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ODISHA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN

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Together, Let us light up our lives

Present: Shri G. Mohapatra, Officiating Chairperson
Shri S. K. Ray Mohapatra, Member

CASE NO. 93 OF 2024

DATE OF HEARING : 19.02.2025

DATE OF ORDER : 24.03.2025

IN THE MATTER OF: An application for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2025-26 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 2025-26 along with its Truing up of expenses for the FY 2023-24 in compliance to the Regulation-7 of the OERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2014.

ORDER

M/s. Odisha Power Transmission Corporation Limited, Bhubaneswar (for short, OPTCL,) the present Petitioner, which carries out intra-state transmission business in the State of Odisha has been notified in Clause-10 of the Govt. Notification No.6892 dated 09.06.2005 as the State Transmission Utility (STU) under Section 39(1) of the Electricity Act,2003 (the Act) with effect from 01.04.2005. 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, being 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 the consequent issuance of vesting orders by the Commission, Bulk Power

Transmission and SLDC Agreements have been signed between OPTCL and the new Distribution Companies/Licensees.

A. PROCEDURAL BACKDROP (Para 2 to 8)

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 within 30th November each year in the prescribed format. OPTCL as a deemed licensee had submitted its ARR application for the FY 2025-26 along with Truing up for the FY 2023-24 before the Commission on 30.11.2024, and the said application was registered as Case No.93 of 2024. After due scrutiny and admission of the matter, the Commission directed OPTCL to publish its ARR & Transmission Tariff application for the FY 2025-26 along with Truing up of the Application for the FY 2023-24 in the approved format in the leading widely circulated newspapers, both English and Odia daily, and also the matter was posted on 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 serving copy on each of them.

3. Accordingly, OPTCL published the said public notice in the English language in the Odia newspaper "The Samaj" & in the English newspaper "The New Indian Express" and in Odia language in Odia newspaper "Sambad" on 14.12.2024. In response to the aforesaid public notice of the applicant, the Commission received 16 number of objections/suggestions from the following persons/ associations/ institutions/organisations:

   i. M/s. Vedanta Limited, 1st Floor," C, Fortune Tower, Chandrasekharpur, Nandanakanan Road, Bhubaneswar-751023.

   ii. M/s. Confederation of Captive Power Plants, Orissa (CCPPO), At-IMFA Building, Bomikhal, Rasulgarh, Bhubaneswar-751010.

   iii. Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President,Upobhokta Mahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012.

   iv. The Utkal Chamber of Commerece & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015. email-pwrtch@gmail.com.

   v. M/s. Power Tech Consultants, At-K-8-82, Kalinga Nagar, Ghatikia, Bhubaneswar-751029., email-pwrtch@gmail.com.

vi. M/s. Jindal Stainless Limited, Kalinga Nagar, Industrial Complex, Jajpur-755026.

vii. M/s. Tata Steel Limited, Athagarh, Anantapur, Po-Dhusuria, Cuttack-754027.

viii. M/s. Tata Steel Limited, Kalinganagar Industrial Complex, Duburi, JK Road, Jajpur-755026.

ix. M/s. Visa Steel Limited, Kalinganagr Industrial Complex, At/Po-Jakhapura, Dist-Jajpur-755026.

x. M/s. Jindal Steel & Power Limited, Chhendipada Road, SH 63, Po-Jindal Nagar, Angul-759111.

xi. M/s. Bhushan Power and Steel Limited, At/Po-Lapanga, PS-Thelkoli, Sambalpur-768212. email-rakesh.pujari@jsw.in.

xii. The Chief Executive Officer, TPCODL, 2nd Floor, IDCO Towers, Janapath, Bhubaneswar-751022.

xiii. Sri Alekha Chandra Mallik, S/o-Harekrushna Mallik, Raghunathpur, Bhubaneswar-751024. email-alekhmallik@gmail.com.

xiv. M/s. Nilachal Ispat Nigam Limited, Nilachal House, Kalinganagar Industrial Complex, Duburi, Jajpur-755026.

xv. The Chief Executive Officer, TPWODL, At/Po: Burla, Dist: Sambalpur-768017.

xvi. Sri Ananda Kumar Mohapatra, S/o- Late Jachindra Nath Mohapatra, Plot No-799/4, Kotiteetrtha Lane, Old Town, Bhubaneswar-02. email: anandamohapatra22@gmail.com.

4. In exercise of the power under Section 94(3) of the Electricity Act, 2003 and with a view to protecting the interest of the consumers, the Commission appointed the 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 the FY 2025-26. The Consumer Counsel presented its views in the hearing.

5. The date for hearing of the matter was fixed to 19.02.2025 at 11.00 AM and it was duly notified in the leading newspaper mentioning the list of the objectors. The Commission also issued individual notice to the Objectors and the Department of Energy (DoE), Government of Odisha (GoO) informing them about the date and time of the hearing through hybrid mode either by physical presence at the Commission's office or through virtual mode and requested the objectors and the Government's authorized

representative, who want to participate virtually, to furnish their e-mail ID to facilitate and for providing links for hearing. Accordingly, the Applicant, Objectors and the representative of DoE, GoO participated in the proceedings and offered their valuable views/ suggestions /proposals during the hearing on hybrid mode on the date and time fixed by the Commission.

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

7. In its consultative process, the Commission conducted a public hearing of the case at its office premises on 19.02.2025 at 11.00 AM. and heard the applicant, objectors, WISE- the Consumer Counsel, appointed by the Commission to analyze the ARR & Transmission Tariff application of OPTCL for the FY 2025-26 and the Representative of the Department of Energy, Government of Odisha at length.

8. The Commission convened the State Advisory Committee (SAC) meeting through virtual mode on 01.03.2025 at 11.00 AM in virtual mode to discuss the Aggregate Revenue Requirement applications and tariff proposals of licensees for the FY 2025-26. The Members of SAC, Special Invitees, the Representative of DoE, Government of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

B. OPTCL's ARR & TARIFF PROPOSAL FOR THE FY 2025-26 & TRUING UP FOR FY 2023-24 (PARA 9 TO 46)

9. As provided under Regulation 53 (1) in Chapter VIII of OERC (Conduct of Business) Regulations, 2004, Clause 19.3 of License Conditions of OPTCL and 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 No. 72 of 2019, exercising the power conferred under Regulation 9.1 of the aforesaid Regulations, had extended the applicability of OERC's Transmission Tariff Regulations, 2014 until further orders. In compliance with 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 2025-26 along with truing-up application for the FY 2023-24 before the Commission for approval.

Categorization of Customers

10. OPTCL is responsible for the planning and development of the 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 customer with the right to use the Intra-State Transmission System for a period exceeding 12 years but not exceeding 25 years. Based on such premise, four DISCOMs, NALCO, IMFA, ABREL SPL, ABREL SPV, MCL and BEL happen to be the long-term customers of OPTCL.

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

M/s Dhamra Port Company Limited is the only Medium-Term Open Access Customer (MTOA Customer).

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 THE FY 2025-26

Formulation and Computation of Transmission Charges:

11. The Commission has framed OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 (hereinafter called "OERC's Transmission Tariff Regulations, 2014") which was published in the 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 2025-26 in line with the above Regulations of OERC. Regulation 5 of the OERC's Transmission Tariff Regulations, 2014 which 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 the FY 2025-26 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:

12. 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 (A&G) Expenses;

(c) Repairs and Maintenance (R&M);

(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 2025-26 are as under:

Salaries, wages, pension contribution and other employee costs:

13. OPTCL has submitted that the Employee Cost 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.

14. Accordingly, OPTCL proposes **Rs.554.05 Cr.** under the head Employees Cost for the FY 2025-26. The component-wise details are shown in the Table below.

Table - 1
Employee Cost Proposed by OPTCL for FY 2025-26

(Rs. in Crore)

Particulars	Amount
Employee costs including Salary, Dearness Allowance, etc.	340.92
Terminal Benefit Liability of Employees and Existing Pensioners	228.03
Less: Capitalization	14.90
Total	**554.05**

Administrative and General (A&G) Expenses:

15. OPTCL has proposed **Rs. 49.80 Cr.** towards A&G Expenses for FY 2025-26. The A&G Expenses include property-related expenses, communication, professional charges, conveyance and travelling, SLDC charges, license fees and material-related expenses. The A&G expenses show an increasing trend in recent years due to an increase in the number of establishments (for smooth operation, maintenance and project execution), price rise and inflation being on the higher side than the amount approved by the Commission.

Repair and Maintenance (R & M) Expenses:

16. OPTCL has stated that, it has 194 Nos. Grid Sub-Stations of different voltage classes and 16,508.068 ckt. Kms of EHT transmission lines as on 31.03.2024. The details are shown in the Table given below.

