees | 2303 | | | | |

It is seen from the above that there is a drastic reduction of the number of employees over a period of 12 years. The Commission expressed grave concern over the inadequate man power in OPTCL although the network assets of OPTCL have increased substantially. At the time of separation i.e. on 31.03.1999 OPTCL (managed by GRIDCO) has inherited assets base of Rs.1178.93 cr. which is increased to Rs.2793.54 cr. as on 31.03.2011. Therefore, the Commission feels that it is highly necessary to fill up the vacancy regularly for proper maintenance of the network assets of OPTCL which is the backbone of the power system of Odisha.

233. In view of the above observation, the Commission agrees with the proposal of OPTCL and directs that the report of NPC is to be implemented without any further delay. The OPTCL in their reply to query has mentioned that the financial implication of new posts as per NPC would be of the order of Rs.14.80 cr. per annum. The Commission does not agree the proposal of financial implication submitted by OPTCL as it was not supported with detailed calculation.

However, for the purpose of determination of number of employees as on 31.03.2013 the Commission considers 50% of the proposed addition of employees at the level of 377 nos. as the recruitment process will continue throughout the year. Accordingly, the financial implication shall be determined on average number of employees rather than considering the total number of employees proposed for that year.

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

**Table - 30**

| | As on 31.03.2011 | As on 31.03.2012 | As on 31.03.2013 |
|---|---|---|---|
| No. of existing employees | 3671 | 3488 | 3865 (3488 + 377) |
| Avg. no. of employees for the financial year | | 3580 [(3671+3488)/2] for 2011-12 | 3677 [(3488+3865)/2] for 2012-13 |

235. The basic pay + GP for FY 2012-13 is determined after factoring in average number of employees approved by the Commission in the above table and considering annual increment @3% on Basic Pay + Grade Pay extrapolated for 12 months for FY 2011-12. The amount works out to Rs.62.69 cr. for the financial year 2012-13.

**Dearness Allowance**

236. As regards Dearness Allowance, the prevailing rate approved by Govt. of Odisha is 58% w.e.f. 01.7.2011. In the past there has been periodic rise in DA from 1st January and 1st July of each year. Last time the incremental rate of DA was 7%. With the anticipated rise of 7% in each dose i.e. 01.01.2012, 01.07.2012 and 01.01.2013 the annual average DA for 2012-13 is evaluated at 72% in comparison to the existing DA rate of 58%. The Commission approves the same for the financial year 2012-13.

**House Rent and Medical Allowance**

237. In respect of other major expenditures such as medical allowance, house rent allowance etc. the following principles have been adopted.

Medical allowance - 5% of (Basic Pay + GP)
House rent allowance - 15% of (Basic Pay + GP)

While fixing the rate of HRA, the Commission scrutinized the data filed by the licensee in respect of previous years. An analysis of the filling by OPTCL is given below:

**Table - 31**

**(Rs. Cr.)**

| | **2007-08 (Actual) (2009-10 filing)** | **2008-09 (Actual) (2010-11 filing)** | **2009-10 (Actual) (2011-12 filing)** | **2010-11 (Actual) (2012-13 filing)** |
|---|---|---|---|---|
| Basic Pay + GP | 47.90 | 68.26 | 92.91 | 74.72 |
| HRA | 5.62 | 7.94 | 9.79 | 9.14 |
| %to Basic Pay + GP | 11.73 | 11.63 | 10.54 | 12.23 |

As seen from the above the percentage of HRA to Basic pay + GP varies between 10.54% to 12.23% which is below the rate of 15% approved by the Commission. The Commission is, therefore, justified is allowing 15% of Basic Pay + GP considering the fact that OPTCL provides quarters to employees at different locations and, therefore, 20% flat on total Basic pay + GP as proposed by GRIDCO should not be allowed towards HRA. Hence, the Commission approves 15% of Basic pay + GP towards HRA.

**Stipend to Management Trainee**

238. OPTCL proposed to recruit 213 numbers of Asst. Managers at a consolidated pay of Rs.15,000/- PM, 139 numbers of Junior Managers at a consolidated pay of Rs.10,000/- PM and made a provision of Rs.3.39 Cr for the FY 2012-13. OPTCL submits that a significant number of posts are lying vacant in different ranks due to retirement, death, promotion etc. as a result of which the functioning of organization has been seriously affected. OPTCL plans to fill up the vacancy in a phased manner and accordingly the recruitment process is going on.

239. The Commission accepts the proposal of OPTCL and allows Rs.3.39 cr. towards stipend to management trainee under the head employee cost for the FY 2012-13.

Besides above OPTCL proposed Rs.1.9 cr. towards recruitment of 305 numbers of Executives. The Commission allows the same as a pass through for 2012-13.

**6th Pay Arrear:**

240. The Commission in line with last tariff Order allows 1/3rd of the total amount of arrear of Rs.147.13 cr. The Commission, therefore, allows Rs.49.04 crore i.e. 1/3rd of 147.13 crore during 2012-13 towards arrear dues in respect of 6th Pay Commission recommendation.

**Terminal Benefits**

241. For the year 2012-13, OPTCL has projected an amount of (a) Rs.420.62 cr. towards terminal liability of employees and existing pensions and (b) Rs.10.00 crore towards payment of differential pension and pensionary benefits to the absorbed Govt. Engineers in OPTCL/GRIDCO. The break up claim of OPTCL under item (a) is given under table below:

**Table - 32**

**(Rs. Cr.)**

| **Sl No.** | **Terminal Benefits** | **Projected Actuarial Liability as at 31.03.2011 (Approved by OERC)** | **Projected actuarial Liabilities as at 31.03.2013 (as per actuarial valuation)** | **Additional fund Requirement** |
|---|---|---|---|---|
| | **1** | **2** | **3** | **4= (3-2)** |
| 1 | Pension & Pension in Payment | 885.10 | 1287.96 | 402.86 |
| 2 | Gratuity | 66.09 | 63.83 | 0 |
| 3 | Leave Encashment | 64.67 | 73.23 | 8.56 |
| 4 | **Total** | **1015.86** | **1425.02** | **411.42** |
| 5 | Additional Gratuity liability towards revision of limit with retrospective effect | | | 8.20 |
| 6 | Employer's Contribution for Non-Pensioners & New Pension Scheme | | | 1.00 |
| 7 | **Total Liabilities** | | | **420.62** |

242. Regarding actuarial valuation the Commission in its last Tariff Order for 2011-12 has mentioned the following:

*"236. The Commission on 08.12.2009 appointed M/s. Darashaw & Company Pvt. Ltd., Mumbai as actuary for undertaking assessment of pension, gratuity and leave encashment liability of employees of four DISCOMs and OPTCL upto 31.3.2009 with projection for the financial year 2009-10 and 2010-11.*

*237. M/s. Darashaw & Co. the actuary have submitted the report and the final report has been sent to the concerned licensee through e-mail. A summary of such valuation vis-à-vis the corpus availability in respect of the licensee is given in table below:*

***Table – 36***
***Acturial Valuation as given by the Actuary M/s DARASHAW, Mumbai***

***(Rs. Crore)***

| | ***OPTCL*** | ***WESCO*** | ***NESCO*** | ***SOUTHCO*** | ***CESU*** |
|---|---|---|---|---|---|
| ***31.03.09*** | | | | | |
| *Pension* | *843.66* | *290.91* | *267.44* | *271.37* | *528.46* |
| *Gratuity* | *53.84* | *32.77* | *30.38* | *28.22* | *54.32* |
| *Leave* | *52.08* | *34.24* | *29.74* | *27.61* | *62.42* |
| ***Total*** | ***949.58*** | ***357.92*** | ***327.56*** | ***327.2*** | ***645.20*** |
| ***31.03.10*** | | | | | |
| *Pension* | *864.87* | *301.97* | *278.2* | *281.22* | *552.8* |
| *Gratuity* | *59.12* | *36.52* | *32.61* | *31.16* | *57.71* |
| *Leave* | *58.02* | *37.13* | *32.37* | *30.68* | *67.7* |
| ***Total*** | ***982.01*** | ***375.62*** | ***343.18*** | ***343.06*** | ***678.21*** |
| ***31.03.11*** | | | | | |
| *Pension* | *885.10* | *310.17* | *285.88* | *293.18* | *571.63* |
| *Gratuity* | *66.09* | *38.69* | *36.17* | *34.13* | *61.53* |
| *Leave* | *64.67* | *40.1* | *35.85* | *33.84* | *73.41* |
| ***Total*** | ***1015.86*** | ***388.96*** | ***357.9*** | ***361.15*** | ***706.57*** |

***Table – 37***
***Expected Corpus Availability***

***(Rs. Crore)***

| | ***OPTCL*** | ***WESCO*** | ***NESCO*** | ***SOUTHCO*** | ***CESU*** |
|---|---|---|---|---|---|
| *OB As on 01.4.99/Fund transfer from GRIDCO to DISCOMs* | *184.07* | *70.77* | *68* | *67.39* | *138.56* |
| *Allowed by the Commission* | | | | | |
| *1999-00* | *11.68* | *6.71* | *5.62* | *7.78* | *0.00* |
| *2000-01* | *25.22* | *6.27* | *7.07* | *7.07* | *0.00* |
| *2001-02* | *27.74* | *7.92* | *7.00* | *6.63* | *6.09* |
| *2002-03* | *30.52* | *8.08* | *7.21* | *6.81* | *6.27* |
| *2003-04* | *33.57* | *8.96* | *7.56* | *7.57* | *6.90* |
| *2004-05* | *117.54* | *11.30* | *8.35* | *9.40* | *3.25* |
| *2005-06* | *40.62* | *12.06* | *8.92* | *10.03* | *3.51* |
| *2006-07* | *44.68* | *12.07* | *9.55* | *9.73* | *13.19* |
| *2007-08* | *55.38* | *16.36* | *15.30* | *13.97* | *18.28* |
| *2008-09* | *51.34* | *37.02* | *25.16* | *24.49* | *48.10* |
| *2009-10* | *76.94* | *37.04* | *27.19* | *20.53* | *49.68* |
| *2010-11* | *140.20* | *51.81* | *51.13* | *58.22* | *75.84* |
| *Sub-Total* | *655.43* | *215.6* | *180.06* | *182.23* | *231.11* |
| ***Grand Total*** | ***839.5*** | ***286.37*** | ***248.06*** | ***249.62*** | ***369.67*** |

***Table – 38***
***Differential Funding requirement as per valuation***
***(Rs. Crore)***

| ***Licensee*** | ***Valuation as per Actuary (as on 31.3.2011)*** | ***Expected corpus availability*** | ***Difference to be funded*** |
|---|---|---|---|
| *OPTCL* | *1015.86* | *839.5* | *176.36* |
| *WESCO* | *388.96* | *286.37* | *102.59* |
| *NESCO* | *357.9* | *248.06* | *109.84* |
| *SOUTHCO* | *361.15* | *249.62* | *111.53* |
| *CESU* | *706.57* | *369.67* | *336.90* |

*238. It is seen from the above table that as on 31.3.2011 the differential liability to be funded works out to Rs.176.36 crore in respect of OPTCL. The Commission allows the entire differential amount of Rs.176.36 crore as a pass through in ARR for the FY 2011-12."*

243. As seen from the above order of the Commission, the entire corpus as on 31.03.2011 valued by the independent actuary is fully funded. To continue with the actuarial valuation of terminal liabilities the Commission has awarded the job afresh to M/s. Darashaw & Co. Pvt. Ltd. for conducting valuation upto 31.03.2010 with projection upto 31.03.2012 vide Lr. No. 1739 dtd. 17.09.2011, after following transparent procedure of selecting the actuary. On 08.11.2011 M/s Darashaw & Co. Pvt. Ltd. wrote a letter to the Commission that they would be unable to provide service in accordance with the initial discussion. Further, the Actuary stated that such thing is beyond their sphere of control. The Commission after getting the refusal letter from the Actuary decided to allow the terminal benefit on a provisional manner for the year 2012-13. The valuation can be updated within a period of three to five years.

Further, the Commission observed that OPTCL inherited the pensional liability of 4493 numbers of employees of the erstwhile OSEB at the time of separation of transmission and distribution business. This is not the case with DISCOMs.

Hence, pending periodical actuarial valuation as per the direction of the Commission the terminal liability may be allowed based on the cash outflow for the financial years.

244. In reply to the query OPTCL in Item No. 14 have submitted that for the FY 2011-12 (upto to 30.11.2011) the cash outflow towards gratuity, leave, pension amounts to Rs.80.40 cr. (pension-Rs.67.25 cr. + Gratuity Rs.8.74 cr.+ leave Rs.4.41 cr.). This excludes an amount of Rs.0.86 cr. towards 6th Pay arrear pension. The actual pay out for a period of 8 months (upto 30.11.2011) of the financial year is extrapolated for a period of 12 months and the annual terminal liability is determined at Rs.120.60 cr. (Rs.80.4/8 x 12) and the Commission approves the same towards terminal liability for the FY 2012-13.

