ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO. 4, CHUNOKOLI, SHAILASHREE VIHAR,
BHUBANESWAR-751021

****

Present: **Shri G. Mohapatra, Member**
Shri S. K. Ray Mohapatra, Member

CASE NO. 76 OF 2022

DATE OF HEARING : 14.02.2023

DATE OF ORDER : 23.03.2023

IN THE MATTER OF: **An application for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2023-24 filed by OPTCL under Sections 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Conduct of Business) Regulations, 2004, OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and other tariff related matters for the FY 2023-24.**

And

Truing up for the FY 2021-22 in compliance to the Regulation-7 of the OERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2014.

O R D E R

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short OPTCL), the petitioner in the present case has been notified as State Transmission Utility vide clause -10 of the State Government Notification No-6892 dated 09.06.2005 under Section 39(1) of the Electricity Act2003. It carries out Intra State transmission business in the state of Odisha with effect from 09.06.2005. By virtue of the 2nd Proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as "the Act") OPTCL is a deemed Transmission Licensee under the Act and is now governed by License Conditions set forth in OERC (Conduct of Business) Regulations, 2004, at Appendix 4B issued under Section 16 of the Act, as modified by Commission's Order dated. 27th October 2006. After completion of the sale process of erstwhile distribution utilities and consequent to issuance of vesting orders by the Commission, Bulk Power Transmission and SLDC Agreements have been signed between OPTCL and new distribution companies.

A. PROCEDURAL HISTORY (Para 2 to 7)

2. As per OERC (Conduct of Business) Regulations, 2004 and OERC (Terms and Conditions for Transmission Tariff) Regulations, 2014, licensees/deemed licensees are

required to file their Aggregate Revenue Requirement (ARR) within 30th November of each year in the prescribed formats. OPTCL as a deemed licensee had submitted its ARR application for FY 2023-24 along with Truing up for FY 2021-22 before the Commission on 30.11.2022 and the said application was registered as Case No.76 of 2022. After due scrutiny and admission of the matter, the Commission directed OPTCL to publish its ARR & Transmission tariff application for FY 2023-24 in the approved format in the leading and widely circulated in English language in one issue each of a daily English and Odia daily newspaper and in Odia language in one issue of daily Odia newspaper and also the matter was posted in the Commission's website in order to invite objections/views 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.

3. Accordingly, OPTCL published the said public notice in one issue of the leading daily English and Odia newspaper. The Commission issued notice to each applicant, objectors and to the Government of Odisha represented by Department of Energy to send their authorized representative to take part in the ensuing tariff proceedings.

4. In response to the aforesaid public notice of the applicant, the Commission received objections/suggestions from the following persons/associations/institutions/ organizations.

   a) Shri R.P.Mahapatra, Retd. Chief Engineer & Member (Gen.) erstwhile OSEB, Plot No-775 (P), Lane-3, Jayadev Vihar, Bhubaneswar-751013;
   b) M/s. Grinity Power Tech Pvt. Ltd., At-K-8-82, Kalinga Nagar, Ghatikia, Bhubaneswar-751029;
   c) Shri Soumya Ranjan Patnaik, S/O. Late Brajabandhu Patnaik, MLA, Khandapada, Plot No. 185, VIP Colony, Nayapalli, Bhubaneswar-15;
   d) Shri Akshya Kumar Tripathy, General Secretary, Nikhila Odisha Bidyut Sramika Mahasangha, Power House Colony, Bhubaneswar-751012;
   e) Shri Bibhu Charan Swain, the Authorized Representative of M/s.Utkal Chamber of Commerce & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015;
   f) M/s. Ferro Alloys Corporation Limited (FACOR), D.P.Nagar, Randia, Dist-Bhadrak-756135;
   g) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President, Upobhokta Mahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012; and

h) M/s. Vedanta Limited,1st Floor, C-2 Fortune Tower, Chandrasekharpur, Nandanakanan Road, Bhubaneswar-751023.
i) M/s. Visa Steel Ltd., Kalinganagar, Industrial Complex, At/P.O;Jakhapura, Dist.-Jajpur-755026
j) Shri Ananda Kumar Mohapatra, Plot No.799/4. Kotitirtha Lane, P.O: Old Town, P.S. Lingaraj Police Station, Bhubaneswar-751002;
k) Ms. Nibedita Mishra, Addl. Secretary, Department of Energy, Govt. Of Odisha;
l) Shri Puneet Munjal (Chief Regulatory& G.A.), TPCOD for self and for other DISCOMs of Odisha; and
m) Shri Manoj Kumar Das, Chief Project Manager, GRIDCO Ltd.

All the said objectors/their representatives along with the representative of Dept. of Energy, GoO were present during tariff hearing through hybrid mode except the representative of M/s.Grinity Power Tech Pvt. Limited and M/s. Vedanta Ltd. The written submissions filed by them were taken on record and also considered by the Commission.

5. The applicant has submitted its reply on issues raised by the various objectors who participated in the hearing and to the queries raised/suggestions of the Commission made during hearing.

6. In exercise of the power conferred under Section 94(3) of the Electricity Act, 2003, the Commission has appointed World Institute of Sustainable Energy (WISE), Pune as Consumer Counsel for objective analysis of the licensee's Aggregate Revenue Requirement and Determination of Transmission Tariff proposal for FY 2023-24 with a view to protect the interest of the consumers.

7. The date for hearing of the matter was fixed to 14.02.2023 at 11.00 AM and it was duly notified in the leading newspaper mentioning the list of the objectors. The Commission has also issued individual notices to the objectors and the Department of Energy, Government of Odisha (GoO) informing them about the date and time of hearing through hybrid mode (physical &virtual) and requesting the applicant, the objectors and the Government's authorized representative to furnish their e-mail ID and WhatsApp number in the address oerc.vc@gmail.com on the previous day of hearing for providing links for facilitating their presence in virtual mode. Accordingly, the applicant, objectors and representative of Department of Energy, GoO participated during the proceedings and offered their views/suggestions/proposals during the hearing pertaining to the ARR and Transmission Tariff of OPTCL for the FY 2023-24. The Consumer Counsel presented its views during the hearing.

B. OPTCL's ARR & TARIFF PROPOSAL FOR THE FY 2023-24 & TRUING UP FOR FY 2021-22 (PARA 8 TO 46)

8. 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 and under Regulation 5.2 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, OPTCL is required to submit its Aggregate Revenue Requirement (ARR) application by 30th November for the ensuing year before OERC for approval. The Commission, in its order dated 21.04.2020 in case number 72 of 2019, exercising the power conferred under Regulation 9.1 of the aforesaid Regulation, had extended the applicability of Transmission Tariff Regulations, 2014 until further orders. In compliance to the provisions of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, OPTCL has submitted its Aggregate Revenue Requirement & Transmission Tariff application for the FY 2023-24 and along with truing-up for the FY 2021-22 before the Commission for approval.

Categorization of Customers

9. OPTCL is responsible for planning and development of intra-state transmission system of the State. All the customers seeking access to OPTCL's Transmission System are classified under three categories:

   a. Long Term Access Customers (LTA Customers): A Long-Term Access Customer means the right to use the Intra-State Transmission System for a period exceeding 7 years but not exceeding 25 years. Based on such premise, four DISCOMs, NALCO, IMFA and BEL happen to be the long-term customers of OPTCL.

   b. **Medium Term Open Access Customers (MTOA Customers):** Medium Term Open Access means the open access for a period exceeding three (3) months but not exceeding three (3) years.

   c. **Short Term Open Access Customers (STOA Customers):** Short Term Open Access means open access for a period up to one (1) month at a time.

   Medium-Term Open Access or Short-Term Open Access shall be granted, if the resultant power flow can be accommodated in the existing transmission system or the transmission system under execution and no augmentation/expansion of the transmission system is required for granting such open access.

ARR & TARIFF PROPOSAL FOR FY 2023-24

Formulation and Computation of Transmission Charges:

10. The Commission has framed OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 (herein after called "OERC Regulations, 2014") which has been published in Extra Ordinary issue of the Odisha Gazette on 04.12.2014 and made effective from that date.

OPTCL, the Transmission Licensee, has submitted the ARR & Transmission Tariff application for the FY 2023-24 in line with above Regulations of OERC. Regulation 5 of the OERC's Transmission Tariff Regulations, 2014 specifies the procedure for Tariff Determination and Regulation 8 specifies the Principles for Determination of ARR. As per the Regulation 8.1, the ARR for the Transmission Business for each year shall contain the following items:

(i) Operation and Maintenance expenses;
(ii) Interest and Financial Charges;
(iii) Depreciation;
(iv) Return on Equity;
(v) Income Tax;
(vi) Deposits from Transmission System Users;
(vii) Less: Non-Tariff Income
(viii) Less: Income from Other Business as specified in these Regulations

The various costs involved for carrying out transmission business by OPTCL for FY2023-24 while formulating the ARR and Transmission Tariff have been categorized under the following heads:

I. Fixed Cost

- Operation & Maintenance(O&M) Expenses
- Interest and Financial Charges
- Depreciation
- Return on Equity

II. Others:

- Incentive for System Availability

DETAILS OF FIXED COST:

O&M Expenses:

11. As per the Regulation 8.2 of OERC Regulations, 2014, Operation and Maintenance (O&M) expenses shall include:

(a) Salaries, wages, pension contribution and other employee costs;
(b) Administrative and General Expenses;
(c) Repairs and Maintenance;
(d) Expenses related to auxiliary energy consumption in the sub-station for the purpose of air-conditioning, lighting, technical consumption, etc.; and
(e) Other miscellaneous expenses, statutory levies and taxes (except corporate income tax)

The details of O&M Expenses proposed by OPTCL for the FY 2023-24 are as under:

Salaries, wages, pension contribution and other employee costs:

12. OPTCL in its proposal has submitted that, the Employee Cost includes Basic pay, Dearness Allowance (DA), House Rent Allowance (HRA), Medical Allowance, Conveyance Allowance/Reimbursement, Stipend for New recruitment, Staff Welfare expenses, Ex-gratia, other expenses etc, Terminal benefit liability (Pension, Gratuity and Leave Salary) and employer contribution to NPS.

13. Accordingly, OPTCL proposes **Rs.508.76 Cr.** under the head Employees Cost for the FY 2023-24. The component wise details are shown in the table below.

Table - 1
Employee Cost Proposed by OPTCL for FY 2023-24

Particulars	Amount (Rs. Cr.)
Employee cost including Salary, Dearness Allowance etc.	295.51
Terminal Benefit Liability of Employees and Existing Pensioners	226.76
Less: Capitalization	13.51
Total	**508.76**

Administrative and General (A&G) Expenses

14. OPTCL has proposed **Rs. 47.07 Cr.** towards A&G Expenses for FY 2023-24. The A&G Expenses include property related expenses, communication, professional charges, conveyance and travelling, SLDC charges, license fee and material related expenses. The A&G expenses show an increasing trend in recent years due to increase in number of establishments (for smooth operation, maintenance and project execution), price rise and inflation being on higher side than the amount approved by the Commission.

Repair and Maintenance (R & M) Expenses:

15. OPTCL has stated that, 177 nos. Grid Sub-Stations at different voltage levels and EHT transmission lines of 15,707.454 ckt. kms are in operation as on 01.04.2022. The details are given in the table below.

Table - 2
Details of Sub-stations and Lines of OPTCL (as on 01.04.2022)

Sub-Station and Line Details		
400/220/33kV S/S	2	
400/220/132/33kV S/S	3	
220/132/33kV S/S	25	
220/33kV S/S	15	
220/132kV S/S	1	
132kV Sw. Stn.	23	
132/33kV S/S	108	
Total No. of Sub-Stations	**177**	
Voltage Level	**Lines (ckt. km.)**	**Bays**
400kV	1196.872	70
220kV	6499.154	414
132kV	8011.428	1151
33kV		1364
TOTAL	**15,707.45**	**2999**

16. Further, OPTCL has proposed that, around 20 Nos. of new grid substations under execution to be commissioned during the year FY 2022-23 and FY 2023-24. The R&M works are being undertaken under different activities namely O&M, Telecom, Civil Works and Information Technology (IT). Accordingly, OPTCL has proposed R&M Expenses of **Rs. 164.34 Cr.** for the FY 2023-24. The details of R & M expenses are given in the table below:

Table - 3
Repairs and Maintenance (R&M) Expenses Proposed by OPTCL for the FY 2023-24

Particulars	**OERC Approval (FY 2021-22)**	**OERC Approval (FY 2022-23)**	**Amounts (Rs. Crore)**
(i) O&M	**118.61**	**110.50**	140.23
(ii) Telecom			01.80
(iii) Civil Works			16.34
(iv) InformationTechnology			05.97
Total R & M Expenses			**164.34**

Grid Coordination Committee (GCC) Expenses:

17. OPTCL has proposed **Rs. 0.35 Cr** towards annual GCC Expenses for FY 2023-24 in line with the matters specified in the Chapter-11(2)(2) of the Odisha Grid Code (OGC) Regulations, 2015.

18. OPTCL has proposed **Rs.720.52 Cr** under O&M Expenses for the FY 2023-24, the details of which is given in the table below:

Table - 4
O&M Expenses Proposed by OPTCL for the FY 2023-24

Particulars	Amount (Rs. Cr.)
(i) Employees Cost including Terminal Benefits	508.76
(ii) A&G Expenses	47.07
(iii) R&M Expenses	164.34
(iv) GCC Expenses	0.35
Total O&M Expenses	**720.52**

Interest and Financial Charges:
Interest on Loan

19. OPTCL has proposed **Rs.137.59 Cr.** towards interest on loan capital for the FY 2023-24.

Interest on Working Capital

20. As per the Regulation 8.26 of OERC's Transmission Tariff Regulations, 2014, the rate of interest for working capital shall be on normative basis and shall be equal to the SBI Base Rate plus 300 basis points as on 1st January of the preceding year for which tariff is determined. Considering interest rate of 11.70% (SBI Base rate of 8.70% +3.00%), OPTCL has estimated working Capital requirement of Rs. 290.49 Cr. and accordingly interest on working capital to the tune of Rs. 33.99 Cr. is proposed for the FY 2023-24. It is further stated that, in case of STU (OPTCL), the Commission shall determine the requirement of working capital, if needed, depending on the cash flow position of the licensee and shall allow interest on the same.

Rebate:

21. OPTCL has projected 2% rebate amounting to **Rs. 22.04 Cr.** which is calculated basing on the projected ARR for the FY 2023-24.

New Projects:

22. OPTCL has submitted to spend **Rs. 1,006.59 Cr**. during the FY 2023-24 as Capital Expenditure (CAPEX) on new projects under different activities like Telecom, O&M, IT, Civil Works and Construction. The details of expenditure proposed under CAPEX is furnished in the table below.

Table - 5
Proposed CAPEX on New project for the FY 2023-24

Particulars	Amount (Rs. Cr.)
(i) Telecom Wing	54.70
(ii) Existing Assets (O&M Wing)	197.19
(iii) Information Technology (IT Wing) & others	30.51
(iv) Civil Wing	78.19
(v) New Transmission Projects (Construction Wing)	646.00
Total Capital Expenditure [(i)+(ii)+(iii)+(iv)+(v)]	**1,006.59**

Depreciation:

23. OPTCL has submitted that excluding the Up-valued assets, grant and beneficiary & deposit works assets and fully depreciated (90% of Asset value) from the gross original book value of fixed assets as on 31.03.2022, its own transmission assets is Rs.4457.36 Cr. It has further been projected that Rs.824.17cr. and Rs.847.57Cr. own transmission assets (excluding Deposits works & Grant assets etc.) is likely to be added during FY 2022-23 and FY 2023-24 respectively. Considering the same, the original book value of transmission fixed assets will become Rs. 5281.53 Cr as on 31-03-2023 and Rs. 6129.11 Cr as on 31-03-2024. Accordingly, OPTCL has proposed Rs. 293.96 Cr under the head depreciation for the ensuing FY 2023-24 by considering the average transmission assets for the FY 2023-24.

Return on equity (RoE):

24. OPTCL has submitted that, at the time of de-merger of GRIDCO (effective from 01.04.2005), the equity share capital of OPTCL was stated at Rs. 60.07 Cr. Through infusion of additional capital by the State Government, the paid-up equity capital of OPTCL has increased to Rs. 1886.71 Cr as per the Audited Account as on 31.03.2022 and it includes Rs 647 Cr. of bond with interest converted to Equity. Further, OPTCL has stated that, during the FY 2022-23, Government of Odisha has already infused Rs. 184.76 Cr. and Rs. 62.93 Cr will be infused during the FY2023-24. So, the total equity capital of OPTCL will be Rs. 2134.40 Cr (Rs.1886.71 Cr. + Rs.184.76 Cr. + Rs.62.93 Cr.) as on 31.03.2024. Further by excluding the Equity of Rs. 60.07Cr. (De-merger) and Rs.647.00 Cr (bond with interest converted to Equity), OPTCL proposes RoE on equity capital of Rs 1427.33 Cr. (i.e., Rs.2134.40 Cr. – Rs.60.07 Cr. – Rs.647.00 Cr.). Accordingly, OPTCL proposes Rs 221.24Cr. under RoE (@15.5%) for the ensuing FY 2023-24 as per Clause 8.28 of OERC Transmission Tariff Regulations, 2014.

Income Tax:

25. As per the Regulation 8.43 of OERC's Transmission Tariff Regulations, 2014, Income tax of the Transmission Licensee shall be recovered from the beneficiaries. As per the Audited Accounts of the FY 2021-22, OPTCL has paid Income Tax of Rs.27.21 Cr**.** Accordingly, equivalent amount of Rs. 27.21 Cr. has been proposed for FY 2023-24. The petitioner has stated that, any variation in proposed amount shall be adjusted during the true up exercise based on audited accounts as per the Regulation 8.43 and 8.44.

Incentive for System Availability:

26. The Regulation 6.4 of OERC's Transmission Tariff Regulations, 2014 specifies the "Operational Norm" applicable for transmission system for recovery of full annual

transmission charge by the Transmission Licensee. Further, the Normative Annual Transmission System Availability Factor (NATAF) shall be 98.50% for AC system for recovery of full Annual Transmission Charges. OPTCL has filed the calculation of TAFY for the year 2021-22 as 99.98%. The computation and TAFY figure have been verified and certified by SLDC. In accordance with the formula prescribed in Regulation 6.5, OPTCL has worked out incentive of Rs.11.91 Cr. towards system availability for the year 2021-22. Accordingly, OPTCL proposed Rs.11.91Cr. towards Incentive for System Availability for the ensuing FY 2023-24.

Total Transmission Cost:

27. Considering the proposed cost / expenses under different heads and incentives, OPTCL has submitted that, the total transmission cost will be Rs. 1468.45 Cr. for the ensuing FY 2023-24.

Miscellaneous Receipt:

28. OPTCL has stated that, compared to earlier years, the earning from supervision charge is drastically reduced due to number of applicant industries is very less. Hence, in line with the trend of revenue earning during 1st six month of FY 2022-23, OPTCL proposes **Rs. 366.45 Cr.** under Miscellaneous Receipt such as inter-State wheeling charges, STOA & STU charges, Bank interest and other receipts for the FY 2023-24.

Summary of ARR proposed by OPTCL for the FY 2023-24

29. Considering all the aforesaid proposed transmission costs and miscellaneous receipts, OPTCL has filed its Net Aggregate Revenue Requirement (ARR) of **Rs.1102.00 Cr** for the ensuing FY 2023-24 before the Commission for approval. The Summary of ARR are shown in the table below:

Table - 6
Summary of ARR Proposed by OPTCL for FY 2023-24

	Particulars	Amounts (Rs Cr.)	
1.	**O&M Expenses (a+b+c+d)**		**720.52**
	(a) Employees Cost including Terminal Benefits	508.76	
	(b) A&G Cost	47.07	
	(c) R&M Cost	164.34	
	(d) Other misc. expenses, statutory levies and taxes (GCC)	0.35	
2.	**Interest & Financial Charges (e+f+g)**		**193.62**
	(e) Interest on Loan Capital	137.59	
	(f) Interest on Working Capital	33.99	
	(g) Rebate	22.04	
3.	**Depreciation & amortisation expense**		**293.96**
4.	**Return on Equity**		**221.24**
5.	**Income Tax**		**27.21**
6.	**Incentive for system availability**		**11.91**

Particulars		Amounts (Rs Cr.)
Total Transmission Cost (1+2+3+4+5+6)		**1468.45**
7. Less: Miscellaneous Receipt		366.45
8. Net ARR proposed to recover from LTOA Customers:		**1,102.00**

Transmission Loss

30. OPTCL has submitted that, the transmission loss is purely a technical loss and dependent on the location of generation sources, system configuration and power flow requirements at different load centres. Further due to increasing demand of power on account of industrialization and implementation of central & state sponsored schemes like ODSSP, RGGVY, DDUGJY, BGJY, 24x7 Power for All, IPDS, SCRIPS etc. in Odisha, flow of power in the transmission network contributing to increased transmission loss. OPTCL further mentioned that, its transmission loss is already very low which means further reduction in loss is bit difficult. OPTCL has been able to reduce the transmission loss over the years by commissioning a number of new transmission projects strategically and adopting innovative schemes under Master Maintenance Plan during last few years. The actual transmission loss in the OPTCL's transmission system from April' 22 to September' 22 is 3.14% against Commission's approval of 3.00% for FY 2022-23. OPTCL expects the loss level to remain around 3.15% in the current year. Accordingly, OPTCL proposes 3.10% transmission loss during FY 2023-24.

OPTCL Revenue Receipt and Deficit in the Proposed ARR for the FY 2023-24:

31. OPTCL has stated that, it has taken the recent realistic demand projection of all four DISCOMs **33,858 MU (3865.07 MW)** for FY 2023-24. Further it has projected that, 300 MU (34.25 MW) energy to be transacted in 33kV & 11kV network of DISCOMs for which OPTCL is not entitled to get any transmission charge as per the Commission's order. Hence, excluding this, the petitioner has estimated that, net **33558 MU** (i.e., 33858MU - 300 MU) will be transmitted over the OPTCL's network for DISCOMs. Further OPTCL has projected 678 MU (77.43 MW) for wheeling and supply of Emergency/Back-up power to IMFA, NALCO, ABREL & BEL. Accordingly, the petitioner projected that, 34236 MU (i.e., 33558 MU+678 MU) to be transmitted over its network.

32. Regarding recovery of transmission charges from the LTA Customers during FY 2023-24, OPTCL has proposed in the following manner:

    i. By charging at the rate applicable to DISCOMs for wheeling of 33558 MU (3830.82 MW).

ii. By charging at the rate applicable to LTA customers like IMFA, NALCO, ABREL & BEL for wheeling and supply of Emergency/Back-up power of 678 MU (77.43 MW)

Accordingly, the petitioner projected that, at the existing transmission tariff of 28 P/U, Rs.958.61Cr revenue will be possible from the projected units of 34236 MU.

Excess/Deficit of Revenue Requirement:

33. OPTCL has projected revenue deficit of Rs. 143.39 Cr. (Rs.1102.00 Cr – 958.61 Cr) considering the ARR proposed and the revenue to be earned from wheeling of 34236 MU at the existing transmission tariff of 28 paise/unit.

Proposal for revision of Transmission Tariff/ Wheeling Charges:

34. OPTCL has submitted that as the deficit cannot be met at the existing transmission tariff rate of 28 paise/unit and accordingly, requested to the Commission for approval of:

1. Aggregate Revenue Requirement of Rs.1102.00 Cr.
2. Recovery of Transmission Charge @ Rs. 7725.20 /MW/Day or 32.19 Paise/unit.
3. Transmission Loss for wheeling as 3.10% on energy drawl for FY 2023-24.

Open Access Charges:

35. The Para 20(2), chapter 5 of Regulation "OERC (Terms and conditions of Intra state open access) Regulations 2020" (effective from 18.11.2021) specifies the details of Open Access Charges and transmission charges shall be payable on the basis of contracted capacity in case of long-term and medium-term open access consumers and on the basis of scheduled load in case of short-term open access consumers.

36. The Commission, vide Letter No. DIR(T)-332/2008/77 dated 01.02.2021, had clarified that the DISCOMs do not come under the new regulation "OERC (Terms and conditions of Intra state open access) Regulations 2020" and they are governed under OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014. Therefore, the transmission charges for the LTA customers are to be recovered as under:

i. From four DISCOMs (i.e. TPCODL, TPWODL, TPNODL & TPSODL) as per the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 **[For FY 2023-24, the DISCOMs projection 33558 MU (3830.82MW)]**

and

ii. From other LTA customers (i.e. NALCO, IMFA, ABREL & BEL) as per OERC (Terms and conditions of Intra state open access) Regulations 2020.

[For FY 2023-24, NALCO, IMFA, ABREL & BEL have projected their demands as 87.60 MU (10.00 MW), 360 MU (41.10 MW),164.25 MU (18.75MW) and 65.70 MU (7.50 MW respectively].

37. OPTCL has proposed the Open Access charges for the FY 2023-24 as shown in the table below.

Table - 7
Open Access Charges proposed by OPTCL for the FY 2023-24

Particulars	Per Unit Approach
Net Aggregate Revenue Requirement (Rs. Cr.)	1102.00
Proposed Energy to be transmitted in OPTCL Network (MU)	34236.00
Power Flow in MWs (34236 MU)	3830.82
Proposed Transmission Tariff (Rs. /MW/Day)	7725.20
Proposed Transmission Charges (Paise/unit)	32.19

Reactive Energy Charges:

38. The Commission in Para 16 (page 5) of the order dated 05.02.2019 in Case No. 50/2017 has inter alia viewed that the provisional reactive energy charges of 3 paise/kVARh as allowed in ARR 2018-19 order continue for the time being till a final justification is submitted by OPTCL in consultation with the stakeholders. Accordingly, OPTCL is holding consultation with the stakeholders at regular intervals and some more time is required in this regard. Hence, OPTCL proposes to approve **3paise/kVARh** provisionally as Reactive Energy Charges for the FY 2023-24.

Levy of Grid Support Charges (GSC):

39. An Application has filed before the Commission on 23.09.2020 for determination and approval to levy Grid Support Charges for industries having Captive Generating / Cogeneration plants and running in parallel with the Grids of OPTCL. The same is registered as OERC Case No.-52/2020 and presently under consideration of the commission. If the same is decided in favour of OPTCL, the major portion of accrual from GSC shall be passed on to the end users resulting in further reduction in transmission cost. However, the same is subjected to necessary clearance by the Hon’ble Orissa High Court in W.P(C) No-2220 of 2021 & W.P(C) No-16513 of 2021 filed by M/s Vedanta Limited and M/s CCPPO Odisha respectively.

Rebate:

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

Delayed Payment Surcharge:

41. 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 1.25% 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).

Duty and Taxes:

42. 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.

TRUING-UP PROPOSAL OF OPTCL FOR FY 2021-22:

43. OPTCL has submitted that, as per Regulation 7.1 (Truing up of Capital Expenditure and Tariff) of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 (in short 'Transmission Tariff Regulations, 2014'), OPTCL may file an application each year for truing-up along with the tariff petition filed for the next tariff period and the Commission shall carry out truing-up exercise along with the tariff petition filed for the next tariff period. OPTCL in the instant application has submitted its truing-up proposal for the FY 2021-22 and prayed before the Commission to carry-out truing- up exercise.

44. The petitioner has further submitted that the trueing-up of annual fees and charges of SLDC functions shall be carried out as per Regulation-4 of the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010. Accordingly, the surplus of **Rs. 3.81 Cr.** from SLDC Transaction during the FY 2021-22 has been transferred to SLDC Development Funds.

45. OPTCL has submitted that during FY 2021-22, it has incurred a net deficit of Rs.25.16 Cr. Therefore, the petitioner requests the Commission to consider the component wise surplus/shortfall to carry out the truing up of ARR for FY 2021-22. The components approved in ARR, actual as per audited accounts and truing-up proposed by OPTCL for the FY 2021-22 is shown in the table below:

Table - 8
Truing-up Proposed by OPTCL for the FY 2021-22 (Rs. Cr.)

Particulars	OERC Approved	Actual as per audited accounts of OPTCL	Truing up Proposed	Surplus/ (Deficit)
A. Expenditure				
1. Employee Cost (Net)	457.88	477.52	477.52	(19.64)
2. R & M Cost	118.61	98.86	98.86	19.75
3. A& G Cost (Including SLDC and GCC)	30.70	86.01	86.01	(55.31)
4. Depreciation	232.95	342.56	209.82	23.13
5. Interest on long-term liability	94.50	72.42	72.42	22.08
6. Rebate	15.86	14.40	14.40	1.46
7. Incentive for system availability	5.00	-	11.91	(6.91)
8. Return on Equity	131.70	-	182.84	(51.14)
9. Income tax	-	-	27.21	(27.21)
Total Grand Total (1 to 9)	**1,087.20**	**1,091.77**	**1,180.99**	**(93.79)**
Less: Inter-state wheeling & Misc. Revenue	243.28	319.00	319.00	75.72
Net Transmission Cost	**843.92**	**772.77**	**861.99**	**(18.07)**
Revenue from Transmission Charges	792.93	785.84	785.84	(7.09)
Difference to be allowed in truing up (FY 2021-22)	**50.99**	**(13.07)**	**76.15**	**(25.16)**

46. Further, OPTCL submits that, a review application has been filed, vide petition No. 61/2022 against the order dated 12.07.2022 passed in case No-119/2021 in the matter of turning up the ARR of OPTCL for the FY 2020-21 to consider the net deficit of Rs. 228.97 Cr up to 31.03. 2021.Accordingly, OPTCL prays before the Commission to approve truing-up exercise for the FY 2021-22 and to consider the deficit amount of Rs.25.16 Cr. for FY 2021-22 and the cumulative deficit of Rs. 254.13 Cr. (Rs.228.97 Cr.+Rs.25.16 Cr.) till FY 2021-22.

C. VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2023-24 (PARA 47 TO 49)

47. World Institute of Sustainable Energy (WISE), Pune was appointed as the Consumer Counsel for objective analysis of the proposal regarding ARR and tariff for the FY 2023-24 along with truing-up of FY 2021-22 filed by OPTCL in the instant petition. WISE acting as Consumer Counsel had analysed the application of the licensee and its important observations/suggestions are given below:

Annual Revenue Requirement:

48. In FY 2022-23, the total ARR was increased by 4.41% only over the approved ARR of the FY 2021-22. But the revenue requirement projected by OPTCL for the FY 2023-24

is about 29.37% more than that approved for the FY 2022-23. This increment is due to increase in Employee Cost (6.62%) R&M Cost (48.72%), A&G cost (24.75%), interest on loan capital (24.75%), depreciation (25.86%) and incentive (138.20%). The comparative figures of components of ARR are given in the table below.

Table - 9
Comparative Annual Revenue Requirement of OPTCL (Rs. Crore)

Particulars	Approved FY 2021-22	Approved FY 2022-23	Proposed FY 2023-24	Increase in the FY 2022-23 over the FY 2021-22(%)	Increase in the FY 2023-24 over the FY 2022-23(%)
Employees Cost incl. Terminal Benefits	457.88	477.19	508.76	4.22	6.62
A&G Cost	30.35	37.73	47.07	24.32	24.75
R&M Cost	118.61	110.50	164.34	-6.84	48.72
Other misc. expenses, statutory levies and taxes (GCC)	0.35	0.35	0.35	0.00	0.00
Interest on Loan Capital	94.50	110.29	137.59	16.71	24.75
Interest on Working Capital	0	-	33.99		
Rebate	15.86	16.64	22.04	4.92	32.45
Depreciation	232.95	233.57	293.96	0.27	25.86
Return on Equity	131.70	141.67	221.24	7.57	56.17
Income Tax	0	2.16	27.21		1159.72
Incentive for system availability	5.00	5.00	11.91	0.00	138.20
Total	**1087.20**	**1135.1**	**1,468.45**	**4.41**	**29.37**
Less Misc. Receipts	243.28	303.15	366.45	24.61	20.88
Less Surplus True up	51.00	-			
ARR to be recovered from LTOA Customers i.e. OPTCL's Aggregate Revenue Requirement	792.93	831.95	1,102.00	4.92	32.46
Transmission Charges (P/U)	25	28.00	32.19	12.00	14.96

49. The significant increase in all the above expenses 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. Also, Transmission loss should be fixed at a reasonable level. Therefore, there is need to review the following expenses for the benefit of the consumers:

- ✓ Employee cost incl. terminal benefits and pension,
- ✓ R&M expenses specifically on engagement of Security personnel,
- ✓ A&G expenses,
- ✓ Interest on new loan to be disbursed to OPTCL,
- ✓ depreciation,
- ✓ RoE and
- ✓ Interest on working capital.