Table 2
Sub-station and line details of OPTCL

Sub-Station and Line Details	
400/220/33kV S/S	2
400/220/132/33kV S/S	3
220/132/33kV S/S	28
220/33kV S/S	18
220/132kV S/S	1

132kV Sw. Stn.	26	
132/33kV S/S	116	
Total No. of Sub-Stations	**194**	
Voltage Level	**Lines (ckt. km.)**	**Bays**
400kV	1196.872	70
220kV	6831.365	449
132kV	8479.831	1255
33kV		1482
TOTAL	**16,508.068**	**3256**

17. Further, OPTCL has proposed that, around 8 Nos. and 10 Nos. new Grid Substations are proposed to be commissioned during the FY 2024-25 and 2025-26. The R&M works are being undertaken under different wings namely O&M, Telecom, Civil Works and Information Technology (IT). Accordingly, OPTCL has proposed R&M Expenses of **Rs.217.70 Cr.** for the FY 2025-26. The details of R & M expenses are given in the Table below:

Table 3
Repairs and Maintenance Expenses Proposed by OPTCL for the FY 2025-26
(Rs.in Cr.)

<table>
<tr><th>Particulars</th><th>OERC Approval (FY 2023-24)</th><th>OERC Approval (FY 2024-25)</th><th>Projection (FY 2025-26)</th></tr>
<tr><td>(i) O&M wing</td><td rowspan="5">135.00</td><td rowspan="5">135.00</td><td>192.46</td></tr>
<tr><td>(ii) Telecom wing</td><td>3.73</td></tr>
<tr><td>(iii) Civil Works wing</td><td>11.80</td></tr>
<tr><td>(iv) Information Technology & Others</td><td>9.71</td></tr>
<tr><td>Total R & M Expenses</td><td>217.70</td></tr>
</table>

Grid Coordination Committee (GCC) Expenses:

18. OPTCL has proposed **Rs.0.35 Cr.** towards annual GCC Expenses for the FY 2025-26 in line with the matters specified in Chapter 11 (2)(2) of the Odisha Grid Code (OGC) Regulations, 2015.

19. Accordingly, OPTCL has proposed **Rs.821.90 Cr.** towards O&M Expenses for the FY 2025-26, details of which are given in Table 4 below:

Table 4
O&M Expenses Proposed by OPTCL for the FY 2025-26
(Rs.in Cr.)

Particulars	Amount
(i) Employee cost including Terminal Benefits	554.05
(ii) A&G Cost	49.80

(iii) R&M Cost	217.70
(iv) GCC expenses	00.35
Total O&M Expenses	**821.90**

Interest and Financial Charges:

Interest on Loan:

20. OPTCL has estimated total interest on loan capital is Rs.301.54 Cr. after considering interest on loan capital of Rs.155.93 Cr. to be capitalised during the FY 2025-26, it has proposed net interest on loan capital of **Rs.145.61 Cr.** (Rs. 301.54 Cr.- Rs. 155.93 Cr.) for the FY 2025-26.

Interest on Working Capital:

21. OPTCL has estimated its working capital requirement of Rs.332.99 Cr. and the interest on working capital is Rs 44.12 Cr for the FY 2025-26. However, it has not proposed any amount of interest on working capital but requested that the Commission may consider the interest on working capital incurred, if any, for FY 2025-26 during the truing up exercise.

Rebate:

22. As per Regulation 8.49 of the OERC Transmission Tariff Regulations, 2014, OPTCL has proposed **Rs. 27.97 Cr.** towards rebate @ 2% on the projected ARR for the FY 2025- 26.

New Projects:

23. OPTCL has proposed **Rs.2272.07 Cr.** for the FY 2025-26 towards Capital Expenditure (CAPEX) on new projects under different activities like Construction, O&M, Telecom, IT and Civil Works. The details of expenditure proposed under CAPEX are given in the Table below.

Table 5
CAPEX Proposed by OPTCL for FY 2025-26

(Rs.in Cr.)

Particulars	Amount
(i) New Transmission Projects (Construction Wing)	1639.79
(ii) Existing Assets (O&M Wing)	413.14
(iii) Telecom Wing	102.00
(iv) Information Technology (IT Wing) & others	51.59
(v) Civil Wing	65.55
Total Capital Expenditure [(i)+(ii)+(iii)+(iv)+(v)]	**2272.07**

Depreciation:

24. OPTCL has submitted that after excluding the grant, beneficiary & deposit works assets of Rs.1847.86 Cr. and fully depreciated (90% of Asset value) assets value of Rs.1858.82 Cr. from the gross original book value of fixed assets of Rs.9015.83 Cr., its own transmission assets become Rs.5309.30 Cr. as on 01.04.2023. OPTCL has requested the Commission not to deduct the up-valued assets of Rs.512.71 Cr. while calculating the transmission assets as the same has fully depreciated in 27 years from 1996. Further, after adjustment/deletion, fixed assets of Rs.538.29 Cr. (Rs.563.38 Cr. - Rs.25.09 Cr.) have been added during the FY 2023-24 which includes assets value of Rs.206.09 Cr. towards grant, beneficiary and deposit works. OPTCL has reported that during the FY 2023-24, fixed assets of Rs.39.68 Cr. have been fully depreciated (90%). Accordingly, OPTCL has estimated the gross original book value of fixed assets as on 31.03.2024 is Rs.5601.67Cr. (Rs.5309.15 Cr. + Rs.538.29 Cr. - Rs.39.68 Cr. - Rs.206.09 Cr.) excluding the grant, beneficiary & deposit works and fully depreciated assets.

Further, OPTCL has projected that, transmission assets (excluding Deposits works & Grant assets etc.) of Rs.526.26 Cr. and Rs.1605.73 Cr. to be added during the FY 2024-25 and FY 2025-26 respectively. Considering the same, the original book value of transmission fixed assets will become Rs.6127.93 Cr. as on 31.03.2025 and Rs.7733.67 Cr. as on 31.03.2026. Based on the above-projected capitalisation, OPTCL has proposed **Rs.356.57 Cr.** towards depreciation for the FY 2025-26.

Return on equity (RoE):

25. OPTCL has submitted that at the time of the de-merger of GRIDCO, its opening equity share capital as on 01.04.2005 was Rs.60.07 Cr. Thereafter, the State Government has infused equity share capital of Rs.2746.52 Cr. till date against various transmission projects including Rs.647.00 Cr. towards conversion of bonds with interest into equity. Further, it has been projected that another Rs.140.30 Cr. will be received by March 2025 from the planned budget of the Energy Department for the FY 2024-25 and as expected, the State Government will further infuse Equity Share Capital of Rs.954.53 Cr. during the FY 2025- 26 against the various transmission projects. Considering the above, OPTCL has projected that its total Equity Capital will be Rs.3901.53 Cr as on 31.03.2026.

However, based on the projected original book value of transmission fixed assets of Rs.6127.93 Cr. as on 31.03.2025, OPTCL has proposed a Return on Equity (RoE) of **Rs.284.95 Cr.** (@ 15.5% on 30% of Rs.6127.93 Cr.) for the FY 2025-26.

Income Tax:

26. As per Regulation 8.43 of the 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 2023-24, OPTCL has paid Income Tax of Rs.10.77 Cr. Accordingly, it has proposed the same amount of **Rs.10.77 Cr.** towards income tax for FY 2025-26. Further, the petitioner has stated that any variation in the proposed amount shall be adjusted during the true-up exercise based on audited accounts as per Regulations 8.43 and 8.44 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014.

Incentive for System Availability:

27. Regulation 6.4 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 specifies the "Operational Norm" applicable for the 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 the AC system for recovery of full Annual Transmission Charges. OPTCL has filed the calculation of the Transmission Availability Factor for the Year (TAFY) for the FY 2023-24 as 99.98%. The computation and TAFY figures have been verified and certified by SLDC. In accordance with the formula prescribed in Regulation 6.5, OPTCL has worked out an incentive of Rs.13.46 Cr. towards system availability for the FY 2023-24. Accordingly, OPTCL proposed **Rs.13.46 Cr.** towards Incentive for System Availability for the ensuing FY 2025-26.

Total Transmission Cost:

28. Considering the proposed cost/expenses under different heads and incentives, OPTCL has submitted that, the total transmission cost will be **Rs. 1663.33 Cr.** for the ensuing FY 2025-26.

Miscellaneous Receipts:

29. OPTCL has submitted that, in line with the trend of revenue of previous years and earnings during 1st six months of the FY 2024-25, it has proposed **Rs.264.62 Cr.** for the FY 2025-26 towards Miscellaneous Receipts such as Inter-State Transmission charges, STOA & MTOA charges, Bank interest, Supervision Charges, lease rent, Scrap Sale and Other receipts.