245. OPTCL further submitted that pursuant to the Govt of Odisha in Finance Dept. Resolution No. 16500 dated 02.04.2011, OPTCL issued Notification No. AW-Pen-I-9/2009/11279 dated 05.07.2011 for revision of the maximum limit of Death-cum-Retirement Gratuity from Rs.2.50 lakhs to Rs.7.50 lakhs w.e.f.

01.01.2006 for executive and non-executive employees of OPTCL. The additional liabilities in this respect works out to Rs.8.20 Crore (approx.). It is further submitted that this additional liabilities of Rs.8.20 Crore was not included in the projected liabilities of Gratuity done by actuary. Hence, OPTCL requested the Commission to approve the same as additional liability in the ARR. The Commission approves the same as it is a statutory liability and OPTCL has to make provision for discharging the liability. Besides above OPTCL claim Rs.1 crore towards employers matching contribution for employees joining under NPS and non-pensioner category. The Commission allows the same as a pass through in revenue requirement.

246. Regarding item (b) i.e. payment of differential pension and pensionary benefits to the absorbed Govt. Engineers in OPTCL/GRIDCO, the OPTCL has made a provision of Rs.10 cr. to be allowed in the ARR for FY 2012-13. In the tariff order for FY 2011-12, the Commission has given the following directions:

*"249. Thus, the Commission would like to summarize its direction and observation as under:-*

*(i) The Commission agrees and approves in-principle for calculating the pensionary benefits of the absorbed engineers by taking into account the last pay (including grade pay) drawn to be drawn from the transferee organization and the retirement from such organization and service rendered both under the State Govt. as well as under the Transferee organization for the limited purpose of protecting the loss of pension to those absorbed engineers.*

*(ii) After deducting pension/revised pension being drawn/to be drawn by the absorbed engineers from the State Govt. in respect of the service rendered under the State Govt. up to the appointed date (i.e. 31.3.1997 AN) shall be deducted from the revised pension which is to be determined by taking into account the last pay including grade pay drawn from the transferee organization on the date of retirement from such organization and the service rendered both under the State Govt. and the Transferee organization.*

*(iii) The revised pension for the period rendered under the State Govt. would be calculated in respect of (a) those transferred/ absorbed engineers those who have retired or due to retire on or after 01.12.2008, or would retire in future (b) transferred/absorbed engineers those who have already retired before 01.01.2006 and (c) those who have retired on or after 01.01.2006 but before 01.12.2008.*

*(iv) Since the pension/revised pension would continue to be drawn from the State Govt. in respect of the service rendered under the State Govt., there is no occasion for refund of pension already drawn from the State Govt. nor there would be any occasion for*

*the State Govt. to deposit the pensionary liabilities with the Transferee organization.*

(v) *For determining the enhanced differential pension of those absorbed engineers from the transferee organization and the revised pension from the state from time to time the procedure outlined from para 246 to 247 would be followed keeping in view the amendment that may be made by Finance Department from time to time for revision of pension from the State Govt. employees.*

*250. The Transferee organizations (OPTCL/GRIDCO/OHPC) and Energy Department may take follow up action in the light of the observations and analysis made from Para-242 to 249 with due consultation with Finance Department, Govt. of Orissa."*

247. For the FY 2011-12 the Commission provisionally allowed Rs.3 cr. pending actual additional liability on account of enhanced pension.

During FY 2012-13 OPTCL made a provision of Rs.10 cr. OPTCL in its submission had stated the following:

"In this regard necessary notification of the Finance Deptt., Govt. of Odisha for payment of differential liabilities is yet to come out. After the same is notified, OPTCL will work out the actual additional differential liabilities towards Pension, Commutation and Gratuity. It is expected that the initial amount required will be much higher than the amount allowed as the number of retired employees exceeds 225. In view of above, additional fund of Rs.10.00 Crore may be provided on adhoc basis for FY 2012-13."

The Commission approves an amount of Rs.10 cr. provisionally for the FY 2012-13 and directs to pursue the matter with Govt. of Odisha and workout the actual liability on the basis of the Govt. of Odisha notification.

248. The statement of Employees Cost for FY 2012-13 proposed by OPTCL and approved by the Commission is depicted in table below:

**Table – 33**

**Employees Cost proposed and approved for FY 2012-13**

**(Rs. Cr.)**

| Sl. No. | Particulars | Approved for FY 11-12 | Proposed for FY 12-13 | Approved for FY 12-13 |
|---|---|---|---|---|
| 1. | Salaries (Basic Pay+ Grade Pay) | 62.58 | 79.27 | 62.69 |
| 2. | Overtime | - | - | - |
| 3. | Dearness Allowance | 34.42 | 56.28 | 45.14 |
| 4. | Other Allowance | 0.73 | 0.66 | 0.66 |
| 5. | Bonus and Overtime | 0.13 | 0.13 | 0.13 |
| 6. | Provision towards Wage revision | - | 2.80 | 2.80 |

| Sl. No. | Particulars | Approved for FY 11-12 | Proposed for FY 12-13 | Approved for FY 12-13 |
|---|---|---|---|---|
| 7. | Enhanced in Salary (NPC) | | 14.8 | - |
| 8. | Sub Total (1 to 7) | 97.86 | 153.95 | 111.42 |
| | **Other Staff Cost** | | | |
| 9. | Reimbursement of Medical Expenses | 3.13 | 3.96 | 3.13 |
| 10. | Leave Travel Concession | 0.73 | 0.77 | 0.77 |
| 11. | Reimbursement of House Rent | 9.39 | 15.85 | 9.40 |
| 12. | Interim Relief to Staff/ Premium under GIS | 0.53 | 0.46 | 0.46 |
| 13. | Encashment of Earned Leave | - | - | - |
| 14. | Stipend to Management Trainee | 3.91 | 3.39 | 3.39 |
| 15. | Stipend for new recruited Non-Executive | | 1.90 | 1.90 |
| 16. | Honorarium | | 0.08 | 0.08 |
| 17. | Payment under Workmen compensation Act | 0.03 | 0.06 | 0.06 |
| 18. | Ex-gratia | | 0.16 | - |
| 19. | Miscellaneous | 0.56 | 0.13 | 0.13 |
| 20. | Uniform and liveries | | 1.33 | 0.33 |
| 21. | Sub Total (9 to 20) | 18.28 | 28.10 | 19.66 |
| 22. | Staff Welfare Expenses | 3.20 | 3.20 | 3.20 |
| 23. | Terminal Benefits | 176.36 | 420.62 | 129.80 |
| 24. | Payment of differential pension and pensionary benefit to the absorbed Govt. Engineer in OPTCL/GRIDCO | 3.00 | 10.00 | 10.00 |
| 25. | **Total (7+21+22+23+24)** | **298.70** | **615.86** | **274.08** |
| 26. | Less : Capitalisation | 9.60 | 9.54 | 4.64 |
| 27. | Net Total | 289.10 | 606.32 | 269.44 |
| 28. | Arrear due to 6th Pay Commission recommendation | 49.04 | 49.04 | 49.04 |
| | **Total** | **338.14** | **655.36** | **318.48** |

**R&M Expenses**

249. OPTCL has proposed an amount of Rs.95.46 cr. towards repair and maintenance expenditure for FY 2012-13. The details of R&M expenditure are given below:

**Table – 34**
**Break up of R&M expenses under different heads**

| Particulars | OPTCL Proposal FY 2012-13 |
|---|---|
| a) O&M | 54.03 |
| b) Telecom | 13.60 |
| c) Civil Works | 3.50 |
| d) Information Technology | 4.33 |
| e) Rolling Stock | 20.00 |
| **Total R&M Expenses (a+b+c+d+e)** | **95.46** |

250. Item-wise R&M expenditure of operation and maintenance wing proposed by OPTCL for FY 2012-13 is shown in the table as under:

**Table – 35**
**Item-wise R&M Expenditure of O&M Wing Proposed for FY 2012-13**

| Sl. No. | Work/Equipment details | Unit Rate (Rs. Lakh) | Quantity | Total Cost (Rs. Cr.) |
|---|---|---|---|---|
| 1 | Circuit Breaker (Nos.) | | | |
| | a) 400kV | 25 | 3 | 0.75 |
| | b) 220kV | 15.03 | 14 | 2.10 |
| | c) 132kV | 6.32 | 30 | 1.90 |
| | d) 33kV | 1.78 | 50 | 0.89 |
| 2 | Station Battery (Sets) | 14.8 | 5 | 0.74 |
| 3 | Station Battery Charger | 3.85 | 3 | 0.12 |
| 4 | C.T. (Nos.) | | | |
| | a) 400kV | 8.9 | 5 | 0.45 |
| | b) 220kV | 4.03 | 29 | 1.17 |
| | c) 132kV | 1.18 | 10 | 0.12 |
| | d) 33kV | 0.33 | 50 | 0.17 |
| 5 | P.T. (Nos.) | | | |
| | a) 220kV | 2.79 | 5 | 0.14 |
| | b) 132kV | 1.64 | 5 | 0.08 |
| | c) 33kV | 0.21 | 5 | 0.01 |
| 6 | L.A. (Nos.) | | | |
| | a)400kV | 1.14 | 6 | 0.07 |
| | b) 220kV | 0.45 | 20 | 0.09 |
| | c) 132kV | 0.31 | 30 | 0.09 |
| | d) 33kV | 0.07 | 30 | 0.02 |
| 7 | Relays (Diff types.) | LS | | 1.00 |
| 8 | Testing equipment (Different types ) | LS | | 1.00 |
| 9 | On Line Filter M/C | 20 | 6 | 1.20 |
| 10 | Online Moisture Remover | 50 | 3 | 1.50 |

| Sl. No. | Work/Equipment details | Unit Rate (Rs. Lakh) | Quantity | Total Cost (Rs. Cr.) |
|---|---|---|---|---|
| 11 | Off Line Fault Locator | 25 | 6 | 1.50 |
| 12 | Control cable.(Assorted in km.) | 1 | 30 | 0.30 |
| 13 | SF-6 Gas Cylinders (50 kg.) in Nos. | 0.56 | 50 | 0.28 |
| 14 | Overhauling of CB | LS | | 1.00 |
| 15 | Illumination of Grid Substation with repair of ACDB panel. | LS | | 1.00 |
| 16 | Spare for ERS system. | LS | | 0.50 |
| 17 | AMC on Energy Metering System. | LS | | 0.61 |
| 18 | Repair of defective Power Transformers | LS | | 10.00 |
| 19 | Renovation of Earthing system of EHT lines & Grid S/s. | LS | | 0.50 |
| 20 | ACMachine(In Nos) | 0.250 | 50 | 0.13 |
| 21 | Civil Works | LS | | 2.00 |
| 22 | Insulators (In Nos) | | | |
| | a) 90 KN LR for 132kV | 0.070 | 1000 | 0.70 |
| | b) 90 KN Disc | 0.005 | 2000 | 0.10 |
| | c) 120KN Disc | 0.007 | 1000 | 0.07 |
| | d) 160KNDisc | 0.007 | 500 | 0.04 |
| | e) 90KN LR for 220 kV | 0.100 | 700 | 0.70 |
| | f) 160 KN LR for 220 kV | 0.140 | 200 | 0.28 |
| | g) 120KN LR for 132kV | 0.080 | 200 | 0.16 |
| 23 | GI Earth Wire(7/3.15)(KM) | 0.22 | 100 | 0.22 |
| 24 | a) Vibration damper(In Nos)(conductor) | 0.006 | 200 | 0.01 |
| | b) Vibration damper(In Nos)(Earth Wire) | 0.004 | 200 | 0.01 |
| 25 | H/W Fitting(In Nos) | LS | | 0.20 |
| 26 | Installation and commisioning of new Energy meters | 0.11165 | 600 | 0.67 |
| 27 | Installation of 2nd Station Transformer (315KVA) in Grid S/s (Nos.) | 6 | 25 | 1.50 |
| 28 | AMC on different types of Testing equipment | LS | | 0.50 |
| 29 | Concreting of Switch Yard | LS | | 0.50 |
| 30 | 33kV C/R Panel | 2 | 4 | 0.08 |
| 31 | Misc. expenses for O&M field divisions such as; Painting of towers & Transformers, Switch yard cleaning, Transportation of trfs., Welding of tower members, AMC on A/c. machines,Gardening, Remetaling of Sub-Station, Strengthening of Towers & Sanitary works | LS | | 16.00 |
| 32 | Bus Augmentation | LS | | 0.50 |
| 33 | Towers | | | |
| i | OA ( 4.22 MT) x 2 | 0.56 | 8.44 | 0.05 |

| Sl. No. | Work/Equipment details | Unit Rate (Rs. Lakh) | Quantity | Total Cost (Rs. Cr.) |
|---|---|---|---|---|
| ii | OB ( 6.53 MT) x 2 | 0.56 | 13.06 | 0.07 |
| iii | OC ( 9.513 MT) x 2 | 0.56 | 19.03 | 0.11 |
| iv | PA ( 3.14 MT) x 2 | 0.56 | 6.28 | 0.04 |
| v | PB ( 4.761 MT) x 2 | 0.56 | 9.52 | 0.05 |
| vi | PC ( 5.914 MT) x 2 | 0.56 | 11.83 | 0.07 |
| | **Total** | | | **54.03** |