D. VIEWS OF OBJECTORS ON TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2023-24 & TRUING -UP OF FY 2021-22 AND RESPONSE OF OPTCL (PARA 50 TO 209)

The views/suggestion of the objectors on various issues placed before the Commission and OPTCL's response thereto are summarised below:

Selection of the Chairperson of OERC

Views of Objectors

50. Shri R. P. Mahapatra has submitted that the Commission is not properly constituted, at present, to hear the ARR and Tariff Applications of the different constituents in the power sector. He referred the provisions in Section 85(2) and 85(3) of the Electricity Act, 2003, relating to Constitution of Selection Committee to select Members of State Commission. Further, in accordance with the provisions in Sections 85(2) and 85(3), the Selection Committee should have finalized the selection of the Chairperson by 16.10.2021, i.e. three months before the completion of term of the Chairperson, OERC. Accordingly, the State Government should have issued the Order appointing the successor of the Chairperson, OERC before he demitted office on 15.01.2022.

51. Further, in contravention of the provisions in the Electricity Act, 2003, no appointment of the Chairperson has been made even though more than 12 (twelve) months have been elapsed in the meantime. The determination of the Tariff through public hearing, is one of the most important functions of the Commission and accordingly all the three Members should hear the Tariff Petitions. The provisions in Section 93 of the Electricity Act, 2003 cannot be considered as applicable, when there is inordinate delay in filling up the vacancy of the post of Chairperson without any justification whatsoever.

52. The Objector prayed that the Commission may direct that the existing Tariff determined for the FY 2022-23 be continued till determination of Tariff for the FY 2023-24 through public hearing, after the appointment of the Chairperson of the Commission.

Submission by OPTCL

53. OPTCL has submitted that approval of Aggregate Revenue Requirement and Transmission Tariff process is a yearly routine process and exclusively within the prerogatives of the Commission. Any delay or deferment of this process would have adverse repercussions. In this context it is noteworthy that as per Section 93 (Vacancies etc. not to invalidate proceedings) of the Act 2003, "No act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate

Commission.”. Accordingly, the Commission prudently decided to go ahead with the approval of Aggregate Revenue Requirement and Transmission Tariff approval process for OPTCL as per the schedule. Therefore, it is prayed before the Commission not to consider the objections raised.

Supreme Court order

Views of Objectors

54. Shri Soumya Ranjan Patnaik submitted that Supreme Court of India, while disposed of the Civil Appeal No. 1933 of 2022 (TPCL Transmission vrs MERC), has held that the State Electricity Regulatory Commissions (SERCs) are not determining Tariff as per the guiding principles specified in section 61 of the Act and direction is given to all the SERCs including the Commission for compliance of the guiding principles of section 61 of the Act in making/notifying the desired regulations within three months from the Date of the said Order. The Objector hoped that pragmatic remedial actions may be initiated at the earliest.

Submission by OPTCL

55. In its response, OPTCL has submitted that this issue is not related to the current ARR & Transmission tariff as the petition has been filed based on the prevailing OERC (Terms and conditions for Determination of Transmission Tariff) Regulations, 2014 and OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020.

Violation of Section 61(a) of the Act

Views of Objectors

56. Shri Soumya Ranjan Patnaik submitted that the Commission has grossly failed to uphold the nine guiding principles of section 61 of the Act not only in specifying the terms & conditions in the regulations notified for the purpose of determination of Transmission Tariff, charges & fees but also in the tariff proceeding too. The first guiding principle spelled out in Section 61(a) stipulates the Commission to follow the principles and methodologies specified by the Central Electricity Regulatory Commission (CERC) for determination of Tariff applicable to Transmission Licensees. CERC specifies the principle of Capacity based Tariff for sharing of the total cost incurred by the Transmission Licensee. The Principles and methodologies have been detailed in the notified regulations, namely CERC (Terms & Conditions of Tariff) Regulations, 2019, CERC (Sharing of inter-State Transmission Charges & Losses) Regulations, 2020, CERC (Grant of Connectivity, LTA and MTOA in the inter-state Transmission and related matters) Regulations, 2009 and CERC (Connectivity and

General Network Access to ISTS) Regulations, 2022. The GNA (General Network Access) regulations specify the capacity of the Designated ISTS Customer (DICS), which is playing crucial role in sharing the total cost of the transmission licensees as per the CERC Regulations; but in Odisha, the Commission does not spell out the GNA capacity of the DISCOMS, LTOA, MTOA and Generating Companies while determining the transmission tariff. So, capacity-based transmission tariff principle specified by CERC is grossly violated by the Commission in sharing/recovering the total cost of the Petitioner (OPTCL). Further, the Objector submitted that the Commission is still following the obsolete and unlawful "Postage Stamp Method" in the proceeding to determine the Transmission Tariff Zonal Postage Stamp Method. Therefore, the Objector requested to introduce the capacity-based transmission tariff principle to determine the transmission tariff for FY 2023-24.

Submission by OPTCL

57. OPTCL has not submitted any specific comments in this regard.

Section 61(D) of the Act and Multi-year Tariff (MYT) Principle

Views of Objectors

58. Shri Soumya Ranjan Patnaik submitted that Section 61 of the Electricity Act, 2003 and the National Tariff Policy (NTP)-2016 notified by Central Govt u/s 3 of the Act, mandates the State Electricity Regulatory Commission (SERCs) and CERC to follow the principle of Multi-Year Tariff (MYT) in framing regulations & determination of Tariff and Charges of the Generating Companies and Licensees. The Act stipulates the Commission to determine the Tariff in a prudent and realistic manner for the ensuing year. So the act of prudency and the reality checking in the part of the Commission is best ascertained from the rate of variation recorded during truing up exercises. In the absence of truing up exercise of the previous year, the Commission losses its capacity of prudent checking of the ARR documents filed by the Licensee for determination of tariff for the ensuing year and for which if the tariff is determined without truing up exercises by the Commission, then it becomes imprudent and unrealistic. The Commission has been determining the Tariff of the Licensee for the previous years in an imprudent and unrealistic manner because while determined the tariff for ensuing year in the past, the Commission did not true up the previous years' tariff order with audited account & business plan.

59. Further, the Objector submitted that the Commission did not pay any heed to the guiding principle of MYT approach, resulted the performances of the licensees could not be reached to the desired level and in the other hand the retail Tariff has been

increased year after year in an imprudent and unrealistic manner as seen during last decade.

Submission by OPTCL

60. OPTCL submitted that the current ARR & Transmission tariff is filed based on the prevailing OERC (Terms and conditions for Determination of Transmission Tariff) Regulations, 2014 and OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020. The previous year tariff of OPTCL has been determined by the Commission based on the OERC (Terms and conditions for Determination of Transmission Tariff) Regulation, 2014 which is in force as per para 186 (Page No. 42) of the ARR & TT order dated 21.04.2020 of the Commission in Case No. 72/2019.

61. OPTCL stated that, as regards to Truing up of the Tariff order, it may be noted that, the Commission has already completed the truing up exercise up to FY 2020-21 and the Truing up for FY 2021-22 has already been filed with the current petition.

62. Further, it is submitted that, as per the CERC Regulation Truing up is carried out for additional Capital Expenditure only which is as under.

"Truing up of tariff for the period 2019-24:
(1) The Commission shall carry out truing up exercise for the period 2019-24 along with the tariff petition filed for the next tariff period, for the following:
(a) the capital expenditure including additional capital expenditure incurred up to 31.03.2024, as admitted by the Commission after prudence check at the time of truing up:
(b) the capital expenditure including additional capital expenditure incurred up to 31.03.2024, on account of Force Majeure and Change in Law."

63. Further, the performance of OPTCL is being reviewed invariably on a periodical basis i.e. quarterly, half yearly and annually by Commission. After prudence check, the Commission pronounces it's Record Notes along with respective views / suggestions/ directions. Accordingly, OPTCL complies with the aforesaid views / suggestions/ directions.

Absence of required Regulations to support MYT Principles

Views of Objectors

64. An Objector requested the Commission to follow the principles of multiyear tariff (MYT) in specifying the terms and conditions for determination of transmission tariff. Though OERC's Transmission Tariff Regulations, 2014 specifies for approval of business plan and the Aggregate Revenue Requirement (ARR) for the control period of

five years ending on 31 Mar-2019 but the same was not followed then. The Licensee did not submit the figures of approved ARR passed out in the business plan for the relevant FY of the control period while tariff was revised. In the present Petition, the Petitioner has not submitted the approved ARR under the MYT regime/Business Plan. Fresh ARR without any linkage to the figures approved in the business plan under MYT regime has been submitted by the Petitioner for consideration. So, how the Transmission Tariff is determined under MYT Principle? The present Petition does not hold the MYT Principles and this is a case of clear violation to section 61(f) of the Act. The Objector requested the Commission to follow the MYT principles in the proceeding to determine the transmission tariff.

65. For the FY2023-24, the Petitioner does not submit the approved ARR under business plan. The fact is that the five years control period specified in the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 have been ended on 31st March 2019. Thereafter, the required MYT regulation is neither notified the Commission for the next control period nor the improved performance-based norms and ARR are approved. In the absence of approved ARR under business plan for the current control period, the tariff determination process has been completely based on estimated figures without any resemblance to the reality. The Tariff determination process the Commission has been a ceremonial only without any prudence and rationality. Therefore, the Respondent urged the Commission to initiate necessary action for formulation of MYT regulations for next control period so as to make tariff prudent, rational and realistic.

Submission by OPTCL

66. As regards to MYT principle, the Commission vide para 211 of the ARR & TT order of OPTCL for FY 2022-23 has already clarified regarding the adoption of said MYT principle in its Regulations and the aforesaid para is depicted below:

> *"Multi-year tariff principle is nothing but setting up of some bench marks for components of tariff for future year. This gives the predictability to the tariff during the control period. In our Regulation we have adopted the MYT principle by fixing benchmark for different component of tariff such as O&M expenses, depreciation and return on equity etc. for control periods. The Regulations also differentiate different components of tariff on the basis of controllable and uncontrollable costs. Therefore, the present Regulation is purely within the framework of MYT regime."*

67. Projection for the FY 2023-24 has been made considering the current requirement as well as approved Business Plan of OPTCL for 2nd control period i.e. from FY 2019-20 to FY 2023-24.

Energy flow

Views of Objectors

68. An Objector submitted that the functions of the SLDC and the STU have been well enumerated in section 31 & 39 of the Act. In view of the provisions given in section 31 (2) (e) of the Act, the Petitioner (OPTCL) was requested to furnish us the following data and information for the previous year FY-2021-22 well in advance before the public hearing of the cases.

- Actual total energy flow in the State grid during previous year (both in MW & MUs) considering all the LTA, MTOA & STOA Customers. Installed capacity and allocated capacity (GNA Capacity) of the State grid (both in MW & MUs)
- Furnish us User-wise data (GNA) for use of the total grid capacity availed by the Grid-Users. If possible, the data may be furnished zone-wise.

Submission by OPTCL

69. OPTCL submitted the total as well as DISCOMs wise energy flow in the State grid during the FY 2021-22 is furnished below.

Table 10

USERS	ENERGY FLOW	
	MU	AVERAGE MW
TPCODL	9164.893	1046.221
TPNODL	6866.893	783.891
TPSODL	3740.499	426.998
TPWODL	15308.192	1747.511
NALCO	53.919	6.155
IMFA	346.46	39.550
TOTAL	**35480.856**	**4050.326**

70. Further, with respect to GNA, in accordance with clause (d) of CERC (Connectivity and General Network Access to the Inter-state Transmission system) Regulations 2022, 2157 MW of the GNA deemed to have been granted to STU (Odisha).

Reconciliation of input energy and corresponding Revenue

Views of Objectors

71. One of the Objectors submitted that there are difference in input energy considered by GRIDCO and OPTCL. GRIDCO projected the sum of power requirement of four DISCOMs for FY 2023-24 is 36358 MU and requirement of power of CGPS (NALCO & IMFA) is 70 MU. However, the Petitioner submitted that requirement of energy as 33558 MU (after deducting 33KV wheeling of 300 MU by DISCOMS) which is to be wheeled in the transmission system during ensuing FY 2023-24. The above projection is very less by 2800 MU (36358 MU against 33558 MU). Further, the energy

requirement of four LTA Consumers like NALCO, IMFA, BEL and ABREL is stated as 678 MU whereas GRIDCO considered it as 70 MU only by considering NALCO & IMFA only. Also, the energy to be wheeled as per GRIDCO is 36428 MU whereas OPTCL submitted that only 34226 MU and the difference between GRIDCO proposal and Petitioner's proposal is 2192 MU. The above difference of input projection in between GRIDCO & OPTCL impacts significantly to the Transmission Tariff and Bulk Price and the demand of LTA Consumers. Therefore, the Objector requested the Petitioner to reconcile the input energy and demand projection.

72. Further, if higher input is considered for approval of ARR and Transmission Tariff of OPTCL, then additional revenue of Rs. 61.38 Cr on wheeling of 2192 MU at existing Tariff of 28 P/U will be derived by the OPTCL during the ensuing FY 2023-24. So, OPTCL could generate surplus funds after meeting the ARR proposal. The surplus revenue gap of the Petitioner entitles for reduction of transmission tariff.

Submission by OPTCL

73. OPTCL Submitted that the present application has taken the recent realistic demand projection of all four DISCOMs to be 33858 MU (3865.07 MW) for FY 2023-24 on the basis of the projection given by all four DISCOMs. OPTCL envisages 300MU (34.25 MW) energy to be transacted in DISCOMs 33kV & 11kV network for which OPTCL is not entitled to receive any transmission charge as per Commission’s order. Hence, total MU to be transmitted in OPTCL network gets reduced to 33558 MU (33858-300) from the total demand projection of DISCOMs.

74. Further, for FY 2023-24 NALCO, IMFA, BEL & ABReL have projected their respective demand as 88MU (10MW), 360MU (41MW), 66MU (7.5MW) & 164MU (18.75MW). Accordingly, OPTCL has proposed 678 MU towards wheeling to industries from CGPs & emergency sale to CGPs in its ARR application for FY 2023-24. In case of BEL & ABReL, respective contracted capacity has been considered as per their LTA applications.

75. Accordingly, proposed energy to be transmitted in OPTCL Network (MU) is given in the table below.

Table - 11
Energy to be transmitted in OPTCL Network

Sl. No.	Customer	Energy demand (MU) as per DISCOMs estimation (FY 2023-24)
1	TPCODL	10999
2	TPNODL	7750

Sl. No.	Customer	Energy demand (MU) as per DISCOMs estimation (FY 2023-24)
3	TPWODL	10500
4	TPSODL	4609
6	**Total DISCOMs**	**33858**
7	**Less:** Drawal in 33kV & 11kV network	300
8	Energy transmitted for DISCOM	33558
9	Wheeling to industries from CGPs & Emergency Sale to CGPs	678
	Total	**34236**

Transmission loss and Energy Audit

Views of Objectors

76. One of the Objectors submitted that there is enough measure by which OPTCL could reduce the Transmission loss. OPTCL should conduct energy audits and their standard performance should be monitored by a third-party auditor appointed by the Commission so as to assess the actual performance of the licensees.

77. The Objector submitted that the clause no. 7.2(1) of the Tariff Policy, 2016, specifies the transmission loss allocation. As per the same, transactions are being charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter-state transmission, the SERCs may evolve a similar framework for intra-state transmission. The loss framework should ensure that the loss compensation is reasonable and linked to applicable technical loss benchmarks. The benchmarks may be determined by the Appropriate Commission after considering advice of CEA. However, the Commission is not following the above guideline of loss determination and allocation.

78. Another Objector submitted that OPTCL has proposed transmission loss at 3.10%; however, in conformity with the power sector reform, OPTCL needs to reduce the transmission loss significantly. Further, OPTCL should provide the details of the identified areas where loss is maximum. OPTCL shall have to mention the methodology adopted to estimate the transmission loss for every year. OPTCL has proposed transmission loss without giving the breakup of the losses in different components of transmission system i.e. lines, substations, power transformers and autotransformers etc. OPTCL should have submitted the energy audit report and their standard performance should be monitored by third party auditor as appointed by the

Commission. Further, an Objector proposed to approve transmission loss of OPTCL at 2.5% instead of OPTCL's proposed transmission loss at 3.1%.

Submission by OPTCL

79. The actual transmission loss for the period Apr' - Sep' 2022 is calculated as 3.14% as shown in the ARR application for FY 2023-24. This figure is less than the actual transmission loss that has taken place during last year (FY 2021-22) i.e. 3.18%. In fact, OPTCL had projected Transmission loss of 3.10% for the FY 2022-23, but Commission had set a target of 3.00% which could not be achieved yet.

80. The transmission loss is purely technical loss and a function of real time injection of power by a number of generators, system configuration and power flow requirements at different load centers. It depends on many parameters / factors such as distance and mismatch between generation and load centers, types of load, reactive power compensation, voltage profile, seasonal variation of demand load etc. Thus, OPTCL does not have much control over the same at any point of time. The transmission system of OPTCL operates as an integral part of the Eastern Region 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.

81. As a matter of fact, some grid s/s and lines are being constructed in many remote and deprived areas funded under Central & State Govt. schemes in the interest of public. Additional length in EHT lines and Sub-stations in under-loaded areas are also responsible for increase in transmission loss.

82. The Transmission Loss in OPTCL network is in a gradually reducing trend over the years i.e. from 3.73% during 2014-15 to 3.18% in 2021-22 and has remained 3.14% within 1st six months of FY 2022-23 mainly due to addition of infrastructure and various system strengthening works taken up by OPTCL. The actual losses incurred over the years by OPTCL have been within the margin allowed by Commission up to the year FY 2017-18. However, in the FY 2018-19, the Commission set the loss at 3.00% though the projected transmission loss was at 3.25% and thereafter the Commission has been pegging the transmission loss at the same level though loss projected by OPTCL remained in a downward trend.

Table - 12
Transmission loss proposed, approved and actual

Year	Tr. Loss proposed	OERC Approval	Actual
2014-15	3.75%	3.75%	3.73%
2015-16	3.75%	3.75%	3.67%
2016-17	3.70%	3.70%	3.58%

Year	Tr. Loss proposed	OERC Approval	Actual
2017-18	3.50%	3.50%	3.34%
2018-19	3.25%	3.00%	3.28%
2019-20	3.25%	3.00%	3.25%
2020-21	3.20 %	3.00%	3.22%
2021-22	3.15%	3.00%	3.18%
2022-23	3.10%	3.00%	3.14% (1st six months)

83. From the table given above, it is also clear that each year upto FY 2017-18, the transmission loss achieved by OPTCL has remained at a level lower than the approved figures by commission and from FY 2018-19 the target set by OERC appears to be very stiff which was hard to achieve though the trend of lesser transmission loss year after year has been achieved.

84. Further, the transmission losses depend upon the voltage level at which the power is transmitted. The transmission losses are higher where the percentage of lower voltage (132kV or below) transmission system is higher. A comparison of the average transmission losses of a few state transmission licensees and their corresponding transmission assets at low voltage level (132 kV) is shown below.

Table - 13

Transmission Loss (%) Of Other States of Low Voltage Lines upto 132kv for FY 2020-21

States	% of Low voltage Lines (up to 132 kV)			
	Transmission Lines up to 132kV (Ckm)	**Total Transmission Lines (Ckm)**	**% of Transmission Lines up to 132kV**	**Actual Transmission Losses for FY 2020-21 (%)**
Odisha (OPTCL)	7,393	14,805	50%	3.22
Uttar Pradesh (UPPTCL)	26,595	50,762	52%	3.37
Gujarat (GETCO)	40,434	67,601	60%	3.41

85. It may be appreciated that the transmission loss (technical) is bound to happen as per law of physics and is very difficult to reduce after a certain level. Also, at all India level, the transmission loss of utilities have remained at more than 3.00% and to suffice the same point the table is given below for information of the Commission.

Table - 14
Transmission Loss of different states during FY 2022-23

Name of states	Tr. loss proposed by Utility	Tr. loss approved by State Commission
Uttar Pradesh (UPPTCL)	3.27%	3.27%(UERC)
Gujarat (GETCO)	3.72%	3.72% (GERC)
Assam (AEGCL)	3.30%	3.30%(AERC)

86. However, as a responsible Transmission utility, OPTCL is making an all-out effort to reduce the transmission loss further by undertaking various system operation and loss reduction measures by implementing the emerging technologies like system Automation, load bifurcation, modification in system configuration, procurement of more efficient equipment, Digitalization of grids by using Bay Control units, Protection system improvement using Busbar protection and Event Logger, Conversion of Radial to Ring system, Advanced Metering Infrastructure etc. to bring it to 3.10% by FY 2023-24 as set out in Business plan of OPTCL.

In view of the above submissions, the prayers made by the Objector to allow Transmission Loss of 2.5% are not based on any justifiable reason and are liable to be rejected.

87. OPTCL has already installed 2177 nos. of 0.2s accuracy class, ABT Compliant Energy Meters at identified points to meet the requirement for Energy Auditing as well as Billing. Monthly data enables OPTCL for assessing the individual transmission element wise losses (i.e. across Power Transformers, Auto Transformers & EHT lines etc.). Sub-station wise energy flow calculations are carried out and accordingly remedial action is taken. However, discrepancies in respect of Metering Convention & Accuracy Class of Instrument Transformers are identified at certain locations and are being sorted out. By measuring the quantum of flow of energy in lines and substations, improvement in the system is monitored on monthly basis with respect to previous baseline data acquisitioned.

88. In view of the reducing trend of transmission loss level, OPTCL expects the loss level to remain around 3.10% in the current year. Accordingly, OPTCL has proposed transmission loss of 3.10% during FY 2023-24. However, OPTCL expects the transmission loss will be further reduced with the successful implementation of all the ongoing projects.

Available capacity of the various segments/zones

Views of Objectors

89. Another Objector submitted that in addition to open access related information for sale of the services of state grid in open market, OPTCL is further required to compute the available capacity of the various segments/zones of the Transmission lines and Sub-Stations as per the methods specified by the Commission in the regulation no. 41 of OERC (T&C for intra-State Open Access) Regulations, 2020. The above regulation requires the Petitioner to disclose the un-utilised capacity of the state grid in the website of SLDC/STU for the necessary information of the stakeholders. The methodology for

computation of available capacity for open access for each transmission segment/zone and for every sub-station is given in the aforesaid regulation. Therefore, it was requested by the Objector to direct the Petitioner to comply with the directives of intra-state open access regulations in a time bound manner.

Submission by OPTCL

90. OPTCL submitted that the monthly Total Transfer Capacity (TTC), Reliability Margin (RM) and Available Transfer Capacity (ATC) of the State Control area are computed using PSS/E software in line with the method adopted by the Regional Load Despatch Centers (RLDCs) & National Load Despatch Centre (NLDC) and displayed in the SLDC website to inform about the maximum import and export capability of the State Control area in a particular month. This study is carried out in advance for three months. This information is available in the public domain and all the open access customers can access this information for their use. Further, during the current year, no open access application has been rejected on account of congestion in transmission corridor.

O & M Expenses

Views of Objectors

91. One of the Objectors submitted the summary of Employee expenses, R&M expenses, and A&G expenses of last thirteen years in terms of approved and actual expenses.

92. Another Objector requested OPTCL to submit reasons of non-utilisation of funds allocated for O&M work. Proper maintenance has not been carried out by OPTCL since 58% of regular posts are lying vacant for which proper maintenance are not carried out. OPTCL management have not yet prepared a regulation to regularise the contractual / outsource workers and not even prepared the yardstick as per the increase in its system. The management has to produce the list of outsource workers category wise and division wise with the name of contactor engaged in OPTCL before allowing the O&M expenses.

93. An Objector submitted that the Petitioner has to produce the detail expenditure incurred in O&M work – (i) O&M, (ii) Telecom, (iii) Civil, (iv) Technical since 2010 to 2021.

Submission by OPTCL

94. Year wise OERC approval and actual expenditure towards R&M for the period from 2013-14 to 2022-23 (up to date) are given in the Table below

Table - 15
R&M Expenses approved and actual

Financial Year	OERC Approved	Actual
2013-14	60.00	70.20
2014-15	93.00	100.31
2015-16	108.00	113.35
2016-17	110.59	149.53
2017-18	124.97	137.83
2018-19	111.00	115.13
2019-20	115.22	125.53
2020-21	115.22	103.07
2021-22	118.61	98.86
2022-23 (up to December, 2022)	110.50	80.71

95. From the above, it is observed that OPTCL has been effectively utilizing the R&M expenditure approved by OERC except FY 2020-21 & FY 2021-22 and achieved Transmission system availability more than specified norms. Fund allotted for R&M expenditure for FY 2020-21 & FY 2021-22 couldn’t be achieved due to pandemic situation. However, difference amount shall be adjusted during the true up exercise based on audited accounts of FY 2022-23.

96. The Government of ODISHA has approved the sanctioned strength for various posts in OPTCL. Accordingly, OPTCL is filling up the vacancies in a phased manner. The detailed expenditure incurred towards R&M works under different heads executed by OPTCL during FY 2010-11 to FY 2021-22 is provided by OPTCL. The list of outsourced workers engaged in OPTCL is also submitted.

A & G Expenses

Views of Objectors

97. One of the Objectors submitted that the Commission has almost freezed the A&G cost of OPTCL which is mostly dependent on the numbers of offices. Over a period of time the strength of grid substations and lines had increased to almost 3 times which required a greater number of field offices; and hence, A&G expenses should be revised accordingly.

98. The Objector submitted that the actual A&G Expenses paid by the licensee for FY22 as per the cash flow information is Rs. 26.94 Cr whereas the audited A/c figure shows Rs. 86.01 Cr. The audited A/c figure includes Rs. 59.07 Cr of provision which have not been paid during FY22 and the same has been reversed in FY23. Therefore, on realistic point of view, a sum of Rs. 26.94 Cr. may be passed out in the truing up exercises for the FY22 and accordingly A&G Expenses may be passed out in tariff for FY 2023-24 in a realistic manner.

Submission by OPTCL

99. OPTCL submitted that as per Regulations, the A&G cost should be increased by WPI on the base year, provided the number of establishments have remained the same; but the Objector has rightly pointed out that the number of establishments/offices of OPTCL has increased over a period of time commensuration with the increase in asset by addition of grid Sub-stations, ckt. Kms. of lines and MVA capacity for better supervision in construction, operation and maintenance and for maintaining quality of supply. Hence, A&G expenses should be increased proportionately. OPTCL in its ARR application for the previous 3 years has been proposing A&G expenses in line with the concern of the Objector but the Commission is yet to consider the same.

100. OPTCL submitted as per the Regulation 8.14 of OERC Transmission Regulations, 2014, the Commission shall allow A&G expenses by giving an escalation factor equal to WPI over the amount approved by the Commission in the previous year. However, due to growth and expansion of Transmission network, number of offices in headquarters as well as in field have been increased over a period of time which requires the base A&G expenses to be revised over and above which WPI factor has to be factored in for arriving at the A&G expenses.

101. Further, OPTCL submitted a comparative chart of asset addition is given under.

Table -16

Year	No. of Grid Substations	MVA capacity	Ckt. Kms. of Line
2012-13	101	11554	11386
2021-22	177	24403.50	15707.45

A Comparative chart of number of Establishments

Table - 17

Year	Subdivisions	Division	Circles	Zones (EDs)	CGMs	Directors
2012-13	190	38	11	0	5	4
2021-22	376	64	16	4	8	4

Note: CGMs and Directors have corporate level offices where as EDs (Zones), Circles, Divisions and Subdivisions are field level offices.

Subdivisions include Grid substations, Line Maintenance subdivisions, Construction Subdivisions, Telecom, Civil and Stores sub divisions.

102. For Calculation of A&G Cost, the base year cost as on 01.04.2005 determined by the Commission was Rs. 14.96 Cr. After 18 years of escalation it became Rs. 16.23 Cr. i.e. average increase of Rs.90 lakhs per year. If we consider the time value of money by discounting @ 8% the approved amount Rs. 14.96 Cr. as at 01.04.2005 would be about

Rs. 59.78 Cr. in FY 2022-23. During these 18 years, Nos. of Grids Sub-station and lines have been added to the Asset base of OPTCL (as explained in above paragraph) for which the field as well as Corporate office establishment expenses have increased, which required more A&G expenses.

103. The A&G Expenses include property related expenses, communication, professional charges, conveyance (officers provided with vehicles) and travelling, SLDC charges, licensee fee and material related expenses and a host of office establishment expense. The A&G Expenses have shown an increasing trend in recent years due to increase in number of establishments (for smooth operation, maintenance and project execution), price rise and inflation which is on the higher side than the amount approved by the Commission. In view of the above, OPTCL has estimated Rs. 47.07 Cr. towards A&G Expenses for FY 2023-24.

104. In the true up application OPTCL requested for True up of Rs. 58.61 Cr. towards expenditure on impairment loss recognised on non-financial assets, Loss on theft/Shortage/Obsolete of material and others and Other Losses under A&G Expenses. This includes Rs.50.71 Cr. provision of doubtful debt towards receivable of transmission charges from SOUTHCO, CESU & WESCO and the balance towards net of losses incurred on PMC charges. It may be noted that the above transactions were already recognized as income in the year it happened and trued up. Though Commission has given the direction to recover the arrear dues of DISCOMs in the vesting orders, after the OTS (one-time settlement) order dtd. 22.12.2022, the chances of recovery of arrear dues seems to be “nil”. Therefore, OPTCL requested the Commission to consider the above said amount under A&G Expenses in truing up for the FY 2021-22.

105. Further, as regards to provision entries, OPTCL has already explained in details towards needs of the provision as per the GAAP. Therefore, the above amount has not been reversed in FY 2022-23. Therefore, OPTCL requested the Commission not to consider the contention of the objector in this regard.

R & M Expenses

Views of Objectors

106. The Commission approved Rs. 118.61 Cr. under the head R& M cost in Tariff for the FY 22021-22 against which the audited figure including the provisions stands at Rs. 98.86 Cr. The cash flow information depicts that Rs. 93.22 Cr. has been actually paid in cash for FY 2021-22 that is the provision of Rs. 5.64 Cr. has been provided in the audited A/c of the licensee of the FY 2021-22 which reversed in the FY 2022-23. So,

the truing up exercise reveals the Commission has passed out excess R& M cost of Rs. 25.39 Cr in proceeding to determine tariff for FY 2021-22. So the Objector urged the Commission to pass out required amount under the head R& M cost in the tariff for FY 2023-24.

Submission by OPTCL

107. As per the audited account the R&M Expenses has been categorized under the following heads which consists so many items directly attribute to the R&M works.:-

1. Repair & Maintenance of Building
2. Repair & Maintenance of Plant & Machinery
3. Repair & Maintenance of Lines, Cables & network Assets
4. Repair & Maintenance of Electrical Installation
5. Repair & Maintenance of Vehicle
6. Repair & Maintenance of Furniture & Fixture
7. Repair & Maintenance of Office Equipment

108. As per the Cash flow statement, the cash outflow towards R&M Works has been mentioned. However, in the audited account the actual R&M has been shown based on the Principle of Accounts and prescribed Standards. Further, anticipation of reversal of Rs.5.64 Cr. in FY 2022-23 is totally baseless.