Summary of ARR proposed by OPTCL for the FY 2025-26

30. Considering all the aforesaid proposed transmission costs and miscellaneous receipts, OPTCL has proposed its Net Aggregate Revenue Requirement (ARR) of **Rs.1398.71 Cr.** for the FY 2025-26 before the Commission for approval. The Summary of ARR is shown in the Table below:

Table - 6
Summary of ARR Proposed by OPTCL for FY 2025-26

(Rs. in Crore)

Particulars	**Amounts**	
1. O&M Expenses (a+b+c+d+e)		**821.90**
a. Employees Cost including Terminal Benefits	554.05	
b. A&G Cost	49.80	
c. R&M Cost	217.70	
d. Expenses related to auxiliary energy consumption	-	
e. Other misc. expenses, statutory levies and taxes (GCC)	0.35	
2. Interest & Financial Charges (f+g+h+i)		**175.68**
f. Interest on Loan Capital	145.61	
g. Interest on Working Capital	-	
h. Rebate	27.97	
i. Exemption as per OERP-2022	2.10	
3. Depreciation & amortisation expense		**356.57**
4. Return on Equity		**284.95**
5. Income Tax		**10.77**
6. Incentive for system availability		**13.46**
7. Total Transmission Cost (1+2+3+4+5+6)		**1663.33**
8. Less: Miscellaneous Receipt		264.62
9. Net ARR proposed to recover from LTA Customers (7-8)		**1398.71**

Transmission Loss:

31. 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 the increasing demand for power on account of industrialization and implementation of central & state-sponsored schemes like ODSSP, SCRIPS, RRCP, LVMS, DRPS etc. in Odisha, the flow of power in the transmission network contributes to increased transmission loss. OPTCL further mentioned that its transmission loss is already very low and further reduction in loss becomes difficult. OPTCL has been able to reduce transmission loss over the years by commissioning several new transmission projects strategically and adopting innovative schemes under the Master Maintenance Plan during the last few years. The actual transmission loss in the OPTCL's transmission system from April 2024 to September 2024 is 3.09% against the Commission's approval of 3.00% for the FY 2024-25. OPTCL expects the loss level

to remain around 3.08% in the current year. Accordingly, OPTCL proposes 3.05% transmission loss during the FY 2025-26.

OPTCL Revenue Receipt and Deficit in the Proposed ARR for the FY 2025-26:

32. OPTCL has stated that it has taken the recent realistic demand projection of all four DISCOMs 38537.40 MU (4399.24 MW) for the FY 2025-26. Further, the energy of 440 MU (50.23 MW) is likely to be transacted in 33kV & 11kV networks 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 38097.40 MU (i.e., 38537.40 MU - 440 MU) will be transmitted over the OPTCL's network for DISCOMs. Further OPTCL has projected 561.94 MU for wheeling and supply of Emergency/Backup power to IMFA, NALCO, ABREL & BEL. Accordingly, the projected energy transaction over its network would be about 38659.34 MU (i.e., 38097.4 MU+ 561.94 MU).

Further, OPTCL has projected energy transmission of 104.95 MU (24.95 MU for M/s ABReL (Odisha) SPV Limited and 80 MU for M/s MCL) through the OPTCL network for FY 2025-26 which will get an exemption of twenty (20) paisa per unit on STU charges as per clause No. 10(4) of the Odisha Renewable Energy Policy-2022. Taking the above energy requirement into consideration, OPTCL has projected the transaction of **38764.29 MU** (38659.34 MU + 115.49 MU) over its network.

33. Regarding recovery of transmission charges from the LTA Customers during FY 2025-26, OPTCL has proposed as follows:

i. By charging at the rate applicable to DISCOMs for transmission of 38097.40 MU (4349.01 MW).
ii. By charging at the rate applicable to LTA customers like IMFA & NALCO for transmission and supply of Emergency/Backup power of 527.60 MU (60.23 MW).
iii. By charging at the rate applicable to RE LTA customers like M/s ABREL SPL (25.88 MU) & M/s BEL (8.46 MU) for transmission power of 34.34 MU as per OERC (Promotion of Renewable Energy through Green Energy Open Access) Regulations, 2023.
iv. By charging at the rate (exemption of twenty-20 paisa per unit) applicable to LTA customers like M/s ABReL (Odisha) SPV Limited (24.95 MU) and M/s MCL (80 MU) for transmission power of 104.95 MU as per Odisha Renewable Energy Policy-2022.

OPTCL has estimated that the existing transmission tariff @ 24 P/U would generate revenue of Rs. 927.82 Cr. from the projected units of 38659.34 MU and @ 04 P/U (after exempting 20 P/U) can earn Rs.2.52 Cr from projected units of 104.95 MU. Accordingly, OPTCL has estimated to earn a total revenue of **Rs.930.34 Cr.** from LTA customers by transmitting **38764.29 MU** during the FY 2025-26.

Excess/Deficit of Revenue Requirement:

34. OPTCL has projected a revenue deficit of **Rs.468.37 Cr.** for the FY 2025-26 by considering the proposed ARR of Rs.1398.71 Cr. and the estimated revenue of Rs.930.34 Cr. to be earned at the existing transmission tariff @24 P/U.

Proposal for revision of Transmission Tariff/ Wheeling Charges:

35. OPTCL has submitted that as the deficit cannot be met at the existing rate of transmission tariff (i.e., @24 P/U), it has requested before the Commission to approve:

- Aggregate Revenue Requirement of **Rs.1398.71 Cr.**
- Recovery of Transmission Charge @ **Rs. 8660/MW-Day** i.e. **36.08 Paise/unit.**
- Transmission Loss for wheeling as **3.05%** on energy drawl for the FY 2025-26.

Open Access Charges:

36. Regulation 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.

37. 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 2025-26, the DISCOMs projection is 38097.4 MU (4349.01MW)]

and

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

iii. From RE LTA customers (i.e. ABREL SPL, BEL, ABREL SPV & MCL) as per OERC (Promotion of Renewable Energy through Green Energy Open Access) Regulations 2023.

[For FY 2025-26, NALCO, IMFA, ABREL SPL, BEL, ABREL SPV & MCL have projected their respective demands as 147.6 MU (10 MW), 380 MU (41.09 MW), 25.88 MU (18.75 MW), 8.46 MU (7.50 MW), 24.95 MU (15.62 MW) & 80 MU (50 MW)]

38. OPTCL has proposed the Open Access charges for the FY 2025-26 as shown in the Table below.

Table - 7
Open Access Charges proposed by OPTCL for the FY 2025-26

Particulars	Per Unit Approach
Net Aggregate Revenue Requirement (Rs. Cr.)	1398.71
Proposed Energy to be transmitted in OPTCL Network (MU)	38764.29
Power Flow in MWs (38764.29 MU)	4425.15
Proposed Transmission Tariff (Rs. /MW/Day)	8660
Proposed Transmission Charges (Paise/unit)	36.08

Reactive Energy Charges:

39. OPTCL has submitted that 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 time being till a final justification is submitted by OPTCL in consultation with the stakeholders. In view of the above, OPTCL has provisionally proposed 3paise/KVARh as Reactive Energy Charges FY 2025-26.

Levy of Grid Support Charges (GSC):

40. OPTCL had filed an application (Case No 44 of 2024) before the Commission on 26.06.2024 for determination and approval for levy of Grid Support Charges for industries having Captive Generating / Cogeneration plants and running in parallel with the Grids of OPTCL subsequent to order dated 06.07.2023 of 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. The Commission vide order dated 09.07.2024 in Case No. 44 of 2024 has directed to submit a consolidated report considering certain queries. OPTCL is in the process of submitting the report complying with the suggestions of the Commission. If the levy of GSC is decided in favour of the petitioner (OPTCL),

the major portion of accrual from GSC shall be passed on to the end users resulting in further reduction in transmission cost.

Rebate:

41. As per the direction of OERC, DISCOMs are governed under OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014. Accordingly, rebate shall be allowed vide Regulation 8.49 & 8.50 i.e. a rebate of 2% on the monthly bills (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% on the monthly bills, if paid within 30 days on the presentation of the bill.

42. Long & Medium-term Open Access Customers other than DISCOMs are governed under OERC (Terms and Conditions of Intra-state Open Access) Regulations, 2020. They shall pay the transmission charges within seven (07) days from the date of receipt of the bill as mentioned vide Regulation 32(2)(b) of Intra state Open Access Regulations 2020. There is no provision of rebate for early payment in the said Regulations 2020. Necessary directions may please be given in this regard.

Late Payment Surcharge:

43. Regulation 8.48 of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 shall be followed for DISCOMs. Regulation 33 of OERC (Terms and Conditions of Intra State Open Access) Regulations, 2020 shall be followed for Long & Medium-Term Open Access Customers other than DISCOMs.