251. OPTCL proposes to spend Rs.13.60 cr. towards telecom R&M including ULDC. Details of the above amount is given in table below:

**Table – 36**
**R&M Expenditure Plan of Telecom Wing for FY 2012-13**

| Sl. No. | Item | Amount (Rs. In Cr.) |
|---|---|---|
| **1** | **AMC of RTU under ULDC project** | **1.05** |
| | a)Cost of AMC | 0.12 |
| | b) Cost of new feeder/ element integration | 0.18 |
| | c) Purchase of new RTU for replacement | 0.75 |
| **2** | **AMC APS package** | **0.22** |
| | a) Cost of AMC | 0.12 |
| | b) Cost of replacement/ repair of materials | 0.10 |
| **3** | **AMC of Wideband Communication package** | **0.78** |
| | a) Cost of AMC | 0.65 |
| | b) Cost of Spares (LS) | 0.13 |
| **4** | Procurement of Outdoor coupling equipment (CVT, Wave traps) | 2.00 |
| **5** | Procurement of Test Instruments | 0.35 |
| **6** | Procurement of battery & battery charger | 0.50 |
| **7** | Procurement of AC machine with Srabilizer | 0.13 |
| **8** | Procurement of OPGW cable with hardware fittings(10 kms) | 0.30 |
| **9** | Procurement of spares for PLCC, PABX, Chargers, MCD-80, NSD- 50, NSK - 5 etc. | 1.00 |
| **10** | Royalty charges/License fees payable to DOT for wideband communication system under ULDC project | 1.19 |
| **11** | Insurance charges for ULDC equipment | 0.20 |
| **12** | Revival of carrier back up protection system (14 line in Ist phase) | 2.20 |
| **13** | Provision of Logic earth and surge arrestor at different grid sub - stations(10 nos) | 0.06 |
| **14** | R & M of Telecom works at Divisional levels | 2.50 |
| **15** | License fee for walki- Talkie | 0.07 |
| **16** | Procurement of SVS/PIU unit | 0.05 |
| **17** | Procurement of Old version PLCC sets | 1.00 |
| | **Grand Total** | **13.60** |

252. OPTCL also proposed an expenditure of Rs.3.50 cr. towards civil works relating to major Repair and Maintenance of office buildings, associated colonies and grid sub-stations of OPTCL during FY 2012-13.

253. A provision of Rs.4.33 cr. is made towards R&M expenses pertaining to IT works during FY 2012-13.

**Table – 37**

**R & M Expenditure Plan of IT Wing for FY 2012-13**

| Sl. No. | ITEM | | Amount (Rs. Cr.) |
|---|---|---|---|
| **A** | **ERP** | | **0.92** |
| | **1** | ERP-Linceses | 0.62 |
| | **2** | ERP-Implementation | 0.30 |
| **B** | **Other IT (IT Consumables )** | | **0.25** |
| **C** | **Primary Data Center** | | **0.061** |
| | **2** | Office Systems | |
| | a | PCs & Pheripherals | 0.04 |
| | b | Lap Tops (Hqrs) | 0.02 |
| **D** | **Networking** | | **3.09** |
| | **1** | WAN | |
| | **a** | Leased Lines Maint | 0.36 |
| | **b** | Leased Lines Bandwith | 2.43 |
| | **c** | VSAT | 0.12 |
| | **d** | LAN (ISP) | 0.12 |
| **E** | **FMS** | | 0.06 |
| **F** | **Disaster Recovery (Electrical AC Systems)** | | **0.011** |
| **Total** | | | **4.33** |

**SYSTEM UPGRADATION, OPERATION AND MAINTENANCE**

254. Commission at different time has given approval to the following Schemes and Projects. The schedule dates of completion of the projects are as given below.

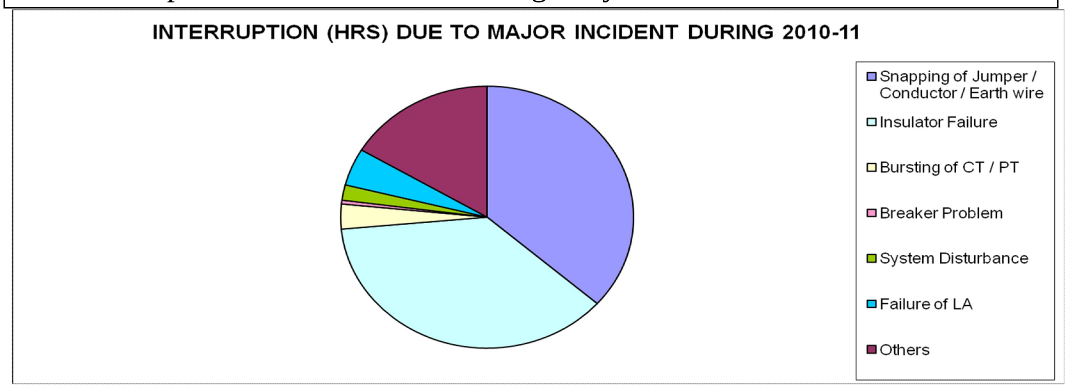
**System Interruptions due to Major Incident**

255. OPTCL's system has faced aggregated Annual interruptions varying from 1 hour to 102 hours at different locations on account of conductor/jumper snapping, insulator failure, bursting of Current Transformer/Potential Transformer, breaker problem, system disturbance, Lightening 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 2010-11. The interruption details are shown below:

**Table - 38**

**Interruption due to Major Incidents (2010-11)**

| **Incident** | **Duration of Interruption** | **No. of Interruption** |
|---|---|---|
| Snapping of Jumper / Conductor / Earth wire | 100:08:00 | 78 |
| Insulator Failure | 101:48:00 | 57 |
| Bursting of CT / PT | 8:25:00 | 15 |
| Breaker Problem | 1:17:00 | 7 |
| System Disturbance | 5:12:00 | 4 |
| Failure of LA | 12:39:00 | 17 |
| Others | 45:05:00 | 38 |
| The duration 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 2010-11. | | |




**Maximum/Minimum Demand (MW) achieved excluding trading.**

256. During FY 2010-11 the daily peak demand touched at 3347 MW maximum on dt.23.03.2011 and a minimum of 2407 MW on dt.27.05.2010. The peak demand of 3347 MW in 2010-11 is about 200 MW above the peak demand experienced during the previous year 2009-10 (of 3150 MW). But the total energy drawl is 22170 MU in FY 2010-11 against 20624 MU in 2009-10 which indicates a growth in electricity consumption of around 1546 MU in the state.

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

257. 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 157 kV minimum and 265 kV maximum in its 220 KV system and 90 KV minimum and 146 KV maximum in its 132 KV system. Hence, due to such abnormal voltage performance in some of the Grid S/Ss of OPTCL, distribution licensees are facing difficulty in supplying power at the correct voltage to their consumers. OPTCL is advised to take suitable action like putting up capacitor banks and additional remedial measures like system up-gradation and investments etc. 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 frequency shall take up with them for remedial measures.

**Table - 39**

**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 | 265 | 230 |
| 2 | Duburi | 239 | 204 |
| 3 | Joda | 240 | 210 |
| 4 | Tarkera | 237 | 212 |
| 5 | Budhipadar | 232 | 216 |
| 6 | Balasore | 234 | 192 |
| 7 | Narendrapur | 250 | 180 |
| 8 | Chandaka | 242 | 157 |
| 9 | Bhanjanagar | 242 | 172 |
| 10 | Theruvali | 256 | 215 |
| 11 | Meramundali | 234 | 203 |
| 12 | Bidanasi | 265 | 170 |
| 13 | Katapalli | 230 | 204 |
| 14 | Bhadrak | 230 | 180 |
| 15 | Paradeep | 230 | 190 |
| 16 | Bolangir | 232 | 199 |
| 17 | Mendhasal | 246 | 182 |

**Allowable Range (145 -122 KV)**

| Sl. No. | Name of the 220/132 kV Grid Sub-station | Maximum Voltage in kV | Minimum Voltage in kV |
|---|---|---|---|
| 1 | Cuttack | 140 | 94 |
| 2 | Puri | 140 | 90 |
| 3 | Khurda | 140 | 92 |
| 4 | Berhampur | 146 | 102 |
| Balance 132/33 KV S/S, the voltage profile is satisfactory i.e. within allowable range. | | | |

**<u>Initiatives for Operation and Maintenance</u>**

258. The Commission in Para 266 of the ARR and Transmission Tariff of OPTCL for the year 2011-12 has stipulated as under:

> *"The Commission will continue to take up periodical reviews of Repair and Maintenance works of the licensee and may engage independent team of experts to monitor and report the progress of R&M works being undertaken. Technical audit to recheck and verify the status of work being executed by the licensee shall be a regular feature in the year 2011-12. If OPTCL fails to build up the system as desired by the Commission, the expenditure now shall be revised & the transmission tariff may be suitably modified after the mid-year review apart from any other action that may be considered appropriate".*

259. In line with above observation and in continuation with the earlier enquiries conducted in respect of Operation and Maintenance of OPTCL system and to ascertain the exact status of implementation of recommendations/directions, the Commission had time & again reviewed the compliances and issued appropriate orders.

260. Compliance report furnished by OPTCL has been received in respect of short term and long-term measures recommended by the enquiry teams. Although most of the short term recommendations have been attended to still a number of long term recommendations are yet to be complied. During the performance review on 20.12.2011, the Commission has directed OPTCL to take expeditious steps to comply with the recommendations of the independent technical teams for improvement of power supply system in the State and furnish the upto-date status as on December, 2011 for perusal of the Commission.

261. **Summary of Recommendations made by the Enquiry Team on O&M of OPTCL**

- Provision of PLCC/SCADA in all 220 kV Grid S/s.
- Replacement of very old ABCBs, MOCBs ,BOCBs available in grid S/Ss.
- Provision of 3rd Bay in the Grid S/Ss and augmentation of transformation capacity.
- As 220kV and 132 kV network & the associated grid S/Ss of the system is the backbone of the transmission system, and a regular planned maintenance and timely augmentation of lines and substations with proper protection system in place are required to minimize breakdowns and extend uninterrupted power supply to DISCOMs. Further a system can be so designed that it can meet the contingency maintenance.
- Modern way of management and planning is required by OPTCL for a healthy transmission system to extend quality & reliable power to DISCOMs. Hence, for better flexibility of the transmission system, OPTCL should set up a team consisting of professional experts in each O&M circle to attend any type of problem in the Grids under that circle.
- There should be regular review by the GM of EHT(O&M) circle regarding functioning of each O&M division under his control at least once in each quarter and send the review report with all the problems along with the suggestion/remedial measures to the corporate office for appropriate action.
- Review/analysis of each interruption should be made and planning strategy should be developed for proper operation and maintenance of the transmission system
- Alternative source of supply should be made available at all grid substations to avoid total power failure in the region due to fault in the single source of supply. All EHT grid S/S should operate in a ring arrangement.

262. OPTCL should develop a system of annual inspection by its higher officials to the field to ascertain the exact situation and requirement of maintenance of its grid S/Ss in particular and transmission system as a whole. As a part of theft prevention measure, name of OPTCL may be embossed throughout the conductor at a specific distance of 1-2 meters.

263. It has been seen that the projects of OPTCL undertaken through World Bank/PMU/ADB schemes/funding from own sources etc. have not progressed as per the implementation plan. Though many of the projects have been completed within time or with little delay, some of the major projects have been inordinately delayed either due to backing out of the contractor or ROW problem or theft of materials etc. This has led to cost and time overrun. OPTCL should have a well structured project management group with identified responsibility. OPTCL should regularly monitor the progress and final execution of all the on-going transmission projects. OPTCL authorities should take up the matter with the concerned District Administration to solve the ROW problems and land disputes etc. Timely intervention by OPTCL is required to see that no investment should be left idle because of some ROW/land dispute etc.

264. 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 downstream distribution lines for evacuation of power. Hence, prior to submission for the proposal of any transmission project for approval of OERC, OPTCL should discuss about the proposed project with the concerned DISCOM. The investment on S/S should not be left idle due to non-completion of inter-linking transmission lines.