109. In the truing up application OPTCL has clearly mentioned item wise expenses against various head and incurred deficit or earned surplus in comparison to approval vis-s- vis actual based on the audited account for the FY 2021-22. As per the calculation cumulative net deficit as on 31.03.2022 is Rs. 228.97 Cr. Therefore, item wise truing up as suggested by the objector under head R&M Expenses is not prudent and not to be considered.

110. OPTCL further submitted that as on 01.04.2022, OPTCL owns 177 nos. Grid Sub-Stations and 2999 bays of different voltage classes and EHT transmission lines of 15,707.454 ckt.. kms. Out of the above about 30% of sub stations have already completed 25 years and 21% of sub stations have already completed 35 years. OPTCL has been given importance for availability of networks 24x7. The system availability of FY 2021-22 is about 99.98%. To upkeep the transmission network for the benefit of State consumers at large, R&M Expenses (both preventive and breakdown) are highly essential. The repair and maintenance is a controllable item and due measures have been taken by OTCL to control the cost considering the requirement to upkeep the assets.

111. The projection of OPTCL amounting to Rs.164.34 Cr is estimated considering requirement to upkeep the transmission infrastructures/assets, which may be considered. The items wise detail are already mentioned in the Petition.

Interest on Working Capital

Views of Objectors

112. Another Objector submitted that OPTCL has shown abundant cash balance in its books. Therefore, there is no necessary to go for working capital loan from Banks. As the Licensee does not seek loan from the banks to meet the working capital requirement, so question does not arise to allow Interest of Rs. 33.99 Cr on working capital loan. Moreover, in the previous Tariff Order, the Commission has also rejected the claim of above interest citing the abundant cash balance in the books of licensee.

Submission by OPTCL

113. OPTCL submitted that as per CERC Regulation, the interest on working capital is allowed on normative basis i.e. irrespective of availing the working capital loan by the licensee.

114. Further, as per of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 the Interest on working capital is one of the components for determination of Transmission Tariff. Therefore, OPTCL requested to allow interest in working capital based on the prevailing OERC Regulations.

Interest and Finance Charges

Views of Objectors

115. One of the Objectors submitted that OPTCL has projected payment of interest and finance charges of Rs. 137.59 Cr for FY 203-24 whereas it is Rs. 138.02 Cr as per the Cash flow information. So, proper reconciliation is not done between ARR and F-8 form. Further, the Licensee has projected to take loans of Rs. 237.20 Cr including Rs. 150.00 Cr from UCO Bank and Rs. 87.20 Cr New loan without citing any reason behind this new loan. What is the necessity on the part of the licensee to go for more loans while they have abundant amount of cash balance in books? Moreover, there is balance of huge depreciation reserve in the accounts of the Licensee which could be utilised for that purpose. Therefore, the Objector requested the Commission to reject the new loan proposal of Rs. 237.20 Cr for the FY 2023-24 and deduct the 6.75% interest of Rs. 16 Cr from the balance revenue gap of Rs. 109.40 Cr. By disallowing the new loans for the FY 2023-24, the negative balance of revenue gap will be reduced to Rs. 93.40 Cr. Further, as per the Cash Flow Information, the total repayment of loan

(repayment of principal and Refund of Infrastructure Loan) is Rs. 79.80 Cr for FY 2023-24, whereas, Table no. 12 of the ARR says the total loan to be redeemed is Rs. 111.33 Cr. The Objector requested the Licensee to reconcile the two balances with necessary reason.

Submission by OPTCL

116. As per CERC Regulation, the interest on loan is allowed on normative basis. The debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan. Same is also mentioned in OERC Regulations. Therefore, as per the regulations all the capital investments by any transmission licensee is entitled to both Interest on loan and Return on Equity (RoE) irrespective of actual loan availed or not. State Govt. is providing 30% of the Cost as equity support in some of the projects and the balance amount i.e. (70%) are arranged through loans from the Banks / Financial Institutions. Last year OPTCL has tied up loan proposal for 12 numbers of projects amounting to Rs.468.29 Cr. with UCO Bank. State Govt. has already provided Equity support of Rs.140.00 Cr. Therefore, this year OPTCL has projected to avail Rs.150.00 Cr. from UCO bank.

117. The interest projection in ARR is based on the terms and condition of the loan irrespective of interest accrued and due. However, the cash flow statement shows the actual cash out flow which includes the interest accrued and due of FY 2021-22 paid in FY 2022-23. Hence the difference.

118. Further, there is no reserve named as depreciation reserve accounted for in the OPTCL books of Account. Therefore, OPTCL prayed before the Commission not to consider the contention of the objector.

119. Total repayment of loan including infrastructure loan principal for the FY 2023-24 will be Rs.123.33 Cr. In table -12, OPTCL has shown those loan which are considered by OERC. Therefore, infrastructure loan amounting to Rs.12.00 Cr has not been included in Table-12. With regard to Cash flow statement the repayment of JICA loan amounting to Rs.43.53 Cr has been excluded inadvertently. Therefore, after reconciliation the net cash balance will be reduced to Rs.678.01 Cr.

Depreciation

Views of Objectors

120. An Objector submitted that as per the clause no. 8.37 of OERC Transmission Tariff Regulations, 2014, that the Depreciation allowed in Transmission Tariff is utilized for

the purpose of loan repayment. Higher amount of depreciation can be permitted in case of inadequacy of funds for debt repayment. The Cash Flow information shows that the Licensee has proposed for repayment loan of Rs. 79.80 Cr during the ensuing FY 2023-24. The actual loan repayment during FY20, FY21 & FY22 is very less than the Depreciation passed out in the tariff order for the corresponding period. This shows that, the depreciation allowed in Tariff is at very higher side without any need of the Licensee. The reality of unutilized depreciation in the books of the Licensee puts question on the Book Value of Assets considered for depreciation. The Licensee has not segregated the total Assets into fully depreciated assets and the assets subject to depreciation. It looks like that the fully depreciated Assets have been included in the book of Assets considered for depreciation. The Objector suggested to allow the Licensee to utilise the unutilized depreciation funds passed out in previous tariff orders. Further, the suggestion put forth by the Objector is to disallow the entire depreciation of Rs. 293.96 Cr projected by the Licensee. Otherwise, the Commission may consider maximum depreciation of Rs. 79.80 Cr (equal to loan repayment) in the present case.

Submission by OPTCL

121. Regulation 8.37 of OERC Transmission Tariff Regulations 2014 stated as under:

> *"For the purpose of tariff determination, the rate of depreciation shall be linked to the useful life of the asset, calculated on straight line method. However, a higher rate of depreciation may be permitted by the commission, in case of inadequacy of cash for debt repayment."*

122. Generally accepted accounting principles (GAAP) state that an expense for a long-lived asset must be recorded in the same accounting period as when the revenue is earned, hence the need for depreciation. A depreciation provision allows a company to account for the gradual decline in the value of its fixed assets over time, thus allowing the company's financial statements to accurately reflect the current value of its investments in those assets. Therefore, depreciation is the means for recovery of investments made by any transmission license.

123. Regulation 8.37 provides safe guard for the banks /financial institutions to recover their loans in case of cash inadequacy. Or else, it will be difficult for any licensee to get loan for investments in the regulated tariff regime.

124. OPTCL submitted that depreciation allowed by the Commission has been trued up with the audited account every year as per the regulations. Therefore, assumption of the Objector that OPTCL has huge amount of unutilized depreciation funds is baseless not to be considered. Further, in Table-20 & F-17 the information such as Assets depreciated fully (90%) and assets to be depreciated are already mentioned. Therefore,

OPTCL prayed before the Commission not to consider the contention of the Objector and allowed depreciation based on the prevailing regulations.

Non-tariff income

Views of Objectors

125. Another Objector submitted that OPTCL estimated the Non-Tariff Income of Rs. 366.45 Cr for FY 2023-24; whereas, as per the estimated Cash Flow Information for FY 2022-23, other revenue receipts of the Licensee is 464.39 Cr, including Rs. 16.29 Cr revenue receipts from the four LTA Customers like NALCO, IMFA, BEL & ABREL. Considering the same, the Licensee has under casted the NTI and therefore, the Objector urged the Commission to increase the NTI and revise the Transmission Tariff.

Submission by OPTCL

126. OPTCL submitted that figure shown as other receipts are combination of other income and other non-income. Amount recovered from loans from employees, receipts of security deposit, EMD, GST and others taxes etc. are the category of other non-income. Therefore, OPTCL has rightly projected Rs.366.45 Cr. under the Misc. Income based on the recent trend and estimation. However, deviation if any, may be trued up in FY 2023-24. Therefore, Rs.366.45 Cr. should be considered as Misc. Income.

System Loading and Open Access Information

Views of Objectors

127. One of the Objectors submitted that in order to have an insight on the loading of existing transmission systems corresponding to the system peak demand of 5103 MW as touched on 19th October 2021, the Commission has desired OPTCL to submit 400 kV, 220 kV, 132 kV Power Transformer and EHT lines loading. However, OPTCL has only submitted the Power flow data only for 400 kV and 220 kV line. The 132 kV line load has not been furnished. OPTCL has not submitted all the Power Transformer and ICT loading. Moreover, by only submitting only power transmitted on the peak demand day will not solve the purpose.

128. Further, the Objector submitted that, in order to ascertain the margin availability, OPTCL may be directed to submit the maximum power handling capability, power flow and % loading of all the 400 kV, 220 kV, 132 kV line and Power Transformer, Auto Transformer, ICT Transformers. Once these data are made available, it can be ascertained that, there are sufficient margin available in the transmission network and in

order to utilize it fully, STOA should be promoted and the charges for the same may be kept at 1/4 of the MTOA and LTOA charges and therefore, necessary amendments in the regulations may be made.

129. SLDC and the Petitioner, OPTCL do not submit the details of the STOA and MTOA Customers connected to the State grid. Therefore, the Objector urged the Commission to direct the Petitioner & SLDC to submit the relevant data, such as capacity, wheeling and revenue earned in respect to the STOA and MTOA Customers.

130. As per clause no. 8.2 of OERC's RES Regulations, 2021, SLDC will certify the RPO applicable for Captive Users and Open Access Customers. Therefore, SLDC is requested to submit the details of RPO certification done for the captive users and open access customers during previous year.

Submission by OPTCL

131. OPTCL submitted that the system peak demand of 5103 MW was not on dated.19.10.2021 but on dated.19.10.2020 and the corresponding loading data of important transmission elements (EHT Lines and Transformers) has also been furnished earlier during the process for determination of ARR of OPTCL for FY 2021-22. Further, the loading data of important transmission elements (EHT Lines and Transformers) corresponding to the system demand of 5312MW on 13.06.2022 has already been submitted before OERC vide Compliance Report to the queries raised by OERC.

132. OPTCL submitted that 15194.076 MU of energy has been scheduled to be wheeled through state grid in the FY 2021-22 through STOA. An amount of Rs. 13434.18 Lakh has been collected towards transmission charges of OPTCL in respect of 4703.827 MU of energy transaction through Intra-State Short term open access. The balance energy corresponds to Inter-State open access transactions and the transmission charges has been directly remitted to OPTCL account. The information about the same may be furnished by OPTCL. Further, the customer-wise consolidated open access schedule for a billing month is uploaded in SLDC website during the first week of the succeeding month for information of all stake holders.

133. OPTCL submitted that STOA charges is being charged as per the Open Access Regulations, 2020.

134. OPTCL submitted that the source wise (Conventional, Solar, Non Solar) segregation of the total quantum of scheduled energy procured by the obligated entities through open access/third party transactions is submitted by SLDC every month to Odisha

Renewable Energy Development Agency with intimation to OERC. Further such detailed monthly Report of renewable energy purchased by the obligated entities of the state are made available in the SLDC website and the information for the financial year 2021-22 is submitted.

Cash Flow Statement Vrs ARR & Truing up

Views of Objectors

135. Another Objector submitted that for the control period FY 2019-20 to FY 2023-24, no ARR and business plan along with performance-based norms and standards have been approved. So, in the absence of approved performance-based norms and ARR for FY 2023-24 and in order to make the tariff prudent and realistic, it is appropriate to consider the Cash Flow Information submitted by the licensee for the purpose of approval of the ARR. The norms and standards provided in the 2014-Regulations for approval of ARR and Business Plan have been obsolete in the current year. Renewing the norms passed out in Tariff for FY 2018-19 (last year of the control period as per the Transmission Tariff Regulations-2014) for the ensuing FY 2023-24 is unrealistic and imprudent because the norms approved & notified during previous control period have been obsolete after 10 years for which performance-based new norms are required to be approved & put in place after studying the actual transactions of the licensee for preceding five years. The Objector submitted that considering the consolidated Cash Flow Information and audited Cash Flow Statements submitted by the Licensee for Tariff for FY 2023-24 and previous FYs, respectively, there are abnormal differences.

Submission by OPTCL

136. The Commission in its order dated 21.04.2020 vide case number 72 of 2019, in exercise of power conferred under Regulation 9.1 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 had extended the applicability of above until further orders. In compliance to the provisions of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, OPTCL has submitted its Aggregate Revenue Requirement & Transmission Tariff application for FY 2023-24 for approval of the Commission.

137. In the comments the Objector is advocating for capacity-based tariff and rules & regulations of CERC should be followed in compliance to the NTP. It is to mention here that neither the OERC Regulations nor the CERC Regulation has recommended any parameter for determination of Transmission Tariff based on Cash balance/information.

138. Therefore, OPTCL prayed before the Commission not to consider the contention of the objector regarding determination of ARR based on cash flow by oversighting the prevailing regulations.

Reconciliation of Cash flow

Views of Objectors

139. Another Objector submitted that the Opening Balance (OB) and Closing Balance (CB) given in the audited Cash Flow Statement varies with the Cash Flow Information. There is abnormal gap of Cash Balance in between the two statements. Such abnormal differences of around Rs. 1000 Cr, equivalent with the net ARR cost of the Licence, cannot not be ignored. Therefore, the Objector urged the Commission to direct the licensee to submit the reconciled Cash Flow Information in Form No. F 8.

Submission by OPTCL

140. OPTCL submitted that OPTCL is also executing various DISCOMs projects. Besides, OPTCL is also executing various transmission project on deposit work basis. The Cash balance shown in the Audited accounts comprising both the Transmission and Distribution activity. The Cash Flow submitted along with the ARR is only the cash balances related to OPTCL activities.

Annual Revenue Requirement

Views of Objectors

141. An Objector submitted that the Annual Revenue Requirement of OPTCL for FY 2023-24 may be approved through a prudence check based on the submission made by the Objector.

Submission by OPTCL

142. The projections made by OPTCL in its ARR application based on the OERC Transmission Tariff Regulations, 2014, are very much realistic along with the details of item wise expenditure with justification and hence need full consideration.

Transmission Tariff

Views of Objectors

143. Another Objector submitted that the proposed Transmission Tariff of 32.19 P/U is very high and should not be permitted. This will adversely affect the RST of the DISCOMS and will be a huge burden on the consumers of Odisha.

144. The Objector pointed out that OPTCL has submitted that the total energy to be handled by OPTCL in FY 2023-24 including loss is around 33858 MU. However, the

Commission has accorded in principle approval of the Long-Term Demand Forecast (LTDF) for the period FY 2015-16 to 2023-24 vide Common Order dated 03.05.2016 in case no. 32/2015. Further the Business Plan of OPTCL has been approved by the Commission and hence the total energy to be handled by OPTCL should be considered accordingly. The transmission charges of OPTCL should have been computed considering energy projection based on Commission's approval in LTDF order and approved Business Plan of OPTCL.

145. An Objector submitted that the OPTCL has to reduce the Transmission Tariff to 17 P/U.

Submission by OPTCL

146. OPTCL submitted that the proposed Transmission Charge of 32.19 p/u has been derived by considering the recent realistic energy demand projections made by all the LTOA customers (four DISCOMs & three CGPs) and the ARR figures have been arrived by OPTCL justifying component wise projections as per the provisions contained in OERC Transmission Tariff Regulations, 2014, OPTCL's Audited Accounts for FY 2021-22, all relevant data/information and materials. Moreover, OPTCL had furnished all requisite information and details as per the prescribed formats of the Commission with full justifications. OPTCL has also submitted additional information / clarifications to the queries raised by Commission.

147. Subsequent to the in-principle approval of LTDF order dated 03.05.2016 in Case No. 32/2015 (period FY 2015-16 to FY 2024-25), the Commission has already accorded in-principle approval of LTDF order dated 15.01.2019 in Case No. 47/2018 (period FY 2017-18 to FY 2026-27). Further, the Commission vide para 40 (page 15) of the order dated 03.11.2021 in Case No. 63/2020 (Business Plan of OPTCL for the period FY 2019-20 to 2023-24) is of the view that the demand may undergo a change in case of any delay in commissioning of the projects and load growth. In the same para, the Commission has very precisely observed that it is not inclined to revisit the demand and it will properly scrutinize the demand year wise while approving the ARR of OPTCL for the remaining years of the present Business Plan period. OPTCL has filed the ARR application for FY 2023-24 on 30.11.2022 considering the recent realistic energy demand projections of 33858 MU as communicated by the DISCOMs. The details are submitted in page 47-48 of the present ARR application of OPTCL for FY 2023-24. In view of the above submissions, the prayers made by the Objectors to reduce the Transmission Tariff to 17 P/U is not based on any justifiable reason and are liable to be rejected.

Transmission Pricing

Views of Objectors

148. An Objector submitted that the Clause no. 7 of the Tariff Policy, 2016 specifies the principles and methods of Transmission Pricing. The objective of Transmission Pricing is to promote the effective utilization of the Assets of the Transmission Licensee, OPTCL. In the absence of capacity based Transmission Tariff, the Assets cannot be optimally utilized as seen in Odisha. The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This has been developed by CERC after considering the advice of the CEA. Further, the Policy mandates that the Transmission charges, under this framework, can be determined on MW per circuit kilometer basis, zonal postage stamp basis, or 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 spread between minimum and maximum transmission rates should be such as not to inhibit planned development augmentation of the transmission system but should discourage non-optimal transmission investment. The Commission instead of following the zonal postage stamp basis, it follows the total postage stamp basis in the proceeding to determine transmission tariff, resulting in the capacity of the state grid to be undermined and not utilized optimally.

149. The Objector further submitted that the clause no. 7.1(8) of the Tariff Policy specifies that CERC has specified Regulation on framework for the inter-State transmission. A similar approach should be implemented by SERCs for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow. The Commission does not follow this directive.

Submission by OPTCL

150. OPTCL has not submitted any specific comments in this regard.

Introduction of Grid Support charge for connectivity

Views of Objectors

151. An Objector submitted that there is no provision of introduction of Grid Support charge for providing connectivity to CGP in the Transmission Tariff Regulation, and this is against the spirit of Electricity Act 2003 and hence the proposal of OPTCL is required to be rejected.

Submission by OPTCL

152. The benefits derived by the CGPs with co-located loads are enormous. The benefits are in the nature of ancillary services which are not paid till now. The Grid support charges (GSC)/Parallel operation charge has been levied by different state Regulatory Commissions and upheld by APTEL and Supreme Court of India through various orders and hence the same has been proposed by OPTCL through a separate petition.

RE Open Access charges

Views of Objectors

153. Odisha has more than 8000 MW capacity of Captive generating plant. As per OERC Renewable energy Regulation, 2022 CGP's are obligated entities and have obligation to procure at 3% power of their captive consumption. In order to comply the RPO obligation CGP's have to procure RE power though Open Access. Odisha RE energy policy has provided exemption of STU charges of 20 P/U for the RE projects located within the state. Since the state has limited potential of RE generation, obligated entities have to procure RE power from outside the state. In view of the same, an Objector requested the Commission to exempt STU charges on the RE power availed from Open Access granted from outside the State.

Submission by OPTCL

154. OPTCL has not submitted any specifies reason provided.

Reactive Energy Charges

Views of Objectors

155. One of the Objectors submitted that OPTCL has proposed to introduce Reactive Energy Charges of 3 Paise/KVARh, which is very high and should be reduced in consultation with various stakeholders.

Submission by OPTCL

156. As per Regulation 31 (1) under Chapter-7 (IMBALANCE AND REACTIVE ENERGY CHARGES) of the OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020, payment for the reactive energy charges by open access consumers shall be in accordance with provisions stipulated in the State Grid Code or as may be specified in relevant regulations / orders of the Commission.

157. The Commission in Para 16 (page 5) of the order dated 05.02.2019 in Case No. 50/2017 has inter alia viewed that the provisional reactive energy charges of 3

paise/KVARh as allowed in ARR 2018-19 order may continue for time being till a final justification is submitted by OPTCL in consultation with the stakeholders.

158. In view of the above, OPTCL proposes that 3paise/kVARh may be approved provisionally as Reactive Energy Charges FY 2023-24. Hence, rejection of the proposal of OPTCL with regard to Reactive Energy Charges as suggested by the Objector is not just and proper.

Clean Development Mechanism

Views of Objectors

159. The Tariff Policy mentioned that the tariff fixation for all electricity projects (generation, transmission and distribution) that result in lower Green House Gas (GHG) emissions than the relevant base line should take into account the benefits obtained from the Clean Development Mechanism (CDM) into consideration, in a manner so as to provide adequate incentive to the project developers. The Commission does not pay any heed to lower the emissions of GHG in its tariff proceeding. Moreover, the concept like GHG does not find place in the Tariff orders of the Commission.

Submission by OPTCL

160. The OPTCL submitted that the issue is not related to the current ARR & Transmission tariff as the petition has been filed based on the prevailing OERC Regulations, 2014 and OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020.

Captive generation

Views of Objectors

161. One of the Objectors submitted that provision related to captive generation as mentioned in Tariff Policy is not meticulously followed by the Petitioner. Such captive plants could supply surplus power through grid subject to the same regulation as applicable to generating companies. Firm supplies may be bought from captive plants by distribution licensees using the guidelines issued by the Central Government under section 63 of the Act taking into account second proviso of para 5.2 of this Policy. The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges. Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair. Grid connected captive plants could also supply power to non-captive users connected to the grid through available transmission facilities based on negotiated tariffs. Such sale of electricity would be subject to

relevant regulations for open access including compliance of relevant provisions of rule 3 of the Electricity Rules, 2005.

Submission by OPTCL

162. OPTCL has not submitted any specific comments in this regard.

Norms for capital and operating costs and laid down Standards of Performance

Views of Objectors

163. Another Objector submitted that as per Clause no. 7.1(5) of the Tariff Policy, 2016 the Central Commission has specified norms for capital and operating costs and laid down Standards of Performance for inter-State transmission licensees. Tariff determination and adherence to Standards of Performance shall be carried out in accordance with these norms, as amended from time to time. However, the Commission does not pay any attention to the norms for capital & operating costs and to the laid down standards of performance either in the regulations or in the tariff orders. Therefore, the Objector urged the Commission to follow the policy directives in the proceeding to determine tariff.

Submission by OPTCL

164. OPTCL has not submitted any specific submission in this regard.

Figures of audited A/c includes provisions

Views of Objectors

165. Another Objector submitted that the figures shown actual under the audited A/c is not real because provisional expenditure (which is not paid but provided for payment during next FY) is included therein. In case of tariff determination, realistic figures which are actually paid or expected to be paid are to be considered for tariff determination. Providing mere provision for expenditure under various heads in the books does not entitle to pass out in tariff. There is difference in expenses considered in cash flow statement and considered in audited statement, and the same is true for Employee expenses, A&G expense and R&M expenses

Submission by OPTCL

166. OPTCL is a company incorporated under the Companies Act & the accounts of OPTCL are being prepared based on the generally accepted principles of Accounting, and also as per the applicable Accounting Standards.

167. Provisions, as per the accounting practices are created to provide for known liabilities pertaining to a year, which could not be discharged during that particular financial year. Further, creation of the provisions is necessary as per prudence and is required, so that the accounts for a year show a true and fair view of the company's workings. Therefore, passing provision entries to recognize the actual expenses for a particular year is a necessity. Accordingly, a liability is created & thus there is nothing wrong in this. Further, OPTCL clarified that once a provision for any expenses is created by charge to P&L account, the same is not reversed, but is paid in the subsequent accounting period.

168. OPTCL further informed that the accounts of the company are subject to various audits like the Statutory Audit, the AG Audit and the Tax Audit, and not even once such instances have been pointed out by any of these Auditors, for the simple reason that this is not a practice that is followed by OPTCL. The allegations that the "provision provided in the accounts of OPTCL under various head during the time of finalization of accounts at the end of the current year is reversed by the same amount in the beginning of the next year, thereby leave no payable" are against the fundamental principles of accounting and are therefore unfounded.

Commercial viability of Investment & Revenue Realisation of OPTCL

Views of Objectors

169. To verify the commercial viability of the investment done in the State transmission segment by OPTCL, analysis has been made by an Objector, with reference to the PFC report for FY20 titled "Performance of Power Utilities". The respondent presented the units wheeled by the transmission utilities per Rs. 1 value of net Asset and the revenue derived to net Assets in percent terms. Odisha stands on the mid way as per the analysis. In case of Odisha, 12000 MW installed capacity of CGPs are exporting their surplus power of more than 23000 MU per annum to outside the State but OPTCL could not capitalise the revenue in its books of account. To improve the commercial viability of the investment, it is necessary on the part of OPTCL to update books of account with the sale of such huge surplus power by CGPS to outside the State.

Submission by OPTCL

170. OPTCL is mandated to ensure development of an efficient, coordinated and economical transmission network for smooth flow of power to the load centers. OPTCL has to ensure the quality power supply, performance standards and availability of networks to meet customers' expectations. Besides, OPTCL planned to increase its coverage area of network to remote, tribal and other underdeveloped area, providing quality power supply, maintaining higher system availability, reducing transmission loss etc. to prove

the electricity 24x7 to all the consumers of Odisha, OPTCL has construction numbers of substation and line based on requirement by the DISCOMs. All the project are not commercially viable for investment. However, for the Socio-Economic Obligation OPTCL also constructed transmission network for the benefits of the consumers. State Government has provided huge amount for the construction of the transmission network against the project which are not commercially viable. As regard to PFC report, as the same has not been furnished by the Objector, so, OPTCL will not offer any comments against the PFC report.

171. As per the Electricity Act, the intra state transmission shall facilitate and promote transmission, wheeling and inter-connection arrangements within its territorial jurisdiction for the transmission and supply of electricity by economical and efficient utilization of electricity. Being the designated STU, OPTCL cannot engage in the business of trading electricity. Further, OPTCL has been able to maintain the system availability beyond normative level of 98.5% always and allow open access to all the prospective buyers without discrimination, subject to availability of the corridor as per Regulations. OPTCL is recognizing all the revenue in terms of transmission charges as approved by OERC from the users of the Transmission Network.

Asset Management

Views of Objectors

172. Prudent Asset Management is a systematic approach to the governance and realization of value from the things that an entity is responsible for, over their whole life cycles. Asset management includes developing, operating, maintaining, upgrading, and disposing of assets in the most cost-effective manner. To capitalize the economics of asset management, CERC has launched the final version of e-Assets module titled "SAUDAMINI" w.e.f. 24th July 2021. The Commission having jurisdiction over intra-state utilities, can launch the e-module asset management system in Odisha and direct the Licensees and Companies to upload their asset data in the above module for necessary information of all the Stakeholders.

Submission by OPTCL

173. OPTCL submitted that the issue is not related to the current ARR & Transmission tariff of OPTCL.

Acute staff shortage in OPTCL

Views of Objectors

174. For smooth and efficient management of the affairs of OPTCL, an organization structure was formulated by OPTCL with the assistance of National productivity council in 2013 which was approved by GOO in the year 2014. But since inception the

sanctioned technical manpower was never filled up and at present also, there is significant vacant post. The Objector submitted that the Commission will be surprised that OPTCL do not have a minimum regular staff for maintenance of sub-stations and lines. In operation, OPTCL has only one staff per shift in most of the grid substations, though safety rule requires there should be at least two staffs in every shift to manage round the clock operation in grid substations. Four engineering posts are sanctioned but there is only one operation engineer in almost 95% of the grid substations. There is also a serious shortage of Finance officers. There is also a severe shortage of office assistants to an extent of 50%. This severe staff crunch is adversely affecting the functioning of OPTCL and if this is not taken care, this may drive OPTCL to a state of collapse. The Objector requested that the Commission should take the above facts in to consideration and immediately order for restructuring. The Commission should direct OPTCL to restructure its technical manpower strength to increase career prospects of technical manpower and additionally provide time bound scale as prevalent in many electricity utilities in India. Therefore, suitable provisions should be made in the ARR order.

Submission by OPTCL

175. Government of Odisha has approved the sanctioned strength for various posts in OPTCL. Accordingly, OPTCL is filling up the vacancies in a phased manner.

Staff salary

Views of Objectors

176. The salary of electricity employees and Engineers all across the Indian states is higher than their state govt counterparts on account of emergent and hazardous nature of job. The engineers of OPTCL and so also of the entire power sector have been deprived of this benefit and they are victims of this historical injustice. Further, most of the state power utilities follow a 4/5-year salary revision system both for workmen and engineers. The OPTCL engineers and so also all power sector engineers have been deprived of this benefit causing serious dissatisfaction amongst engineers. The Objector requested that the Commission may direct OPTCL to follow a simultaneous salary revision both for workmen and engineers and also introduce at least 25% higher pay to electricity sector employees and engineers.

Submission by OPTCL

177. OPTCL has not submitted any comments in this regard.

Severe stagnation in technical disciplines

Views of Objectors

178. The only motto of the restructuring was to open up promotion opportunities. In OPTCL apart from severe stagnation, there is requirement of more manpower in view of addition of new grid substations and lines.

Submission by OPTCL

179. OPTCL is filling up the promotional posts as and when vacancies arise taking into consideration the eligibility criteria. The DPCs are held in time and there is no pending promotional cases as on date.

Introduce capacity-based tariff for OPTCL

Views of Objectors

180. An Objector submitted that due to capacity-based tariff, PGCIL is making huge profit year after year and is able to take up ambitious projects. PGCIL is also able to offer attractive compensation package to its employees which in turn is playing a great motivation to its improved efficiency. On the other hand, OPTCL is hugely handicapped by the tariff structure and is unable to take up ambitious projects and invest in its employees. The Objector urged that the Commission should accept the petition of OPTCL submitted in the year 2020 and devise a capacity-based tariff structure.

Submission by OPTCL

181. OPTCL submitted that the issue is not related to the current ARR & Transmission tariff of OPTCL.

Tariff based competitive bidding (TBCB)

Views of Objectors

182. One of the Objectors submitted that electricity sector has undergone rapid changes in all dimensions in the last three decades. Since Odisha was always first to adopt experimentation in the name of reforms, scenario for Odisha power sector was completely different and so were its consequences. After so many failed experiments, another experimentation is ready for application without any meticulous evaluation i.e. TBCB (Tariff based Competitive Bidding). The Commission has issued an order regarding development of intrastate transmission projects through Tariff based competitive bidding (TBCB) in the state of Odisha and United Forum of OPTCL Employees (UFOE) had submitted its concerns for public hearing regarding the background, loop holes and apprehensions and suggestion regarding implementation of TBCB. Instead of moving in haste, detailed study of TBCB routes adopted so far elsewhere must be undertaken along with the circumstances of accepting it and benefits

accrued or challenges it has thrown must be evaluated. The Commission should take a review on its decision on TBCB through public hearing as it will have far reaching consequences on overall tariff.

Submission by OPTCL

183. OPTCL submitted that the issue is not related to the current ARR & Transmission tariff of OPTCL.

Substations and lines

Views of Objectors

184. OPTCL may be directed to give an undertaking through an affidavit that they will supply quality power with proper voltage. The Objector has requested to furnish a detailed list of substations and lines which are more than 40 years old.