Duty and Taxes:

44. 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 2023-24:

45. 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 2023-24 and has prayed the Commission to carry out the truing-up exercise.

46. OPTCL has submitted that during FY 2023-24, it has incurred a net deficit of Rs.139.71 Cr. Therefore, the petitioner requests the Commission to consider the surplus/deficit against each item for the truing-up of ARR for FY 2023-24. The actual figures/ amounts as per audited accounts and truing-up proposed by OPTCL against the approval of the Commission in ARR for the FY 2023-24 is shown in the Table below:

Table - 8
Truing-up Proposed by OPTCL for the FY 2023-24

(Rs. in Crore)

Sl No	Particulars	OERC Approval	Actual as per Audited Accounts	Truing up proposed	Surplus/ (Deficit)
1	Employee Cost (Net)	449.08	493.67	493.67	-44.59
2	R & M Cost	135	130.83	130.83	4.17
3	A & G Cost	40.28	46.83	42.81	-2.53
4	Depreciation	269.54	294.71	294.71	-25.17
5	Interest on long-term liability	111.83	120.96	120.96	-9.13
6	Rebate	17.92	16.23	16.23	1.69
7	Incentive for system availability	5.00		13.46	-8.46
8	GCC Expenses	0.35	-	-	0.35
9	Return on Equity	140.42		172.21	-31.79
10	Income tax	27.21		10.77	16.44
11	**Total Transmission Cost (1 to 10)**	**1,196.63**	**1,103.23**	**1,295.65**	**-99.02**
12	**Less:** Inter-state wheeling & Misc. Revenue	300.45	412.67	282.59	17.86
13	**Net Transmission Cost**	**896.18**	**690.56**	**1,013.06**	**-116.88**
14	**Revenue from Transmission Charges**	**896.18**	**873.35**	**873.35**	**22.83**
15	**Gap - Surplus/(Deficit) (14-13)**	**0.00**	**182.79**	**-139.71**	**-139.71**

C. VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2025-26 (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 2025-26 along with the Truing-up of the FY 2023-24 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 2024-25, the total ARR was increased by 5.42% only over the approved ARR of the FY 2023-24. However, the revenue requirement projected by OPTCL for the FY 2025-26 is about 53.07% more than that approved for the FY 2024-25. This increment is

due to an increase in Employee Cost (13.39%), R&M Cost (61.26%), A&G cost (34.41%), RoE (75.74%), Depreciation (29.35%), Rebate (38.74%) and incentive (169.20%). The comparative figures of components of ARR are given in the table below.

Table 9
Comparative Annual Revenue Requirement of OPTCL

(Rs. Crore)

	Approved FY 2023-24	**Approved FY 2024-25**	**Proposed FY 2025-26**	**Increase % 2024-25 vs 2023-24**	**Increase % 2025-26 vs 2024-25**
Employees Cost incl. Terminal Benefits	449.08	488.63	554.05	29.61	13.39%
A&G Cost	40.28	37.05	49.80	26.94	34.41%
R&M Cost	135.00	135.00	217.70	25.41	61.26%
Other misc. expenses, statutory levies and taxes (GCC)	0.35	0.35	0.35	0.00	0
Interest on Loan Capital	111.83	133.95	145.61	33.19	8.70%
Rebate	17.92	20.16	27.97	54.07	38.74%
Depreciation	269.54	275.67	356.57	18.73	29.35%
Return on Equity	140.42	162.14	284.95	94.48	75.74%
Income Tax	27.21	7.00	10.77	34.84	53.86%
Incentive for system availability	5.00	5.00	13.46	148.40	169.20%
Total	1,196.63	1264.95	1663.33	35.52	31.49%
Less Misc. Receipts	300.45	302.75	264.62	-19.81	-12.59%
Less Surplus True-up	-		-	-	-
Aggregate Revenue Requirement	896.18	913.76	1398.71	54.06	53.07%
Transmission Charges (P/U)	24.00	24.00	36.08	-14.29	50.33%

49. The significant increase in all expenses as mentioned above would impose an excessive burden on the general consumers of the State, as this would be passed on to the ultimate users through GRIDCO and DISCOMs. Transmission loss should be fixed at a reasonable level. Therefore, there is a need to review the following expenses for the benefit of the consumers:

Employee costs including terminal benefits, R&M expenses, A&G expenses, Interest on new loan to be disbursed to OPTCL, depreciation, RoE and Interest on working capital.

D. VIEWS OF OBJECTORS ON THE TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2025-26 AND REJOINDER SUBMITTED BY OPTCL (PARA 50 TO 96)

The issue-wise views of the Objectors placed before the Commission and the response of OPTCL are summarised below:

O & M Expenses

Views of Objectors

50. Nearly 58% of regular posts are lying vacant for which proper maintenance is not carried out by OPTCL. The Petitioner has to produce the detailed expenditure incurred in O&M work – (i) O&M, (ii) Telecom, (iii) Civil, and (iv) Technical from 2010 to 2024 and the reasons for non-utilization of funds allocated for O&M work.

51. OPTCL has proposed a 61% increase in R&M costs and a 13% increase in Employee expenses compared to the previous year. The objector has requested the Commission to approve the same based on actuals derived till December 2024.

52. OPTCL has proposed a 34% increase in A&G costs compared to the previous year. The objector suggests a prudence check based on actuals.

Submissions by OPTCL

53. OPTCL has provided the year-wise OERC approvals and actual expenditures for Repair and Maintenance (R&M) from FY 2013-14 to FY 2024-25 (up to date) in the table below.

Table 10
Submission of OPTCL on approved and actual O&M expenses

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	110.50	114.14
2023-24	135.00	130.83
2024-25 (up to December, 2024)	135.00	114.76

54. From the above, it is observed that OPTCL has been effectively utilizing the R&M expenditure approved by the Commission for periodical & condition-based maintenance and as a result of transmission system availability has been consistently more than the specified norms.

55. 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.

56. In last year's Tariff Order, the Commission observed that the health of transmission assets is vital for the smooth and reliable operation of transmission system assets. The Commission therefore desires that OPTCL should incur R&M expenses exclusively for condition-based maintenance of transmission assets to improve the reliability and availability of equipment & material associated with the transmission system for smooth and trouble-free operation of the system. As of date, about 61 Nos. of Grid Substations and 100 Nos. of lines have completed the lifespan of 25 years and 35 years respectively. Accordingly, OPTCL projected Rs.217.70 Cr. towards Repair & maintenance which is well within the regulatory limit of Rs.238.85 Cr. (i.e. 2.50% of GFA as of 31.03.2024). Therefore, the commission is hereby requested to consider the proposal of OPTCL and allow Rs.217.70 Cr. towards Repair & Maintenance Expenses (R&M).

57. OPTCL has submitted that the nature of the A&G expenses of the power utilities is almost the same. However, it is observed for FY 2024-25, the Commission had considered the escalation factor of all the utilities differently. The escalation factor for OPTCL is 0.73%, GRIDCO is 5.00%, DISCOMs is 7.00% and OHPC is 5.47%. Ideally, the escalation factor of all the utilities should have been in parity. As per the Regulations, the A&G cost should be increased by WPI on the base year, provided the number of establishments has remained the same. However, the number of establishments/offices of OPTCL has increased over a period of time commensurate with the increase in assets by the addition of grid Substations, ckt. kilometers of lines and MVA capacity for better supervision in construction, operation and maintenance and for maintaining the quality of supply. Hence, A&G expenses should be increased proportionately. Further, it is submitted that some of the A&G Expenses are related to CPI also and it is evident that every year the actual expenses have crossed the approved amount despite it being a controllable expenditure. Therefore, the Commission is hereby requested to consider the proposal of OPTCL and allow Rs.49.80 Cr. towards Administrative and General Expenses (A&G).

<u>Return of Equity (ROE):</u>

Views of Objectors

58. One of the Objectors has submitted that, OPTCL has claimed RoE of Rs.284.95 Cr. for FY 2025-26 at 15.5% on 30% of GFA of Rs. 6127.93 Cr. i.e. RoE has been claimed on equity base of Rs.1838.00 Cr. which is considerably higher than the equity base on which RoE was allowed in True- Up FY 2022-23 in 13.02.2024 order and requests for prudence check.

59. The other Objector has submitted that, the equity of OPTCL comprises mostly public capital disbursed by the Government of Odisha from the State budget and the public should not give any return to OPTCL on the said public capital. Therefore, the Objector has objected on the Return on Equity on the public Capital and has urged the commission to trace out the funding of private capital lying unheeded in the capital assets worth Rs.6127.93 Cr and allow depreciation and RoE on such funding only.

60. OPTCL has proposed a 76% higher RoE as compared to the previous year approval. Therefore, the objector has requested the Commission to compute the RoE based on the approved equity based on prudence check.