265. The Commission In the Business Plan Order of the OPTCL dtd. 19.07.2010 in Case No. 51/2007 have mentioned the following:

*"The transmission system forms the backbone of the entire value chain of the electricity network. A robust transmission grid serves as a strategic link between generation and distribution network. The Commission is, therefore, concerned about maintenance of such a fragile transmission system of OPTCL. The OPTCL needs to spend adequately to maintain the transmission system in order to cater to the growing demand of consumers and exponential addition of consumers through various rural electrification programmes. In order to asses the status of OPTCL transmission system, Commission engaged teams of independent experts to enquire into O&M of EHT division of Kesinga, Theruvali, Balasore, Jajpur Road (part), Joda and Bhubaneswar (part).*

*The summary recommendation of the enquiry team on such inspection is given below:*

- *Provision of PLCC/SCADA is completely neglected in most of the Grid S/S OPTCL should provide SCADA interface in all 220 KV Grid S/S.*
- *Very old ABCBs, MOCBs, BOCBs specifically at Rayagada, Kesinga and Theruvali Grids may be replaced immediately.*
- *As 220kV and 132 kV network & the associated grid S/Ss of the system is the backbone of the transmission system, a regular planned maintenance and timely augmentation of lines and substations with proper protection system in place are required to minimize breakdowns and extend uninterrupted power supply to DISCOMs. Further a system can be so designed that it can meet the contingency maintenance.*

- *OPTCL should maintain its network in a proper manner and plan out the strategy starting from procurement to timely maintenance.* ***.*** *OPTCL has been directed to replace the circuit breakers wherever required in a phased manner and should be completed within next one year.*

- *Modern way of management and planning is required by OPTCL for a healthy transmission system to extend quality & reliable power to DISCOMs. Hence, for better flexibility of the transmission system, OPTCL should set up a team consisting of professionally experts in each O&M circle to attend any type of problem in the grids under that circle.*

- *There should be regular review by the GM of EHT (O&M) circle regarding functioning of each O&M Division under his control at least once in each quarter and the review report with all the problems along with the suggestions/remedial measures should be sent to the Corporate office of OPTCL for appropriate action.*

- *OPTCL should carryout regular patrolling of all the feeders. The weak points identified during regular patrolling should be replaced during the prearranged shutdown to avoid longer interruptions owing to breakdowns/faults. Regular/Periodical patrolling of all lines must be ensured. Review/analysis of each interruption should be made and planning strategy should be developed for proper operation and maintenance of the transmission system*

- *Alternative source of supply should be made available at all grid substations to avoid total power failure in the region due to fault in the single source of supply. All EHT Grid S/S should operate in a ring arrangement.*

- *Civil maintenance of control rooms, quarters & buildings etc. are badly neglected causing damage to structures and equipments, hence the Commission directed OPTCL to review the works of Civil Works Divisions and repair and maintenance works should be done immediately to avoid further deterioration.*

- *Transformers should be off-loaded at erection sites instead at Central Store to avoid time & cost over run. The Commission directed that the civil construction and the dispatch schedule of the equipment should be properly planned for the purpose.*

  *In addition to the above, the present poor condition of transmission system can be ascribed to poor maintenance, long delay in execution of projects and monitoring performances of various elements of system.*

*The Commission has addressed this issue in the approval of ARR towards determination of transmission tariff of OPTCL for FY 2010-11. Commission, therefore, directs that OPTCL shall fully implement the recommendations of the independent expert as a part of the R&M expense in phased manner in order to complete the same during the control period of 2009-13."*

266. The Commission reviewed the actual amount spent vis-à-vis amount approved by the Commission towards R&M.

**Table - 40**
**Actual R&M Expenses vis-à-vis approved R&M Expenses**
**(Rs. cr.)**

| Year | R&M Expenses approved by OERC | Actual R&M Expenditure |
|---|---|---|
| 1999-2000 | 19.84 | 9.51 |
| 2000-01 | 14.67 | 9.90 |
| 2001-02 | 15.99 | 8.81 |
| 2002-03 | 17.43 | 9.35 |
| 2003-04 | 13.35 | 7.03 |
| 2004-05 | 14.07 | 4.59 |
| 2005-06 | 14.80 | 6.94 |
| 2006-07 | 36.00 | 11.31 |
| 2007-08 | 47.00 | 16.52 |
| 2008-09 | 53.88 | 15.66 |
| 2009-10 | 47.00 | 26.14 |
| 2010-11 | 60.00 | 28.32 (As per Audited Account) |
| 2011-12 | 75.00 | 20.34 (As per cash flow statement April 2011 to Nov., 2011) |
| 2012-13 | 95.46 (Proposed) | |

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

268. The transmission system of OPTCL is the life-line of the power system of Odisha. The Commission holds the view that the lines and sub-stations of OPTCL should be kept in proper conditions to ensure uninterrupted and quality power supply in the State. Unless the transmission system is maintained properly, the DISCOMs who are the real beneficiaries would be put in trouble and the entire power system would be in complete jeopardy. Hence, the Commission directs OPTCL to carry out the orders mentioned in the Business Plan Order dtd. 19.07.2010.

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

270. Further, to ensure that the engineers of the Licensees are well versed with various provisions of Electricity Laws, Standards, Codes, Acts etc, the Commission had advised the GoO vide Letter No.1829 dt.17.10.07 to revive the conducting of professional examination for the engineers of the licensee/OHPC/OPGC. However, in view of the provisions contained in Regulation 7 of the

CEA(Measures relating to safety and Electric Supply) Regulations, 2010, the licensees should take appropriate actions as regards to safety measures for operation and maintenance of transmission, distribution system. This would ensure adherence of safety parameters and minimize Electrical Accidents.

271. OPTCL in its additional submission have given details of purchase orders and the status of procurement of the O&M material during 2011-12 which is given below:

**Table – 41**

**Status of Procurement of O&M Materials for FY 2012-13**

**Table-A indicating O & M Materials for which PO will be placed**

| Sl.No | Name of the Items | Amount in crores. | Schedule date of Delivery | REMARKS |
|---|---|---|---|---|
| 1 | Conductor | 29.198 | 31/08/2012 | Evaluation Complete, P.O to be placed |
| 2 | Insulators | 6.9 | 31/07/2012 | --do-- |
| 3 | Cable | 0.31 | 31/05/2012 | --do-- |
| 4 | Silicon Coating on Insulator | 1.54 | 29/09/2012 | Tender to be floated |
| 5 | Hard ware fittings | 2.9 | 29/09/2012 | Bids under Evaluation |
| 6 | Isolator | 0.93 | 31/12/2012 | --do-- |
| 7 | Towers | 0.5402 | 28/02/2013 | --do-- |
| 8 | CT, PT, CVT | 1.945 | 31/12/2012 | --do-- |
| 9 | Breaker | 3.616 | 31/12/2012 | --do-- |
| 10 | Battery Set & Battery Charger | 1.08 | 31/07/2012 | --do-- |
| 11 | Hydraulic Compressor | 0.36 | 31/07/2012 | --do-- |
| 12 | Testing Equipment. | 3.655 | 28/02/2013 | Tender to be floated |
| 13 | Transformer Oil | 1.94 | 30/11/2012 | Bids under Evaluation |
| 14 | Control relay panel. | 0.0791 | 30/03/2013 | --do-- |
| 15 | SF6 Gas | 0.63 | 31/07/2012 | Evaluation Complete, P.O to be placed |
| 16 | Safety Equipment. | 1.046 | 30/03/2013 | Tender to be floated |
| 17 | Earth wire | 0.36 | 31/07/2012 | Evaluation Complete, P.O to be placed |
| 18 | CMRI | 0.6 | 30/04/2012 | --do-- |
| 19 | Data down loading from Energy meters | 3.26 | 30/03/2013 | Tender to be floated |
| 20 | Transformer oil filteration plant. | 0.82 | 29/09/2012 | Tender to be floated |
|  | 33KV VCB Limb- | 0.2459 | 31-05-2012 | Evaluation Complete, P.O to be placed |
|  | Total (A) | **61.9552** |  |  |

**Table-B indicating estimated expenditure during 2012-13 for which P.O have been issued.**

| Sl.No | Item | Amount in crores. | P.O No.& Date |
|---|---|---|---|
| 1 | 12 Nos. 220 Kv SF6 C.T. | 0.6097362 | 9319/ 14/10/2011 |
| 2 | 372 Nos. 33 Kv C.T. | 1.4710326 | 9310/14/10/2011 |
| 3 | 300 Nos. 132 Kv C.T. | 3.972347 | 9313/14/10/2011 |
| 4 | 97 Nos. 33 Kv N.C.T. | 0.1928312 | 9316/14/10/2011 |
| 5 | 11 Nos. 220 Kv CVT. | 0.2556895 | 3907/26/05/2011 |
| 6 | 24 Nos. 220 Kv Oil Filled C.T. | 0.8406259 | 9534/25/10/2011 |
| 7 | 3rd bay 3rd phase bay extension work | 10.39 | 8481/23/08/2011,8485/23/08/2011,8539/24/08/2011,8543/24/08/2011,8610/26/08/2011,8615/26/08/2011 |
| 8 | Capacitor Bank | 8.91 | 8564/24/08/2011,8569/24/08/2011 |
| 9 | Repair of transformers | 5.8 | 9115/26/09/2011,9120/26/09/2011,9304/14/10/2011 |
| | **Total (B)** | **32.442262** | |
| | **Grand Total (A+B)** | **94.39746** | |

272. Besides above OPTCL have given a list of procurement and expenditure of O&M in IT for FY 2012-13 amounting Rs.3.65 cr. Similarly for 2012-13 the procurement status of Telecom material have been furnished as per which Rs.3.18 cr. of material is to be procured and accordingly tenders to be floated. As regards civil works OPTCL have given a list of construction/renovation of civil works for the FY 2012-13. The details are given below:

**Table – 42**

**Status for construction /Renovation of Civil Works for FY 2012-13**

| Sl. No. | Name of the Works | Amount (Rs. Lakhs) | Target date of delivery | Remarks |
|---|---|---|---|---|
| 1. | Provision of tiles in the residential quarters of OPTCL colony, Bhoi Nagar, Bhubaneswar | 162.00 | 31.03.2013 | Administration Approval accorded. Work put to tender for Rs.10.66 lakhs and balance Rs.151.34 lakhs will be put to tender shortly. |
| 2. | Provision of compound wall in OPTCL colony, Bhoi Nagar, Bhubaneswar | 50.00 | | Administrative Approval accorded. Work put to tender for Rs.19.32 lakhs and balance Rs.30.68 lakhs will be put to tender shortly. |

| Sl. No. | Name of the Works | Amount (Rs. Lakhs) | Target date of delivery | Remarks |
|---|---|---|---|---|
| 3. | Construction of compound wall in different grid sub-stations of OPTCL | 485.72 | 31.03.2013 | Work in Progress |
| 4. | Construction of approach roads in different grid-sub-stations of OPTCL | 192.20 | 31.03.2013 | Work in Progress |
| 5. | Renovation of control rooms in different grid-stations of OPTCL | 62.69 | 31.03.2013 | Work in Progress |
| 6. | Construction of Guest houses for Executives inside 132/33 KV grid S/S at Puri | 65.82 | 31.03.2013 | Administrative approval accorded. Work will be put to tender shortly. Put to tender shortly. |
| 7. | Construction of Guest houses for Staffs inside 132/33 KV grid S/S at Puri | 56.47 | 31.03.2013 | Administrative approval accorded. Work will be put to tender shortly. Put to tender shortly. |
| 8. | Construction of Power Training Center Annex 220 KV Grid S/S campus at Chandaka. | 196.80 | 31.03.2013 | Work in progress. |
| 9. | Renovation of OPTCL Transit house at Saheed Nagar, Bhubaneswar | 36.85 | 31.03.2013 | Work will be put to tender shortly. |
| | **Total** | **1308.55** | | |

273. In view of the above observations and the data filed by the Licensee the **Commission allows Rs.95.00 cr. towards Repair & Maintenance for the FY 2012-13 as against Rs. 95.46 Cr claimed by the licensee**. Out of this approved amount the Commission directs OPTCL to spend at least Rs.15.00 crore towards civil maintenance.