185. OPTCL should furnish the list of 33/11 KV substations already constructed, commissioned and consumers are getting quality voltage along with amounts spend on those projects.

186. The Objector submitted that OPTCL management have mentioned near about 165 nos. of sub-stations & 14804 kms. of lines are now available for operation. The OPTCL should produce the detail list of sub-stations & lines that are outlived & not in working condition. What action OPTCL has taken for renovation & modernization of the above?

Submission by OPTCL

187. Over the years OPTCL has been continuously planning and implementing substantial no. of projects to strengthen its transmission system for ensuring quality, adequacy & reliability of power supply in the State based on requisition of DISCOMs and by Transmission Planning through system study. However, if there still remains any area / areas of the State under brownout or blackout condition due to want of lines and Sub stations of STU, the objector may please specify the same so that the same shall be considered by OPTCL with due prudence.

188. Further, as desired the list of Sub-stations having more than 40 years of life period is mentioned below.

Table - 18

List of Sub-stations having more than 40 years of life period

Sl No	Sub-Stations	Voltage Level (Kv)	Year of Commissioning
40 - 45 Years of Service			
1	Chhatrapur	132/33 kV	1982
2	Dhenkanal	132/33 kV	1982
3	Kesinga	220/132/33kV	1982
4	Balasore	220/132/33kV	1981
5	Bolangir	132/33kV	1981

Sl No	Sub-Stations	Voltage Level (Kv)	Year of Commissioning
6	Paradeep	220/132/33kV	1981
7	Polasponga	132/33kV	1981
8	Rairangpur	132/33kV	1981
9	Tarkera	220/132kV	1981
10	Jayanagar	220/132/33kV	1980
11	Bargarh	132/33kV	1979
12	Bhubaneswar	132/33kV	1979
13	Kendrapara	132/33kV	1979
45 - 50 Years of Service			
1	Aska	132/33kV	1975
2	Therubali	220/132/33kV	1974
3	Mohana	132/33kV	1973
4	Rajgangpur	132/33kV	1973
> 50 Years of Service			
1	Chainpal	132/33kV	1972
2	Brajarajnagar	132/33/11kV	1969
3	Jajpur Road	132/33kV	1969
4	Khurda	132/33kV	1969
5	Ganjam	132/33kV	1967
6	Berhampur	132/33/11kV	1964
7	Sunabeda	132/33kV	1964
8	Rayagada	132/33kV	1962
9	Joda	220/132/33kV	1959
10	Jharsuguda	132/33kV	1958
11	Rourkela	132/33kV	1958
12	Choudwar	132/33kV	1956

189. The list of EHT lines having more than 40 years of life span is mentioned below:

Table - 19
List of EHT lines having more than 40 years of life

Sl No	Name Of EHT Line	Voltage Level (Kv)	Year Of Commissioning
40 - 45 Years of Service			
1	220 kV Balimela PH - U.Sileru SC	220	1982
2	220 kV Jayanagar - Balimela - III SC	220	1982
3	132 kV Aska - Chhatrapur DC	132	1982
4	132 kV Chhatrapur - Balugaon SC	132	1982
5	132 kV Kesinga – Powmax (Turla) SC	132	1982
6	132 kV Machkund PH - Jayanagar (RE Line) SC	132	1982
7	132 kV Therubali - Kesinga SC	132	1982
8	132 kV Bargarh - Bolangir SC	132	1981
9	132 kV Chhatrapur- IRE DC	132	1981
10	132 kV Joda - Palasponga - Rairangpur SC (Loc. No. 1 to 111)	132	1981

Sl No	Name Of EHT Line	Voltage Level (Kv)	Year Of Commissioning
11	132 kV Kendrapara - Paradeep DC	132	1981
12	132 kV Polasponga LILO DC (Loc. No. 73/1 to 73/6)	132	1981
13	132 kV Tarkera - RSP DC	132	1981
14	132 kV Aska - Berhampur SC	132	1980
15	132 kV Balasore - Bhadrak SC	132	1980
16	132 kV Bhanjanagar - Aska DC	132	1980
17	132 kV Bolangir - Saintala SC	132	1980
18	132 kV Kesinga - Saintala SC	132	1980
19	132 kV Polasponga - Rairangpur SC (Loc. No. 111 to 336)	132	1980
20	132 kV TTPS - Chainpal - II & III DC	132	1980
21	220 kV Rengali - Tarkera DC (Loc. 1 to 187)	220	1979
22	220 kV Tarkera - Rengali DC (Loc. No. 188 to 645)	220	1979
23	132 kV Burla PH - Chiplima PH DC	132	1979
24	132 kV Chandaka - Bhubaneswar Ckt-I SC	132	1979
25	132 kV Chandaka - Bhubaneswar Ckt-II SC	132	1979
26	132 kV Chiplima PH - Bargarh SC	132	1979
27	132 kV Jaipur Road - Bhadrak SC	132	1979
28	132 kV Jajpur Road - Kendrapara DC	132	1979
29	132 kV Khurda - Balugaon SC	132	1978
45 - 50 Years of Service			
1	132 kV Chainpal - FCI DC	132	1975
2	220 kV Bhanjanagar - Meramundali DC (Loc. No. 197 to 470)	220	1974
3	220 kV Jayanagar - Balimela DC	220	1974
4	220 kV Jayanagar - Therubali DC	220	1974
5	220 kV Therubali - Bhanjanagar DC (Loc. No. 471 to 827)	220	1974
6	220 kV Therubali - Bhanjanagar DC (Loc. No. 828 to 1049)	220	1974
7	132 kV Rajgangpur - OCL SC	132	1973
8	132 kV Rajgangpur - Traction DC	132	1973
50 - 55 Years of Service			
1	132 kV Chainpal - Choudwar Ckt – II SC (Loc. No. 1 to 151)	132	1972
2	132 kV Chainpal - Choudwar Ckt - II SC (Loc. No. 152 to 314 via ICCL)	132	1972
3	132 kV Jayanagar - Sunabeda SC	132	1970

Sl No	Name Of EHT Line	Voltage Level (Kv)	Year Of Commissioning
4	132 kV Bidanasi - Chandaka SC (Loc. 1 - 51)	132	1969
5	132 kV Bidanasi - Chandaka SC (Loc. 52 to 90)	132	1969
6	132 kV Chandaka - Khurda SC	132	1969
7	132 kV Choudwar - Bidanasi SC (Loc. No. 22 - 23 - 91 to 118)	132	1969
8	132 kV Duburi - Jajpur Road DC	132	1969
9	132 kV TTPS - Duburi DC	132	1969
10	132 kV Chhatrapur - Ganjam SC	132	1968
11	132 kV TTPS - Chainpal - I SC	132	1968
55 - 60 Years of Service			
1	220 kV Bhanjanagar - Meramundali DC (Loc. No. 196 up to Meramundali)	220	1967
2	220 kV TTPS - Joda DC (Loc. No. 1 to 234)	220	1967
3	220 kV TTPS - Joda DC (Loc. No. 235 to 503)	220	1967
4	220 kV TTPS - Meramundali DC	220	1967
5	132 kV Therubali - Rayagada SC	132	1967
6	132 kV Angul - Boinda SC	132	1963
7	132 kV Angul - TTPS SC	132	1963
8	132 kV Burla PH - Boinda SC	132	1963
> 60 Years of Service			
1	132 kV Berhampur - Mohana SC	132	1962
2	132 kV Rayagada - Akhusingh – Mohana SC	132	1962
3	132 kV Joda - Nalda - Bhalulata SC	132	1959
4	132 kV Rourkela - Nalda SC (Up to Bhalulata, Loc. No. 1 to 78)	132	1959
5	132 kV Budhipadar - Tarkera Ckt - I SC (Rajgangpur to Tarkera, Loc. No. 1 to 88)	132	1958
6	132 kV Budhipadar - Tarkera Ckt - II SC (Rajgangpur to Tarkera, Loc. No. 1 to 89)	132	1958
7	132 kV Budhipadar - Tarkera DC (Bamra to Rajgangpur, Loc. No. 283 to 410)	132	1958
8	132 kV Budhipadar - Tarkera DC (Up to Bamra, Loc. No. 164 to 283)	132	1958
9	132 kV Burla PH - Budhipadar DC	132	1958
10	132 kV Burla PH - HINDALCO DC	132	1958
11	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. 171 - 294)	132	1958
12	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. 294 - 430 - 526, Bamra to Rourkela)	132	1958

Sl No	Name Of EHT Line	Voltage Level (Kv)	Year Of Commissioning
13	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. J1 - J65)	132	1958
14	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. J65 – 171)	132	1958
15	132 kV Chainpal - Choudwar Ckt - I SC (Loc. No. 1 to 147)	132	1958
16	132 kV Chainpal - Choudwar Ckt - I SC (Loc. No. 148 to 285)	132	1958
17	132 kV Tarkera - Rourkela Ckt - I SC	132	1958
18	132 kV Tarkera - Rourkela Ckt - II SC	132	1958
19	132 kV Jayanagar - Rayagada SC	132	1956
20	132 kV Machkund PH - Jayanagar SC	132	1956

190. The list of 33/11kV Sub-stations with lines which have already been commissioned & loaded under Odisha Distribution System Strengthening Projects (ODSSP), IPDS & DDUGJY has been submitted.

- The expenditure incurred under ODSSP as on 31.12.2022 is Rs. 3514.00 Cr.
- The expenditure incurred under IPDS as on 31.12.2022 is Rs. 65.05 Cr.
- The expenditure incurred under DDUGJY as on 31.12.2022 is Rs. 68.29 Cr.

191. At present OPTCL is operating with 187 numbers of GSS and around 15942.35 Ckt.kms. of EHT lines. Regular maintenance of all the GSS along with the associated lines are carried out through well experienced staffs. Further, time to time augmentation / renovation / modernization of required GSS and up gradation / replacement of essential EHT lines have been carried out by OPTCL to maintain quality power supply to the consumers. OPTCL is strategically replacing/upgrading conductors in old EHT lines on priority basis for reduction in Transmission loss and to cater the load demand reliably. Also upgradation and Modernization of Old Grid Sub-stations are being done by replacing the obsolete/outdated equipment with the objective to keep the assets in efficient working condition. So, there are no such GSS & lines which have outlived or not in a position to work.

Other issues

Views of Objectors

192. An objector submitted that OPTCL may submit the audited balance sheet, P/L Statement and along with the Auditor report without which the tariff proposal should not be entertained.

193. Further the Objector requested to OPTCL has to be shared the audited balance sheet of 2021-22. Further, each year truing up exercise and business plan approval should be carried out by Commission through a process of public hearing

194. The OPTCL management have not prepared a regulation for regularisation of the contractual outsource workers working under OPTCL that should be done and produce before the Commission.

Submission by OPTCL

195. The Audited Accounts for FY 2021-22 is already enclosed with current ARR & Transmission Tariff Application of OPTCL for FY 2023-24 and Truing up application for the FY 2021-22.

196. Similarly, the Business Plan of OPTCL for a particular control period is also approved by the Commission through a process of public hearing. The five year Business Plan of OPTCL for control period FY 2019-20 to 2023-24 has been duly approved by OERC vide order dated 03.11.2021 in Case No- 63/2020.

197. The projects related works are being taken up post approval of the same by OERC through Intra State Transmission Plan of Odisha based on OGC Regulations 2015 along with License Conditions of OPTCL, 2010 and Business Plan of OPTCL based on Transmission Tariff Regulations 2014 respectively.

198. Contractual / outsource workers are engaged in OPTCL on as and when requirement basis through manpower / job outsourced basis. Each of the Contractors / Agencies is selected through tender basis by annually / biennially.

Intra-State Open Access

Views of Objectors

199. An Objector submitted that, the Petitioner (SLDC) has huge responsibility and obligations to disclose the required data as specified by the Commission under the Chapter-9, Regulation No.36 of OERC (Terms & Conditions of intra-State Open Access) Regulations, 2020 titled "Information System" in the website of SLDC in a separate webpage under the heading "Open Access Information". The above regulations reads that "The State Load Dispatch Centre shall post the following information on its website in a separate web page titled "Open access information" and also issue a monthly and annual report containing such information.

200. The Objector submitted that in view of the above query during last tariff proceeding, the Petitioner replied that, they would declare all above information in their website as desired by regulations. But the information has been declared in wilful manner by the Petitioner, which do not resemble with the regulatory information

201. The Objector urged the Commission to implement the above regulations for the growth of operation and services of the State grid in the open market so as to derive revenue in accordance with the efficiency of the Petitioner. The Objector submitted that he does not know what restricts the Petitioner to avail maximum advantages from above open

access regulations & state grid and further what prevents them for the non-disclosure of such status & picture of state grid in public domain. Therefore, the Objector urged the Commission to issue necessary directions to the Petitioner for compliance of the above regulations in a time bound manner.

202. Besides the above disclosure, the Petitioner (SLDC) is also under an obligation to disclose and issue monthly and annual report containing such information in the above specified website. However, nothing of the above disclosure is found in the website. The Objector hoped that the Petitioner shall be very much vigilant in updating the required information in the public domain for more and more sale of the services of state grid in real time mode. The efficiency of the manpower & the grid shall be increased adequately. Therefore, the Petitioner (OPTCL) should furnish the necessary data as sought above well in advance before the public hearing of the cases.

Submission by OPTCL

203. The Petitioner submitted that SLDC website is regularly updated with the Open Access information in line with the Regulation No. 36 (Chapter-9) of the OERC (Terms & Conditions of intra-State Open Access) Regulation, 2020. The month wise open access information is available in the SLDC website and the daily reports of SLDC such as Grid Status Report & Power Status Report which contains the overview of State grid as well as daily open access information is available in public domain. Also the peak load flow of EHV / HV lines emanating from OPTCL grids and transformer loading corresponding to the peak demand of current financial year is displayed in the SLDC website. Further, the monthly and annual system performance report containing all the above information is available in SLDC website. OPTCL may provide the information regarding average loss in transmission system and GRIDCO may provide the losses of the distribution system derived by the distribution licensees. SLDC has always operated in a neutral and transparent manner without hiding any information.

Non-Separation of SLDC from OPTCL

Views of Objectors

204. The Respondent submitted that despite completion of full 12 years since the notification of OERC (Fees & Charges of SLDC & other related matters) Regulations 2010, the SLDC function of the OPTCL could not be separated as per the provision of section 31 of the Act. No ring fencing works are done either by OPTCL or by the Govt of Odisha or GRIDCO so as to make SLDC an independent body. However, separate entity like the POSOCO is functioning since year 2010. The Director of SLDC has been appointed by Govt of Odisha like the appointments of other directors like Director (Operation), Director (Project), Director (HRD) and Director (Finance) for OPTCL to manage and

control over various functions/wings of OPTCL without its separation. No Licence is issued to SLDC to carry out its functions due to the constraints of separate entity. Under the provisions of the Act, a Govt Company should be formed to take over the SLDC function of OPTCL. So, the separation and independent functioning of SLDC like the separation of POSOCO from PGCIL has been a myth. Further, due to the non-separation of SLDC from OPTCL, the latter has filed the Petition for former for determination of fees & charges for SLDC function. Moreover, the truing up of the Fees & Charges Orders for SLDC issued by the Commission is not done since long. In the above backdrop, the Respondent urged the Commission to merge the two Petitions and issue a common Tariff Order for Transmission Tariff and Fees & charges for SLDC functions till the formation of a Govt Company to take over the SLDC function from OPTCL so that it would be easier for the Commission and the Transmission Licensee to true up the Tariff order.

Submission by OPTCL

205. Both the ARR applications of OPTCL and SLDC have been filed based on respective Regulations as detailed below.

206. The Application for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2023-24 filed by OPTCL under Sections 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with Regulations of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and OERC (Conduct of Business) Regulations, 2004 and

207. The Application of the OPTCL for approval of Annual Revenue Requirement and Determination of Fees & Operating Charges for SLDC functions for FY 2023-24 in line with the provision mentioned in the CERC (Fees & Charges of RLDC & other related matters) Regulations, 2009, OERC (Fees & Charges of SLDC & other related matters) Regulations, 2010.

Renewable Energy Policy

Views of Objectors

208. The Objector stated that Govt of Odisha has notified the Odisha Renewable Energy Policy, 2022 on dt 30.11.2022 in which SLDC is given huge roles and responsibilities. In view of clause no. 23.8 titled "Grid Balancing Asset", the Policy states that, SLDC shall hold consultations with all grid connected Renewable Purchase obligated entities to aggregate the total ESO (Energy Storage Obligation) requirement of the State and explore the possibility of procuring the service of developers of PSH, BESS etc to provide storage as a service to meet the aggregate storage demand. SLDC shall claim the cost of procuring such service in its ARR. The Commission may frame suitable

Regulations to enable SLDC to avail services of grid balancing assets and recovery of the costs associated with such services. In view of above state policy directive, SLDC needs to detail out the action taken on the issue.

Submission by OPTCL

209. OPTCL submitted that SLDC has issued letter to all the grid connected Renewable Purchase obligated entities of the state requesting them to furnish their yearly total Projected Energy Demand starting from FY 2022-23 to 2029-30, so as to aggregate the estimated total Energy Storage Obligation (ESO) requirement of the State as mandated in the Odisha Renewable Energy policy, 2022.

E. OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (PARA 210)

210. The Commission convened the State Advisory Committee (SAC) meeting on 15.03.2023 at 11:00 A.M. through physical mode. The Members of SAC deliberated on various issues related to power sector and the Annual Revenue Requirement of various licensees. SAC Member emphasised for promotion of R&D activity and standardisation of transmission elements in OPTCL system. OPTCL may go for establishment of a Centre of Excellence in its Training Centre to impart training to the persons in the power sector and for promotion of policy research. OPTCL may explore the possibility of development of such centre through PPP mode on self-sustainable basis. Standard design of towers and lines should be published by OPTCL in order to enable MSME manufacturers to supply the same. The projects under execution by OPTCL should be monitored properly for timely completion to avoid time and cost overrun and will also be helpful to extend quality/reliable power to the consumers of the State. In response to above, CMD, OPTCL stated that steps have been taken for establishment for Centre of Excellence in the OPTCL Training Centre. Approved tower design at various voltage level is available in the website of the Company. OPTCL has already created Chair in IIT, Bhubaneswar to strengthen industry-academia relationship which will help OPTCL to resolve complicated technical issues.

F. VIEWS OF GOVERNMENT OF ODISHA ON TARIFF ISSUES (Para 211)

211. The Commission had written to Government of Odisha, vide Letter No.DIR(T)-405/2023-24/271 dated 03.03.2023, to submit their views on various issues raised during the tariff hearing for FY 2023-24. Government of Odisha, in their letter No. 3402 dated 21.03.2023, has intimated that Government has agreed to extend the status-quo on up-valuation of assets of OPTCL, till FY 2025-26 in line with earlier intimation vide letter No.3333 dt.24.03.2021. Government of Odisha has also requested to make various enabling provisions of the RE Policy, 2022 in the ARR & Tariff orders.

G. COMMISSION'S VIEWS AND ORDER (PARA 212 TO 370)

212. During the hearing, objections were raised by the Learned Objectors Shri R. P. Mahapatra, Shri Soumya Ranjan Patnaik, Hon'ble MLA, Khandapada and Shri R. C. Satapathy, stating that this Commission, presently functioning with two Members, one of whom is the Acting Chairperson, is incompetent to embark upon hearing on ARR and Tariff application as well as the Truing Up application of OPTCL for the FY 2023-24.

213. Similar objection was rejected by this Commission in the speaking orders dated 13.02.2023 in Case No.74 of 2022 and Case No.75 of 2022. The above objection is nothing but *ad infinitum.* In other words, a party cannot be permitted to raise similar objections time and again before this Commission during course of hearing. We would like to quote here the provisions under which the aforesaid orders dated 13.02.2023 have been passed.

Section 93 of the Electricity Act, 2003 states as follows:

"Vacancies, etc., not to invalidate proceedings. – No act or proceeding of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission."

Section 9(4) of the Orissa Electricity Reform Act, 1995 states as follows:

"(4) The quorum for the meeting of the Commission shall be two, but in the case of a meeting of the Commission to review any previous decision taken by the Commission or for consideration of any issue which could not be decided on account of equality of votes in favour of or against the resolution proposed or where the issue considered at a meeting in which only two members of the Commission were present, the quorum for the meeting shall be all the three:

Provided that, in case of emergency, the Commission may decide any matter by circulation to member or members."

Further, Regulation 8(1)(b) of the OERC (Conduct of Business) Regulations, 2004 states as follows:

"Subject to the provision of the Act, Rules and Regulations framed thereunder, the quorum for meeting of the Commission shall ordinarily be two but the Commission may determine by order in writing, the matters which can be heard by a single Member."

214. In view of the above, this Commission, functioning with the Acting Chairperson and another Member at that time, was vested with the required quorum for hearing of the petition at hand. Hence, the objection raised on behalf of the above Objectors was

untenable in the eye of law and was hence rejected. Consequently, the hearing of the present petition was taken up.

215. The Commission had notified OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014. The "Control Period" is defined in the said Regulations at Regulation 2.1 (k) as "Control Period" means a multi-year time period fixed by the Commission, from time to time. As per above Regulations, the 1st Control Period is from 1st April, 2014 to 31st March, 2019. After expiry of 1st control period in the year 2019, the Commission had allowed OPTCL to submit their Business Plan for 2nd control period which was defined by the Commission as a period starting from 01.04.2019 to 31.03.2024. Accordingly, OPTCL had submitted its Business Plan for 2nd control period which has been approved by the Commission in their order in Case No. 63/2020 dated 03.11.2021. In addition to above the Commission in their order in Case No. 72/2019 exercising power under Regulation 9.1 had also extended the definition of controllable and uncontrollable cost enumerated in the above Regulations until further order. The Regulations of the Commission remains in force until it is specifically repealed by the Commission. The Regulations empower the Commission to define control period from time to time. The Commission in pursuance of the OERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2014 has made 2nd control period operational with effect from 01.04.2019 as explained above.

216. Under Section 61 (a) of the Electricity Act, 2003, the Commission is to be guided by the principle and methodologies specified by the Central Commission for determination of tariff applicable to generating company and transmission licensee. The Central Commission has adopted PoC method for determination of inter-State transmission charges. The Commission is fully aware of it. Though introduction of PoC may be technically possible in Odisha but its implementation requires details study and analysis of the system. The Commission in one of the earlier occasions had made an attempt in this regard. In absence of relevant information and detailed study, the Commission had decided that postage stamp method is the appropriate method for determination of intra-state transmission charges in the present state of affairs. Accordingly, the Commission had notified the Transmission Regulation, 2014.

217. Multi-year tariff principle is nothing but setting up of some bench marks for components of tariff for a control period. This gives the predictability to the tariff determination during the control period. OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014 have adopted the MYT principle by fixing up benchmark for different components of tariff such as O&M expenses, depreciation and return on equity etc. for control periods. The Regulations

also differentiate different components of tariff on the basis of controllable and uncontrollable costs. Therefore, the present Regulation is purely within the framework of MYT regime.

218. Accordingly, the Commission while approving ARR and transmission tariff of OPTCL for the FY 2023-24, shall be guided by the principles as laid down in OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and also shall be guided by the provisions of the Tariff Policy as well as other Statutory Notifications and Directives with due consideration of specific need of Odisha.

219. Some of the objectors have pointed out that many substations and lines of OPTCL have crossed their useful service life. It is also a fact that OPTCL had inherited transmission network from GRIDCO on "as is where is" basis. Continuous expansion/up-gradation, addition of new substations & lines and regular Operation & Maintenance (O&M) of transmission system are required for smooth flow of power from generating station to ultimate consumer through transmission and distribution network. A robust transmission system is required for reliability, availability of power supply and for safe & secure operation of the grid, to meet the growing power demand of DISCOMs and to meet the contingency conditions as well as to fulfil the expectation of the consumer to avail uninterrupted (24x7) quality power. In view of the above, the Commission, over the past several years, has been approving a significant amount of Capital Investment proposals for installation of new Grid substations, transmission lines etc. for availability of adequate margin/capacity in Transmission network to avoid any transmission constraints and is also allowing significant amount of R&M expenses for encouraging the Licensee to carry out required maintenance for maintaining a healthy transmission system. Further, most of the RE generators are likely to be connected in future to the STU network. Therefore, the efficiency of intra-state transmission network would be enhanced for smooth flow/evacuation of power.

220. The tariff policy notified by the Ministry of Power on dated 28.01.2016 stipulates the following objectives in respect of transmission system:

(i) Ensuring optimal development of the transmission network ahead of generation with adequate margin for reliability and to promote efficient utilization of generation and transmission assets in the country;

(ii) Attracting the required investments in the transmission sector and providing adequate returns.

221. Para 7.2(2) of Tariff Policy states that it is desirable to move to a system of loss compensation based on incremental losses as present deficiencies in transmission capacities are to overcome through network expansion. Necessary studies are to be

conducted to establish the allowable level of system loss for the network configuration and the consequential capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading lead to significantly higher losses, CTU/STU should ensure upgradation of transmission systems to avoid the situations of overloading.

222. 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. All the available information, particularly the information on available transmission capacity and load flow studies, should be shared with intending users by the CTU/STU and the load dispatch centres.

223. It is observed that during FY 2021-22 the daily peak demand touched 5645 MW on dt.17.07.2021 and a minimum of 2965 MW on dt.26.05.2021. The peak demand in 2021-22 is about 597 MW (11.82%) more than the peak demand experienced during the previous year 2020-21 (5048 MW). The total energy drawl is about 27627 MU in FY 2021-22 against 25448 MU in 2020-21, which indicates the increase in electricity consumption of around 2179 MU (8.56%) in the State.

Computation of Transmission Loss for FY 2023-24

224. 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 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 principle of ‘As the System Operates’.

225. OPTCL submitted that the transmission loss is purely a technical loss and dependent upon voltage level of transmission, the real time injection of power by number of generators, system configuration and power flow requirements at different load centres. It also depends on parameters/factors such as distance and mismatch between generation & load, types of load, reactive power compensation, voltage profile, seasonal variation of demand etc. OPTCL therefore does not have much control over the same. OPTCL, in the interest of public has constructed grid substations and transmission lines in remote and deprived areas of the State with financial support from Central & State Government. Expansion of EHT network, addition of Substations and operation of some of the additional transmission elements in those areas in under-loaded conditions are also responsible for increase in transmission loss. The under loading of EHT lines and substations for most of the time in remote areas are also responsible for over voltage problem at EHT level. The actual transmission loss of

OPTCL was within the margin allowed by the Commission up to the year FY 2017-18. The actual transmission loss in the OPTCL's transmission system for FY 2018-19, FY 2019-20 & FY 2021-22 was 3.28%, 3.25 %, 3.22% &3.18% respectively as against Commission's approval of 3.00%.

226. The approved and actual transmission loss for the year 2012-13 to 2022-23 is furnished in the table below:

Table - 20

FY	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Approved (%)	3.80	3.80	3.75	3.75	3.70	3.50	3.00	3.00	3.00	3.00	3.00
Actual audited (%)	3.84	3.79	3.73	3.67	3.58	3.34	3.28	3.25	3.22	3.18	3.14 (Provisional for April 22 to Sept' 22)

227. Loss reduction is also a part of efficient operation. It is the responsibility of the OPTCL to reduce its transmission loss in time bound manner. OPTCL has undertaken various loss reduction measures by implementing emerging technologies like the Substation Automation System, digitisation of Grids by using Bay control units, uprating of conductors from ACSR to HTLS, conversion from single circuit to double circuit line, procurement of efficient equipments etc.

228. In view of this trend of transmission loss level and adoption of various loss reduction strategies, OPTCL has proposed 3.10% transmission loss during FY 2023-24. However, Commission emphasises the reduction in loss level to 3%.

229. OPTCL, at present is calculating the Transmission Loss in the network by deducting the energy sent out to the DISCOMs and others from the energy input to the network. One of the reasons of more transmission loss is because of the availability of higher percentage of 132 kV lines (in Ckm) to that of total lines (Ckm) in OPTCL system. OPTCL further submitted that the approved transmission loss of similar type of utilities in India such as UPPCL (Uttar Pradesh) and (GETCO) Gujarat for the FY 2022-23 will be more than 3%. OPTCL is taking steps like upgradation to higher voltage level, use of low loss conductor, conversion of S/C line to D/C line, augmentation of Transformers for reduction of transmission loss.

230. It is observed that OPTCL has not achieved the loss target approved by the Commission for the FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22. OPTCL in its submission has submitted that the approved loss level could not be achieved primarily due to addition of infrastructure and various system strengthening works in remote and deprived areas of the State. However, the neighbouring state such as Andhra Pradesh, where almost similar type of network configuration is available, the

Electricity Regulatory Commission has considered the lower limit of intra state transmission loss for the FY 2023-24 at the level of 2.80% and average transmission loss of 3%. Further, the transmission losses approved by the respective Electricity Regulatory Commissions for other neighbouring states like West Bengal, Madhya Pradesh, Bihar, Chhattisgarh with similar type of infrastructure are in the range of 2.23% to 3%. Hence, keeping in view the licensees' track record in reduction of the losses, the huge investment made in the transmission network for system strengthening, automation, utilisation of energy efficient equipments etc., and considering the submission of objectors as well as OPTCL, the Commission approves 3.00% as transmission loss for FY 2023-24 which is same as that of previous year. Further, the Commission directs OPTCL to continuously monitor the operation of transmission system, prevent over loading/under loading wherever possible by taking suitable measures and take up innovative action for optimum loading of the existing network for further reduction of loss.

231. OPTCL is mandated to ensure development of an efficient, co-ordinated and economical transmission network for smooth flow of power from generating stations to load centres including remote tribal and other underdeveloped area. OPTCL is also responsible for reducing transmission losses and providing reliable, 24x7 quality power to all consumer of the State, maintaining high system availability. Transmission loss is a technical loss, which is inevitable /unavoidable and limited scope is available to reduce losses. However, OPTCL is directed to carry out energy audit of the transmission system to identify areas where loss is more and to assess the losses in various transmission elements (power transformers, transmission lines, particularly over loaded lines, etc.) at different voltage levels, (400 kV, 220 kV, 132 kV) and plan accordingly to undertake various remedial measures to reduce transmission loss further. Moreover, transmission loss also depend on the voltage level of power transmission. It is observed that transmission assets (No. of substations & associated transmission lines) at 132 kV level has increased over the years, which forms back bone of Odisha transmission system. OPTCL may plan to increase its transmission network at next higher voltage level i.e. at 220 kV level which can handle more power at reduced losses and will result in overall reduction in transmission loss.

232. As per the OERC (Fees & Charges of SLDC and other related matters) Regulation, 2010, calculation of transmission loss is one of the market operation functions of SLDC. Therefore, OPTCL in association with SLDC shall submit a report on transmission loss at different voltage levels of OPTCL's transmission network. A report on the transmission loss at different voltage levels for the FY 2022-23 should be

furnished latest by 30.06.2023. Further, a report on the month wise transmission loss in intra-state transmission system at different voltage levels (i.e. 132 kV, 220 kV and 400 kV levels) for the 1st quarter of FY 2023-24 should reach the Commission by 31.08.2023. This report shall be indicative of the present status of loss in OPTCL system vis-à-vis their claim in the Tariff petition.

Execution of Transmission Projects

233. OPTCL has submitted that extending transmission system to remote & under developed areas for providing reliable power supply not only increase the under utilised assets but also increase the transmission loss. The investment made by OPTCL in such area is not viable because of low growth in demand. It is a fact that the development works like establishment of hospitals, deep borewell for agricultures etc. are being hampered particularly in remote areas because of poor quality of supply including low voltage profile. The Commission, while approving the investment proposals of OPTCL had also observed that the State Government desires to support the projects coming up in the remote areas for the larger interest of the people of the State and to cater to the expected load growth and promoting industrial development, etc. The Commission therefore directs OPTCL to take up the matter with Government of Odisha to fund the economically unviable projects required for socio economic development activities and for the larger interest of the State through grants.