Submissions by OPTCL

61. Regulation 8.27 of OERC's Transmission Tariff Regulations, 2014 stipulates that the Return on Equity (RoE) shall be computed in rupee terms, on the equity base determined in accordance with regulations 4.8 to 4.22 and regulations 8.17 to 8.24. Further, as per Regulations 8.28 & 8.29, STU (OPTCL) shall be allowed a Return on Equity Capital in rupee terms at the rate of 15.5% per annum (post-tax), on the amount of equity capital base as determined by the Commission. This rate of return needs to be grossed up with the normal/applicable tax rate. Further, the maximum equity allowable for ROE as per the regulation is 30% of the Capital Cost (GFA). Considering the above, OPTCL has projected the ROE of Rs.284.95 Cr. on equity base of Rs.1838.38 Cr. (i.e. 30% of the GFA: - Rs. 6127.93 Cr. as on 31.03.2024). However, for FY 2024-25, the Commission has allowed ROE on the actual equity capital infused by the Government of Odisha where Equity Capital of Rs.647.00 Cr. has not been considered.

Depreciation:

Views of Objectors

62. OPTCL has projected depreciation of Rs.356.57 Cr. for FY 2025-26, up from Rs.275.67 Cr. in FY 2024-25. The objector has requested the Commission to scrutinize the depreciation rates and ensure they align with tariff regulations.

63. One of the Objectors has submitted that the OPTCL has proposed repayment of the loan worth Rs.178.53 Cr. for FY 2025-26 but claims Depreciation of Rs.356.57 Cr., which is double the repayment of the loan. The excess depreciation claim over & above the repayment of the loan is redundant. Further, the Objector has urged the Commission to initiate action to distinguish the source of funding (Public or Private) behind the capitalisation of fixed Assets to secure the public capital paid by the people.

Submissions by OPTCL

64. OPTCL has submitted its ARR application for FY 2025-26 as per the various provisions stipulated in OERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2014 and directions of the Commission passed in different orders with proper justifications.

Income Tax:

Views of Objectors

65. Under Income Tax, OPTCL has proposed 54% higher as compared to the previous year ARR approved by the Commission. The Objector requested the Commission to take a suitable decision while approving the Income Tax expenses subject to actual payment, which will be verified during the truing up exercise of that year.

Submissions by OPTCL

66. Regulation 8.44 of OERC's Transmission Tariff Regulations, 2014 stipulates that "the actual assessment of income tax should take into account benefits of tax holidays and the credit for carry forward losses applicable as per the provisions of the Income Tax, Act 1961 shall be passed on to the consumers". Further, OPTCL has submitted that the actual assessment for FY 2025-26 shall be made only after the end of FY 2025-26. Therefore, OPTCL has projected Income Tax of Rs.10.77 Cr. based on the assessment order for FY 2023-24.

<u>Transmission Tariff/Transmission charges:</u>

Views of Objectors

67. OPTCL has projected a deficit revenue gap of Rs.468.37 Cr. for the FY 2025-26 and proposes an increase in transmission charges to 36.08 paise/unit. Many Objectors argue that this increase is very high and have suggested that the transmission charges should be revised downward based on the energy availability projected by GRIDCO.

68. Considering the transmission charges for the DISCOMs and other LTOA consumers, the petitioner has proposed Transmission charges @ 36.08 P/U for FY 2025-26. This leads to an increase in tariff hike of 12.08 P/U, as compared to 24.00 P/U in the last FY 2024-25. This increase in transmission charges sought is 50% higher compared to last year, and shall impact the financial position of Discoms unless the retail supply tariff is increased proportionately. Therefore, the Commission is requested to balance out the situation so that the interests of all the stakeholders will be safeguarded.

Submissions by OPTCL

69. The ARR projection of Rs.1663.33 Cr. for FY 2025-26 has increased by 2.57% over the projection of FY 2024-25. The Transmission Charge has been arrived at 36.08 paise per unit by dividing the total ARR of OPTCL with the recent realistic MU projections of DISCOMs. This rate will decrease if DISCOMs' drawal increase. Alternatively, OPTCL has proposed to recover the Transmission charges every month, based on the recent realistic MU projections of DISCOMs

<u>Historical liabilities of erstwhile Distribution Companies:</u>

Views of Objectors

70. One of the Objectors has submitted that any attempt to transfer historical liabilities of erstwhile Distribution Companies to successor entities directly contravenes Section 21 of the Electricity Act, 2003. The legislative framework clearly prohibits such transfer of historical liabilities, a position that has been consistently upheld by various State Electricity Regulatory Commissions. This principle formed the cornerstone of the distribution sector restructuring process and was explicitly incorporated in the RFP documents that governed the vesting of erstwhile Discoms into new entities. Therefore, the Objector has prayed before the Commission to take the above into consideration while approving the ARR and True up of the OPTCL so as to ensure the letter and spirit of the Electricity Act, 2003, and the established principles of Balance Sheet segregation

remains intact. This would ensure regulatory consistency and protect the financial viability of the successor entities as envisaged under the Act.

Submissions by OPTCL

71. OPTCL has no comments on the reply submitted by the Objector.

Renovation & Modernisation (R&M):

Views of Objectors

72. One of the Objectors has submitted that OPTCL should provide a detailed list of sub-stations and lines that are outdated and not operational. Additionally, the Objector has inquired about the actions taken by OPTCL for the Renovation and Modernization of these lines and sub-stations.

Submissions by OPTCL

73. At present OPTCL is operating with 197 Nos. of GSS and around 16600.348 Ckt. kms. of EHT lines. Regular maintenance of all the GSS along with the associated lines is carried out by well-experienced staff. Further, time to time augmentation /renovation /modernization of required GSS and upgradation/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 a priority basis for the reduction in Transmission loss and to cater for the load demand reliably. Also, up-gradation and Modernization of Old Grid Substations are being done by replacing obsolete/outdated equipment with the objective of keeping the assets in efficient working condition. So, there are no such GSS & lines that have outlived or are not in a position to work.

Exemption on STU charges for procurement of green power from outside the State:

Views of Objectors

74. Some of the Objectors have submitted that the imposition of 100% of transmission charges on availing green power from outside of the state by the industries is making the cost of power highly uneconomic. Further considering the imposition of emission tariff on imports by the European Union due to the introduction of the Carbon Border Adjust Mechanism (CABM) and the State's limited potential of commercially proven RE sources, the Objectors have prayed before the Commission that the waiver/exemption on STU charges allowed in Odisha RE Policy 2022 for RE projects commissioned within the State should be extended for procurement of green power from outside the State also.

Submissions by OPTCL

75. Industries are already benefiting from the waiver of transmission charges for the procurement of Renewable Energy (RE) power through the CTU network, which places a financial burden on all Designated Interstate Customers (DICs) including GRIDCO in the state of Odisha. Further, the Commission has already facilitated the procurement of RE power from outside the state by applying transmission charges on a scheduled basis, rather than on contracted capacity. This initiative has benefitted industrial consumers procuring RE power.

76. In addition to the above, OPTCL has submitted that it is constructing transmission projects with significant associated costs. Further waivers on transmission charges for industrial consumers could place an additional burden on retail consumers. Therefore, the request of the objectors on waiver/exemption of STU charges for procurement of green power from outside the State should not be approved by the Commission.

<u>Transmission Loss, Energy audits and the standard of performance:</u>

Views of Objectors

77. Some of the Objectors have submitted that, OPTCL should provide the details of the identified areas where loss is maximum so that OPTCL can formulate action plans for loss reduction. OPTCL should inform the methodology adopted to estimate the transmission loss for every year. OPTCL should have undertaken energy audits of lines and substations to know the quantum of transmission loss in the system and the aforesaid energy Audit report should be monitored by the third-party Auditor as appointed by the Commission. Further, some of the Objectors have submitted that OPTCL has proposed the transmission loss arbitrarily, without giving the breakup of the losses in different components of the transmission system, i.e. lines, substations, power transformers, autotransformers, etc., is not appropriate for the S.T.U.

78. Further, some of the Objectors have submitted that, in the neighboring States 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%. Additionally, the transmission losses approved by the respective Electricity Regulatory Commissions for other neighboring states like West Bengal, Madhya Pradesh, Bihar, and Chhattisgarh with similar types of infrastructure are in the range of 2.23% to 3%. Considering the same,

Objectors have proposed to approve the transmission loss of OPTCL at 2.5% instead of OPTCL's proposed transmission loss of 3.05%

79. OPTCL should be directed to consider the meter data to assess the month-wise transmission loss in the intra-state transmission system including losses at different voltage levels (i.e. 132 kV, 220 kV and 400 kV levels).