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

274. OPTCL during FY 2012-13 has proposed Rs.39.11 cr. towards A&G expenses. Break up of expenses for FY 2012-13 along with the figures for 2010-11 and 2011-12 as filed by the licensee is depicted in the table below:

**Table – 43**
**Administration and General Expenses**

**(Rs. Cr.)**

| Sl. No. | Particulars | FY 10-11 (Prov.) | OERC Approval for FY 11-12 | Estimation for FY 11-12 | Estimation/ Projection for FY 12-13 |
|---|---|---|---|---|---|
| 1 | Property related expenses | 0.18 | | 0.20 | 0.22 |
| 2 | Communication | 0.43 | | 0.47 | 0.52 |
| 3 | Professional Charges | 2.05 | | 2.26 | 2.48 |
| 4 | Conveyance & Traveling | 3.90 | | 4.29 | 4.72 |
| 5 | Other Expenses | 26.56 | | 28.24 | 30.01 |
| 6 | Material related expenses | 0.01 | | 0.21 | 0.21 |
| 7 | OERC License Fee | 1.00 | | 1.00 | 1.00 |
| 8 | Sub-Total (1 to 7) | 34.13 | | 36.67 | 39.16 |
| 9 | Less: Expenses capitalized | - | | 0.05 | 0.05 |
| | **Total A&G Expenses** | **34.13** | **18.00** | **36.62** | **39.11** |

275. The Commission in line with earlier orders, allows escalation of 8.87% (Rate of inflation as measured by W.P.I.) over the approved amount of Rs.16.56 cr. for FY 2011-12. **Hence, the Commission allows Rs.18.03 cr. towards normal A&G expenses for FY 2012-13.** Over and above the normal A&G, the Commission allows the revised Licence Fee to be paid to the Commission amounting Rs.1.25 cr. with effect from 01.04.2012, and Inspection Fees of Rs.1.97 cr. proposed by the Licensee. Hence, the Commission allows Rs.21.25 cr. under the head A&G for FY 2012-13 as against OPTCL's proposal of Rs.39.11 cr.

**Interest on Loan**

276. OPTCL has proposed Rs.102.54 crore towards interest on long term loan for the FY 2012-13. Loan-wise interest payment schedule as proposed by the licensee is exhibited in table below :

**Table – 44**

**Projection for Interest on loan for FY 2012-13 (Rs. in Crore)**

| Sl. No. | Particulars | Rate of Interest | Principal CB as on 31.03.12 | Loan to be received during 2012-13 | Principal repayment for 2012-13 | Interest payment for 2012-13 |
|---|---|---|---|---|---|---|
| **A** | **Govt. Loans** | | | | | |
| | State Govt.(Cash Loan) | 13.00% | 2 | | 0.12 | 0.26 |
| | State Govt.(CRF) | 0.00% | 15 | | | |
| | Central Govt. Loan | 9.00% | 11.26 | | | 1.01 |
| | GoO Bonds | 13.00% | 400 | | 20 | |
| | IBRD Loan | 13.00% | 0 | | | |
| | **Sub Total** | | **428.26** | | **20.12** | **1.27** |
| **B** | **Institutional Loans** | | | | | |
| | REC Loan(12.25% w.e.f 28/3/11) | 12.25% | 28.5 | | 2.03 | 3.39 |
| | REC Loan(New) | 11.75% | 9.89 | | 0.7 | 1.13 |
| | REC Loan(New) | 12.75% | 15.08 | | 1.02 | 1.87 |
| | REC Loan(New) | 11.50% | 24.17 | | 1.61 | 2.71 |
| | REC Loan(New) | 11.00% | 24.88 | | 0.41 | 2.73 |
| | PFC Loan | 11.25% | 0 | | | |
| | PFC Loan (New) | 11.25% | 15.46 | | 1.23 | 1.69 |
| | **Sub Total** | | **117.99** | | **7** | **13.52** |
| **C** | **Secured Loan** | | | | | |
| | Union Bank of India | 8.25% | | | | 0 |
| | HUDCO | 8.25% | 46.82 | | 28.87 | 3.69 |
| | UCO Bank | 9.00% | | | | |
| | Oriental Bank of Commerce | 8.75% | 58.99 | | 28.57 | 5.38 |
| | **Sub Total** | | **105.81** | | **57.44** | **9.07** |
| **D** | **OPTCL Bonds** | | | | | |
| | Open Market Loan | 11.50% | 0.11 | | 0.11 | 0 |
| | Pension Trust Bond | 9.00% | | | | 0 |
| | **Sub Total** | | **0.11** | | **0.11** | **0** |
| **E** | Deposit from EHT Consumers | | | | | |
| | **Sub-Total of Infrastructure Loan** | | **76.44** | | **0.02** | **0** |
| **F** | **Loans for New Projects (PFC/REC)** | **12.50%** | **275.19** | **795.96** | | **66.95** |
| **G** | **Other Loans & Finance Charges** | | | | | |
| | Employee Housing Loans | 12.00% | 0.74 | | 0.02 | |
| | Finance Charge | | 0 | | | 11.73 |
| | **Sub Total** | | **0.74** | | **0.02** | **11.73** |
| **H** | **Grand Total** | | **927.36** | **795.96** | **84.67** | **102.54** |

277. It is observed from the above table that during FY 2011-12, OPTCL proposes to avail new loan of Rs.275.19 cr. and during FY 2012-13 Rs.795.96 cr. The interest impact of the above new loans at 12.5% is claimed at Rs.66.95 cr. Replying to the query OPTCL have submitted the project-wise loans to be availed during 2011-12 and 2012-13. The same is submitted in the table below:

**Table - 45**

**Additional Loan for New Projects During 2011-12 & 2012-13 to be availed from PFC/REC and other Financial Institution**

**(Rs. Cr.)**

| Sl No | Name of the Project | Sanctioned by | Project Cost | Loan Amount Sanctioned | Loan Received as on 31.03.11 | Loan to be taken during 2011-12 & 2012-13 |
|---|---|---|---|---|---|---|
| A | **Loans Sanctioned** | | | | | |
| 1 | 2X12.5 MVA, 132/33 S/s at **BASTA**, | REC | 16.99 | 13.27 | **8.09** | 5.18 |
| 2 | 2X12.5 MVA, 132/33 S/s at **KARANJIA & BARAPALLI** | REC | 40.08 | 31.33 | **27.30** | 4.03 |
| 3 | 2X12.5 MVA, 132/33 S/s at **BHADRAK** | REC | 33.05 | 19.12 | **5.38** | 13.74 |
| 4 | 400 K.V D.C Line Trans. Line from **Meramundali to Duburi** | REC | 141.48 | 79.71 | **46.66** | 33.05 |
| 5 | 2x12.5 MVA, 132/33 KV S/S at **Purushottampur** with LILO arrangement(2.5 Kms) | REC | 15.99 | 14.66 | - | 14.66 |
| 6 | Restoration of 220 KV DC Line from Budhipadar to Bolangir | REC | 28.88 | 25.99 | - | 25.99 |
| 7 | 220 KV **BIDANASI-CUTTACK** D.C Line(10.42 Kms) | PFC | 16.43 | 15.31 | - | 15.31 |
| 8 | 132 KV S.C. Line from Paradeep to Jagatsingpur | PFC | 16.02 | 11.22 | - | 11.22 |
| 9 | 2x40 MVA, 132/33 KV S/S at Udala **with LILO arrangemet** | PFC | 26.19 | 22.26 | - | 22.26 |
| 10 | 2X12.5 MVA, 132/33 S/s at **Dabugaon with S.C Line on D.C Tower (40.75kms)** | REC | 25.97 | 23.81 | **2.95** | 20.86 |
| 11 | 2X12.5 MVA, 132/33 S/s at **Nuapada with S.C line on D.C Tower(72.2 kms)** | REC | 34.85 | 31.95 | **3.82** | 28.13 |
| 12 | 2X12.5 MVA, 132/33 S/s at **Kuchinda with LILO arrangement(29.35 Kms)** | REC | 25.97 | 23.80 | **2.74** | 21.06 |
| 13 | 2X12.5 MVA, 132/33 S/s at **Padampur with S.C Line on D.C Tower (45.53kms)** | REC | 27.57 | 25.28 | **2.98** | 22.30 |
| 14 | 2x12.5 MVA, 132/33 KV S/S at **Chandpur with LILO arrangement(2.31 Kms)** | PFC | 16.81 | 13.00 | - | 13.00 |
| 15 | 2x12.5 MVA, 132/33 KV S/S at | REC | 29.87 | 27.38 | **3.29** | 24.09 |

| Sl No | Name of the Project | Sanctioned by | Project Cost | Loan Amount Sanctioned | Loan Received as on 31.03.11 | Loan to be taken during 2011-12 & 2012-13 |
|---|---|---|---|---|---|---|
| | **Boudh with S.C Line on D.C Tower (50.73kms)** | | | | | |
| 16 | 2x12.5 MVA, 132/33 KV S/S at **Bhawanipatna with LILO arrangement(6.61 Kms)** | REC | 19.59 | 17.96 | **2.30** | 15.66 |
| 17 | 2x20 MVA, 132/33 KV S/S at **Banki with S.C Line on D.C.Tower(19.69 Kms)** | PFC | 21.16 | 16.50 | - | 16.50 |
| 18 | 2x160 MVA, 220/132 KV S/S & 2x20 MVA, 132/33 KV S/S at **Karadagadia** , Khurda with LILO arrangement (10 Kms) | REC | 80.94 | 72.84 | - | 72.84 |
| 19 | 2x20 MVA, 132/33 KV S/S at **Kalunga** with LILO arrangemet (2.671 Kms) | PFC | 17.93 | 12.34 | - | 12.34 |
| 20 | 2x40 MVA, 220/33 KV S/S at **Bonai with LILO arrangemet (10kms)** | PFC | 28.74 | 25.68 | - | 25.68 |
| 21 | 2x40 MVA, 132/33 KV S/S at **Anandpur with LILO arrangemet (10kms)** | PFC | 22.41 | 17.93 | 17.93 | - |
| 22 | 220/33 KV S/S at Gopinath**pur with LILO arrangemet** | PFC | 25.55 | 21.72 | - | 21.72 |
| 23 | 220/33 KV S/S at Lapanga **with LILO arrangemet** | 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 Barbil **with LILO arrangemet** | REC | 17.41 | 15.66 | - | 15.66 |
| | **TOTAL** | | **943.43** | **767.84** | **123.44** | **644.40** |
| B | **Loan Proposal for Sanction for New Projects:** | | | | | |
| 1 | 220/33 KV Grid S/s at Kuarmunda, Sundergarh | | 62.12 | | | |
| 2 | Installation of Capacitor Bank | | 18.59 | | | |
| 3 | Integration of 3nos of Grid S/s for SCADA connectivity under ULDC Expansion Scheme | | 35.86 | | | |
| 4 | 132/33KV Grid S/s at Sarasmal, Jharsuguda | | 13.13 | | | |
| 5 | 132/33KV Grid S/s at Olavar, Kendrapada | | 33.93 | | | |
| 6 | 220/132KV Grid S/s at Kesinga,Kalahandi | | 75.87 | | | |
| 7 | 220/132KV Grid S/s ,Cuttack | | 30.38 | | | |

| Sl No | Name of the Project | Sanctioned by | Project Cost | Loan Amount Sanctioned | Loan Received as on 31.03.11 | Loan to be taken during 2011-12 & 2012-13 |
|---|---|---|---|---|---|---|
| 8 | 132/33KV Grid S/s Luna Kendrapada | | 19.59 | | | |
| 9 | SCADA Interface points at all 220/132KV Grid S/s | | 67.48 | | | |
| 10 | 220/132KV Grid S/s at Dhamara, Bhadrak | | 74.95 | | | |
| | **TOTAL** | | **431.90** | | | |

From the table above it is found that OPTCL has not availed any new loan during 2011-12. Also the cash flow statement for FY 2011-12 (actual upto Nov., 2011) submitted by OPTCL in Annexure-13 of the reply to query do not show any new loan received during the FY 2011-12. Therefore, the Commission feels it justified to allow interest on loan actually received by OPTCL upto 31.03.2011. Hence, the interest of Rs.66.95 cr. claimed by OPTCL on new loans is disallowed by the Commission.

278. During the FY 2008-09 and FY 2009-10 OPTCL had availed the following loans for capital works after demerger of OPTCL from GRIDCO in 2005. The loan-wise details is given as per table below:

**Table – 46**

| | Date | Amount (Rs. Cr.) |
|---|---|---|
| Amount of loan availed during FY 2008-09 & 2009-10 | 28.3.2008 | 30.53 |
| | 06.8.2008 | 10.59 |
| | 17.3.2009 | 15.33 |
| | 12.8.2009 | 24.17 |
| | 31.03.2010 | 24.88 |
| | 31.03.2010 | 17.93 |
| | **Total :** | **123.43** |

279. The Commission allows Rs.13.52 cr. during FY 2012-13 towards interest on the above amount of loan of Rs.123.43 cr. The loan wise interest is given in table below:

**Table – 47**

**(Rs. Cr.)**

| Date | Loan Amount | Interest allowed during 2012-13 |
|---|---|---|
| 28.3.2008 | 30.53 | 3.39 |
| 06.8.2008 | 10.59 | 1.13 |
| 17.3.2009 | 15.33 | 1.87 |
| 12.8.2009 | 24.17 | 2.71 |
| 31.03.2010 | 24.88 | 2.73 |
| 31.03.2010 | 17.93 | 1.69 |
| **Total** | **123.43** | **13.52** |

280. Except the above stated loans all the other loans are old and inherited from desegregated balance sheet of GRIDCO. Loan-wise analysis is done in subsequent para to determine the prudence of loans availed by the licensee.