234. The Commission had earlier directed OPTCL to monitor the projects in more professional manner. The Commission had also suggested for Aap based project monitoring system. However, the Commission expresses its concern about the delay in execution of the projects in spite of repeated direction of the Commission. The Commission, therefore directed OPTCL to have a project monitoring cell, to monitor the progress of projects, identify the bottlenecks/constraints and resolve the issues for timely execution of the projects. Assistance of professional experts may be taken for estimation, preparation of bill of materials, tendering, design & engineering and erection & commissioning of project, etc.

235. Transmission system connects generation source with the distribution system and plays an important role in extending 24X7 quality power to the consumers. Transmission planning is an ongoing process of assessing the electric system and its ability to deliver electricity reliably, efficiently to customers and recommending system reinforcements to meet forecasted load demand. As per the Section 39(2) of the Electricity Act 2003, Intra State Transmission System should be developed in a coordinated manner in consultation with CTU, State Government, Generating Companies, Regional Power Committees, CEA, Licensees etc. The Inter-State Transmission System (ISTS) is

developed by CTU in consultation with CEA, STUs and other stakeholders but Intra-state transmission development is the responsibility of State Transmission Utility (STU). As per tariff policy, necessary studies are to be conducted to augment the transmission system and to reduce transmission system loss. Planning of transmission network (at least considering network upto132/33 kV transformers) is essential and needs to be based on load flow study for at least five (5) years' time frame considering the projected load growth, generation addition, operation feedback.

The summary of study report for the time frame shall bring out

a) List of existing lines getting over loaded at 132 kV, 220 kV & 400 kV level

b) List of existing sub-stations with over loaded transformers

c) Requirement of additional lines & sub-stations

d) Requirement of compensation to address over voltage problem

e) Technical loss etc.

236. The development of Intra-state transmission system should always match with development of ISTS and downstream distribution network. Mismatch in development will create un-utilisation/under-utilisation of transmission assets. Coordinated development of Intra-state Transmission System including distribution network is very much required for optimum utilization of developed transmission system.

237. OPTCL is directed to develop its own system study group instead of relying upon the Consultants for proper planning of the system in a coordinated manner to avoid stranded assets in the system. OPTCL should have systematic planning followed by implementation plan for smooth execution of the projects approved by the Commission.

238. DPR is to be prepared based on above studies covering required augmentation/ strengthening of existing transmission infrastructure and requirement of additional infrastructure (new sub-station and lines at 400kV/220kV/132kV level) to meet the projected demand in different time frame. Thereafter, OPTCL should formulate the stage-wise implementation plan accordingly.

239. The Commission is of the opinion that quality and reliable transmission network is important for overall development of power sector in the state aiding in providing last mile connectivity. Further, with the push of Government of India and the State Government in its Renewable Policy 2022 for addition of renewable energy, it is imperative that there is requirement of a robust transmission infrastructure in place to facilitate evacuation of such renewable power. The Commission opined that OPTCL being the STU is responsible for the integrated, planned and coordinated development of the Transmission network of the State. The Commission accords in-principle approvals of the schemes proposed by OPTCL either in the Intra State Transmission

plan or in Business Plan for next five years with specific directives to approach the Commission for approval of the investment proposal of each viable project to be implemented for the benefit of the sector. Therefore, considering different load scenario which has impact on the loss level and consequently on the sale the OPTCL is directed to approach the Commission with DPR along with report of long-term transmission system studies (considering various generation and load scenario under peak and off-peak period) in line with the Licence Conditions and Tariff Regulations and Transmission Planning Criteria-2023 of CEA along with the cost benefit analysis before any expenditure.

240. The Commission feels that one of the reasons for increase in ARR of OPTCL year after year is the high capital investment in creation of lot of stranded/ under-utilised assets. The creation of more under-utilized transmission assets adds to increase in losses as well as O&M expenses of transmission elements and ultimately increase burden on consumer. Therefore, the Commission desires that no transmission system strengthening and expansion proposals should be executed without the prior approval of the Commission. OPTCL should submit the comprehensive system study along with requirements as specified in the licence conditions of OPTCL and tariff regulations.

241. The concept of dynamic line ratings may also be considered during planning to accommodate additional power flow during night peak hours, when ambient temperature is lower than day time temperature. Further, the requirement of additional transmission network for meeting GNA requirement as per plan of CEA, CERC (Connectivity and General Network Access to the Inter-state Transmission System) Regulations and Generation Research Adequacy need to be taken into account, while planning the transmission system of the state.

242. The creation of new substation shall be based on load growth and voltage level shall be decided based on quantum of power to be handled. OPTCL should have consultation with DISCOMs to access the expected demand growth. The new sub-station should have adequate space provision for accommodating future expansion (addition of bays, transformation capacity, reactive compensation etc.) so as to avoid creation of another sub-station unnecessarily in nearby area.

243. OPTCL shall prepare the DPR based on Standardisation of (a) maximum MVA capacity of sub-station (132/33 kV, 220/132 kV, 220/33 kV, 400/220/132 kV), (b) rating of Power Transformer including the foundation of transformer, (c) (N-1) contingency criteria for lines and transformers (d) maximum line length & the power flow per circuit in 132 kV, 220 kV and 400 kV lines under different configuration, (e) span length of 132 kV, 220 kV and 400 kV overhead lines, (f) type

(ACSR/AAAC/High Tempt & low Sag/any other) & size (Dia & Area) of conductor for 132 kV, 220 kV and 400 kV overhead lines, (g) Rating of 132 kV, 220 kV and 400 kV Switchgear (CB, Isolator) (A, kA & duration, Type: SF6/any other type), (h) rating of Shunt Reactor (Bus & Line) etc. The standardization would help in the long run for smooth management of assets & investments and faster delivery of equipment/material. The specification for power transformer, switchgear, Surge Arrester, CT, PT/CVT, conductor, insulator, firefighting system, lighting system, AC/DC system etc. need to be standardised keeping in view the development of cyclone resilient transmission infrastructure, wherever required. This would facilitate interchangeability of equipment/material and spares across OPTCL and would also facilitate the common pooling of spares.

244. The transmission asset mapping in essential for an efficient way of monitoring & maintaining the existing transmission assets for healthy operation. OPTCL have almost completed 100% Transmission asset mapping. Further, OPTCL is monitoring the healthiness of transmission elements using modern diagnostic tool to minimise outage of transmission assets and ensure reliability & availability of transmission system for uninterrupted power supply to ultimate consumer. The list of diagnostic tools available in identified locations for Condition Based Maintenance (CBM) of Transmission assets and requirement of additional diagnostic tools for catering to entire State shall be furnished.

245. Odisha is a cyclone prone area and the transmission & distribution network along coastline is being affected very frequently because of cyclone. The frequency of occurrence and intensity of cyclonic wind has increased over the years causing large scale damage to the transmission and distribution system infrastructure. The effect of cyclonic storm is largely felt within the belt of 60 kms from the coast line. OPTCL should, therefore, plan for cyclone resilient transmission infrastructure for the State. A document prepared by the task force constituted by the MoP, GoI on “Cyclone Resilient Robust electricity transmission and distribution infrastructure in coastal area” is available in the public domain for reference. The said document has clearly elaborated about the design aspects and various measures etc. to be considered to reduce the impact of cyclone in coastal areas. Provision of adequate spares, Emergency Restoration System (ERS) and mobile sub-station should be made in line with CEA guidelines/regulations for faster restoration of system and to meet the contingency situation during cyclone. OPTCL shall submit brief on action taken in this direction including the availability of material bank and availability of ERS & mobile substations

to meet such contingency situation. The details of Government's assistance for this purpose is to be furnished.

246. It is observed that in the transmission system of OPTCL, about 29 nos. of substations (at 132 kV and 220 kV level) have crossed 40 years of their service life (against useful life of 25 years) and more than 76 transmission lines are in operation for more than 40 years (against useful life of 35 years). Most of the substations/transmission lines belongs to 132 kV levels. Hence it is high time and is an opportunity for OPTCL to plan and explore the possibility of uprating (by replacing conventional ACSR/AAAC conductor by HT/HTLS conductor)/upgradation of such transmission elements to next higher voltage level based on transmission system studies so that more power can be handled at reduced losses. The possibility of conversion of existing transmission line to double circuit/multi circuit/multi circuit & multi voltage configuration may also be explored for optimum use of row as Right of Way (RoW) is going to be one of the major challenges in construction of new transmission line(s) in future. Use of multi-circuit, multi-circuit & multi-voltage, compact transmission lines using insulated cross arm and use of steel pole, use of high temperature conductor, FACTs devices etc. are the need of the hour to optimise RoW and increase power flow per meter of RoW. In this connection, MoP document on reduction in RoW in urban and forest area which is available in the public domain may be referred.

247. MoP has advised to conduct cyber security audit of the entire cyber infrastructure including websites at regular intervals through CERT-In (Indian Computer Emergency Response Team) empanelled auditors so as to identify the gap and take appropriate corrective actions. OPTCL is therefore directed to intimate the status of implementation of regular cyber security audit and other proactive steps being taken to prevent possibility of Cyber intrusion attempts and security of the transmission system.

248. OPTCL shall conduct protection audit on regular basis for efficient and healthy operation of its system. The brief details of action taken in this direction shall be submitted to the Commission.

249. OPTCL in obedience to the order of the Commission dated 24.03.2022 in case No. 105 of 2021 has signed an agreement with Power Grid Corporation of India Ltd. (PGCIL) to provide Consulting services for setting up of State Transmission Asset Management System (STAMS). OPTCL shall furnish a brief report on Progress in that direction and the schedule date of operation of STAMS.

250. Electrical safety hazards are increasingly posing risk to people and property in the form of shocks, injury, fire, explosion leading to fatal/non-fatal accidents. The growing number of electrical accidents in the State is a serious concern for all. Highest no. of

fatal accidents in the State are associated with transmission system of OPTCL. The primary reasons of such incidents are basically due to non-adherence to safety rules, no/improper maintenance of transmission/distribution system elements, non-compliance of safety clearances, lack of proper use of safety gadgets by the employees etc. Further, appropriately trained/licensed personnel are not being entrusted to work in the field. CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 has vividly dealt with all these matters i.e., relating to issue of certificate of competency /electrical work permit, engagement of personnel having undergone appropriate training, engagement of safety officer, maintaining equipment/material in healthy condition, maintenance of required safety clearances etc. In this connection, the Commission has framed a Regulation on compensation to electrical accident victims. The Commission, therefore, directs the licensee to submit a brief report on no. of fatal accidents & action taken to minimise such incidents in future.

251. OPTCL has submitted that in obedience to the ARR & Tariff order for the FY 2022-23 some of the existing substation/ transmission lines and equipments have been upgraded to enhance power transfer capacity and reliability. OPTCL system is also having proper protection devices in place for safe operation of the power system, reduction of the risk of damage to the equipments and to avoid all kinds of electrical accidents. Further, OPTCL has submitted that Substation Automation System(SAS), M.S. Project and Global Project Monitoring System (GPMS), State Transmission Asset Management System(STAMS), Geographical Information System (GIS), Automatic Demand Management System (ADMS), Automated Fault Analysis System and Remote Accessibility System (AFS & RAS) are being adopted by OPTCL for safe, reliable and efficient operation of its transmission system taking into account the expected large scale integration of generation from renewable sources having intermittency and variability.

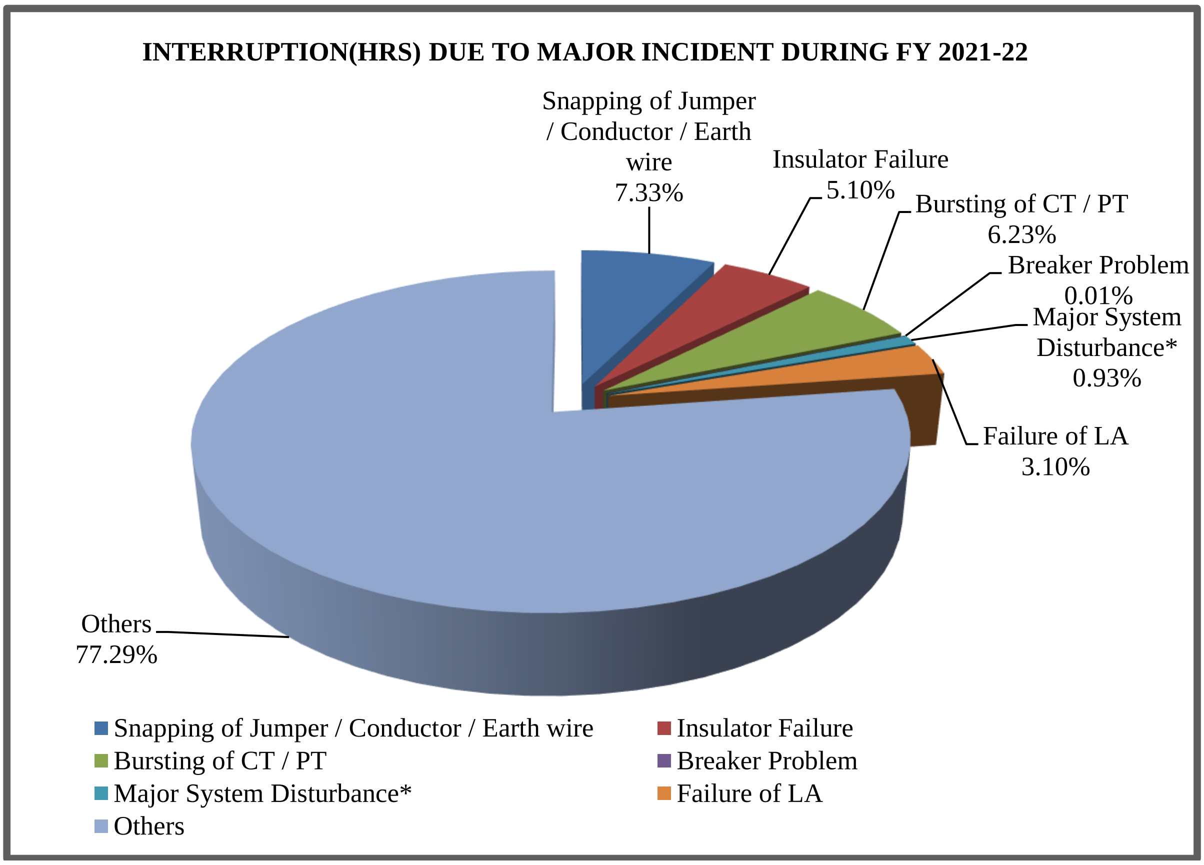
System Interruptions due to Major Incident and Voltage Profile:

252. OPTCL's system has faced aggregated Annual interruptions varying from 2 hours to 18 hours at different locations on account of conductor/jumper/earth wire snapping, insulator failure, bursting of Current Transformer/ Potential Transformer, breaker problem, system disturbance, Lightening Arrester failures etc. The duration as mentioned below is the sum total of interruptions occurred at different areas (s/s) during the FY 2021-22. 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 effort has been made by OPTCL in maintaining uninterrupted power supply even in the event of generation

failures. It has been reported that the load restriction has been imposed to curtail demand due to non-availability of generation/failure of generating stations. OPTCL claimed that there was no black out experienced in the State during the FY 2021-22. Duration of interruption in the year is given in the table below:

Table - 21
Interruption due to Major Incident

Incident	Duration of Interruption	No. of Interruption	Percentage
Snapping of Jumper / Conductor / Earth wire	18:26:00	53	7.33%
Insulator Failure	12:49:00	25	5.10%
Bursting of CT / PT	15:40:00	12	6.23%
Breaker Problem	0:02:00	3	0.01%
Major System Disturbance*	2:21:00	6	0.93%
Failure of LA	7:48:00	18	3.10%
Others	194:19:00	490	77.29%
Total	251:25:00	607	100.00%
The duration of interruption indicated above is the sum total of interruptions occurred at different areas(S/s) during the year. However there was no total blackout experienced for the State during the year 2021-22.			



253. 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 system voltage of 132 kV, 198-245 kV for system voltage of 220 kV and 380-420 kV for system voltage of 400 kV. OPTCL has experienced minimum & maximum operating voltage of 112 kV & 151 kV in its 132 kV system. The voltage profile at 220 kV level was quite

satisfactory except at Jayanagar and Narendrapur Substations where voltage has gone beyond maximum permissible limit of 245 kV and touched 249 kV and 252 kV respectively. The maximum operating voltage in one of its 400 kV Substation i.e. Dubyuri(N) has touched 433 kV.

254. OPTCL is advised to take suitable steps to keep the OLTC of the power transformers in healthy condition and should be operated to maintain the voltage within the permissible limits. Further, OPTCL should conduct reactive compensation studies and take necessary steps for replacement of reactive compensation devices (like line reactors, bus reactors, STATCOM etc.) at suitable locations for a better voltage control and reliable operation of its transmission system. The reactive load of DISCOMs is to be monitored regularly and OPTCL shall take up the matter with DISCOMs for providing adequate compensation in distribution system as remedial measure and required system studies may also be carried out for advising DISCOMs to resolve such issues.

255. OPTCL has to take steps for faster and timely execution of the transmission projects, already approved by the Commission, with optimization of cost and to avoid cost and time overrun & ultimate tariff burden to the consumers. Further, OPTCL should plan expansion of transmission network based on system study for longer time frame taking in to account the operation feedback of SLDC to avoid under-utilization of transmission assets ensuring no under loading of transmission lines and optimum loadings on substations to minimize system losses and overall transmission cost, ultimately reducing tariff burden on consumers. OPTCL need to take prior approval of the Commission for the investment required for transmission network expansion/ strengthening.

256. As an important function of the licensee all major incidents affecting any part of the transmission system should be reported to the Commission in accordance with the provisions of Condition 9.3 of Transmission License Condition and consequent instruction dated 03.01.2007. The Commission, therefore, directs OPTCL to report all the major incidents for which any part of the transmission system is affected in the approved formats within the time line as specified in the aforesaid letter.

257. In line with Odisha Renewable Energy Policy 2022 of Govt. of Odisha, OPTCL is directed to consult grid connected Renewable Purchase Obligated entities for providing storage facility in from of BESS and plan in co-ordination with GRIDCO for development of PSP in the state to meet Energy Storage Obligation (ESO) and accommodate intermittency & variable nature of generation from RE sources which is the trend of the future.

258. As advised SAC, OPTCL should promote R&D activity and standardisation of transmission element and should export the possibility of development of centre of excellence in its capacity building centre through PPP mode.

Finance

Truing up of OPTCL for the FY 2021-22

259. In the instant application, along with ARR & tariff application of FY 2023-24, OPTCL has proposed for truing-up for the FY 2021-22 in compliance with Regulation 7.1 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014. The analysis of element wise expenditure and income proposals and the proposal for truing up of OPTCL are discussed in the following paragraphs.

260. OPTCL has submitted that the income and expenditure relating to SLDC has been segregated as a part of true up from the consolidated account of OPTCL and consequential surplus of Rs.3.81 Crore has been transferred to SLDC Development Fund as per provisions stipulated in the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010. The details are shown in the table below:

Table - 22

OPTCL & SLDC Income & Expenditure Break up of FY 2021-22

Sl No	Particulars	Actual as per Audited Accounts		
		Consolidated OPTCL Account	SLDC	Transmission
1	2	3	4	5=3-4
A	**Expenditure**			
1	Employee Cost	**487.39**	9.87	477.52
2	R & M Cost	**99.55**	0.69	98.86
3	A & G Cost	**87.19**	1.18	86.01
4	Depreciation	**343.38**	0.82	342.56
5	Interest on Loan Capital	**72.42**	-	72.42
6	Rebate	**14.49**	0.09	14.40
7	Provisions for Tax & Other	**63.36**	-	63.36
8	**Total Expenditure (1+2+…. +7))**	**1,167.78**	**12.65**	**1,155.13**
B	**Income**			
9	Revenue from Operations	**1,045.90**	16.32	1,029.58
10	Other Income	**183.85**	0.14	183.71
11	**Total (9+10)**	**1,229.75**	**16.46**	**1,213.29**
C	**Gap - Surplus/(Deficit) (18-15)**	**61.97**	**3.81**	**58.16**

Employees Cost including Terminal Benefits:

261. OPTCL has submitted that, the Commission had allowed Rs.457.88 Cr. towards Employee Cost including Terminal Benefits for the FY 2021-22. As per the audited accounts, excluding Rs.9.87 Cr of SLDC, the employees cost including terminal benefit liabilities of OPTCL is Rs.477.52 crore.

262. Further, OPTCL has submitted that, Regulation 8.9 of OERC Transmission Tariff Regulations, 2014 states as under:

"Terminal Liabilities would be provided based on a periodic actuarial valuation to be made by the Commission in line with the prevailing Indian accounting standards".

As per IND AS-19 issued by MCA, employee benefit liabilities shall be assessed through actuarial valuation. Based on the report of Independent Actuary Dr. R. Kannan, BCIC, Kolkata, OPTCL has made provision of Rs.200.10 Cr towards terminal liabilities in the statement of P&L A/c for FY 2021-22. Besides that, the actual expenditure toward employer's contribution in case of NPS and NP category is Rs.22.86 Cr. against approved amount of Rs.13.19 Cr. Hence, OPTCL has requested the Commission to consider Rs.222.96Cr (Rs.200.10cr+ Rs.22.86 Cr) in the truing-up of FY 2021-22.

263. The Commission has analysed the proposals and submission made by the petitioner towards employees cost. In the ARR & tariff Orders, the Commission had provisionally allowed Terminal benefits liabilities to meet the statutory obligations. Subsequently, the actual terminal benefit liabilities trued up based on the respective year audited accounts of OPTCL. Over the periods up to FY 2020-21, the total terminal benefit approved by the Commission in the truing up orders is Rs. 2871.29 Cr. The details are shown in the table below:

Table – 23
Approved Terminal Benefit (Rs. Cr)

Financial Year	Amounts
Up to 31-03-2008	571.02
2008-09	51.34
2009-10	76.94
2010-11	140.20
2011-12	171.03
2012-13	146.19
2013-14	83.69
2014-15	195.63
2015-16	138.26
2016-17	188.04
2017-18	623.84
2018-19	168.17
2019-20	163.35
2020-21	153.59
Total up to 31.03.2021	**2,871.29**
Approved in ARR Order of FY 2021-22	201.16
Total up to 31.03.2022	**3072.45**

264. Further, by analysing the audited accounts of Terminal Benefits Trust Fund for the FY 2021-22, the Commission observes that as per the actuarial valuation upto 31.03.2022, total Corpus requirements is Rs.2903.00 Cr whereas value of corpus investment is Rs.2270.71 Cr only. When the Commission has already approved sufficient funds (i.e., Rs.3072.45Cr) to meet the corpus requirements, still there is a shortfall in Corpus investment amounting of Rs.632.29Cr (Rs.2903.00Cr - Rs.2270.71Cr) till 31.03.2022. The true up requirement for the trust for FY 2021-22 is Rs.68.17 Crore. The table below depicts the same.

Table - 24
Terminal Benefits Trust Fund Accounts as on 31.03.2022

Trust	Corpus Requirement up to 31.03.2022	Actual Investment up to 31.03.2022	Gap in Investment as on 31.03.2022	OPTCL payable to trust as on 31.03.2022	Trust Deficit of FY 2021-22 (Expenditure-Income)
1	**2**	**3**	**4=2-3**	**5**	**6**
Pension	2,660.52	2,057.61	602.91	739.47	46.71
Gratuity	115.27	76.86	38.41	13.92	18.44
Leave	127.21	136.24	(9.03)	36.21	3.02
Total	**2,903.00**	**2,270.71**	**632.29**	**789.60**	**68.17**

265. Considering the above facts and figures in the Trust audited accounts, the Commission is inclined to determine the actual terminal benefits requirements and accordingly approves Rs.122.74 Crore for truing-up for the FY 2021-22 towards Terminal benefit liabilities including actual NPS and NP category of Rs 22.86 Cr. The details are mentioned in the table below:

Table – 25
Terminal benefit allowed for FY 2021-22

Particulars	Amount (Rs. Cr.)
Trust Deficit	68.17
Corpus Requirements (Rs.2903.00 Cr - Rs.2871.29 Cr allowed upto 2020-21)	31.71
Employers Contributions to NPS &NP	22.86
Total	**122.74**

266. Further the Commission directs OPTCL to invest the differential amount Rs.632.29 Cr to maintain the corpus requirement at par with actuarial valuation of Rs.2903.00 Cr up to 31.03.2022.

267. Accordingly, with the above observation and direction, the Commission now approves Rs. 377.30 crore towards the employee cost of OPTCL as truing up for FY 2021-22 as against the earlier approval of Rs.457.88 Cr in the ARR & tariff Order for FY 2021-22. The details are shown in the table below:

Table - 26
Employees Cost Approved for FY 2021-22

Sl No	Particulars	Approved in ARR	Actual As per Audited Accounts	SLDC Portion	Transmission Portion	Approved in Truing Up
1	**2**	**3**	**4**	**5**	**6=4-5**	**7**
A	**Salaries & Allowances etc.**					
1	Basic pay & DA	216.05	189.05	6.85	182.20	182.20
2	House Rent Allowance	15.02	50.81	1.89	48.92	48.92
3	Other Allowance	6.53	18.58	0.70	17.88	17.88
4	Bonus	0.04	0.01	-	0.01	0.01
5	Stipend for MT	7.26	4.19	-	4.19	4.19
6	Out Source Engagement	2.57	2.21	-	2.21	2.21
7	Ex-Gratia	5.00	4.39	0.09	4.30	4.30
8	Staff welfare Expenses	3.07	8.14	0.02	8.12	8.12
9	Others Employee Cost	3.07	2.38	0.09	2.29	2.29
10	**Sub-Total (1+2+…+9)**	**258.61**	**279.76**	**9.65**	**270.11**	**270.11**
B	**Terminal Benefits &NPS**					
11	Pension fund	185.48	180.26	-	180.26	
12	Gratuity fund	10.43	11.85	-	11.85	99.88
13	Leave Encashment	5.25	7.99	-	7.99	
14	Provident fund	13.19	23.08	0.22	22.86	22.86
15	**Sub-Total (11+12+13+14)**	**214.35**	**223.18**	**0.22**	**222.96**	**122.74**
16	**Total (10+15)**	**472.96**	**502.94**	**9.87**	**493.07**	**392.85**
17	Less: - Emp. Cost Capitalized	15.08	15.55	-	15.55	15.55
C	**Total Employees cost (16-17)**	**457.88**	**487.39**	**9.87**	**477.52**	**377.30**

Repair & Maintenance (R&M) Expenses:

268. OPTCL has stated that, the Commission had allowed Rs.118.61 Cr. towards R&M Expenses in the Transmission Tariff Order for FY 2021-22. As per the audited accounts for FY 2021-22, the R&M Expenditure is Rs. 98.86 Cr. as detailed in the table below:

Table - 27
Actual R&M Cost for the FY 2021-22 (Rs. Cr)

Particular	Actual	SLDC	Transmission
Building	11.03	-	11.03
Plant and machinery	58.51		58.51
Lines cables and network assets	25.60		25.60
Electrical installations	1.12	0.13	0.99
Vehicle	0.11	0.00	0.11
Furniture and fixtures	0.03	0.00	0.03
Office equipment	3.15	0.56	2.59
Total	**99.55**	**0.69**	**98.86**

269. OPTCL has requested the Commission to consider Rs.98.86 Cr. as R&M expenses for FY 2021-22. The commission scrutinised the audited accounts of OPTCL and accordingly approves Rs. 98.86 Cr towards R & M expenses for truing-up of FY 2021-22 as against the earlier approval of Rs.118.61 Cr in the ARR & tariff Order of FY 2021-22.

Administration & General (A&G) Expenses:

270. OPTCL has stated that, the Commission had allowed Rs. 30.35 Cr. towards A&G Expenses and Rs.0.35 crore towards GCC expenses in the Transmission Tariff Order for FY 2021-22 whereas as per the audited accounts for FY 2021-22, the actual A&G Expenses is Rs.29.61Cr on account of Insurance, Rates & Taxes, Hire Charges of vehicle, Telephone & Internet Charges, Printing & Stationery, Security and other Personnel (Watch & Ward Expenses), Postage & Telegram, Rent, Advertisement, Electricity & Water Charges, Legal/Consultancy charges, Travelling expense, Professional Fees, Internal Audit Fees, Disaster Expenses Commission on Sale of Scraps, Office Maintenance etc., which are generally considered as A&G Expenses.

271. Besides the above actual A&G expenses, OPTCL has submitted that, Rs.58.61 Crore is shown in the audited accounts under A&G Expenses towards provisions & other adjustment on account of expenditures like impairment loss recognized on non-financial assets, Loss on theft/Shortage/Obsolescence of material & others and other losses. Out of which Rs.50.71 Cr. is towards receivable as transmission charges from DISCOMs and PMC charges which were already recognized as income in the year it had happened and trued up. OPTCL has further stated that, even though Commission has given the direction to recover the arrear dues of DISCOMs in the vesting orders, after the filing for OTS (One Time Settlement) by the DISCOMs before the Commission, the chances of recovery arrear dues seems to be nil. Therefore, OPTCL has requested the Commission to consider the above amount under A&G Expenses towards provisions & other adjustment in the truing-up for FY 2021-22.

272. OPTCL has further submitted that as per the Regulation 8.14 of Transmission Tariff Regulations, 2014 for OPTCL the Commission is to allow A&G expenses by giving an escalation factor equal to WPI over the amount approved by the Commission in the previous year. Accordingly, the Commission after escalating the A&G figure for 2020-21 by 2.76%, had allowed Rs.23.93 Crore as A&G expenditure for 2021-22 other than the expenditure like Licence Fee and SLDC Fee etc. Therefore, the Commission had approved an amount of Rs.30.70 Crore as A&G cost including Licence Fee and SLDC fee etc. The petitioner has submitted that with the increase in number of sub-stations and divisions, the A&G expenses would increase proportionately therefore, the A&G expenses is always on higher side in comparison of OERC approval. Accordingly, it has submitted that, the total A&G Expenses amounting to Rs.86.01 Cr. may be considered in truing up for the FY 2021-22 against approved amount of Rs. 30.70 Cr (including GCC of Rs.0.35Cr).

273. The Commission, after analysing the A&G expenses in the audited Accounts of OPTCL, has observed that the actual A&G expenses of OPTCL is Rs 27.40 Cr (excluding expenses capitalised) as against the earlier approval of Rs 30.70Cr (including GCC) in the ARR for FY 2021-22. Therefore, the Commission approves Rs.27.40 Cr towards actual A&G expenses as it is within the approved limit as per the Regulations 6.3 of OERC (Terms and Condition for Determination of Transmission Tariff) Regulation, 2014.

274. Besides above, the Commission observed that, as decided in the One-Time Settlement (OTS) scheme of DISCOMs, non-recovery of outstanding arrear relating to transmission charges from DISCOMs is a regulatory loss for OPTCL. Therefore, the Commission approves Rs.50.71 Cr assuming it as regulatory loss as claimed by OPTCL under A&G Expenses. Other provisions and losses claimed by OPTCL under A&G Expenses are disallowed in line with earlier truing up order passed by the Commission.