80. Further, one of the Objectors has submitted that, considering the operating capacity of CGP in Odisha at 9850 MW, the estimated inadvertent injection to the OPTCL grid will be around 985 MU. On accounting this said inadvertent power, the Transmission loss of OPTCL will further reduce. In view of the submission, the Objector has prayed before the Commission to consider the above inadvertent power and accordingly recalculate and approve the transmission loss.

Submissions by OPTCL

81. OPTCL has submitted that 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 loads, 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. Further, OPTCL has submitted that 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 the public. The additional length in EHT lines and Substations in under-loaded areas is also responsible for the increase in transmission loss.

82. Further, citing the example of some States such as Uttar Pradesh (UPPTCL), Gujarat (GETCO), Assam (AEGCL), Rajasthan (RVPN) & Himachal Pradesh (HPPTCL), OPTCL has submitted at all India level, the transmission loss of utilities has consistently exceeded 3.00%. Further, the all-India average transmission loss published by the Grid Controller of India Limited, National Load Despatch Centre, the figure for the period from January 6, 2025, to January 12, 2025, is 4.00%. Additionally, the Central Electricity Authority's General Review 2024, which covers data for FY 2022-23, indicates that the transmission loss in the Eastern Region is 3.37%. In comparison to the aforesaid cases, the current transmission loss level of OPTCL is significantly lower.

83. 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 emerging technologies system like Automation,

load bifurcation, modification in system configuration, procurement of more efficient equipment, Digitalization of grids by using Bay Control Units (BCUs), Protection system improvement using Busbar protection and Event Logger, Conversion of Radial to Ring system, Advanced Metering Infrastructure etc. to bring it to 3.05% by FY 2025-26.

84. Further. OPTCL has differed to the assumption of the Objector that around 985 MU of inadvertent power will be injected into the OPTCL system in a year, considering the CGP capacity of 9850 MW. In this regard, OPTCL has submitted that during the last six months, the total inadvertent power injection to OPTCL is 239.38 MU, which has been already considered while calculating the Transmission loss of 3.09% in form T-6. Hence, Transmission loss as suggested by the Objector is not just and proper. Details of inadvertent power injected by CGPs in FY 2024-25 till November have been given by OPTCL. So, the prayers made by the Objectors to reduce the transmission loss at 2.5% are not based on any justifiable reason and are liable to be rejected. Further, OPTCL has submitted that the Transmission charge is being computed on Open access transactions based on scheduled energy. Hence, OPTCL does not reap any benefit out of inadvertent power.

85. Regarding the Energy Audit, OPTCL has submitted that around 2600 nos. of 0.2s Accuracy Class ABT Energy meters are required for different metering points at all Grid Substations of OPTCL for billing and audit purposes. 538 nos. of meters have been installed by OPTCL at different metering points. 2000 nos. energy meters will be installed at different Grid Substations under the SAMAST Project, out of which 70 nos. meters have already been installed and the installation process of the balance meters is in progress. The installation of energy meters for balance metering points under the SAMAST Project will be completed by 31^{st} October 2025. After installation of the meters, energy audit and calculation of transmission losses of OPTCL on an element-wise basis at different voltage levels will be feasible.

<u>Open Access Charges:</u>

Views of Objectors

86. Some of the Objectors have requested the Commission to direct OPTCL to submit the maximum power handling capability, power flow and % loading of all the 400 kV, 220 kV, 132 kV lines and Power Transformer, Auto Transformer, ICT Transformers. It is also desired that OPTCL should conduct load flow analysis to handle around 2000-3000 MW differential load in the appropriate manner. Once these data are made available, it can be ascertained that the sufficient margin is 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 1/4th of the MTOA and LTOA charges and necessary amendments in the regulations may be made.

Submissions by OPTCL

87. OPTCL has already conducted load flow study considering different load scenarios i.e. summer peak, Winter lean, High hydro, Low Hydro & Solar Peak, in the Revised 14th Intra-state Transmission Plan of Odisha for FY 2022-23 to FY 2026-27, which has been approved by the Commission vide case no. 08/2024. In the aforesaid report, the percentage loading of all Transmission lines, ICT, Auto & Power Transformers till FY 2026-27 have been mentioned. The Transmission infrastructures are created considering the demand and request of the DISCOMs from time to time, after due approval from the Commission through the Transmission Plan. The DISCOMs and other LTA customers are responsible for bearing the full approved ARR of OPTCL. Further, STOA charges are being charged as per the Open Access Regulations, 2020.

Reactive energy charges:

Views of Objectors

88. Some of the Objectors have submitted that the Commission has provisionally approved reactive energy charges @ 3 paise/kVARh and had directed OPTCL to submit the justification of reactive energy charges in consultation with the stakeholders. Considering the above, some of the Objectors have prayed before the Commission to not allow the proposed reactive energy charges for FY 2025-26 and to direct OPTCL to refund the reactive energy charges collected from the last 4 years, if the same required justification has not been submitted by OPTCL.

Submissions by OPTCL

89. 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.

90. Further, 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 the ARR order of OPTCL for FY 2018-19 continue for time being till a final justification is submitted by OPTCL in consultation with the

stakeholders. However, OPTCL has not realized any revenue from Reactive Energy Charges so far. In view of the above, OPTCL has provisionally proposed that 3paise/KVARh as Reactive Energy Charges for FY 2025-26. Hence, the rejection of the proposal of OPTCL with regard to Reactive Energy Charges as suggested by the Objectors is not just and proper.

<u>Execution of the Projects:</u>

Views of Objectors

91. One of the Objectors has highlighted issues with voltage fluctuations and underloading of grid substations, particularly in the Jeypore, Burla, and Bolangir circles and has raised the concern regarding the need for additional grid capacity if existing capacity is underutilized. Further, the Commission may direct OPTCL to continuously monitor the operation of the transmission system, prevent overloading/underloading wherever possible by taking suitable measures and take up innovative action for optimum loading of the existing network for further reduction of loss.

92. Further, it was highlighted that some of the Substations are operating in an underloaded condition because of the absence of downstream infrastructure of DISCOMs. The Commission has already directed OPTCL to take action for a coordinated development of the intra-state network, ISTS and downstream distribution network. The time frame of execution of the transmission system should be discussed with DISCOMs & CTU in order to avoid stranded assets and idle investments.

93. The Commission should direct OPTCL that no transmission system strengthening proposal should be executed without the prior approval of the Commission. OPTCL should submit the comprehensive system study along with requirements as specified in the license conditions of OPTCL and tariff regulations for approval of the Commission before proceeding with the execution of the project. Further, the Commission should direct OPTCL to take up the matter with the Government of Odisha to fund the economically unviable projects and the other projects that are required for the larger interest of the State through grants.

Submissions by OPTCL

94. OPTCL has submitted that it always executes its projects which are either approved in the Business Plan of OPTCL or Intra State Transmission Plan. Subsequently, all the projects of OPTCL are approved in the Intra State Transmission Plan, Business Plan and Investment Proposal. The 14^{th} Intra State Transmission Plan of Odisha is being revisited

considering the load projections of DISCOMs, upcoming industrial/urban growth, and large-scale integration of RE.

95. To prevent overloading, regular system study has been carried out and accordingly, augmentation of the network capacity is taken out as and when required. Priority has been given to use the underloaded network. As directed by the Commission, regular meetings are being conducted with DISCOMs for the creation and timely completion of downstream infrastructure for optimum utilization of transmission networks. New Transmission elements proposed by OPTCL to strengthen state evacuation are deliberated and approved in the CMETS-ER meeting, held on a monthly basis, which are further incorporated in the National Transmission Network.

96. Since the creation of transmission infrastructure requires huge investments, OPTCL always requests the State Government for financial support. The State Govt. has been contributing 100% financial assistance in the form of grant/equity in case of non-remunerative projects and contributing 30% equity support in other cases.

E. OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC) (PARA 97 TO 98)

97. The Commission convened the 37th State Advisory Committee (SAC) meeting on 01.03.2025 at 11:00 A.M. through Virtual Mode (VC). Various issues related to the power sector and the Annual Revenue Requirement of OPTCL, the transmission licensee, were discussed and members made their valuable suggestions on ARR and Tariff proposal of OPTCL. A brief summary of suggestions/views of the members during the meeting is given below:

(a) The concern was raised about the high employee cost of OPTCL and its rising trend. High employee costs in OPTCL might be because of legacy issues and requested the Commission to prepare a roadmap for gradual reduction in the employee cost of OPTCL.

(b) The increase in costs due to inflation would be compensated to some extent through initiatives like digitization, improved efficiency, intelligent trading and the use of improved software.

(c) The conduction of intra-regulatory meetings was suggested to access the expenditure approved for the licensees and also to check if any activity proposed by the licensees is being repeated during approvals.