**State Govt. Loan**

281. OPTCL reports that loan from State Govt. (Cash loan) and CRF stands at Rs.2.00 crore and Rs.15 cr. respectively as on 31.3.2012. The Commission in para 301 have dealt extensively on moratorium on debt service of State Govt. loan and keeping in abeyance of up-valuation of assets etc. In line with the observation of the Commission, the interest impact on State Govt. loan is not allowed as a pass through in the ARR for the FY 2012-13.

**Central Govt. Loan**

282. This is a loan availed by erstwhile OSEB for construction of transmission lines which was ultimately transferred to OPTCL. The loan balance as on 31.03.2012 is shown at Rs.11.26 cr. Every year the Commission in the annual revenue requirement considers the interest impact on the above loan. The Commission therefore allows Rs.1.01 crore towards interest for the FY 2012-13 as proposed by the licensee.

**Loan from UBI**

283. GRIDCO during 2004-05 availed a loan of Rs.100 crore to swap a portion of Bond IC/99 of NALCO, Bond 1/2002 of NALCO at an average rate of 8.25%. GRIDCO, after making repayment of Rs.1.20 crore during 2004-05, transferred the loan balance of Rs.98.80 crore to OPTCL. The loan balance as on 31.3.2012 stands nil. Hence, OPTCL has no interest on the above loan.

**Loan from HUDCO**

284. GRIDCO had availed a loan of Rs.300 crore from HUDCO @ 7.75% (floating rate) to discharge the old loan from LIC, ICICI and a portion of Power Bond during 2003-04. At the time of transfer of liability, GRIDCO transferred an amount of Rs.252.53 crore to OPTCL. After repayment, the same loan as at the end of 31.03.2012 is projected at Rs.46.82 cr. During 2012-13, OPTCL proposes to repay Rs.28.87 crore towards principal leaving a balance of Rs.17.95 cr. as on 31.03.2013. The interest impact of the above loan has been calculated at Rs.3.69 cr. for the FY 2012-13. The Commission hereby approves the interest amount of Rs.3.69 cr. for FY 2012-13 as claimed by the licensee.

**Loan from Oriental Bank of Commerce**

285. During 2005-06, GRIDCO had availed an amount of Rs.200.00 crore as loan from the Oriental Bank of Commerce to swap principal and interest of IBRD loan. This loan was assigned to OPTCL at the time of transfer of liability. The loan balance as on 31.03.2012 stands at Rs.58.99 crore. For FY 2012-13, OPTCL has estimated an amount of Rs.28.57 crore towards repayment of principal leaving a balance of Rs.30.42 crore as on 31.03.2013. The interest impact of the above loan has been estimated at Rs.5.38 cr. @ rate of interest 11.75% for the FY 2012-13. The

Commission hereby approves the same and allows the interest of Rs.5.38 crore as a pass through in the revenue requirement for FY 2012-13.

**Finance Charges**

286. For the FY 2012-13, OPTCL claimed an amount of Rs.11.73 crore towards finance charges. Finance charges include Guarantee Commission, Stamp Duty, Service fee, Commitment charges, Audit fees, bank charges for demand draft, etc. In line with earlier order of the Commission allowed the same for the FY 2012-13 as a pass through.

287. Based on the above, the total interest liability has been worked out at Rs.35.33 crore as summarized in the table below:

**Table – 48**
**Total Interest Liability**

**(Rs. cr.)**

| Sl. No. | Particulars | Rate of Interest | Principal CB as on 31.03.12 | Loan to be received during 2012-13 | Principal repayment for 2012-13 Proposed by Licensee | Interest payment for 2012-13 Proposed by Licensee | Total Interest for 2012-13 Approved by Commission |
|---|---|---|---|---|---|---|---|
| **A** | **Govt. Loans** | | | | | | |
| | State Govt.(Cash Loan) | 13.00% | 2.00 | | 0.12 | 0.26 | 0.00 |
| | State Govt.(CRF) | 0.00% | 15.00 | | | | |
| | Central Govt. Loan | 9.00% | 11.26 | | | 1.01 | 1.01 |
| | GoO Bonds | 13.00% | 400.00 | | 20.00 | | |
| | IBRD Loan | 13.00% | 0.00 | | | | |
| | **Sub Total** | | **428.26** | | **20.12** | **1.27** | **1.01** |
| **B** | **Institutional Loans** | | | | | | |
| | REC Loan(12.25% w.e.f 28/3/11) | 12.25% | 28.50 | | 2.03 | 3.39 | 3.39 |
| | REC Loan(New) | 11.75% | 9.89 | | 0.70 | 1.13 | 1.13 |
| | REC Loan(New) | 12.75% | 15.08 | | 1.02 | 1.87 | 1.87 |
| | REC Loan(New) | 11.50% | 24.17 | | 1.61 | 2.71 | 2.71 |
| | REC Loan(New) | 11.00% | 24.88 | | 0.41 | 2.73 | 2.73 |
| | PFC Loan | 11.25% | 0.00 | | | | |
| | PFC Loan (New) | 11.25% | 15.46 | | 1.23 | 1.69 | 1.69 |
| | **Sub Total** | | **117.99** | | **7.00** | **13.52** | **13.52** |
| **C** | **Secured Loan** | | | | | | |
| | Union Bank of India | 8.25% | | | | 0 | 0 |
| | HUDCO | 8.25% | 46.82 | | 28.87 | 3.69 | 3.69 |
| | UCO Bank | 9.00% | | | | | |
| | Oriental Bank of Commerce | 8.75% | 58.99 | | 28.57 | 5.38 | 5.38 |
| | **Sub Total** | | **105.81** | | **57.44** | **9.07** | **9.07** |
| **D** | **OPTCL Bonds** | | | | | | |
| | Open Market Loan | 11.50% | 0.11 | | 0.11 | 0 | 0 |

| Sl. No. | Particulars | Rate of Interest | Principal CB as on 31.03.12 | Loan to be received during 2012-13 | Principal repayment for 2012-13 Proposed by Licensee | Interest payment for 2012-13 Proposed by Licensee | Total Interest for 2012-13 Approved by Commission |
|---|---|---|---|---|---|---|---|
| | Pension Trust Bond | 9.00% | | | | 0 | 0 |
| | **Sub Total** | | **0.11** | | **0.11** | **0** | **0** |
| **E** | Deposit from EHT Consumers | | | | | | |
| | **Sub Total of Infrastructure Loan** | | **76.44** | | **0.02** | **0** | **0** |
| **F** | **Loans for New Projects (PFC/REC)** | **12.50%** | **275.19** | **795.96** | | **66.95** | **0** |
| **G** | **Other Loans & Finance Charges** | | | | | | |
| | Employee Housing Loans | 12.00% | 0.74 | | 0.02 | | 0 |
| | Finance Charge | | 0.00 | | | 11.73 | 11.73 |
| | **Sub Total** | | **0.74** | | **0.02** | **11.73** | 11.73 |
| **H** | **Grand Total** | | **927.36** | **795.96** | **84.67** | **102.54** | **35.33** |

288. **The Commission, therefore, allows an amount of Rs.35.33 crore on account of interest payment for the FY 2012-13 as against claim of OPTCL for Rs.102.54 cr. and Rs.61.33 cr. approved for 2011-12.**

### Depreciation

289. OPTCL has claimed an amount of Rs.155.99 crore towards depreciation for the year 2012-13. The computation is based on CERC (Terms and Conditions of Tariff) Regulation, 2009. A detailed statement of fixed assets and block-wise computation of depreciation is given in the table below:

**Table – 49**
**Block-wise computation of depreciation**

**(Rs. cr.)**

| Particulars | Depreciation Rate prescribed by CERC Regln. 2009 | Depreciation @ Pre-92 Rate as per GoI Notification | Gross Block (01.04.2011) (Prov.) | Gross Block (01-04-12) (Projected) | Deprcn. for FY 12-13 as per CERC Regln. | Deprcn. for FY 12-13 @ Pre-92 Rate |
|---|---|---|---|---|---|---|
| Land and Rights | 0.00% | 0.00% | 34.85 | 37.69 | 0.00 | 0.00 |
| Buildings | 3.34% | 1.80% | 78.14 | 84.50 | 2.82 | 1.52 |
| Plant & Machinery (Other Civil works) | 3.34% | 1.80% | 4.29 | 4.64 | 0.15 | 0.08 |
| Plant & Machinery | 5.28% | 3.80% | 1275.54 | 1379.34 | 72.83 | 52.41 |
| Plant & Machinery (Lines, Cables & Network Assets) | 5.28% | 2.57% | 1387.49 | 1500.40 | 79.22 | 38.56 |
| Vehicles | 9.50% | 12.86% | 1.50 | 1.62 | 0.15 | 0.21 |
| Furniture, Fixture | 6.33% | 4.55% | 2.26 | 2.45 | 0.16 | 0.11 |
| Office Equipment | 6.33% | 9.00% | 9.47 | 10.24 | 0.65 | 0.92 |
| **TOTAL** | | | **2793.54** | **3020.88** | **155.99** | **93.82** |

290. OPTCL submits that if pre-92 rate is adopted for computation of depreciation then OPTCL will face severe financial burden to meet its debt repayment obligation. Hence, OPTCL has urged the Commission to allow Rs.155.99 crore towards depreciation in the ARR of FY 2012-13 to enable OPTCL to repay the loan availed for CAPEX in time.

291. It is revealed from the above table that Gross Fixed Asset as on 31.3.2012 would be at Rs.3020.88 crore as against the actual figure of Rs.2793.54 crore as on 31.3.2011 Thus, as per OPTCL projection there is an addition of asset of Rs.227.34 crore during 2011-12. In the balance sheet of OPTCL for the year 2010-11, work-in-progress of old projects was Rs.556.25 crore. Therefore, the addition of fixed assets of Rs.227.34 crore for the year 2011-12 appears to be reasonable and the Commission approves the same.

**Keeping in abeyance the upvaluation of assets, moratorium of debt services etc.**

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

**Table - 50**

**(Rs. Cr.)**

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

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

293. The book value of gross fixed asset of OHPC was up-valued by Rs.840.20 cr.

294. 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.

295. 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.

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

297. 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.

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

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

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

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

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

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

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

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

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

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

Since 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, the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond is not been taken into account for FY 2012-13. Accordingly, the Commission has approved calculation of depreciation based on historical cost of assets.

302. 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.

303. A Table showing gross fixed assets as on 01.4.96 and year-wise asset addition thereafter till 2011-12 is depicted below.

**Table – 51**

**(Rs. cr.)**

| **Year** | **OPTCL** |
|---|---|
| GFA as on 1.4.1996 | 514.32 (Pre upvalued) |
| 1996-97 | 49.46 |
| 1997-98 | 39.94 |
| 1998-99 | 62.50 |
| 1999-00 | 111.79 |
| 2000-01 | 134.10 |
| 2001-02 | 86.44 |
| 2002-03 | 132.17 |
| 2003-04 | 69.46 |
| 2004-05 | 71.72 |
| 2005-06 | 158.91 |
| 2006-07 | 144.23 |
| 2007-08 | 206.10 |
| 2008-09 | 142.72 |
| 2009-10 | 188.49 |
| 2010-11 | 189.80 |
| Approved during 2011-12 | 227.34 |
| Assets as on 01.4.2012 | 2529.49 |

304. The Commission has calculated depreciation on the approved asset base at Pre-92 rate. The classification of assets has been done proportionately based on the audited account for 2010-11 submitted by OPTCL. Accordingly, the Commission

approves an amount of Rs.78.57 crore towards depreciation for the FY 2012-13 as per the details shown in Table below:

**Table – 52**

**(Rs. cr.)**

| **Particulars** | **Pre-92 rate of depreciation as per GOI notification dated 31.01.92** | **Book Value of asset as on 01.04.1996** | **Book Value of asset as on 01.04.2012** | **Depreciation for the year 2012-13** |
|---|---|---|---|---|
| Land and Rights | | 8.07 | 31.56 | 0.00 |
| Building | 1.80% | 13.09 | 70.75 | 1.27 |
| Plant & Machinery (other civil works) | 1.80% | - | 3.88 | 0.07 |
| Plant & Machinery | 3.80% | - | 1156.33 | 43.94 |
| Plant & Machinery (line, cables and network) | 2.57% | 492.71 | 1254.98 | 32.25 |
| Vehicles | 12.86% | 0.02 | 1.36 | 0.18 |
| Furniture, Fixture | 4.55% | 0.19 | 2.05 | 0.09 |
| Office equipment | 9.00% | 0.25 | 8.58 | 0.77 |
| **Grand Total** | | **514.32** | **2529.49** | **78.57** |

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

306. As regards depreciation and repayment of loan, the recent notification of CERC dt.20.01.2009 states the following:

**Chapter-3.17(1):** The value base for the purpose of depreciation shall be the capital cost admitted by the Commission.