275. Accordingly, the Commission now approves Rs. 78.11 Cr (Rs.27.40 +Rs.50.71Cr) under A& G Cost of OPTCL for truing up of FY 2021-22. The details are shown in the table below:

Table - 28
Actual A&G Expenses for the FY 2021-22 (Rs. Cr)

Sl. No.	Description	Actual as per Audited Accounts	SLDC	Transmission	Approved for Truing up
1	2	3	4	5=3-4	6
A	**Actual A & G Expenses**				
1	Power and fuel consumed	2.84	0.43	2.41	2.41
2	Hire charges on vehicle	10.08	0.02	10.06	10.06
3	Legal and professional fees	1.93	0.02	1.91	1.91
4	Rent	2.40	-	2.40	2.40
5	Watch and ward expenses	2.51	0.29	2.22	2.22
6	License and other fees	2.07	-	2.07	2.07
7	Rates and taxes	0.18	-	0.18	0.18
8	Insurance charges	0.02	-	0.02	0.02
9	Fees and subscription	0.14	-	0.14	0.14
10	Advertisement for tenders	0.23	-	0.23	0.23
11	Travelling expenses	1.23	0.02	1.21	1.21
12	Communication expenses	0.52	0.01	0.51	0.51
13	Office maintenance charges	0.82	0.05	0.77	0.77
14	Auditors remuneration and out-of-pocket expenses	0.15	-	0.15	0.15
15	Other General expenses	5.67	0.34	5.33	5.33
16	**Sub-total (1+2+…. +15)**	**30.79**	**1.18**	**29.61**	**29.61**
B	**Provisions & Other Adjustment under A&G expenses**				
17	Impairment loss recognised on non-financial assets	2.20	-	2.20	-

Sl. No.	Description	Actual as per Audited Accounts	SLDC	Transmission	Approved for Truing up
18	Loss on theft/Shortage/Obsolete of material and others	0.42	-	0.42	-
19	Other Losses	55.99	-	55.99	50.71
20	**Sub-total (17+18+19)**	**58.61**	**-**	**58.61**	**50.71**
C	**Total (16+20)**	**89.40**	**1.18**	**88.22**	**80.32**
D	Less: Capitalised	2.21	-	2.21	2.21
E	**Total A& G Expenses & Other**	**87.19**	**1.18**	**86.01**	**78.11**

Depreciation:

276. OPTCL has submitted that the Commission had allowed an amount of Rs.232.95 Cr. towards depreciation in the Transmission Tariff Order for FY 2021-22. As per the audited accounts for FY 2021-22, the total depreciation and amortization expense is shown at Rs. 343.38 Cr which is calculated on straight line method as per the rates as well as methodology notified under the Electricity Act, 2003. The details are shown in the table below:

Table - 29
Depreciation as per Audited Accounts of OPTCL for FY 2021-22

Sl No	Description	Actual	SLDC	Transmission
1	**2**	**3**	**4**	**5=3-4**
1	Amortisation of leasehold assets	1.89	-	1.89
2	Depreciation on Buildings	4.90	-	4.90
3	Depreciation On Electrical Installation	0.64	0.02	0.62
4	Depreciation on Other civil works	2.97	0.00	2.97
5	Depreciation on Plant and Machinery	215.51	0.00	215.51
6	Depreciation on Lines, Cable Network etc.	106.78	-	106.78
7	Depreciation on Vehicles	0.10	0.00	0.10
8	Depreciation on Furniture and Fixtures	0.44	0.02	0.42
9	Depreciation on Office Equipment	7.58	0.77	6.81
10	Amortisation of Computer Software	2.57	-	1.89
	TOTAL	**343.38**	**0.82**	**342.56**

277. The petitioner has submitted that the depreciation on Transmission Activities is Rs.342.56 crore including Rs.96.42 Cr. towards the depreciation made on account of assets created by the beneficiary and Govt. on deposit work basis. After that, the net depreciation for OPTCL owned assets is Rs.246.14 Cr. (Rs.342.56 Cr- Rs.96.42cr)

which includes Rs.1.89 Cr. towards lease rent paid against the land acquired for substation on lease from the State Govt.

278. The petitioner has submitted that the depreciation needs to be calculated as per the Regulation 8.38 & 8.34 of OERC Transmission Tariff Regulations, 2014 and has requested the Commission to allow depreciation on the total value of assets at historical cost and not at the deemed cost. The petitioner states that, the Commission in their ARR & tariff Order for FY 2022-23 at para 284 had calculated the original book value of own Assets is Rs.3689.84 Cr. as on 01.04.2021 after excluding of up-valued assets of Rs.534.58Cr, Grant, Beneficiary & Deposit Assets of Rs.1450.59 Cr and fully depreciated assets of Rs.1562.57Crore from the original book value of transmission fixed asset of Rs.7237.58 Crore as on 01.04.2021. During the FY 2021-22, it has added assets value of Rs.1035.62 crore including grant, beneficiary & deposit works assets of Rs.198.68 Cr. Further during FY 2021-22, assets value of Rs.69.42 cr. has fully depreciated. After Considering the above assets of FY 2021-22, OPTCL claimed that its own transmission assets is Rs.4457.36 Cr. (Rs.3689.84 Cr +Rs.1035.62 Cr - Rs.198.68 Cr -Rs.69.42 Cr) as on 31.03.2022 and in line with that it has proposed to truing-up of Rs. 209.82 Cr under depreciation for FY 2021-22. The details submitted by OPTCL are shown in table below:

Table – 30
Depreciation proposed by OPTCL for True up (Rs. Crore)

Particulars	OERC Rates of Depreciation (%)	Book value of Own Fixed Assets as on 01.04.2021	Book Value of Fixed Assets added in FY 2021-22	Book Value of Fixed Assets Fully depreciated in FY 2021-22	Book Value of Grant, Beneficiary & Deposit works Fixed Assets Added in FY 2021-22	Book value of Own Fixed Assets as on 31.03.2022	Depreciation for FY 2021-22
1	**2**	**3**	**4**	**5**	**6**	**7=3+4-5-6**	**8= (3+7)/2 X 2**
Free Hold Land	-	46.02	2.63	-	-	48.65	-
Lease Hold Land	3.34	45.24	1.20	-	0.47	45.97	1.52
Buildings	3.34	129.44	11.63	0.01	-	141.06	4.52
Electrical Installation	5.28	6.34	0.70	0.05	0.23	6.76	0.35
Plant and Machinery: (Other Civil Work)	3.34	81.05	5.01	-	1.72	84.34	2.76
Plant and Machinery	5.28	2,530.31	641.76	4.27	43.56	3,124.24	149.28
Plant and Machinery: (Lines, Cables & Network)	5.28	795.08	333.12	63.09	152.66	912.45	45.08
Vehicles	9.50	0.61	-0.13	-0.08		0.56	0.06
Furniture, Fixture	6.33	5.20	0.37	0.05		5.52	0.34
Office Equipment	6.33	32.97	39.33	2.03	0.04	70.23	3.27
Intangible Assets	15.00	17.58	-	-	-	17.58	2.64
Total		**3,689.84**	**1,035.62**	**69.42**	**198.68**	**4,457.36**	**209.82**

279. Further, OPTCL in its instant application has submitted that, as per audited account of FY 2021-22, the grant and beneficiary & deposit works assets at deemed cost is Rs. 1649.27 Cr as on 31.03.2022. Therefore, OPTCL has requested to provide the details of original book value of Grant and Beneficiary & deposit works Assets as on 31.03.2022. However, OPTCL subsequently submits that the original book value of grant, beneficiary & deposit works assets as on 31.03.2022 is Rs. 1711.45 cr. instead of Rs.1649.27Cr.

280. The Commission has gone into the details of the submission made by the OPTCL where it has proposed to true up of Rs.209.82 Cr towards depreciation for the FY 2021-22 as well as the transmission assets position of OPTCL as per the audited accounts including prior period details (i.e. Transferred from OSEB to GRIDCO, GRIDCO to DISCOMs & GRIDCO to OPTCL under different Govt. of Odisha transfer Scheme notifications) and the transmission assets considered in different tariff orders passed by the Commission. The Commission has analysed the truing up proposal as stated above and the following are the observations of the Commission in this regard.

i. **Original Book Value of Transmission Fixed Asset:** The original book value of transmission fixed assets added over the periods as per audited accounts of OPTCL as on 31.03.2022 are shown in the table below:

Table - 31
Book Value of Transmission Fixed Assets as on 31.03.2022

Assets Added during Financial Year	Original Book Value (Rs. Cr)	At Deemed Cost (IndAS)
Up to on 31.03.1999 ***(As per GoO Transfer Scheme Notification dated 26-11-1998)***	**1,178.93**	
1999-00	111.79	
2000-01	115.48	
2001-02	83.75	
2002-03	132.17	
2003-04	69.45	
2004-05	71.72	
2005-06	158.91	
2006-07	144.23	
2007-08	206.10	
2008-09	142.72	
2009-10	188.49	
2010-11	189.80	
2011-12	135.58	
2012-13	219.48	
2013-14	180.05	
2014-15	142.62	
Total (up to 31.03.2015)	**3471.27**	**1590.18**
2015-16	768.81	768.81
2016-17	683.82	683.82
2017-18	447.00	447.00
2018-19	665.94	665.94
2019-20	535.73	535.73
2020-21	665.01	665.01

Assets Added during Financial Year	Original Book Value (Rs. Cr)	At Deemed Cost (IndAS)
Sub-total (up to 31.03.2021)	**7,237.58**	**5356.49**
2021-22	1,035.62	1,035.62
Total (up to 31.03.2022)	**8,273.20**	**6392.11**

ii. **Up-valued Transmission Assets:** In the past tariff orders, the pre-up valued assets determined by the Commission up to 31.03.1999 was Rs.666.22 Cr. (i.e., as on 01.04.1996 was Rs.514.32 Cr. plus addition of Transmission assets during FY 1996-97 to FY 1998-99 was Rs.151.90 Cr). But as per Govt, of Odisha Transfer Scheme notifications dated 26.11.1998, transmission asset of Rs.1178.93 as on 31.03.1999 transferred to GRIDCO was including the up-valued assets. Considering the above admitted values, the up-valued effect on assets was Rs.512.71 Cr (Rs.1178.93 Cr - Rs.666.22 Cr).

281. After analysing the above facts and figures, the Commission considers that the historical original book value of transmission fixed assets as on 01.04.2021 amounting to Rs.7237.58Cr. After deduction of fully depreciated assets of Rs.1562.57, Up-valued assets of Rs. 512.71 Cr & assets created out of grant, beneficiary & deposit works of Rs.1512.77 Cr. (Rs.1711.45 Cr. as on 31.03.2022- Rs.198.68 Cr. for FY 2021-22) as on 01.04.2021, OPTCL's own asset value is derived by the Commission at Rs. 3649.53 Cr. as on 01.04.2021. The details are shown in the table below:

Table - 32
Audited Book value of Fixed Assets as on 31.03.2021

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Gross Fixed Assets as per audited accounts as on 01-04-2021	Up-valued Assets	Original book value of Grant & Beneficiary /Deposit Assets as on 01-04-2021	Fully (90%) Depreciated Assets as on 01.04.2021	Original Book Value of Own Fixed Assets as on 01.04.2021
2	**3**	**4**	**5**	**6**	**7**	**8=4-5-6-7**
Free Hold Land	-	52.31	6.26	6.29	-	39.76
Leasehold Land	3.34	55.99	-	5.11	-	50.88
Building	3.34	137.99	15.10	7.01	0.21	115.67
Electrical Installation	5.28	10.25	-	3.44	0.47	6.34
Plant & Machinery: (Other Civil Works)	3.34	85.76	0.91	3.13	-	81.72
Plant & Machinery	5.28	4,190.91	266.02	928.50	696.19	2,300.20
Plant & Machinery: (Line, Cable & Network)	5.28	2,625.07	221.17	544.74	850.47	1,008.69
Vehicles	9.50	2.51	-	-	1.46	1.05
Furniture & Fixture	6.33	8.17	0.46	0.44	1.33	5.94
Office Equipment	6.33	51.04	2.79	3.42	12.44	32.39
Intangible Assets	15.00	17.58	-	10.69	-	6.89
Total		**7,237.58**	**512.71**	**1,512.77**	**1,562.57**	**3,649.53**

282. The Commission has scrutinised the audited account of OPTCL, which shows that it has added assets value of Rs. 1035.62 Cr. including grant, beneficiary & deposit works assets of Rs.198.68 Cr. Besides that, taking in to account the book value of assets of Rs.69.42 cr. which has fully depreciated during FY 2021-22, the Commission derives the transmission assets of OPTCL at Rs.4417.05 Cr. (Rs.3649.53 Cr +Rs.1035.62 Cr - Rs.198.68 Cr -Rs.69.42 Cr) as on 31.03.2022. Considering the above assets and applicable rate of depreciation, the Commission arrives at a value of Rs.207.14 Cr towards depreciation for truing-up of FY 2021-22. The details are shown in the table below:

Table - 33
Depreciation trued up for FY 2021-22

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Own Fixed Assets as on 01-04-2022	Book Value of Fixed Assets added in FY 2021-22	Book Value of Grant, Beneficiary & Deposit works Fixed Assets Added in FY 2021-22	Book Value of Fixed Assets Full depreciated in FY 2021-22	Book value of Own Fixed Assets as on 31.03.2022	Depreciation for FY 2021-22
1	2	3	4	5	6	7=3+4-5-6	8=(3+7)/2 X 2
Free Hold Land	-	39.76	2.63	-	-	42.39	-
Leasehold Land	3.34	50.88	1.20	0.47	-	51.61	1.71
Building	3.34	115.67	11.63	-	0.01	127.29	4.06
Electrical Installation	5.28	6.34	0.70	0.23	0.05	6.76	0.35
P&M (Other Civil Works)	3.34	81.72	5.01	1.72	-	85.01	2.78
Plant & Machinery	5.28	2,300.20	641.76	43.56	4.27	2,894.13	137.13
P&M (Line, Cable & Network)	5.28	1,008.69	333.12	152.66	63.09	1,126.06	56.36
Vehicles	9.50	1.05	(0.13)		(0.08)	1.00	0.10
Furniture & Fixture	6.33	5.94	0.37		0.05	6.26	0.39
Office Equipment	6.33	32.39	39.33	0.04	2.03	69.65	3.23
Intangible Assets	15.00	6.89	-	-	-	6.89	1.03
Total		**3,649.53**	**1,035.62**	**198.68**	**69.42**	**4,417.05**	**207.14**

Finance Cost:

Interest on Loan:

283. OPTCL states that the Commission had allowed Rs.94.50 Cr. towards interest on loan in the Transmission Tariff Order for FY 2021-22. As per the audited accounts of FY 2021-22, the net interest is Rs. 72.42 after capitalisation of Rs.32.99 Cr. Accordingly, the commission was requested to consider Rs. 72.42Cr towards interest on loan in the truing up of FY 2021-22.

284. The Commission analysed the audited books of accounts of OPTCL for FY 2021-22 and observed that after capitalisation net interest on loan is 72.42Cr. Accordingly, the Commission approves Rs.72.42cr towards interest on loan for the truing-up of FY

2021-22 as against the Rs.94.50Cr approved in the Transmission Tariff Order for FY 2021-22.

Rebate:

285. OPTCL states that, the Commission has allowed Rs.15.86 Cr. towards rebate in the Transmission Tariff Order for FY 2021-22 As per the audited accounts for FY 2021-22, the rebate is Rs. 14.40 Cr. excluding SLDC rebate of Rs.0.09 Cr. Therefore, it has requested the Commission to consider Rs.14.40 Cr. towards rebate in the truing-up of FY 2021-22. After analysing the audited book of Accounts of OPTCL for FY 2021-22, the Commission approves Rs.14.40 Cr. towards rebate in truing up for the FY 2021-22 as against the Rs.15.86 Cr approved in the Transmission Tariff Order for FY 2021-22.

Incentive for System Availability:

286. OPTCL has submitted that the Commission in the Transmission Tariff Order for FY 2021-22 has allowed Rs.5.00 Cr. towards incentive for system availability. The petitioner states that for FY 2021-22 the system availability was 99.98% as verified by SLDC. Accordingly, the system availability is calculated as Rs.11.91 Cr and OPTCL requests the Commission to consider said amount in truing up for the FY 2021-22. The Commission had approved Rs.5.00Cr in the Transmission Tariff Order for FY 2021-22 towards incentive for system availability. Analysing the same, the Commission approves Rs.5.00 Cr towards Incentive for System Availability in this truing up for FY 2021-22.

Return on Equity (RoE):

287. OPTCL has submitted that the Commission had approved RoE of Rs.131.70 Cr. (@ 15.5% on equity value of Rs.849.79 Cr) in the Transmission Tariff order for FY 2021-22. It has stated that as per the audited accounts for the FY 2021-22, the total equity capital is Rs.1886.71Cr which includes Rs.60.07 Cr. inherited by OPTCL at the time of demerger of GRIDCO into GRIDCO & OPTCL and Rs.647 Cr towards conversion of Bond along with interest on equity. Excluding these two components, the petitioner calculates the net equity capital infused by the State Govt is Rs. 1179.64 Cr (Rs.1886.71 Cr – Rs.60.07 Cr – Rs.647.00 Cr) and accordingly request the Commission to consider return on equity amounting of Rs.182.84 Cr. (i.e. @ 15.5% on Rs. 1179.64 Cr.) in the truing of FY 2021-22 as per the Regulation 8.28 of the Transmission Tariff Regulations, 2014.

288. The Commission has examined the submission of OPTCL. The details of sanction orders and dates of equity capital infused by the State Govt. till FY 2021-22 are shown in the table below:

Table – 34

Sl. No.	Sanction Order No. and Date	Amount (Rs. 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	5.00
4	R&R-I-01/2009-4826 dt.01.06.10	20.00
5	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6	R&R-6/12-685 dt.31.01.2012	1.00
7	R&R-6/12-690 dt.31.01.2012	39.00
8	R&R-6/12-695 dt.31.01.2012	3.00
9	R&R-6/12-629 dt.22.01.2013	25.76
10	R&R-6/12-634 dt.22.01.2013	16.60
11	R&R-6/12-624 dt.22.01.2013	7.64
12	R&R-6/12-5693 dt.18.07.2013	29.19
13	R&R-6/12-5698 dt.18.07.2013	11.97
14	R&R-6/12-5703 dt.18.07.2013	8.84
15	R&R-69/14-10445 dt.29.12.2014	10.50
16	R&R-69/14-10450 dt.29.12.2014	27.50
17	R&R-69/14-10455 dt.29.12.2014	12.00
18	R&R-69/14-6823 dt.06.08.2015	19.68
19	R&R-69/14-6818 dt.06.08.2015	17.22
20	R&R-69/14-6813 dt.06.08.2015	20.03
21	BT(P)-15/15-10291 dt.21.12.2015	0.07
22	R&R-69/14-5364 dt.18.7.2016	10.00
23	R&R-69/14-5369 dt.18.7.2016	20.00
24	R&R-69/14-5374 dt.18.7.2016	20.00
25	BT(P)-04/2018/En-1786 dt. 26.02.18	15.00
26	BT(P)-04/2018/En-1791 dt. 26.02.18	20.00
27	BT(P)-04/2018/En-1796 dt. 26.02.18	15.00
28	R&R -54/2015/En-5458 dt. 23.06.15	20.00
29	R&R -54/2015/En-737 dt. 28.01.16	10.00
30	R&R -54/2015/En-4348 dt. 07.06.16	20.00
31	R&R -54/2015/En-466 dt. 17.01.17	60.00
32	R&R -17/2017/En-2895 dt. 22.04.17	20.00
33	R&R -17/2017/En-10216 dt. 27.12.17	50.00
34	R&R -40/2018/En-3902 dt.28.04.2018	15.00
35	R&R -40/2018/En-4632 dt.24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En dt. 19.12.2018	15.00
37	BT(P)-04/2018(pt)-10439/En dt. 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En dt. 19.12.2018	15.00
39	R&R-40/2019-5100/En TD.27.06.2019	3.67
40	R&R-40/2019-6530/En dtd.6.08.2019	11.03
41	201915819273 dtd.27.02.2020	55.00
42	202018025467 dtd.13.10.2020	50.00

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
43	202019752418 dtd.26.03.2021	5.29
44	202019704714 dtd.23.03.2021	9.00
45	202019747311 dtd.26.03.2021	647.00
46	202121454297dtd.06.09.2021	50.00
47	202122892459 dtd.18.12.2021	30.00
48	202122892550 dtd.18.12.2021	30.00
49	202124034526 dtd.03.03.2022	6.65
50	202124047110 dtd.04.03.2022	55.00
51	202124048923 dtd.04.03.2022	4.00
52	202124049541 dtd.04.03.2022	140.00
	Total (up to FY 2021-22)	**1826.84**

289. Further, OPTCL was asked to submit the detail information about capital work-in-progress as on 31.03.2022. But in its reply OPTCL has not furnished the required information in complete shape as desired by the Commission. But after analysing the same, the Commission observes that out of the above equity capital received from the Government of Odisha, equity capital of Rs. 464.62 Cr are still under Capital Work-in-Progress (CWIP) by the end of FY 2021-22, details of which are shown in the table below:

Table - 35

Sl. No.	Name of Project	Scheme	Equity infused by GoO but under CWIP as on 31.03.2022 (Rs. Cr.)
1	2X 40MVA 220/33kV Grid S/S at **Palei, Balichandrapur** with line.	SSP-30% GoO Equity	**12.53**
2	2x160MVA+2x40MVA, 220/132/33kV Grid S/S, **Dhamara** with line	SSP-30% GoO Equity	**26.85**
3	2X40MVA, 132/33kV Grid S/S at **Bhatli** along with line	SSP-30% GoO Equity	**15.69**
4	2X20MVA, 132kV Grid S/S **Lamtaput** with SAS and associated line.	SSP-30% GoO Equity	**7.90**
5	132kV DC line from 220/132/33kV S/S **Baner (Jaipatna)** to 132/33kV S/S at **Junagarh**	SSP-30% GoO Equity	**10.94**
6	2x160 MVA + 2 x 40 MVA, 220/132/33kV S/S at **Kuanrmunda** and associated line	Rs. 300 Cr GoO Equity	**23.17**
7	2x20MVA, 220/33kV S/S at **Baliguda** and associated line	Rs. 300 Cr GoO Equity	**37.43**
8	2x20MVA, 132/33kV **R.Udyagiri** S/S and associated line	Rs. 300 Cr GoO Equity	**16.79**
9	2x20MVA, 132/33kV Grid S/S at **Boriguma** and associated line	Rs. 300 Cr GoO Equity	**7.59**
10	132kV **Jayanagar-Sunabeda** line	Rs. 300 Cr GoO Equity	**7.73**

Sl. No.	Name of Project	Scheme	Equity infused by GoO but under CWIP as on 31.03.2022 (Rs. Cr.)
11	220/33kV Grid ss,**Golabandha, Telkoi**	30% GoO Equity	**16.80**
12	Construction of 132/33 KV Grid S/s GIS at **Hinjilikatu,** Ganjam	30% GoO Equity	**13.49**
13	Construction of 2x20 MVA, 132/33 KV Grid S/s at Hirakud with GIS along with associated 132 KV LILO lind from existing 132 KV Burla-Lapanga line & existing 132 KV ALCO line. Est. Cost-11/2017-18	30% GoO Equity	**14.60**
14	132/33 KV Grid S/S **BIRMAHARAJPUR** & Associated Line	30% GoO Equity	**8.34**
15	220 KV DC Line from **Bolangir to Kesinga**	40% GoO Equity	**33.85**
16	Construction of 2x20 MVA 220/33 KV Grid S/S at **kalimela** with associated 220 kv SC line on DC tower from Malkangiri s/s to the proposed Kalimela s/s with one number feeder bay extension at MALKANGIRI	30% GoO Equity	**18.31**
17	Construction of 2x20 MVA 132/33 KV Grid S/S at **Nawarangpur** with associated 132 KV DC line for LILO arrangement of existing 132 KV Jayanagar - Tentulikhunti line	30% GoO Equity	**11.81**
18	Design engineering, Errection, Testing & Commissioning of 220KV double circuit line from **Jayanagar** 220/132/33 Kv s/s of OPTCL to 400/220KV s/s of PGCIL at **Kaliagaon**	40% GoO Equity	**5.89**
19	(A) Construction of 220/132/33KV grid substation at **Jayapatna** with one no. bay extension at proposed 132/33KV grid substation at Dabugaon and 220KV LILO line from 220KV Indravati-Theruvalli line. (B) Const. of 132KV SC line on DC tower from 132/33KV Dabugaon grid substation to proposed 220/132/33KV grid substation at Jayapatna. (In principle approved by the BoD)	40% GoO Equity	**34.97**
20	2x500MVA, 400/220/33kV GIS at **Paradeep** and associated line	30% GoO Equity	**94.00**
21	2X20MVA, 132/33KVGSS at **Brundabahal** with associated line	100% GoO Equity	**35.29**
22	132/33 KV S/S at **Tarabha** with associated 132kV LILO Line	100% GoO Equity	**4.00**
23	5 Nos of Projects under Scheme RRCP-II	RRCP-II-30% GoO Equity Support	**6.65**
	Total		**464.62**

290. Further, the Government of Odisha specifically in its letter No...3333 dated 24.03.2021 had communicated the Commission that no return on equity shall be paid on the equity of Rs.647.00 crore which is relating to the sanction of Government towards conversion

of bond to the equity. The petitioner has also not claimed any RoE on the above Equity. Excluding the aforesaid amounts from the total equity capital infused by the Govt. of Odisha, the Commission has determined the equity capital as at Rs. 715.22 Cr (i.e., Rs.1826.84 Cr -Rs.464.62 Cr- Rs.647.00 Cr) as on 31.03.2022 and accordingly approves Rs.110.86 Cr (@15.5% of Rs.715.22 Cr) towards return on equity in this truing-up for the FY 2021-22 as against Rs.131.70 Cr approved in the Transmission tariff Order of FY 2021-22.

Income Tax:

291. OPTCL states that as per the audited account of FY 2019-20, it has not paid any income tax during the year and considering the same, the Commission had not allowed any amount towards income tax in the transmission tariff orders for FY 2021-22. Further OPTCL submits that, it has paid income tax of Rs. 27.21Cr as per income tax return filed for the FY 2021-22. The Commission examined the evidential documents provided by the petitioner and accordingly has allowed Rs.27.21 cr towards Income tax for the truing up of FY 2021-22.

Misc. Receipts:

292. OPTCL states that as against its proposal of Rs. 52.72 Cr., the Commission had approved Rs. 243.28 Cr towards Misc. Receipt in the Transmission tariff order of FY 2021-22 from inter-state wheeling, Short Term Open Access and STU charge, Bank Interest, Supervision Charges and other etc. As per audited accounts of FY 2021-22, it has estimated Misc. receipt of Rs. 322.00 Cr whereas it has proposed of Rs.319.00 Cr under this head and accordingly has requested the Commission to consider same in the truing up of FY 2021-22.

293. The Commission has scrutinised the submission of the petitioner with the audited accounts for the FY 2021-22. The Commission has observed that Rs.0.14 Cr of misc. receipts is related to SLDC which is considered twice by OPTCL. Since SLDC surplus/ deficit is dealt separately and transferred to SLDC Development Fund, the Commission approves Rs.321.86 cr. excluding SLDC income relating to misc. receipts for the truing up of FY 2021-22 in line with approval in the earlier ARR& tariff orders. The details are shown in the table below:

Table - 36
Misc. Receipts of OPTCL for the FY 2021-22 (Rs. Cr)

Sl. No.	Particulars	Approved by OERC in the ARR	Actual as per Audited Accounts OPTCL	True up proposed by OPTCL	Approved by OERC for Truing-up
A	**Misc. Receipts**				
1	Short-term Open Access Charges (STOA)	169.92	243.75	243.75	243.75

2	Supervision Charges	23.51	36.15	36.15	36.15
3	Interest from advances to suppliers	0.19	1.58	1.58	1.58
4	Interest from Bank deposits	24.05	28.95	28.95	28.95
5	Net gain/(loss) on disposal of Assets	9.91	-	-	-
6	Other miscellaneous income	15.72	11.43	11.57	11.43
7	**Sub-total (1+2+…+6)**	**243.28**	**321.86**	**322.00**	**321.86**
B	**Other**				
8	Deferred Income on account of Govt & Beneficiary Assets	-	98.33	-	-
9	Provision Written Back	-	7.27	-	-
10	**Sub-total (8+9)**	**-**	**105.60**	**-**	**-**
	Total (7+10)	**243.28**	**427.46**	**322.00**	**321.86**

Transmission Charges

294. OPTCL has stated that while approving the ARR & Transmission Tariff for FY 2021-22, the Commission has approved total ARR of Rs.792.93 Cr. to be recovered from LTA customers. The petitioner has submitted that as per the audited accounts of FY 2021-22, the revenue from transmission charges recovered from the LTA is Rs785.84 Cr. Accordingly, the petitioner has requested the Commission to consider Rs.785.84 Cr. in the truing up for the FY 2021-22.

295. The Commission has examined the audited accounts of OPTCL for the FY 2021-22 and has found that during that year, the petitioner has recovered transmission charges of an amount of Rs.785.84 Cr. from the LTA customers and accordingly approves the same amount for the truing-up of FY 2021-22.

SLDC Development Fund:

296. OPTCL has submitted that in line with the Commission's order dated 20.03.2010, a separate account i.e., SLDC Development Fund has been created for SLDC w.e.f 01.04.2010. Accordingly, surplus derived from SLDC transactions during FY 2021-22 amounting to Rs.3.81 Cr. has been transferred to SLDC Development Fund.

297. The Commission has analysed this submission of the petitioner and observes that the book of accounts of SLDC is yet to be separated from OPTCL. Besides that, the Commission has scrutinised the audited accounts of OPTCL and it is seen that SLDC transactions are segregated from OPTCL and the surplus derived from SLDC transactions during FY 2021-22 amounting to Rs.3.81 Cr. is considered by OPTCL for the truing-up of FY 2021-22. The comparative statement of Commission's approval and actual transaction of SLDC during FY 2021-22 is shown in the table below:

Table - 37
SLDC Transaction during FY 2021-22 (Rs Cr.)

Sl No	Particulars	Approved by OERC in ARR	Actual as per Audited Accounts	Approved in Truing-up
A	**Expenditure**			
1	Employee Cost	7.94	9.87	9.87
2	R & M Cost	0.57	0.69	0.69
3	A & G Cost	1.24	1.18	1.18
4	Depreciation	0.71	0.82	0.82
5	Rebate	-	0.09	0.09
6	**Total (1+2+…. +5))**	10.46	**12.65**	**12.65**
B	**Income**			
7	Revenue from SOC & MOC	10.46	10.45	10.45
8	Scheduling Charges	-	3.79	3.79
9	Other Income & Fees	-	2.22	2.22
10	**Total (7+8+9)**	10.46	**16.46**	**16.46**
C	**Gap - Surplus/(Deficit) (10-6)**	-	**3.81**	**3.81**

Summary of Truing-up approved for FY 2021-22

298. Considering the above facts and figures, the Commission approves Rs.116.40 Cr. towards truing up surplus as against OPTCL's deficit proposal of Rs.73.15 Cr. for the FY 2021-22. The details are shown in the table below:

Table - 38
Summary of Truing-up approved for FY 2021-22

Sl No	Particulars	Approved by OERC in ARR	Actual as per Audited Accounts of OPTCL	True up proposed by OPTCL	Truing-up approved by OERC	Surplus /(Deficit)
A	**Gross Revenue Requirement**					
1	Employee Cost	457.88	477.52	477.52	377.30	80.58
2	R & M Cost	118.61	98.86	98.86	98.86	19.75
3	A & G Cost (Including GCC Expenses)	30.70	86.01	86.01	78.11	(47.41)
4	Depreciation	232.95	342.56	209.82	207.14	25.81
5	Interest on Loan Capital	94.50	72.42	72.42	72.42	22.08
6	Return on Equity	131.70	-	182.84	110.86	20.84
7	Incentives for System Availability	5.00	-	11.91	5.00	-
8	Rebate	15.86	14.40	14.40	14.40	1.46
9	Provisions for Tax & Other	-	63.36	27.21	27.21	(27.21)
10	**Sub-total (1+2+…. +9)**	**1,087.20**	**1,155.13**	**1,180.99**	**991.30**	**95.90**
11	**Less:** Misc. Receipts (Including STA)	243.28	427.45	322.00	321.86	(78.58)
12	**Less:** True up Surplus	51.00	-	-	-	51.00
13	**Net Revenue Requirement {10-(11+12)}**	**792.92**	**727.68**	**858.99**	**669.44**	**123.48**
B	**Revenue from operation**					

Sl No	Particulars	Approved by OERC in ARR	Actual as per Audited Accounts of OPTCL	True up proposed by OPTCL	Truing-up approved by OERC	Surplus /(Deficit)
14	LTA_DISCOMs	774.76	767.37	767.37	767.37	(7.39)
15	LTA_CGPs & Others	18.48	18.47	18.47	18.47	(0.01)
16	**Total (14+15)**	**793.24**	**785.84**	**785.84**	**785.84**	**(7.40)**
C	**Gap - Surplus/(Deficit) (16-13)**	**0.32**	**58.16**	**(73.15)**	**116.40**	**116.08**

299. Further, OPTCL has stated that it has filed the review application vide Case No 62 of 2022 against the Commission's order dated 12.07.2022 in the mater of Truing-up for the FY 2020-21 in Case No 119 of 2021 to consider the net deficit of Rs. 228.97 Cr. up to 31.03.2021. But since the above prayer is a subject matter of another petition, it shall be dealt separately in that petition.