(d) The transmission loss of 3.05% proposed for FY 2025-26 seems to be on the higher side and it needs to be re-looked by OPTCL through energy audit and 3rd party performance audit to identify the areas where loss is maximum. In the case of OPTCL, the transmission loss varies from 1.67% to 3% on month-to-month basis. Therefore, an optimistic challenge may be given to OPTCL for loss reduction.

(e) OPTCL must facilitate power supply to areas that are assigned as industrial parks by IPICOL and the frequency of GCC meetings must be increased for proper coordination between OPTCL and DISCOMs.

(f) In anticipation of the upcoming Tata Steel plant, the Narendrapur substation was upgraded from 40 MVA to 320 MVA. But the said plant never materialized and OPTCL had to bear a heavy loss. There will be the requirement of huge RE power for Green Ammonia & Green Hydrogen and however, there is no information on whether the new plants coming up at Gopalpur would be having their own RE plant.

(g) Load flow studies should be carried out for all the new projects.

(h) The unresolved issues may be discussed with technical experts to find solutions.

98. In response to various queries of members of SAC, the Director (OPTCL) acknowledged the view about the high manpower cost of the company and said that necessary steps have been taken to streamline it. It was assured by OPTCL that it would prepare a roadmap to resolve all legacy issues & move forward towards optimization and put it before the Commission. Regarding pending Industrial applications in the TPNODL area, necessary actions have already been taken like augmentation of transformers & upgradation of the network. Within a few months, spare power transmission capacity will be available to cope with the growing demand in the northern zone of the state. Addressing the issue of transmission of power from inter-state generating stations, he stated that there has never been an incident when the State has been deprived of power from inter-state generating stations due to transmission constraints. In addition, spare capacity is available which is utilized by the STOA customers. He acknowledged that OPTCL had issue regarding connectivity from the Darlipali Power station to the State network. He informed that in the upcoming Thermal power station project, where GRIDCO has power allocation, lines are being constructed from the plant to the Meramundali-B substation and by this process, the transmission charges of CTU will be avoided. He finally concluded that all the views of the members have been noted and rightful actions would be taken accordingly.

F. VIEWS OF STATE GOVERNMENT (PARA 99)

99. The Department of Energy, Government of Odisha, vide their Letter No.3941 dated 21.03.2025, have communicated their views/suggestions on various issues relating to ARR & Tariff proposal of Transmission & Distribution Licensees and Generators for the FY 2025-26. On the issues regarding transmission tariff setting of OPTCL, the Government of Odisha has agreed to extend the status-quo on the up-valuation of assets till FY 2025-26 as intimated earlier by the Department of Energy, vide their letter No.3333 dated 24.03.2021.

G. ANALYSIS OF PROPOSAL OF OPTCL AND COMMISSION'S VIEWS & ORDER (PARA 100 TO 262)

100. The Commission had notified OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and as per Regulation 2.1 (k), the "Control Period" is defined as a multi-year time period fixed by the Commission, from time to time. As per the above Regulations, the 1st Control Period was from 1st April 2014 to 31st March 2019. After the expiry of 1st control period in the year 2019, the Commission had allowed OPTCL to submit their Business Plan for 2nd control period which the Commission defined as a period starting from 01.04.2019 to 31.03.2024. Accordingly, OPTCL had submitted its Business Plan for the 2nd control period which has been approved by the Commission in their order in Case No. 63/2020 dated 03.11.2021. Further, OPTCL had submitted its Business Plan for the 3rd Control period i.e. from FY 2024-25 to FY 2026-27. Due to some anomalies in the information, the Commission did not approve the same. However, OPTCL has been granted the liberty to file a fresh application of the Business Plan for the 3rd control period from FY 2024-25 to FY 2026-27. In addition to the above, the Commission, vide their order in Case No. 72/2019 exercising power under Regulation 9.1 of OERC's Transmission Tariff Regulations, 2014, had also extended the definition of controllable and uncontrollable cost enumerated in the above Regulations until further order. The Regulations of the Commission remain in force until it is specifically repealed by the Commission. The Regulations empower the Commission to define control periods from time to time.

101. The transmission is often considered as the "backbone" of the electricity delivery system and forms a vital link in the electricity supply chain. The transmission system provides interconnection between the source (electrical energy sources) and consumption (load centres) of electricity. In order to ensure a smooth flow of power from the generating station to the end consumer, the transmission system needs to be expanded, upgraded and

maintained on a regular basis. A reliable and secure transmission system is essential for meeting the growing power demand of DISCOMs, for providing uninterrupted power supply and for meeting contingency conditions as well as for fulfilling customer expectations. OPTCL inherited the transmission network from GRIDCO on 01.04.2005 "as is where is" basis. Over the years, the Commission has approved a significant amount of capital investment proposals for the installation of new Grid Substations, transmission lines, upgradation of transformers, etc. to ensure adequate margin/capacity in the transmission network and allowed required R&M expenses to maintain a healthy transmission system. Additionally, most Renewable Energy generators within the state are being connected to the STU network, which further enhances the intra-state transmission network for smooth flow/evacuation of power. As on 31.03.2024, OPTCL owns 194 Nos. of Grid Sub-stations of different voltage classes having 26268 MVA transformation capacity and EHT transmission lines of 16,508.068 Ckm.

102. The tariff policy notified by the Ministry of Power, Government of India on date 28.01.2016 stipulates the following objectives of the 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.

103. Para 7.2(2) of the 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 be 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 power flow beyond certain level of line loading leads to significantly higher losses, CTU/STU should ensure the upgradation of transmission systems to avoid the situations of overloading.

104. Further, Para 7.3(1) of the Tariff Policy states that 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 centers.

105. It is observed that during FY 2023-24, the peak demand touched 6432 MW on dt.27.08.2023 and the minimum demand was 4072 MW on dt.01.01.2024. The peak demand in 2023-24 is about 8 MW more than the peak demand experienced during the previous year 2022-23 (6424 MW). The total energy drawal for the State Consumption is about 36556.82 MU in FY 2023-24 against 32342.77 MU in 2022-23, which indicates an increase in electricity consumption of around 4214.05 MU (13.02 %) in the State. The Maximum energy (3237 MU) and Minimum energy (2335 MU) requirements occurred in the month of May and December respectively.

Computation of Transmission Loss for FY 2025-26

106. 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 basing on the principle of 'As the System Operates'.

107. OPTCL has submitted that the transmission loss is purely a technical loss and dependent upon the voltage level of transmission, the real-time injection of power by a number of generators, system configuration and power flow requirements at different load centres. It depends on many parameters/factors such as distance and mismatch between generation and load centres, types of loads, reactive power compensation, voltage profile, seasonal variation of demand load etc. Transmission loss is a technical loss, which is inevitable /unavoidable, and limited scope is available to reduce losses. Thus, OPTCL does not have much control over the same at any point of time. OPTCL, in the interest of the public, has constructed grid substations and transmission lines in remote and deprived areas of the State with financial support from Central & State Governments. Expansion of the 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 the increase in transmission loss. The underloading of EHT lines and substations in remote areas is also responsible for over-voltage problems at the EHT level. The actual transmission loss of OPTCL was within the margin allowed by the Commission up to FY 2017-18. The actual transmission loss in the OPTCL's transmission system for FY 2018-19, FY 2019-20, FY 2021-22, FY 2022-23 & FY 2023-24 was 3.28%, 3.25 %, 3.22%, 3.18%, 3.15% & 3.11 % respectively as against Commission's approval of 3.00%.

108. The approved and actual transmission loss for the year 2014-15 to 2024-25 is furnished in the Table below:

Table-11

Year	OERC Approval (%)	Actual (%)
2014-15	3.75%	3.73%
2015-16	3.75%	3.67%
2016-17	3.70%	3.58%
2017-18	3.50%	3.34%
2018-19	3.00%	3.28%
2019-20	3.00%	3.25%
2020-21	3.00%	3.22%
2021-22	3.00%	3.18%
2022-23	3.00%	3.15%
2023-24	3.00%	3.11%
2024-25	3.00%	3.09% (1st six months)

109. 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 for more transmission loss is because of the higher percentage of lower voltage (132 kV or below) in the OPTCL transmission system and underloading of the Grid Sub-station. OPTCL further submitted that the actual transmission loss of similar types of utilities in India such as UPPCL (Uttar Pradesh), (GETCO) Gujarat, (AEGCL) Assam, (RVPN) Rajasthan, and (HPPTCL) Himachal Pradesh for the FY 2023-24 is also more than 3%. OPTCL has undertaken various loss reduction measures by implementing emerging technologies like system Automation, load bifurcation, modification in system configuration, procurement of more efficient equipment, Digitalization of grids by using SAS, Protection system improvement using Busbar protection and Event Logger, Conversion of Radial to Ring system, Advanced Metering Infrastructure, upgradation to higher voltage level, use of low loss conductor, conversion of S/C line to D/C line, augmentation of Transformers, etc. In view of this trend of transmission loss level and adoption of various loss reduction strategies, OPTCL has proposed 3.05% transmission loss during the FY 2025-26.