**Chapter-3.17(2)** The salvage value of the asset shall be considered as 10% and depreciation shall be allowed upto a maximum of 90% of the capital cost of the asset.

**Chapter-3.17(4):** Depreciation shall be calculated annually based on Straight Line Method at rates specified in Appendix-III to these Regulations for the assets of generating station and transmission system.

**Chapter-3.17(31):** The repayment for the year of tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

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

licensee meets its principal repayment obligations, otherwise financial institutions would not like to sanction loan to OPTCL.

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

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

**Table – 53**

**Comparison of Principal Servicing obligations vis-a-vis Depreciation available**

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

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

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

312. Based on the above, the Commission feels that it is necessary to allow depreciation in line with the CERC Tariff Regulation of 20.01.2009 so as to enable OPTCL to meet its debt service obligations. This is more so because the

new CERC tariff regulation has done away with the provision of Advance Against Depreciation.

313. The Commission, therefore, has calculated the depreciation in accordance with rates prescribed in Appendix-III of the CERC Tariff Regulations of 20.01.2009 as shown in table below and arrived at a figure of Rs.130.61 crore. In earlier paragraph, Commission had allowed Rs.78.57 crore towards depreciation based on Pre-92 rates. The balance amount of Rs.52.04 crore (Rs.130.61 cr. – Rs.78.57 cr.) is allowed by the Commission as a special appropriation for meeting debt obligation.

314. During FY 2011-12, the Commission had allowed depreciation to OPTCL on an asset base of Rs. 2566.09 crore as on 31.3.2011. After the actual figure for 2010-11 is available, the asset base stands reduced to Rs.2302.15 crore. This has been worked out as under:

**Table – 54**

**(Rs. cr.)**

| | |
|---|---|
| Approval of Gross Fixed Asset as on 01.4.2011 (2011-12 Tariff Order) | 2566.09 |
| Less allowed for 2010-11 (Projection) | 453.74 |
| Add the audited figure of 2010-11 | 189.80 |
| Actual gross fixed assets as on 01.04.2011 | 2302.15 |

315. Based on the actual figures available, the depreciation for the year 2011-12 is re-computed and the depreciation amount for 2011-12 works out to Rs.118.87 crore as against an amount of Rs.132.20 crore approved by the Commission for the year 2011-12. Hence, an excess amount of Rs.13.33 crore (Rs.132.20 cr. – Rs.118.87 cr) has to be adjusted against the approved depreciation for 2012-13. In line with the above discussion, a table showing the computation of depreciation at Pre-92 rate and as per CERC notification is exhibited below.

**Table – 55**

**(Rs. cr.)**

| **Particulars** | **Pre-92 rate of depreciation as per GOI notification dated 31.01.92** | **Depreciation rate prescribed by CERC Regn.** | **Book Value of asset as on 01.4.2012** | **Depreciation for the year 2012-13 as per Pre-92 rate** | **Depreciation for the year 2012-13 as per CERC Regn.** |
|---|---|---|---|---|---|
| Land and Rights | | | 31.56 | 0.00 | 0.00 |
| Building | 1.80% | 3.34% | 70.75 | 1.27 | 2.36 |
| Plant & Machinery (other civil works | 1.80% | 3.34% | 3.88 | 0.07 | 0.13 |
| Plant & Machinery | 3.80% | 5.28% | 1156.33 | 43.94 | 61.06 |
| Plant & Machinery (line, cables and network) | 2.57% | 5.28% | 1254.98 | 32.25 | 66.26 |

| Particulars | Pre-92 rate of depreciation as per GOI notification dated 31.01.92 | Depreciation rate prescribed by CERC Regn. | Book Value of asset as on 01.4.2012 | Depreciation for the year 2012-13 as per Pre-92 rate | Depreciation for the year 2012-13 as per CERC Regn. |
|---|---|---|---|---|---|
| Vehicles | 12.86% | 9.50% | 1.36 | 0.18 | 0.13 |
| Furniture, Fixture | 4.55% | 6.33% | 2.05 | 0.09 | 0.13 |
| Office equipment | 9.00% | 6.33% | 8.58 | 0.77 | 0.54 |
| **Grand Total** | | | **2529.49** | **78.57** | **130.61** |

316. The Commission approves the following for FY 2012-13.

**Table – 56**

| | |
|---|---|
| Depreciation for FY 2012-13 | Rs.78.57. crore |
| Special appropriation for FY 2012-13 | Rs.52.04 crore |
| **Total** | **Rs. 130.61 crore** |
| Less excess allowed during FY 2011-12 | Rs.13.33 crore |
| Balance to be considered in the ARR for FY 2012-13 | Rs.117.28 crore |

**Accordingly, Commission allows an amount of Rs.78.57 cr. towards depreciation and Rs.38.71 cr. towards special appropriation (Rs.52.04 – Rs.13.33 cr.) totalling a sum of Rs.117.28 cr. for meeting repayment obligation as against an amount of Rs.184.67 cr. projected by OPTCL for FY 2012-13. The figure of Rs.184.67 cr. was presented by OPTCL at the time of hearing i.e. on 23.02.2012 for meeting debt service obligation.**

**Return on Equity**

317. OPTCL has claimed an amount of Rs.24.81 crore towards return on equity on a share capital of Rs.160.07 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 to the extent of Rs.100 crore by way of equity contribution over a period of 3 years commencing from 2008-09. OPTCL in its additional submission dtd. 22.02.2012 mentioned that the Govt. of Odisha has recently sanctioned Rs.43 cr. additional equity in favour of OPTCL. In view of infusion of additional equity the present equity base as submitted earlier stands modified to Rs.203.07 cr. (Rs.160.07 cr + Rs.43 cr). Accordingly OPTCL revised its proposal in respect of return on equity to 31.48 cr. during FY 2012-13 as against the earlier proposal of Rs.24.81 cr. The details of sanctioned order of equity share capital from the Govt. of Odisha as mentioned by OPTCL is given below:

**Table – 57**

| 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 |
| | **Total** | **143.00** |

318. Commission feels that OPTCL is entitled to get return on equity value of Rs.143 cr. being infused by State Govt. to be utilized for the transmission project being set up in remote areas. This is in the nature of viability gap funding which is to be utilized for implementation of transmission projects in backward areas.

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

320. **The Commission, therefore, allows return @ 15.5% on the equity value of Rs.143 cr. as stated above. Thus, the Commission approves Return on Equity for an amount of Rs.22.17 cr. during FY 2012-13 as against OPTCL's claim of Rs.31.48 cr. For FY 2011-12 the Commission approved Rs.7.45 cr. as against claim of Rs.24.81 cr. by OPTCL.**

**Interest on Working Capital**

321. OPTCL has proposed an amount of Rs.44.47 crore towards interest on working capital as per CERC Regulation, 2009. The table showing calculation of Interest on working capital proposed by OPTCL is given below:

**Table – 58**
**Calculation of Interest on Working Capital**

| Parameters | Amount (Rs.Cr.) |
|---|---|
| (i) Receivables equivalent to two months of fixed cost. | 186.29 |
| (ii) Maintenance Spares @ 15% of O&M expenses | 118.49 |
| (iii) Operation & Maintenance expenses for one month | 65.83 |
| **Total Working Capital** | 370.61 |
| **Interest on Working Capital @ 12% per annum** | **44.47** |

The Commission does not feel it justified to allow the same in the revenue requirement, since the Transmission Charge is the first charge being recovered from monthly BSP bill of DISCOMs. There may not be any need for working capital in case of OPTCL as OPTCL has surplus fund available with it at any point of time to take up day to day repair and maintenance work as verified from the cash flow statement submitted by OPTCL in reply to the query of the Commission. **Hence, the interest on working capital as claimed by OPTCL amounting Rs.44.47 cr. is disallowed by the Commission.**

**Contingency Reserve**

322. For the year 2012-13, OPTCL has proposed Rs.15.10 crore towards contribution to contingency reserve to be passed on to tariff. OPTCL has stated that requirement of contingency reserve in a natural calamity-prone state like Odisha needs no over emphasis. Investment towards contingency reserve relates to maintaining an emergency fund to meet expenses towards unforeseen calamities. Contingency reserve is being kept in a separate reserve fund and invested in specified securities. The Commission scrutinized the audited account of OPTCL for 2010-11. From Schedule-2 of the Balance-sheet, it is found that OPTCL has a balance of Rs.122.74 crore in Contingency Reserve. On a query regarding utilization of contingency reserve OPTCL has stated that as per audited accounts of 2010-11 an investment of Rs.27.055 cr. has been made by OPTCL towards securities of Govt. of Odisha against utilization of contingency reserve fund. The Commission in line with the orders of the last year does not allow the claim of OPTCL towards contingency reserve since OPTCL has not taken any step for investment of contingency reserves of the balance amount reflected in the Balance sheet.

**Provision for Bad & Doubtful Debt**

323. OPTCL claimed an amount of Rs.0.10 crore towards bad and doubtful debt during 2012-13. The Commission does not allow the same on the ground that OPTCL is getting 100% of its revenue through Escrow from the DISCOMs on first charge basis.

**Grid Co-ordination Committee Expenses**

324. OPTCL claimed an amount of Rs.0.30 crore towards Grid Coordination Committee expenses for FY 2012-13. The Commission hereby approves the same in line with the tariff orders of previous years.

**Payment of SLDC Charges**

325. 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 2012-13 wherein it has been computed that OPTCL has to Pay 10% of SOC to SLDC. Accordingly, OPTCL will pay an amount of Rs. 0.722 cr. per annum to SLDC towards System Operation Charges for FY 2012-13. The details of SOC are available in the ARR of SLDC approved in Case No.150/2010.The said

amount of Rs. 0.722cr. is allowed in the ARR of OPTCL to be recovered through its Transmission Tariff.

**Pass Through Expenses**

326. OPTCL for the FY 2012-13 claimed an amount of Rs.205.81 crore under this head as a pass through in Revenue Requirement on the basis of truing up exercise undertaken by OPTCL. The cumulative negative balance as on 31.03.2011 of OPTCL as per the provisional account of 2010-11 works out to Rs.205.81 crore which the licensee claims to recover through tariff. The Commission has undertaken the truing up exercise of OPTCL based on audited actuals from 2006-07 to 2010-11 and passed order vide case No. 7/2012 dtd.19.03.2012 according to which OPTCL posted a positive gap of Rs.371.03Cr as on 31.03.2011. The Summary of the Truing up exercise is given in table below:

**Table – 59**

**(Rs. cr.)**

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

327. It is clear from the above table that OPTCL posted a cumulative surplus of Rs.371.03 cr. at the end of FY 2010-11. Hence, OPTCL does not require any amount towards special appropriation on past losses. The Commission hereby disallows the claim of Rs.205.81 crore towards pass through expenses.

**Incentive to OPTCL for System Availability**

328. OPTCL in its submission has claimed for an incentive of Rs.9.41 Cr. to be passed on the ARR of FY 2012-13 as the system availability of OPTCL Transmission Network for FY 2010-11 was 99.84%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98%. The OPTCL Incentive Claim of Rs.9.41 Cr. has been certified by SLDC and counter signed by Member Secretary, GCC. A calculation of incentive claimed by OPTCL is given below:

**Table - 60**
**Calculation of Incentive Claimed by OPTCL**

| Name of the long-term customer | Energy Wheeled by OPTCL During 2010-11 (MU) | Transmission Charge @ 23.5 P/U during 2010-11 (Rs. in Crore) | Transmission System Availability during 2010-11 for calculation of incentive | Transmission System Availability above 98% | Incentive claimed by OPTCL for 2010-11 (Rs. in Crore) |
|---|---|---|---|---|---|
| **(1)** | **(2)** | **(3)** | **(4)** | **(5)=(4)- 98%** | **(6)=(3) x (5)** |
| CESU | 7074.59 | 166.25 | 99.84% | 1.84% | 3.06 |
| NESCO | 5103.42 | 119.93 | 99.84% | 1.84% | 2.21 |
| WESCO | 6489.30 | 152.50 | 99.84% | 1.84% | 2.81 |
| SOUTHCO | 2559.70 | 60.15 | 99.84% | 1.84% | 1.11 |
| NALCO | 314.29 | 7.39 | 99.84% | 1.84% | 0.14 |
| IMFA | 216.94 | 5.10 | 99.84% | 1.84% | 0.09 |
| **Total Incentive Claimed (Rs. in Crore)** | | | | | **9.41** |

329. The Commission examined the provision of Section-61 of the Act where it is mentioned that the appropriate Commission shall be guided by the following:

**Regulation 61 (a).** The principles and methodologies specified by the Central Commission for determination of the Tariff applicable to generating companies and transmission licensees.