300. Accordingly, the summary of the truing-up approved by the Commission cumulative surplus over the years is Rs. 91.42 Cr. including present truing up for FY 2021-22. The details are shown in the table below:

Table – 39

FY	Trans. Cost approved in the ARR	Actual Trans. Cost (audited) considered for truing-up	Trans. Revenue from LTA approved in ARR	Actual Trans. Revenue from LTA (audited) considered for truing up	Surplus/ (Deficit) in Trans. Cost	Surplus/ (Deficit) in Trans. Revenue from LTA	Total Surplus /(deficit) for the year considered in Truing-up	Cumulative Truing-up Surplus/ (deficit)
1	**2**	**3**	**4**	**5**	**6=2-3**	**7=5-4**	**8=6+7**	**9**
2006-07	333.27	323.01	333.27	355.34	10.26	22.07	32.33	32.33
2007-08	373.73	334.70	373.73	399.76	39.03	26.03	65.06	97.39
2008-09	376.57	308.07	376.57	413.15	68.50	36.58	105.08	202.47
2009-10	394.15	375.68	394.15	438.06	18.47	43.91	62.38	264.85
2010-11	480.93	431.90	480.93	538.08	49.03	57.15	106.18	371.03
2011-12	572.50	541.02	572.50	570.54	31.48	(1.96)	29.52	400.55
2012-13	587.02	506.10	587.02	549.73	80.92	(37.29)	43.63	444.18
2013-14	585.87	568.21	585.87	598.89	17.66	13.02	30.68	474.86
2014-15	624.50	639.73	624.50	634.34	(15.23)	9.84	(5.39)	469.47
2015-16	630.93	613.17	630.93	613.48	17.76	(17.45)	0.31	469.78
2016-17	623.25	551.19	623.25	665.31	72.06	42.06	114.12	583.90
2017-18	639.40	644.99	639.40	625.15	(5.59)	(14.25)	(19.84)	564.06
2017-18	Adjusted amount as per ARR of FY 2015-16						(427.81)	136.25
2018-19	659.95	688.16	659.95	713.84	(28.21)	53.89	25.68	161.93
2019-20	706.71	737.53	706.71	621.74	(30.82)	(84.97)	(115.79)	46.14
2020-21	713.84	704.24	713.75	633.03	9.60	(80.72)	(71.12)	(24.98)
2021-22	792.92	669.44	792.92	785.84	123.48	(7.08)	116.40	91.42

ARR & Tariff for the FY 2023-24:

301. The Commission has analysed the application of OPTCL for Aggregate Revenue Requirement (ARR) for FY 2023-24 according to OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014. As per Regulation 8.1, the ARR for Transmission Business for each year shall contain the following items.

i. Operation and Maintenance expenses
ii. Interest and Financial Charges
iii. Depreciation
iv. Return on Equity
v. Income Tax
vi. Deposits from Transmission System Users
vii. Less: Non-Tariff Income
viii. Less: Income from other business as specified in these Regulations.

Operation and Maintenance Expenses

302. Operation and Maintenance expenses includes (1) Salaries, Pension contribution and other employee costs. (2) Administrative and General Expenses (3) Repair & Maintenance (4) Expenses related to auxiliary energy consumption in the sub-station for the purpose of air conditioning, lighting, technical consumption etc., and (5) other miscellaneous expenses, statutory levies and taxes.

Employees Cost:

303. OPTCL has proposed employee cost of Rs.508.76 crore for FY 2023-24 which includes Basic pay, Dearness Allowance (DA), House Rent Allowance (HRA), Medical Allowance, Conveyance Allowance/Reimbursement, Stipend for New Recruits, Staff Welfare expenses, Ex-gratia, other expenses etc, Terminal benefit liability (Pension, Gratuity and Leave Salary) and employer contribution to NPS.

304. OPTCL has taken the following assumptions while proposing the employee cost for the ensuing FY 2023-24:

i. **Basic Pay:** The actual cash outflow on this head from April-22 to Oct-22 has been extrapolated to arrive at basic pay for FY 2022-23 at Rs.143.55 Cr. considering the average no. of employees during the periods FY 2022-23 (2495 nos.) and FY 2023-24 (2659 nos.) and a 3% hike in annual increment. The basic pay proposed is **Rs.157.58 Cr**. (i.e., 143.55/2495*2659*1.03).

ii. **Dearness Allowance (DA):** With reference to Finance Department, Government of Odisha letter dated 19.10.2022, OPTCL has considered DA rate @ 45% for FY 2023-24 and accordingly **Rs.70.91 Cr.** proposed towards DA.

iii. **House Rent Allowance (HRA):** OPTCL has submitted that the rate of HRA is 18 -20% depending on the type of city/town they are residing in. OPTCL has estimated HRA of **Rs.25.45 Cr** by considering 85% of the employees and average rate @ 19% of the basic pay.

iv. **Medical Allowance & Reimbursement of Medical Expenses:** OPTCL has submitted that the employees of OPTCL are entitled to get Medical Allowance @ 5% on basic pay for outdoor medical expenses including reimbursement of medical expenses of Rs.1.07Cr. and accordingly has proposed **Rs.8.95 Cr.** under this head.

v. **Staff Welfare Expenses:** OPTCL states that it has implemented group health/medical insurance policy for its employees in lieu of actual medical reimbursement for which OPTCL has proposed Rs.4.01 Cr. towards premium of Group Insurance Scheme. Further towards Uniform, Liveries, GIS, Sports, Recreations & Cultural Activity etc., OPTCL has proposed Rs.5.46 Cr. Accordingly, all together **Rs. 9.47 Cr.** proposed towards staff welfare expenses.

vi. **Engagement of Outsourced Personnel:** OPTCL states that it is functioning with 50% of manpower against sanctioned strength. However, for smooth functioning, it has engaged personnel in different streams through outsourcing. Accordingly, **Rs.3.30 Cr.** proposed towards payment to outsourced personnel.

vii. **Stipend for New Recruitment:** OPTCL has proposed that it is planning to recruit 342 Nos. of employees in FY 2022-23 and 63 Nos. in FY 2023-24, Accordingly, **Rs.5.30 Cr.** proposed towards stipend for the new recruits.

viii. **Other Employees Cost:** OPTCL has proposed towards Ex-gratia-Rs.7.98 Cr, Conveyance allowance and reimbursement-Rs.3.35 Cr, LTC-Rs.0.55 Cr, Honorarium-Rs.0.25 Cr, Capacity Building of employees-Rs.1.20 Cr and other allowances like Shift, Handicap, City, ABT etc. -Rs1.22 Cr. Altogether **Rs. 14.55 Cr** has been proposed under this head.

ix. **Terminal Benefits:** OPTCL has submitted that as per Accounting Standard 15 issued by MCA, employee benefit liabilities shall be assessed through actuarial valuation. The actuarial assumptions are required to measure the obligation and the expense and there is a possibility of actuarial gains and losses. Moreover, the obligations are measured on a discounted basis because they may be settled over many years after the employees render the related service. Accordingly, OPTCL has been doing actuarial valuation by availing the service of qualified Actuary every year.

Further, Para 61 of IND AS-19 states that an enterprise should recognise the net total of the following amounts in the statement of Profit& Loss except to the extent that another Accounting Standard requires or permits their inclusion in the cost of an asset.

(a) Current service cost

(b) Interest cost

(c) Expected return on any plan assets and on any reimbursement rights

(d) Actuarial gains and losses

(e) Past service cost requires an enterprise to recognise it

(f) Effect of any curtailments or settlements; and

(g) Effect of the limit i.e. the extent to which the amount determined

Accordingly, OPTCL has proposed **Rs.212.29 Cr.** towards terminal liabilities (Pension, Gratuity & Leave Encashment) for the FY 2023-24 which is 3% escalation over the projection for FY 2022-23.

Further, **Rs. 14.47 Cr**. is proposed towards employer's matching contribution for employees who have joined under NPS and Non-Pensioner Category.

305. The Commission has reviewed the OPTCL's submission regarding above employees' cost. OPTCL has submitted that 342 number of employees are to be recruited during FY 2022-23 and they will be regularised during FY 2023-24. Whereas it has recruited 66 Nos. of employees only till December, 2022. While computing the average number of employees for FY 2023-24, the Commission has allowed induction of 200 Nos. of employees against the proposed recruitment of 342 numbers in line with last year approval. The average number of employees proposed by OPTCL and approved now by the Commission for determination of basic pay for the FY 2023-24 is shown in the table below:

Table - 40

Number of Employees of OPTCL

Particulars	Proposed	Approved
No. of employees as on 31.03.2022	**2442**	**2442**
Add: Addition during 2022-23	252	252
Less: Retirement/Expired Resignation during 2022-23	146	146
No. of employees expected as on 31.03.2023	**2548**	**2548**
Add: New employees to be inducted during FY 2022-23 & regularized during FY 2023-24	342	200
Less: Retirement/Expired/ Resignation during year 2023-24	120	120
No. of employees as on 31.03.2024	**2770**	**2628**
Average no. of employees for FY 2022-23	2495	2459
Average no. of employees for FY 2023-24	**2659**	**2588**

Basic Pay:

306. The average cash outflow towards basic pay during April, 2022 to December, 2022 is Rs. 11.94 Cr. per month and the prorated basic pay will be Rs.143.32 Cr. for FY 2022-23. By considering the above prorated basic pay of Rs.143.32 Cr. for FY 2022-23, the estimated average number of employees for FY 2022-23 (i.e., 2459 Nos) and FY 2023-24 (i.e., 2588 Nos) and 3% annual increment, the basic pay estimated and approved by the Commission is Rs.153.12 Cr. (i.e., 143.22/2459*2588*1.03) as against OPTCL proposal of Rs. 157.58 Cr for the FY 2023-24. The details are shown in the table below:

Table – 41

Basic Pay estimated for FY 2023-24 (Rs. Cr.)

Cash outflow	OPTCL	OERC
Apr-2022	12.28	12.28
May-2022	12.14	12.14
Jun-2022	11.72	11.72
Jul-2022	11.96	11.96
Aug-2022	11.88	11.88
Sep-2022	11.90	11.90
Oct-2022	11.87	11.87
Nov-2022	-	11.85
Dec-2022	-	11.90
Avg. Basic Pay per month	**11.96**	**11.94**
Pro-rated for FY 2022-23	**143.55**	**143.32**
Estimated for FY 2023-24	**157.58**	**153.12**

Dearness Allowance:

307. OPTCL has considered rate of dearness allowance @ 45% for FY 2023-24 with reference to Finance Department, Government of Odisha letter dated 19.10.2022. The Commission has observed that, considering the present DA rate @ 38% effective from 01.07.2022 sanctioned by Govt. of Odisha and by assuming to increase another 4% w.e.f. 01.01.2023 & 3% from 01.07.2023, the DA rate proposed by OPTCL for FY 2023-24 is considered. Accordingly, the Commission approves dearness allowances of **Rs.68.90 Cr** (i.e., 45% on approved basic pay of Rs.153.12Cr) as against Rs.70.91 Cr. proposed by OPTCL for the FY 2023-24.

House Rent Allowance:

308. OPTCL has been asked to provide the status of residential quarters in OPTCL. In reply to the queries of the Commission, OPTCL has submitted the information on residential quarters available at the Head Quarters and also under divisions. The Commission examined the submission of OPTCL and observes that huge number of quarters are still vacant and some are in inhabitable condition. The details are as under:

Total Residential Quarters (All types) - 2640 Nos
Occupied by Employees (All types) - 805 Nos
Vacancy & inhabitable (All types) - 1688 Nos

309. Further, the Commission has queried for justification of R&M expenditure of Rs.4.44 Cr on residential quarters claimed by OPTCL in the present ARR and furnish the year-wise total expenditure incurred during last three years (FY 2019-20 to FY 2021-22) & till date of FY 2022-23. In reply to the above, OPTCL has stated that maximum quarters are very old and with change in organization structure, chunk of quarters across Odisha are unoccupied. Further, the actual expenditure incurred during above periods are shown in the table below:

Table - 42
Actual Expenditure on residential Quarters

Financial Year	Amount Spent (Rs. Cr)
2019-20	1.62
2020-21	2.33
2021-22	3.08
2022-23 (up to Dec. 2022)	0.56
2023-24 (proposed)	4.44

310. Further in the instant petition, OPTCL has submitted that the original book value of fixed assets under the head Buildings is Rs.141.06 Cr. as on 31.03.2022 and out of which Rs.0.22 Cr. only depreciated fully (90%) up to 31.03.2022. On that basic OPTCL has claimed depreciation on almost full book value of buildings.

311. Analysing the above facts and figures of OPTCL, the Commission observed that at present about 30% employees have occupied the residential quarters and some quarters are in habitable conditions but still are laying vacant. But OPTCL has proposed HRA for 85% employees in its ARR which clearly shows improper/under-utilisation of residential quarters. Considering the same, the Commission directs OPTCL to review appropriately and take needful action for optimum utilisation of available residential quarters otherwise on account of depreciation on idle assets, requirements of more R&M expenses due to longer period of vacancy, and payment of HRA to 85% employees will enhance the tariff burden on consumers.

312. After analysing the actual HRA cash flow percentage (15.91%) of the basic pay from April, 2022 to December, 2022 of FY 2022-23, the Commission approves **Rs.24.36 Cr.** under the head HRA (@ 15.91% on approved basic pay of Rs.153.12Cr.) for the FY 2023-24 as against OPTCL proposed HRA of Rs.25.45 Cr.

Medical Allowance & Reimbursement of Medical Expenses:

313. OPTCL has submitted that its employees are entitled to get Medical Allowance @ 5% on basic pay for outdoor medical expenses and reimbursement of Medical expenses of

Rs.1.07Cr. Accordingly, OPTCL has proposed **Rs.8.95 Cr.** under this head. The Commission observes that when group health insurance policy for the employees OPTCL are in force and also getting Medical Allowance @ 5% on basic pay, further claim of reimbursement for Medical expenses of Rs.1.07 Cr is not proper. Accordingly, the Commission approves Rs. 7.66 Cr (@5% of approved basic pay of Rs.153.12Cr) towards Medical Allowances for FY 2023-24 against OPTCL proposed amount of Rs.8.95 Cr.

Staff Welfare Expenses:

314. OPTCL has implemented group health/medical insurance policy for its employees in lieu of actual medical reimbursement. For which OPTCL has proposed Rs.4.01 Cr. towards premium of Group Insurance Scheme. Further towards Uniform, Liveries, GIS, Sports, Recreations & Cultural Activity etc., OPTCL proposed Rs.5.46 Cr. Accordingly, all together **Rs. 9.47 Cr.** proposed towards staff welfare expenses.

315. In the previous tariff order for FY 2022-23, the Commission had approved Rs. 3.38 Cr only under the head staff welfare expenses. The Commission observed that group health/medical insurance policy has been implemented by OPTCL for their employees. But it is essential to control staff welfare expenses as far as possible. After analysing the above the Commission approves **Rs. 6.50 Cr.** (Rs.4.01 Cr towards insurance premium + Rs.2.49 Cr. towards others) under Staff welfare expenses and directs OPTCL to restrict the staff welfare expenses within the approved limit.

Engagement of Outsourced Personnel:

316. OPTCL has stated that it is functioning with 50% of manpower against sanctioned strength for which OPTCL proposed Rs.3.30 Cr. towards payment to outsourced personnel. Analysing the same, the Commission has allowed **Rs.3.30 Cr** under this head.

Stipend for New Recruitment:

317. OPTCL proposes that it has planned to recruit 342 Nos of employees in FY 2022-23 and 63 Nos in FY 2023-24, Accordingly, Rs.5.30 Cr. is proposed towards stipend for the new recruits for the FY 2023-24. The Commission after prudent check allows **Rs 5.30 Cr** towards stipend for new recruits.

318. The Commission observes that effective manpower planning is essential for the growth of any organisation. With automation and technology intervention, the manpower requirement also undergoes change. Therefore, the Commission directs OPTCL to take prior approval of the Commission for recruitment of additional manpower including recruitment of outsource personnel.

Other Employees Cost:

319. OPTCL has proposed Rs.14.55 Cr towards other employee related Cost such as Ex-gratia, Conveyance allowance and reimbursement, LTC, Honorarium, Capacity Building of employees and other allowances like Shift, Handicap, City, ABT etc. The Commission analysed the actual expenditure during FY 2021-22 and approved the amount for FY 2022-23 under above heads. Accordingly, for Ex-gratia-Rs.5.00 Cr, for Conveyance allowance and reimbursement - Rs.3.35 Cr, for LTC - Rs.0.50 Cr, for Honorarium-Rs.0.10Cr, for Capacity Building of employees-Rs.1.02 Cr and for other allowances like Shift, Handicap, City, ABT etc. - Rs.0.98 Cr approved by the Commission for FY 2023-24 and directed OPTCL to restrict the above other employees cost within the approved limit

Terminal Benefit including NPS

320. While truing up of FY 2021-22 in this petition, the Commission has already approved entire terminal benefit liabilities requirement up to 31.03.2022 of OPTCL. As explained earlier, the Commission provisionally allows Terminal benefits liabilities to meet the statutory obligations in respective ARR & tariff orders. Subsequently, the actual terminal benefit liabilities every year trued up based on the audited accounts of OPTCL. Till FY 2022-23, the Commission has already approved total terminal benefit of Rs. 3172.43 Cr. The details are shown in the table below:

Table - 43
Approved Terminal Benefit (Rs. Cr)

Financial Year	Amounts
Up to 31-03-2008	571.02
2008-09	51.34
2009-10	76.94
2010-11	140.20
2011-12	171.03
2012-13	146.19
2013-14	83.69
2014-15	195.63
2015-16	138.26
2016-17	188.04
2017-18	623.84
2018-19	168.17
2019-20	163.35
2020-21	153.59
2021-22	99.88
Total in truing up orders up to 31.03.2022	**2,971.27**
Approved in ARR Order of FY 2022-23	201.16
Total up to 31.03.2023	**3172.43**

321. Further, in the aforesaid truing up order of FY 2021-22, Commission has given direction to OPTCL to invest shortfall amount of Rs.632.29 Cr to maintain the corpus requirements at par with actuarial valuation up to 31.03.2022, Accordingly, the

Commission has estimated that after investment of Rs.632.29 Cr, the Trust can be able to earn additional interest of Rs.44.26 Cr. (assuming @ 7% rate of interest) during ensuing FY 2023-24 over and above the present interest income. Assuming the same, as against the OPTCL proposal of Rs.212.29 Crore, the Commission has approved **Rs.168.03 Cr** (Rs.212.29 Cr- Rs.44.26 Cr) toward Terminal benefit liabilities for FY 2023-24. Besides the above, the commission approves Rs.14.47 Cr towards employer's matching contribution for NPS and Non-Pensioner Category as proposed by OPTCL for FY 2023-24.

322. Considering the above observations towards employees Cost, the Commission approves Rs. 449.08 Cr as against OPTCL proposed amount of Rs.508.76 Cr for the ensuing FY 2023-24. The details are shown in the table below:

Table – 44
Employees Cost Approved for the FY 2023-24

(Rs. in Crore)

Sl. No.	Particulars	FY 2022-23 Approved	FY 2023-24 Proposed	FY 2023-24 Approved
A	**Salary & Allowance**			
1	Basic Pay	151.67	157.58	153.12
2	Dearness Allowance	56.12	70.91	68.90
3	House Rent Allowance	13.04	25.45	24.36
4	Other Allowance	0.98	1.22	0.98
5	Bonus	0.02	-	-
6	Stipend for New Recruitment	8.46	5.30	5.30
7	Arrear Salary for 7th Pay Commission	15.61	-	-
	Sub-total (A)	**245.90**	**260.46**	**252.66**
B	**Additional Employee Cost**			
1	Out Sources Engagement	2.94	3.30	3.30
	Sub-total (B)	**2.94**	**3.30**	**3.30**
C	**Other Employee Cost**			
1	Medical Expenses (allowance + Reimbursement)	8.13	8.95	7.66
2	Leave Travel Concession	0.50	0.55	0.50
3	Honorarium	0.06	0.25	0.10
4	Ex-gratia	5.00	7.98	5.00
5	Staff Welfare Expenses	3.38	9.47	6.50
6	Conveyance expenses (allowance + Reimbursement)	4.24	3.35	3.35
7	Capacity building charges	1.02	1.20	1.02
	Sub-total (C)	**22.33**	**31.75**	**24.13**
D	**Terminal Benefits**			
1	Pension	185.48	191.24	146.98
2	Gratuity	10.43	12.57	12.57
3	Leave Salary	5.25	8.48	8.48

Sl. No.	Particulars	FY 2022-23 Approved	FY 2023-24 Proposed	FY 2023-24 Approved
4	Other (including contribution to NPS)	18.11	14.47	14.47
	Sub-total (D)	**219.27**	**226.76**	**182.50**
E	**Total Employees Cost (A+B+C+D)**	**490.43**	**522.27**	**462.59**
F	Less: Employees Cost Capitalized	13.24	13.51	13.51
G	**Net Employee Cost (E- F)**	**477.19**	**508.76**	**449.08**

Repair & Maintenance Expenses

323. OPTCL has submitted that, the R&M works are undertaken in different streams namely O&M, Telecom, Civil Works and Information Technology (IT). It has projected a sum of Rs.164.34 cr. towards R&M expenses and the summary of proposed R&M expenses under these four heads is shown in the table below**:**

Table - 45

(Rs. in Cr.)

Particulars	OERC Approval (FY 2021-22)	OERC Approval (FY 2022-23)	Projection (FY 2023-24)
(i) O&M	**118.61**	**110.50**	140.23
(ii) Telecom			1.80
(iii) Civil Works			16.34
(iv) Information Technology			5.97
Total R&M Expenses			**164.34**

324. The OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations at Regulations 8.15 and 8.16 provides the following with regard to determination of Repairs and Maintenance (R&M)

'Repair and Expenses would be allowed at the rate of 2.5% of Gross Fixed Assets (GFA) only on assets owned by the transmission company, for each year of the control period.'

'In case of STU (OPTCL) the Commission shall allow Repair and maintenance expenses basing on the past trend and requirement of the licensee in this regard after prudence check.'

325. OPTCL was asked to submit the actual expenditure incurred under R&M during the previous year 2021-22 and the current year up to December, 2022 (FY 2022-23). OPTCL has submitted that the Actual R&M cost is Rs. 98.87 Cr. during FY 2021-22 and Rs.80.71Cr. during the period from April, 2022 to December, 2022 of current FY 2022-23. By extrapolating the above actual cost of current year, we arrive at a figure of Rs.107.61 Cr. Further, the actual R& M cost during last three financial years as against the Commission's approval are shown in the table below:

Table - 46
R&M Cost of OPTCL

FY	Proposed	Approved	Actual
2019-20	115.22	115.22	125.53
2020-21	140.59	115.22	103.07
2021-22	151.10	118.61	98.86
2022-23	148.04	110.50	80.71 (up to Dec.22)

326. Further, in their submission, some objectors have stated that OPTCL is considering installation of major transmission assets which are capital in nature, under R&M expenses. The expenditure, which are capital in nature should not be booked under R&M expense as it will increase the transmission tariff and resulting in burden on the consumers of the State. Considering the past trend of actual R&M cost and above direction, the Commission approves **Rs.135.00 Cr.** towards R&M cost for the FY 2023-24.

327. The health of transmission assets is vital for smooth and reliable operation of the transmission system assets. The Commission therefore desires that OPTCL should spent R&M expenses exclusively for conditions-based maintenance of transmission assets for improving reliability and availability of equipments & material associated with the transmission system for smooth and trouble-free operation of the system.

Administration & General Expenses

328. OPTCL has proposed an amount of **Rs.47.07 Cr** under the head Administration & General Expenses for the ensuing FY 2023-24. The component wise break up of expenses is given in table below:

Table – 47
A&G Expenses Proposed by OPTCL for the FY 2023-24

PARTICULARS	Amounts (Rs. Cr.)
Property Related Expenses	6.57
Communication	0.87
Professional Charges	7.23
Conveyance & Travelling	14.67
Electricity & Water Charges	2.92
Fees & Subscription	0.10
Books & Periodicals	0.09
Printing & Stationery	0.55
Advertisement	1.35
Entertainment	0.22
Watch & Ward	3.23
Miscellaneous	3.73
Training	2.14
Office Maintenance	2.51
Material related Expenses	0.10
SLDC Charges	0.84
Total	**47.07**

329. As per the OERC Regulation, A&G expenses of the previous year is being escalated considering WPI. Therefore, the Commission considers escalation factor of 4.95% (rate of inflation measured by WPI for the period Dec-2021 to Dec-2022) over the approved A&G expenses of the previous year. The calculation for determining the A&G expenses is given in table below:

Table – 48
A&G Expenses Approved for the FY 2023-24
(Rs. in Crore)

Particulars	Amount
A&G expenses approved during FY 2022-23	31.19
Escalation as per WPI (Dec'2022@ 4.95%)	1.54
A&G Expenses for 2023-24	32.73
Add: Licensee fees to Commission (prov.)	2.50
Add: Inspection fees	4.06
Add: SLDC charges	0.99
Total A&G Expenses approved for the FY 2023-24	**40.28**

330. The Commission approves an amount of **Rs. 40.28 Cr** towards A&G expenses for the FY 2023-24. The Commission also directs OPTCL to restrict the A&G expenses within the approved limit.

Interest and financial charges

Interest on loan

331. OPTCL in OERC Format F-3 has submitted that the opening loan balance was Rs.1828.54 Cr. as on 31.03.2022 and has projected loan of Rs.378.68 Cr and repayment of load amount of Rs.162.84 Cr during the FY 2022-23. Accordingly, the estimated opening loan balance would be Rs.2039.39 Cr as on 31.03.2023. OPTCL has further projected that additional loan of Rs.237.20 Cr and loan repayment of Rs.111.33 Cr would be required during the FY 2023-24. Considering above inflow and outflow of loans, OPTCL has proposed interest amount on loan of Rs.137.59 Cr. for the FY 2023-24. The details of loan position as on 01.04.2023 and interest thereon projected by OPTCL is shown in the table below:

Table - 49

Interest on loan proposed by OPTCL for the FY 2023-24 (Rs. Cr.)

Sl. No.	Particular	Rate of Interest	Principal as on 01.04.23	Loan to be received (FY 2023-24)	Loan to be repaid (FY 2023-24)	Interest payment (FY 2023-24)	Total Payment (FY 2023-24)
1	JICA	5.00%	542.11	-	43.53	21.88	65.41
2	Bank of India	8.35%	18.09	-	6.75	1.23	7.98
3	REC Loan	10.83% (Avg.)	100.67	-	14.38	10.77	25.15
4	Union Bank of India-I	7.25%	432.16	-	46.67	29.64	76.31
5	Union Bank	7.25%	598.35	-		37.94	37.94

Sl. No.	Particular	Rate of Interest	Principal as on 01.04.23	Loan to be received (FY 2023-24)	Loan to be repaid (FY 2023-24)	Interest payment (FY 2023-24)	Total Payment (FY 2023-24)
	of India-II						
6	UCO Bank	6.75%	274.33	150.00		25.27	25.27
7	New Loan	6.75%	73.68	87.20	-	10.86	10.86
8	**Grand Total**		**2039.39**	**237.20**	**111.33**	**137.59**	**248.92**

332. After scrutiny of the audited accounts of OPTCL, the Commission observes that the outstanding loan was Rs.1766.54 Cr as on 31.03.2022. Further, from the loan statement submitted by OPTCL, it is observed that actual loan amounting of Rs.100.51 Cr has only been availed by OPTCL till December 2022 of FY 2022-23.

333. For calculation of interest on loan, the Commission has considered the actual loan & loan repayment by OPTCL during the FY 2022-23 & FY 2023-24. Taking into account the above observations and loan repayment dues proposed by OPTCL for FY 2022-23 and for FY 2023-24, the Commission estimates interest on loan on the average loan position of FY 2023-24. Accordingly, the Commission approves Rs.111.83 Cr towards interest on loan for the FY 2023-24. The details are shown in the table below:

Table - 50
Calculation of Interest on Loan for FY 2023-24

Sources	Rate of Interest (%)	FY 2022-23				FY 2023-24		Avg. loan for FY 2023-24	Estimated Interest for FY 2023-24
		OB as on 31.03.2022	Received	Repayment	CB as on 31.03.2023	Repayment	CB as on 31.03.2024		
1	2	3	4	5	6=3+4-5	7	8=6-7	9=(6+8)/2	10=9x2
Union Bank of India_I	7.25	478.65	-	46.67	431.98	46.67	385.31	408.65	29.63
Union Bank of India_II	7.25	498.53	-		498.53	-	498.53	498.53	36.14
Uco Bank	6.75	74.33	100.00		174.33		174.33	174.33	11.77
Bank of India	8.35	24.86	-	6.78	18.08	6.75	11.33	14.71	1.23
REC	10.83	142.27	-	41.60	100.67	14.38	86.29	93.48	10.12
PFC	10.56	24.26	-	24.26	-		-	-	-
JICA	5.00	523.64	0.51	43.53	480.62	43.53	437.09	458.86	22.94
Total		**1,766.54**	**100.51**	**162.84**	**1,704.21**	**111.33**	**1,592.88**	**1,648.56**	**111.83**

Interest on Working Capital

334. OPTCL has projected its working capital requirement at Rs.290.49 Cr and the interest on working capital is Rs 33.99 Cr for the FY 2023-24. The Commission has analysed the Cash flow statements submitted by OPTCL. The commission observes that OPTCL has always having a net positive cash flow. In the above scenario, the Commission opines that there is no requirement of working Capital loan for OPTCL. Hence the

amount of interest on working capital as proposed by OPTCL is not allowed in the ARR for FY 2023-24.

Depreciation

335. OPTCL has submitted that as per the Regulation 8.38 of OERC (Terms & Conditions for determination of Transmission Tariff) Regulation 2014, the depreciation shall be calculated for each year of the control period on the original book value of the assets considering applicable depreciation rate as determined by the Commission from time to time. The Regulations further provides that the depreciation shall not be allowed on the assets funded by Transmission system users and capital subsidies/grants.

336. The Commission in their ARR & Tariff Order for FY 2022-23 at para 284 had calculated the original book value of own assets is Rs.3689.84 Cr. as on 01-04-2021 after excluding of up-valued assets of Rs.534.58Cr, Grant, Beneficiary & Deposit Assets of Rs.1450.59 Cr and Fully depreciated assets of Rs.1562.57Cr. from the original book value of transmission fixed asset of Rs.7237.58 Cr (as on 01.04.2021). During the FY 2021-22, it has added assets value of Rs. 1035.62cr including grant, beneficiary & deposit works assets of Rs.198.68 Cr. Further, the petitioner states that during FY 2021-22, assets value of Rs.69.42 cr. has fully depreciated. After Considering the above assets of FY 20221-22, OPTCL claimed that own transmission assets is Rs.4457.36 Cr. (Rs.3689.84Cr +Rs.1035.62 Cr - Rs.198.68Cr -Rs.69.42 Cr) as on 31.03.2022.

337. Further OPTCL has submitted that considering transmission assets (excluding Deposit works & Grant assets etc.) of Rs.824.17 Cr. added during FY 2022-23 and Rs.847.57 Cr. to be added during the FY 2023-24, the original book value of transmission fixed assets would be Rs. 5281.53 Cr (as on 31-03-2023) and Rs. 6129.11 Cr (as on 31-03-2024). By taking into account the average transmission assets of the FY 2023-24 and the norms in the Transmission Tariff Regulations, 2014 & rate specified therein, OPTCL has proposed **Rs. 293.96 Cr** under the head depreciation in the ARR for the ensuing FY 2023-24.

338. Further, OPTCL was asked to provide the details of original book value of Grant and Beneficiary & deposit works Assets till 31.03.2022. In its reply to the Queries of the Commission, OPTCL has submitted that the original book value of grant, beneficiary & deposit works assets is Rs. 1711.45 cr. (as on 31.03.2022) instead of Rs.1649.27Cr.

339. The Commission has gone into the details of the submission made by the OPTCL as well as the transmission assets position of OPTCL as per the audited accounts including prior period details (i.e. Transferred from OSEB to GRIDCO, GRIDCO to DISCOMs & GRIDCO to OPTCL under different Transfer Scheme notifications of Government of

Odisha) and the transmission assets considered in different tariff orders passed by the Commission. The relevant observations of the Commission regarding the transmission assets are mentioned below:

i. **Original Book Value of Transmission Fixed Asset:** The original book value of transmission fixed assets added over the periods as per audited accounts of OPTCL (as on 31.03.2022) are shown in the table below:

Table - 51
Book Value of Transmission Fixed Assets as on 31.03.2022

Assets Added during Financial Year	Original Book Value (Rs. Cr)	At Deemed Cost (IndAS)
Up to on 31.03.1999 ***(As per GoO Transfer Scheme Notification dated 26-11-1998)***	**1,178.93**	
1999-00	111.79	
2000-01	115.48	
2001-02	83.75	
2002-03	132.17	
2003-04	69.45	
2004-05	71.72	
2005-06	158.91	
2006-07	144.23	
2007-08	206.10	
2008-09	142.72	
2009-10	188.49	
2010-11	189.80	
2011-12	135.58	
2012-13	219.48	
2013-14	180.05	
2014-15	142.62	
Total (up to 31.03.2015)	**3471.27**	**1590.18**
2015-16	768.81	768.81
2016-17	683.82	683.82
2017-18	447.00	447.00
2018-19	665.94	665.94
2019-20	535.73	535.73
2020-21	665.01	665.01
Sub-total (up to 31.03.2021)	**7,237.58**	**5356.49**
2021-22	1,035.62	1,035.62
Total (up to 31.03.2022)	**8,273.20**	**6392.11**

ii. **Up-valued Transmission Assets:** In the past tariff orders, the pre-up valued assets determined by the Commission up to 31.03.1999 was Rs. 666.22 Cr. (i.e., Rs.514.32 Cr. as on 01.04.1996 + Transmission assets added during FY 1996-97 to FY 1998-99 was Rs.151.90 Cr). But as per Govt, of Odisha Transfer Scheme notifications dated 26.11.1998, transmission asset of Rs.1178.93 Cr. (as on 31.03.1999) transferred to GRIDCO was inclusive of the up-valued assets. Considering the above the up-valued assets was Rs.512.71Cr (Rs.1178.93 Cr-Rs.666.22 Cr).

340. After analysing the above facts and figures, the Commission consider the historical original book value of transmission fixed assets as on 31.03.2022 amounting to Rs 8273.20 Cr. After deduction of fully depreciated assets of Rs.1631.99 Cr. (i.e., Rs1562.57 Cr as on 31.03.2021 + Rs.69.42 Cr of FY 2021-22), Up-valued assets of Rs. 512.71 Cr, assets created out of grant, beneficiary & deposit works of Rs.1711.45 Cr (i.e., Rs1512.77 Cr as on 31.03.2021 + Rs.198.68 Cr of FY 2021-22), OPTCL's own asset is Rs. 4417.05 Cr (as on 01.04.2022).

341. Further, OPTCL stated that Rs. 827.17 Cr. & Rs.847.58 Cr of assets (excluding grant, beneficiary & deposit work) are likely to be added during FY 2022-23 & FY 2023-24 respectively. In this respect, OPTCL was asked to submit the detail information about capital work-in-progress as on 31.03.2022, work started during FY2022-23 and further proposal, if any. But OPTCL has not furnished the required information as desired by the Commission. Therefore, the Commission has provisionally considered addition of asset of Rs.827.17 Cr during the FY 2022-23 and accordingly, original book value transmission fixed assets is estimated to be Rs.5241.22 Cr by end of 31.03.2023. The Commission has estimated and approves the depreciation of Rs. 269.54 Cr for the FY 2023-24 considering assets value of Rs.5241.22 Cr the details of which is shown in the table below:

Table - 52
Calculation of Depreciation for the FY 2023-24 on Transmission Assets

Component of Transmission Assets	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Fixed Assets as per audited accounts as on 31-03-2022	Up-valued Assets	Grant & Beneficiary /Deposit Assets as on 31-03-2022	Fully (90%) Depreciated Assets as on 31-03-2022	Original Book Value of Own Fixed Assets as on 31-03-2022	Own assets to be added during FY 2022-23	Original Book Value of Own Fixed Assets as on 31-03-2023.	Estimated Depreciation for FY 2023-24
1	2	3	4	5	6	7=3-(4+5+6)	8	9	10 = 9x2
Free Hold Land	-	54.94	6.26	6.29	-	42.39	9.03	51.42	-
Leasehold Land	3.34	57.19	-	5.58	-	51.61	8.53	60.14	2.01
Building	3.34	149.62	15.10	7.01	0.22	127.29	26.19	153.48	5.13
Electrical Installation	5.28	10.95	-	3.67	0.52	6.76	1.25	8.01	0.42
P&M (Other Civil Works)	3.34	90.77	0.91	3.13	-	86.73	15.66	102.39	3.42
Plant & Machinery	5.28	4,832.67	266.02	973.78	700.46	2,892.41	579.96	3,472.37	183.34
P&M (Line, Cable & Network)	5.28	2,958.19	221.17	697.40	913.56	1,126.06	169.38	1,295.44	68.40
Vehicles	9.50	2.38	-	-	1.38	1.00	0.10	1.10	0.10
Furniture & Fixture	6.33	8.54	0.46	0.44	1.38	6.26	1.02	7.28	0.46
Office Equipment	6.33	90.37	2.79	3.46	14.47	69.65	13.04	82.69	5.23
Intangible Assets	15.00	17.58	-	10.69	-	6.89	-	6.89	1.03
Total		**8,273.20**	**512.71**	**1,711.45**	**1,631.99**	**4,417.05**	**824.17**	**5,241.22**	**269.54**

342. While approving the investment proposals of OPTCL in Case Nos. 45 of 2021 & 57 of 2021, the Commission has observed that, execution of the projects prior to the approval of the investment proposal by the Commission violates the provisions of the licence condition and is improper. OPTCL should stop such practices in future otherwise non-adherence of the statutory provisions will be viewed seriously henceforth. Further, in case of un-viable project, the Commission directs OPTCL to take up the matter with Government to finance such projects though grant to minimise the tariff burden on consumers.

343. OPTCL is required to submit its Complete Fixed Assets Register at original book value of fixed assets as on 31.03.2023 and addition during FY 2022-23 showing Assets created through Own investment, Grants & from beneficiary deposits and Capital work in progress (CWIP) as on 31.03.2023 in the prescribed format of the Commission at **Annexure- I & II** respectively. The same should reach the Commission's office on or before 30.09.2023 duly audited and certified by the chartered Accountants/Cost Accountants firms.

Return on Equity (RoE):

344. OPTCL claimed that, as per its audited accounts as on 31.03.2022, total Equity Capital is Rs. 1886.71 Cr which includes initial equity of Rs 60.07 Cr relating to de-merger of GRIDCO and Rs 647 Cr. on account of bond with interest converted to Equity. Further Government of Odisha has already infused equity capital of Rs. 184.76 Cr. during FY 2022-23 and likely to infuse equity capital of Rs. 62.93 Cr during FY 2023-24. So, the total Equity Capital will be Rs. 2134.40 Cr as on 31.03.2024. OPTCL has proposed RoE on equity capital of Rs 1427.33 Cr. (i.e., Rs.2134.40 Cr. – Rs.60.07 Cr. – Rs.647.00 Cr.) excluding the Equity of Rs. 60.07Cr. (De-merger) and Rs.647.00 Cr (bond with interest converted to Equity) and accordingly proposes **Rs 221.24 Cr.** under the head RoE (@15.5%) as per Clause 8.28 of OERC Transmission Tariff Regulations, 2014 for the ensuing FY 2023-24.

345. As per the Regulation 8.28 & 8.29 of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, return on equity shall be computed on pre-tax basis @15.50% to be grossed up as per Clause (2) of this Regulation. As submitted by OPTCL the amount of equity infused by State Government till the date of filing application amounts to Rs.2011.40 crore, the details of which along with the sanction order and date of Government fund as filed by OPTCL is given in table below:

Table – 53

Sl. No.	Sanction Order No. and Date	Amount (Rs. 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	5.00
4	R&R-I-01/2009-4826 dt.01.06.10	20.00
5	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6	R&R-6/12-685 dt.31.01.2012	1.00
7	R&R-6/12-690 dt.31.01.2012	39.00
8	R&R-6/12-695 dt.31.01.2012	3.00
9	R&R-6/12-629 dt.22.01.2013	25.76
10	R&R-6/12-634 dt.22.01.2013	16.60
11	R&R-6/12-624 dt.22.01.2013	7.64
12	R&R-6/12-5693 dt.18.07.2013	29.19
13	R&R-6/12-5698 dt.18.07.2013	11.97
14	R&R-6/12-5703 dt.18.07.2013	8.84
15	R&R-69/14-10445 dt.29.12.2014	10.50
16	R&R-69/14-10450 dt.29.12.2014	27.50
17	R&R-69/14-10455 dt.29.12.2014	12.00
18	R&R-69/14-6823 dt.06.08.2015	19.68
19	R&R-69/14-6818 dt.06.08.2015	17.22
20	R&R-69/14-6813 dt.06.08.2015	20.03
21	BT(P)-15/15-10291 dt.21.12.2015	0.07
22	R&R-69/14-5364 dt.18.7.2016	10.00
23	R&R-69/14-5369 dt.18.7.2016	20.00
24	R&R-69/14-5374 dt.18.7.2016	20.00
25	BT(P)-04/2018/En-1786 dt. 26.02.18	15.00
26	BT(P)-04/2018/En-1791 dt. 26.02.18	20.00
27	BT(P)-04/2018/En-1796 dt. 26.02.18	15.00
28	R&R -54/2015/En-5458 dt. 23.06.15	20.00
29	R&R -54/2015/En-737 dt. 28.01.16	10.00
30	R&R -54/2015/En-4348 dt. 07.06.16	20.00
31	R&R -54/2015/En-466 dt. 17.01.17	60.00
32	R&R -17/2017/En-2895 dt. 22.04.17	20.00
33	R&R -17/2017/En-10216 dt. 27.12.17	50.00
34	R&R -40/2018/En-3902 dt.28.04.2018	15.00
35	R&R -40/2018/En-4632 dt.24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En dt. 19.12.2018	15.00
37	BT(P)-04/2018(pt)-10439/En dt. 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En dt. 19.12.2018	15.00
39	R&R-40/2019-5100/En TD.27.06.2019	3.67
40	R&R-40/2019-6530/En Dt.6.08.2019	11.03
41	201915819273 DTD.27.02.2020	55.00
42	202018025467 DTD.13.10.2020	50.00
43	202019752418 dtd.26.03.2021	5.29
44	202019704714 dtd.23.03.2021	9.00
45	202019747311 dtd 26.03.2021	647.00
46	202121454297dtd 06.09.2021	50.00

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
47	202122892459 dtd 18.12.2021	30.00
48	202122892550 dtd 18.12.2021	30.00
49	202124034526 dtd 03.03.2022	6.65
50	202124047110 dtd 04.03.2022	55.00
51	202124048923 dtd 04.03.2022	4.00
52	202124049541 dtd 04.03.2022	140.00
53	202227471090 dtd 18.11.2022	92.24
54	202227471194 dtd 18.11.2022	50.00
55	202227471252 dtd 18.11.2022	22.83
56	202227471290 dtd 18.11.2022	10.00
57	202227471991 dtd 18.11.2022	9.69
	Total (upto 18-11-2022)	**2011.40**

346. OPTCL was asked to submit the detail information about capital work-in-progress as on 31.03.2022, the project for which work has started during FY 2022-23. OPTCL has not furnished the required information as desired by the Commission. But from the information submitted by OPTCL, the Commission observes that Rs. 458.49 Cr could not be capitalised out of the above equity capital infused by the Government of Odisha and will be considered as CWIP during the FY 2023-24, details of which are shown in the table below:

Table - 54

Name of Project	Scheme	Equity infused by GoO but under CWIP upto 31.03.2024 (Rs. Cr)		
		Upto 31.03.2022	FY 2022-23	Total
2X 40MVA 220/33kV Grid S/S at **Palei, Balichandrapur** with line.	SSP-30% GoO Equity	12.53	-	12.53
2x160MVA+2x40MVA, 220/132/33kV Grid S/S, **Dhamara** with line	SSP-30% GoO Equity	26.85	-	26.85
2X40MVA, 132/33kV Grid S/S at Bhatli along with line	SSP-30% GoO Equity	15.69	-	15.69
2X20MVA, 132kV Grid S/S **Lamtaput** with SAS and associated line.	SSP-30% GoO Equity	7.90	-	7.90
132kV DC line from 220/132/33kV S/S **Baner (Jaipatna)** to 132/33kV S/S at **Junagarh**	SSP-30% GoO Equity	10.94	-	10.94
2x20MVA, 132/33kV Grid S/S at **Boriguma** and associated line	Rs. 300 Cr GoO Equity	7.59	-	7.59
2x500MVA, 400/220/33kV GIS at **Paradeep** and associated line	Paradeep-30% GoO Equity	94.00	92.24	186.24
2X20MVA, 132/33KVGSS at **Brundabahal** with associated line	Brundabahal-100% GoO Equity	35.29	22.83	58.12

Name of Project	Scheme	Equity infused by GoO but under CWIP upto 31.03.2024 (Rs. Cr)		
		Upto 31.03.2022	FY 2022-23	Total
132/33 KV S/S at **Tarabha** with associated 132kV LILO Line	Tarabha-100% GoO Equity	4.00	9.69	13.69
Construction of 132/33 KV Grid S/s GIS at **Hinjilikatu,** Ganjam	30% GoO Equity	13.49	-	13.49
Construction of 2x20 MVA, 132/33 KV Grid S/s at Hirakud with GIS along with associated 132 KV LILO lind from existing 132 KV Burla-Lapanga line & existing 132 KV ALCO line. Est. Cost-11/2017-18	30% GoO Equity	14.60	-	14.60
Construction of 2x20 MVA 220/33 KV Grid S/S at **kalimela** with associated 220 kv SC line on DC tower from Malkangiri s/s to the proposed Kalimela s/s with one number feeder bay extension at MALKANGIRI	30% GoO Equity	18.31	-	18.31
Design engineering, Errection, Testing & Commissioning of 220KV double circuit line from **Jayanagar** 220/132/33 Kv s/s of OPTCL to 400/220KV s/s of PGCIL at **Kaliagaon**	40% GoO Equity	5.89	-	5.89
5 Nos of Projects under Scheme RRCP-II	RRCP-II-30% GoO Equity Support	6.65	10.00	16.65
5 Nos of Projects under Scheme LVMS	LVMS-II-30% GoO Equity Support	-	50.00	50.00
Total		**273.73**	**184.76**	**458.49**

347. Further, the Government of Odisha, vide its letter No.3333 dated 24.03.2021, had communicated to the Commission that no return on equity shall be paid on the equity of Rs.647.00 crore which is related to the sanction of Government towards conversion of bond to the equity. In its ARR application, OPTCL has not claimed any RoE on the above equity. Accordingly, the Commission has determined the Equity capital as Rs. 905.91 Cr (i.e., Rs.2011.40 Cr - Rs.458.49 Cr - Rs.647.00Cr) excluding the above amount from the total equity capital infused by the Govt. of Odisha and approves RoE of Rs.140.42 Cr for the FY 2023-24 considering RoE @15.5%.

Income Tax:

348. OPTCL has proposed an amount of Rs.27.21 Crore towards income tax for the FY 2023-24 based on the actual tax paid and income tax return filed for the FY 2021-22 (AY 2022-23). The Commission has examined the income tax return filed by OPTCL for FY 2021-22 and allows **Rs.27.21 Cr** in anticipation of payment made under the head income tax subject to actual payment which will be verified during trued up exercise of that year.

Grid Co-ordination Committee Expenses:

349. OPTCL proposed an amount of Rs.0.35 crore under the head GCC expenses for the FY 2023-24. Even though OPTCL has not spent any amount during FY 2021-22 under this head, in line with last year's approval in ARR & tariff order, the Commission allows an amount of Rs.0.35 crore towards GCC expenses for the FY 2023-24. OPTCL should convene the GCC meeting on regular basis and discharge its responsibilities as stipulated in the Odisha Grid Code-2015.

Incentive for system availability:

350. OPTCL has submitted that the transmission system availability factor (TAFY) for FY 2021-22 was 99.98%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98.50%. Further, the system availability of 99.98% has been duly verified & certified by SLDC. Accordingly, OPTCL has proposed an incentive of Rs.11.91 crore to consider in the ARR of FY 2023-24.

351. The Commission has examined the relevant provision of Act & Regulations on payment of incentive to OPTCL. As SLDC has verified the System Availability of 99.98% during the FY 2021-22 and OPTCL is expected to maintain NATAF more than 98.50% during the FY 2022-23. Further, the Commission while appreciating the system availability of 99.98% during the FY 2021-22, approves an amount of Rs.5.00 crore as incentive in the ARR of OPTCL for the FY 2023-24 with a stipulation that this incentive amount approved by the Commission should be spent on solarisation of grids and capacity building/efficiency improvement of its employees. The Commission directs the OPTCL to submit the detailed breakup of the amount spent under system improvement & capacity building otherwise the same will not be allowed during truing-up.

Rebate:

352. As per the Regulation 8.49 of OERC's Transmission Tariff Regulation, 2014, a rebate of 2% is to be allowed by the transmission licensee in case the payment is received within 2 working days. Similarly, as per the Regulations, 8.50, a rebate of 1% is to be allowed by the transmission licensee in case the payment is received after 2 working days and within a period of 30 days. Accordingly, OPTCL has projected an amount of Rs.22.04 Cr. towards rebate for FY 2023-24. The Commission approves an amount of Rs.17.92 Cr. towards rebate as a pass through in the ARR of FY 2023-24 subject to actual rebate allowed which will be trued up for that year.

Miscellaneous Receipts:

353. OPTCL has proposed an amount of Rs.366.45 Cr towards miscellaneous receipt from inter-state wheeling, short term Open Access & STU charges, Bank interest and other Misc. Receipts which are shown in the table below:

Table – 55

Source	Rs. Cr.
Inter-State Wheeling	9.45
Short-Term Open Access& STU Charges	337.00
Bank Interest	15.00
Other Misc. Receipts	5.00
Total	**366.45**

354. The Commission has examined the submission of OPTCL and actual miscellaneous receipts as per audited accounts of the FY 2021-22. Further, the Renewable Energy Policy, 2022 recently formulated by the State Government envisages large scale integration of Renewable Energy (RE) Generation in the State. The Policy suggests for provision of exemption of 20 paise per unit on STU charges to captive /open access consumers and 50% exemption of cross subsidy surcharge to open access consumers on consumption of energy from RE projects commissioned in the state during the policy period of 15 years. Such exemption will be for 20 years in case of the projects commissioned before 31.03.2026. The Commission therefore considers Rs.300.45 Cr. under miscellaneous receipt for FY 2023-24 instead of proposed miscellaneous receipt of Rs.366.45 Cr. The details of which are shown in table below:

Table – 56

Sl No	Particulars	Approved for FY 2022-23	Proposed for FY 2023-24	Approved for FY 2023-24
1	Short-term Open Access Charges (STOA)	212.64	337.00	271.00
2	Inter-state Wheeling Charges	7.50	9.45	9.45
3	Supervision Charges	1.47	-	-
4	Interest from Bank deposits	23.21	15.00	15.00
5	Net gain/(loss) on disposal of Assets	2.48	-	
6	Other miscellaneous income	5.85	5.00	5.00
7	**Sub-total (1+2+…+6)**	**303.15**	**366.45**	**300.45**

Transmission Cost:

355. OPTCL submitted that, it has taken the recent realistic demand projection of all four DISCOMs to be **33,858 MU (3865.07 MW)** for FY 2023-24. Further it has projected that, energy of 300 MU (34.25 MW) is to be transacted in 33kV & 11kV network of DISCOMs for which OPTCL is not entitled to get any transmission charge as per the Commission’s order. Hence, excluding 300 MU, the petitioner has estimated that, net **33558 MU** (i.e., 33858MU - 300 MU) to be transmitted in the OPTCL network for

DISCOMs. Further 678 MU (77.43 MW) of energy transactions is expected on account of wheeling and supply of Emergency/Back-up power of IMFA, NALCO, ABREL & BEL. Accordingly, the petitioner has projected that, energy of 34236 MU (i.e., 33558 MU+678 MU) is to be transmitted over OPTCL's transmission network.

356. The Commission scrutinized the proposal of OPTCL along with the proposals submitted by the distribution licensees and the total energy to be transmitted over the OPTCL's transmission system is estimated at 37,348 MU for the FY 2023-24, the details of which are given in the table below:

Table – 57
Energy likely to be Transmitted over OPTCL Transmission Network during the FY 2023-24 (MU)

Particulars	Proposed by OPTCL	Approved by OERC
(A) Demand of DISCOM	33,858	36,970
(B) **Less:** Energy transmitted in 33KV & 11 KV network	300	300
(C) Net Energy Transmitted for DISCOM **(A-B)**	33,558	36,670
(D) Wheeling to industries from CGPs & Emergency Sale to CGPs.	678	678
Total (C+D)	**34,236**	**37,348**

357. Having scrutinising each component of the ARR proposed by OPTCL & the total ARR & transmission charges proposed by OPTCL and approved by the Commission for the ensuing FY 2023-24 are shown in the table below:

Table – 58
ARR Proposed by OPTCL and Approved by the Commission for the FY 2023-24 (Rs. Cr.)

Sl No	Particulars	OERC's approval for FY 2022-23	OPTCL's Proposal for FY 2023-24	OERC's approval for FY 2023-24
1	Employee Cost Including Terminal Benefits	477.19	508.76	449.08
2	R & M Cost	110.50	164.34	135.00
3	A & G Cost	37.73	47.07	40.28
4	Depreciation	233.57	293.96	269.54
5	Interest on Loan	110.29	137.59	111.83
6	Interest on Working Capital	-	33.99	-
7	Return on Equity	141.67	221.24	140.42
8	Incentive for System Availability	5.00	11.91	5.00
9	GCC Expenses, statutory levies & taxes	0.35	0.35	0.35
10	Rebate	16.64	22.04	17.92
11	Income Tax	2.16	27.21	27.21

Sl No	Particulars	OERC's approval for FY 2022-23	OPTCL's Proposal for FY 2023-24	OERC's approval for FY 2023-24
12	**Annual Revenue Requirements (ARR) (1+2+…+11)**	**1,135.10**	**1,468.46**	**1,196.63**
13	**Less:** Misc. Receipts (Including STOA)	303.15	366.45	300.45
14	**Annual Revenue Requirement to be recovered from LTA Consumers (i.e. DISCOMs & CGPs) (12-13)**	**831.95**	**1,102.00**	**896.18**
15	No. of Units to be handled (MU)	29,710.00	34,236.00	37,348
16	**Transmission Charges (Paise/kWh)**	**28.00**	**32.19**	**24.00**
17	Expected Revenue from LTA Customers	831.88	958.61	896.35
18	**Gap: Surplus/(Deficit)**	**(0.07)**	**(143.40)**	**0.17**

TARIFF DESIGN

Transmission Tariff:

358. OERC Transmission Tariff Regulation 2014 stipulates that the Transmission Tariff payable by the Beneficiaries of the Transmission System shall be designed to recover the Aggregate Revenue Requirement approved by the Commission for each year of the Control Period. The transmission Tariff shall be computed as follows:

ARR/ Total Energy handled in the Transmission System of the Licensee:

359. 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 **24.00** paisa per kWh which shall be applicable for transmission of power over OPTCL's EHT Transmission Lines and Sub-stations at 400kV/220kV/132kV level and shall be payable by the DISCOMs.

360. The Commission has approved the net ARR of Rs.896.18 Crore for OPTCL for the FY 2023-24, which is 7.72% (Rs.64.21 Cr.) more than ARR approved (Rs.831.97 Cr.) for the FY 2022-23. However, the transmission charges per unit have been reduced by 4 paise per unit for the FY 2023-24 because of increase in energy transaction (from 29,710 MU during the FY 2022-23 to 37,348 MU during the FY 2023-24) over OPTCL's network.

361. The estimated energy for transmission in OPTCL's system is **37,348 MU** with an average demand of **4263.47 MW**. The net transmission cost as indicated in the table above is **Rs.896.18 crore.** Accordingly, the Open Access charges work out to a rounded sum of **Rs.5760.00/MW-day or Rs.240/MWh.** The open access customer (LTA, MTOA and STOA) other than DISCOMs availing Open Access under OERC (Terms and Conditions of Intra State Open Access) Regulations, 2020 shall pay Rs. **Rs.5760.00/MW-day (Rs.240/MWh)** towards transmission charges.

362. The Open Access charges i.e. cross subsidy surcharge, wheeling and transmission charges as determined by the Commission in its order passed in **Case No.85, 86, 87 & 89 of 2022** for Open Access consumers of 1 MW and above shall be applicable.

Transmission Loss for Wheeling:

363. OPTCL had proposed that out of the energy supplied to transmission licensee, 3.10% shall be deducted towards transmission loss and balance is liable to be delivered at delivery point at 400kV/220kV/132kV level. The Commission has approved the transmission loss of 3.00% for wheeling for the FY 2023-24.

Reactive Energy Charges:

364. OPTCL had submitted that the Commission in Para 16 of the order dated 05.02.2019 in Case No. 50/2017 has approved the provisional reactive energy charges of 3 paise/kVARh till a final justification is submitted by OPTCL in consultation with the stakeholders. In view of the above, OPTCL proposes that 3paise/kVARh may be approved provisionally as Reactive Energy Charges for the FY 2023-24.

365. The Commission provisionally approves reactive energy charges @ 3 paise/kVARh for the FY 2023-24. However, the direction of the Commission in the order dated 05.02.2019 in Case No. 50/2017 should be complied by OPTCL.

Transmission Charge Payment Mechanism:

366. The Letter of Credit (LC) arrangement has been introduced as a payment security mechanism which has been agreed by OPTCL and DISCOMs for securing transmission charges.

Exemption under Odisha Renewable Energy Policy, 2022:

OPTCL shall provide exemption of twenty (20) paise per unit on STU charges to captive/open access consumers on consumption of energy from RE projects commissioned in the State during the policy period of fifteen (15) years. This exemption shall be allowed for five (5) more years in case of projects commissioned before 31.03.2026.

Rebate:

367. For payment of bills through a letter of credit or NEFT/RTGS or by payment in cash within two working days (except holidays under N.I. Act) from the presentation of bill, a rebate of 2% on current bill shall be allowed. If the payments are made by a mode other than through a letter of credit but within a period of 30 days of presentation of bills by the Distribution Licensee/user, a rebate of 1% shall be allowed.

Late Payment Surcharge:

368. In case payment of bills by the licensees/ user is delayed beyond a period of 30 days from the date of receipt of bill, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL on the unpaid amount.

369. The transmission tariff approved as above in respect of OPTCL will become effective from 01.04.2023 and shall continue to remain in force until further orders.

370. The Application of OPTCL in Case No. 76 of 2022 is disposed of accordingly.

Sd/-	**Sd/-**
(S. K. RAY MOHAPATRA)	**(G. MOHAPATRA)**
MEMBER	**MEMBER**

ANNEXURE-I

Odisha Power Transmission Corporation Limited

Fixed Assets Register for the FY 2022-23 (in Rs.)

Cost Centre/Unit		Description of Assets						Gross Book value of Fixed Assets as on 31-03-2022		Addition & Delitions/transfer/ Adjustment During FY 2022-23		Gross Book value of Fixed Assets as on 31-03-2023		Rate of Depreciation (%)	Accumulated Depreciation as on 31-03-2022		Addition & Delitions/transfer/ Adjustment During FY 2022-23		Accumulated Depreciation as on 31-03-2023		Net Book Value of Assets as on 31-03-2023		Whether Physicaliy verified (Yes/No)	Whether the Asset under operational condition (Yes/No)	Remarks if any
Code	Name	Major Category	Minor Category	Quantity	Account Code	Location of Assets to identify	Used w.e.f Date-DD-MM-YYYY)	As per Original Cost	Deemed Cost (IndAS)	Addition	Deletion/ Transfer/ Adjustment	As per Original Cost	Deemed Cost (IndAS)		As per Original Cost	Deemed Cost (IndAS)	Addition	Deletion/ Transfer/ Adjustment	As per Original Cost	Deemed Cost (IndAS)	As per Original Cost	Deemed Cost (IndAS)			
1	2	3	4	5	6	7	8	9	10	11	12	13=9+11-12	14=10+11-12	15	16	17	18	19	20=16+18-19	21=17+18-19	22=13-20	23=14-21	24	25	
Example:																									
002	DDO, Hdqrs	Furniture & Fixtures	Wooden Conference Table with Size 5'' x 15''	1 No	10.220	4th Floor , Corporate Office Building	25-11-2018	3,50,000	3,50,000	-	-	3,50,000	3,50,000	6.33	74,174	74,174	22,155	-	96,329	96,329	2,53,671	2,53,671	Yes	Yes	
001	DFB, BBSR	Office Equiment	Scanner	1 No	10.851	O/o CGM (F), FW	10-08-2012	25,000	21,517	-	-	25,000	21,517	5.28	12,723	9,240	1,320	-	14,043	10,560	10,957	10,957	Yes	Yes	

ANNEXURE-II

Odisha Power Transmission Corporation Limited

Capital Work-in-Progress (CWIP) position as on 31-03-2023

Sl No	Cost Centre/Unit		Description of CWIP							Total Cost of the work (Rs Cr.)	Source of Funding (Rs. Cr.)					Project Period (mmm-yy)		Actual fund received till 31-03-2023 (Rs. Cr.)					Actual Expenditure upto 31-03-2023 (Rs.Cr.)	Approved by OERC (Yes/No)
	Code	Name	Major Category	Minor Category	Account Code	Name of Scheme	Name of capital work	Quantity	Location of work to identify		Equity /Own	Debt	Grant	Other	Total	Start	Sch. Date of Completion/ capitalised	Equity /Own	Debt	Grant	Other	Total		