**Regulation 61 (e).** The principle rewarding efficiency in performance.

330. The Regulation 25 (1) & Regulation 28 of CERC (Terms and Conditions of Tariff ) Regulations 2009 stipulate as under:

**Regulation 25 (1).** Recovery of capacity charge, energy charge, transmission charge and incentive by the generating company and the transmission licensee shall be based on the achievement of the operational norms specified in this Chapter.

**Regulation 28.** Normative Annual Transmission System Availability Factor (NATAF) as under:

(1) AC System; 98%

331. As OPTCL has attained the System Availability of 99.84% during FY 2010-11 and is expected to maintain NATAF more than 98% during FY 2011-12, pending the verification, the Commission approves an amount of Rs.2.00 Cr. as an incentive in the ARR of OPTCL for FY 2012-13 (Rs.2.0 cr. approved for FY 2011-12) with a rider that this incentive amount approved by the Commission should be spent in the Grid sub-stations where the EHT voltage is not within (-)12.5% of the normative voltage level at 220 KV /132 KV and continuously suffer from low voltage . The Commission desires that this incentive amount of Rs.2.00Cr. should be spent in such a way that its secondary side 33 KV supply to DISCOMs should be at (+) 33 KV.

**Miscellaneous Receipts**

332. OPTCL has proposed Rs.18 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:

*"The beneficiaries such as Gujurat UVNL (GUVNL) and Madhyapradesh PTCL (MPPTCL) using OPTCL's network are not paying inter-state wheeling charges since long due to dispute raised by MPPTCL and the matter is subjudice now at Hon'ble Suprement Court of India. Other Utilities such as Chhatisgarh SPDCL, MSEDCL, Daman, Diu & DNH are paying at the rate of around 10 paise per unit against our billing rate of 17.5 paise per unit. The order in force as of now as per ATE is around 3.5 paise per unit. As there is a gap of about 14 paise per unit between the rate of billing and the rate in force, the income from inter-state wheeling cannot be assessed correctly for FY 2012-13.*

*In view of reducing revenue trend from Supervision Charge and uncertainty involved in revenue generation from other sources as well, OPTCL expects the Miscellaneous Receipt of Rs.18.00 Crore during FY 2012-13."*

333. The Commission examined the audited accounts of 2010-11 submitted by OPTCL. It is revealed that OPTCL had earned Rs.25.51 crore from supervision charges and other receipts which excludes revenue from Inter-State wheeling, Intra-State short term Open Access. The Commission approved the Misc. receipts of Rs.25.51 cr. to be adjusted from the total revenue requirement.

**Transmission Cost**

334. The total energy to be transmitted in the OPTCL system is estimated at 23485 MU for FY 2012-13, the details of which are mentioned in the Table below:

**Table – 61**

| Details of Energy for Transmission | Proposed by OPTCL (MU) | Approved by OERC (MU) |
|---|---|---|
| Sale to DISCOMs | 24,022.00 | 23,085.00 |
| Wheeling to industries from CGPs | 300.00 | 300.00 |
| Sale to CGPs by GRIDCO | 10.00 | 100.00 |
| **Total** | **24,332.00** | **23,485.00** |

335. The details of expenses proposed by OPTCL and approved by the Commission for FY 2012-13 towards transmission charges are depicted in the Table below:

**Table – 62**
**ARR Proposed and Approved for OPTCL for FY 2012-13 (Rs. in cr.)**

| ITEMS | Approved for 2011-12 | Proposed for 2012-13 | Approved for 2012-13 |
|---|---|---|---|
| Employees Cost including Terminal Benefits | 338.14 | 655.36 | 318.48 |
| R&M Cost | 75.00 | 95.46 | 95.00 |
| A&G Cost | 18.00 | 39.11 | 21.25 |
| Interest on Loan Capital | 61.33 | 102.54 | 35.33 |

| ITEMS | Approved for 2011-12 | Proposed for 2012-13 | Approved for 2012-13 |
|---|---|---|---|
| Depreciation | 79.42 | 155.99 | 78.57 |
| Return on Equity | 7.45 | 24.81 | 22.17 |
| Interest on Working Capital | - | 44.47 | - |
| **Sub-Total** | **579.34** | **1117.74** | **570.80** |
| Special Appropriation | **33.93** | **0.00** | **38.71** |
| **Pass Through Expenses** | - | 205.81 | - |
| Contingency Reserve | - | 15.10 | - |
| Bad & doubtful debt Debts | - | 0.10 | - |
| GCC Expense including SLDC charges | 1.00 | 0.30 | 1.02 |
| Incentive for system availability | 2.00 | 9.41 | 2.00 |
| **Total** | **616.27** | **1348.46** | **612.53** |
| **Less Misc. Receipts** | **43.77** | **18.00** | **25.51** |
| **Annual Revenue Requirement to be recovered from LTOA Consumers (i.e. DISCOMs & CGPs)** | **572.50** | **1330.46** | **587.02** |
| **Transmission Charges (Paise/Unit) (Rounded)** | **25.02 Rounded to 25 paise** | **54.68** | **25.00 paise** |

## TARIFF DESIGN (Para-336 to 351)

### Transmission Charges

336. OPTCL in its ARR Application for FY 2012-13 has proposed Transmission Charges @ 54.68 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.

337. 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 **23485** MU with an average demand of **2680.94** MW. The net transmission cost as indicated in the table above is Rs. **587.02** crore. **With 25 Paise per Unit the LTOA charges, works out to a sum of Rs.6000.00/MW/day or Rs.250/MWh. The long term open access customer availing Open Access under relevant Regulations of OERC shall pay Rs.6000.00/MW/Day or Rs.250.00/MWh towards transmission charges. In accordance with OERC Regulation, 2005, the short term open access customers shall pay at the rate of 25% of the long-term open access charges. Accordingly the Commission approves the rate of Rs.1500.00/MW/day or**

**Rs.62.5 / MWh for STOA customers.** This will be in addition to other charges in accordance with OERC Open Access Regulations, 2005 & 2006.

**Transmission Loss for Wheeling**

338. OPTCL had proposed that out of the energy supplied to transmission licensee, 3.80% shall be deducted towards transmission loss and balance is liable to be delivered at delivery point at 400KV/220KV/132KV. The Commission has approved the transmission loss of 3.80% for wheeling for FY 2012-13

**Reactive Energy Charges:**

339. OPTCL in its ARR application for FY 2012-13 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.

340. The Commission in order dated 06.04.2009 in Case No. 22/2009 had approved for preparation and billing of weekly Reactive Energy Charges (both provisional and final) for FY 2009-10 @ 5.75 paise/KVArh by SLDC as per Clause 1.7 of OGC during the interim period till the Commission finally approves an appropriate Reactive Energy Charges. Further, the Commission in order dated.20.03.2011 had approved Reactive energy charges provisionally @ 6.25 Paise /KVArh as per Clause 1.7 of OGC for FY 2011-12 and directs OPTCL to file the calculation of Reactive Energy Charges afresh with full justification thereof at earliest vide para 23.1/2/3 of the said order. OPTCL has not yet responded to the order of the Commission. In the mean time OPTCL has filed the calculation for Reactive Energy Charges for FY 2010-11 which was registered as case no 126/2010 is pending with the commission. The Commission hereby directs OPTCL to comply the directives vide para 23.1/2/3 of the order dated 06.04.2009 for further hearing and disposal of both the case on the issue of Reactive Energy Charges.

341. Further the Commission vide Order dtd. 06.4.2009 had directed OPTCL to install 150 MVAR compensation in 10 nos. of grid substations viz Bolangir, Patnagarh, Sonepur, Kendrapara, Patamundai, Rairangpur, Jajpur Town, Kesinga, Khariar and Saintala in FY 2009-10 and balance 125 MVAR in 13 nos. of Grid substation viz. Sambalpur, Dhenkanal, Puri, Ransinghpur, Bidanasi, Chandikhol, Choudwar, Cuttack, Nuapatna, Paradeep, Bhadrak, Jaleswar and Sunabeda during 2011-12 subject to system study report after installation of 1st phase 150 MVAR compensation.

342. The Commission had directed OPTCL to install 275 MVAR capacitors with the twin objectives i.e. to improve the voltage in the command areas of 23 nos. of Grid Substations as well as to save a considerable quantity of energy lost in the system in absence of requisite reactive compensation.

343. Commission has already approved the Investment proposal of OPTCL for Rs.18.594 cr. towards installation of Capacitor Banks (total 275MVAR) at 23 nos. existing grid sub-stations vide order dated 20.5.2010 in Case No. 23/2010. During the Performance Review of licensees held in the month of December 2011 OPTCL submitted that it has placed order for installation of 33 KV capacitor

bank with an aggregate capacity of 275 MVAR at 20 numbers of sub stations with maintenance contract for 10 years. Out of the 20 grid sub stations OPTCL has proposed to install 10 nos in CESU area, 5 nos in NESO area, 4 nos in WESCO area and 1 in SOUTHCO area.

344. OPTCl submitted during hearing that the installation of shunt capacitor will be completed in 132/33 KV Grid Sub-stations at Mancheswar, Bhubaneswar by March, 2012 and at other 19 nos. of Grid Sub-stations during FY 2012-13. The Commission hereby directs OPTCL to install shunt capacitors in balance 19 nos of Grid Sub-stations by December, 2012.

345. In view of above orders and observations on Reactive Energy Charges, the Commission approves such charges @ 6.50 paise / KVArh for FY 2012-13 provisionally in line with the provision of Clause 1.7 of OGC which states that the rate for charge/payment of Reactive Energy Charges shall be escalated at 0.25 paise / KVArh per year and directs the licensee to file the calculation of Reactive Energy Charges afresh with full justification thereof at the earliest.

**Implementation of Intra-State ABT**

346. OERC (Intra-State ABT) Regulation, 2007 was published in Orissa Gazette on 14.02.2008. As per Regulation 1 (III), OERC (Intra-State ABT) Regulation, 2007 is in force from 14.02.2008 i.e. the date of publication in the Official Gazette.

347. The Commission vide its order dated 07.02.2012 in Case No. 2/2012 has fixed the date of implementation of Intra-State ABT (Phase-I) in real time mode with commercial implication in the State of Odisha w.e.f 01.04.2012. The Commission reiterates its direction that any lapses in implementation of Intra-State ABT (Phase-I) with commercial implication beyond 01.04.2012 will not be entertained & action under Section 142 will be initiated against the Licensee, SLDC & the Officers responsible for derailing such implementation beyond 01.04.2012.

**Transmission Charge Payment Mechanism**

348. Commission in Transmission Tariff order 2010-11 have stated the following:

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

*373. In the transmission tariff orders for FY 2008-09 and 2009-10, OPTCL would bill the Transmission Charges to the DISCOMs for the use of transmission services on the basis of meter reading at the delivery point* *with a copy to GRIDCO. The bill would be paid by GRIDCO to OPTCL from the receivables of DISCOMs escrowed with GRIDCO and the balance amount available shall be utilized for payment of Bulk Supply Price (BSP). This creates a lot of inconvenience for OPTCL and GRIDCO as well as the DISCOMs with regard to reduction of income tax at source consequently the issue of tax deduction certificate by the ultimate disbursing officer. After due consideration of the difficulties pointed out by OPTCL the Commission feels that the existing procedures needs suitable modification. Commission, therefore, directs that GRIDCO shall issue a standing and irrevocable instruction to the DISCOMs and the Escrow Bank (Union Bank of India) permitting the DISCOMs to make payment against the monthly transmission charge bills of OPTCL from the Escrow Account. DISCOMs shall make payment of SLDC charges to SLDC and transmission charges to OPTCL before making payment of bulk supply bills of GRIDCO"*

The above principle followed for the Financial Year 2010-11 & 2011-12 for payment of monthly SLDC Charges to SLDC & Transmission Charge to OPTCL shall also to be followed for the Year 2012-13.

**Rebate**

349. For payment of bills through a letter of credit or by payment in cash within two working days (except holidays under N.I. Act), 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**

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

351. The transmission tariff approved as above in respect of OPTCL will become effective from 1st April, 2012 and shall continue until further order.

The application of OPTCL in Case No.92 of 2011 is disposed of accordingly.

| | | |
|---|---|---|
| Sd/- | Sd/- | Sd/- |
| **(B. K. Misra)** | **(K. C. Badu)** | **(S. P. Nanda)** |
| **Member** | **Member** | **Chairperson** |