110. It is observed that OPTCL has not achieved the loss target approved by the Commission for FY 2018-19, FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 & FY 2023-24. OPTCL in its submission has submitted that the approved loss level could not be achieved primarily due to the addition of infrastructure and various system strengthening works in remote and deprived areas of the State and due to higher percentage of lower voltage (132 kV or below) in the transmission system. However, in neighbouring States like Andhra Pradesh, where a similar type of network configuration exists, APTransco has managed to maintain transmission losses below 3% since FY 2019-20 to the present.

Further, the transmission losses approved by the respective Electricity Regulatory Commissions for other neighboring states like West Bengal, Madhya Pradesh, Bihar, and Chhattisgarh with similar types of infrastructure are in the range of 2.23% to 3%. It is the responsibility of OPTCL to reduce its transmission loss in a time-bound manner. 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, utilization of energy-efficient equipment etc., and considering the submission of Objectors as well as OPTCL, the Commission approves **3.00%** as transmission loss for the FY 2025-26 which is same as that of the previous year.

111. The Commission had directed OPTCL to continuously monitor the operation of the transmission system, prevent overloading/underloading wherever possible by taking suitable measures, and take up innovative action to optimize the loading of the existing network for further reduction of loss. In compliance with the above, OPTCL has submitted that they have already implemented the updated / modern technology such as the use of Substation Automation System (SAS), Advanced Fault Analysis System (AFAS), Flexible AC Transmission System (FACTS), SCADA system and pilot drone monitoring etc. for better monitoring & controlling of Transmission Elements as well as to increase the power transfer capability, stability and controllability of AC transmission networks which increases the transmission efficiency also. Further, OPTCL has also submitted that it has already implemented the GPS-based line patrolling system in the 400 kV Meramundali-Lapanga-IB thermal line, 400 kV Meramundali-Mendhasal line, 400 kV Meramundali-New Duburi line on Pilot basis successfully and subsequently going to implement the system throughout all the transmission lines strategically. Considering the submission of OPTCL, the Commission directs OPTCL to expedite the process of implementing GPS-based line patrolling in all transmission lines and submit the timeline to complete the same.

112. Transmission loss also depends on the voltage level of power transmission. It is observed that transmission assets (No. of substations & associated transmission lines) at 132 kV level have increased over the years, which forms the backbone of Odisha's transmission system. OPTCL was advised to make their plan to expand the transmission network at the next higher voltage level i.e. 220 kV level to handle more power with reduced loss and decrease the overall transmission loss of the system. In this regard, OPTCL has submitted that, considering the DISCOM's load requirement along with the proposal for installation of new Transmission elements at different voltage levels (400kV, 220kV, 132kV) in & around the State, OPTCL follows the criteria for such additions as per CEA guide line

and finalize the voltage level (whether 400 kV/220 kV/132 kV) for installation of new GSS considering the availability of suitable corridor & possible connectivity to the selected site of the proposed GSS during the transmission planning of OPTCL system.

113. The Commission had directed OPTCL to take the help of emerging technology to carry out an energy audit of the transmission system to identify areas where loss is more and to assess the losses in various transmission elements of Grid Sub-stations and Transmission lines and plan accordingly to undertake various remedial measures to reduce transmission loss further. In compliance with the above, OPTCL has submitted that efforts are underway to determine the transmission loss at different voltage levels of OPTCL's transmission network which involves voluminous data handling all through the manual process. In order to explore a rational approach toward a realistic, time-bound solution, provisions have been outlined in the ongoing SAMAST project. The installation of about 2000 Nos. of additional (70 Nos. already installed) energy meters at different Grid substations under the SAMAST Project will be completed by 31st October 2025. Thereby, about 2600 Nos. of meters would be installed in the system to cover all Grid Substations. After installation of the meters, energy audit and calculation of transmission losses of OPTCL on an element-wise basis at different voltage levels can be accurately addressed. Considering the above, the Commission directs OPTCL to expedite the SAMAST project work for timely completion by October 2025 and to submit the transmission loss on an element-wise basis at different voltage levels along with necessary remedial measures planned/taken to reduce the same. According to the OERC (Fees & Charges of SLDC and other related matters) Regulation, 2010, the calculation of transmission loss is one of the market operation functions of SLDC. Therefore, OPTCL, in consultation with SLDC, is required to submit a report on the transmission loss of OPTCL. This report should include the Transmission loss at the Substations and transmission lines at different voltage levels of OPTCL's transmission network. The Commission further directs that the energy accounts (weekly/monthly settlements) details of all the transmission system users, and the month-wise transmission system availability & transmission loss as certified by SLDC should be placed on its website by the end of the following month.

Execution of Transmission Projects

114. OPTCL being the STU is mandated to ensure the development of an efficient, coordinated and economical transmission network for the smooth flow of power from generating stations to load centers including remote tribal and other underdeveloped

areas. The transmission system connects the generation source with the distribution system and plays an important role in extending 24/7 quality power to consumers.

115. Transmission planning is an ongoing process of assessing the electric system and its ability to deliver electricity reliably, and efficiently to customers and recommending system reinforcements to meet forecasted load demand. As per 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 the 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 up to 132/33 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, and operation feedback. The Resource Adequacy Planning framework mandates the planning of generation resources on a long-term basis for a period of 10 years. Accordingly, transmission system planning needs to match with Generation Adequacy Planning to strengthen the transmission network for smooth flow of power from generating stations to load centres.

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

a) List of existing lines getting overloaded at 132 kV, 220 kV & 400 kV level
b) List of existing sub-stations with overloaded transformers
c) Requirement of additional lines & sub-stations
d) Requirement of compensation to address over-voltage problem
e) Technical loss etc.

116. The revised 14th inter-state transmission system plan (FY 2022-23 to FY 2026-27) submitted by OPTCL has been in principle approved based on the load projections of DISCOMs, upcoming industrial/urban growth, large-scale integration of RE and the proposed green hydrogen project in Paradeep & Gopalpur area and expected generation addition during that time frame as per the system study report. OPTCL should plan the expansion of the transmission network based on system study for a longer time frame (not less than 10 years) considering integration of large-scale RE (Solar/ wind/PSP) generation and expected future load growth and taking into account the operation

feedback of SLDC to avoid under-utilization of transmission assets ensuring no underloading of transmission lines and optimum loadings on substations to minimize system losses and overall transmission cost, ultimately reducing tariff burden on consumers.

117. Further, OPTCL has to develop self-sufficiency in its system study group for review and planning of the transmission system on a rolling basis, which is the need of hours considering the use of Intra-state transmission Systems through General Network Access in the near future. DPR is to be prepared based on the above studies covering the required augmentation/ strengthening of existing transmission infrastructure and requirement of additional infrastructure (new sub-station and lines at 765/400kV/220kV/132kV level) to meet the projected demand in different time frames. Thereafter, OPTCL should formulate the stage-wise implementation plan accordingly.

118. OPTCL has submitted that the Corporate Planning wing regularly utilizes the PSSE software from Siemens and the MI-Power software from PRDC to perform load flow, short circuit and contingency studies in-house. Further, OPTCL has submitted that it has initiated the discussion with PRDC to set up an MI-Power simulation lab at the Power Training Centre, Chandaka for regular training of OPTCL engineers. Considering the above, the Commission directs OPTCL to submit the status of the simulation lab at the Power Training Centre.

119. The Commission believes that a robust and reliable transmission network is essential for the overall development of the power sector in the state, aiding in last-mile connectivity and achieving the ultimate objective of 24x7 quality power to all. Furthermore, with the push from the Government of India and the State Government's Renewable Policy 2022 for large-scale integration of renewable energy, a strong transmission infrastructure is imperative to facilitate the evacuation of such renewable power. The Commission opined that OPTCL, as the STU, is responsible for the integrated, planned, and coordinated development of the state's transmission network. Considering the various load scenarios that impact loss levels and consequently sales, OPTCL is directed to approach the Commission with a Detailed Project Report (DPR) alongside a long-term transmission system study report (taking into account various generation and load scenarios during peak and off-peak periods) in accordance with the Licence Conditions, Tariff Regulations, and Transmission Planning Criteria-2023 of the CEA, as well as a cost-benefit analysis, before proceeding with capital investments.

120. The Commission reiterated that at the time of planning a new substation, it is important to consider the expected load growth in consultation with DISCOMs and the amount of power that needs to be handled in order to determine the appropriate voltage level. The new substations need to have (N-1) contingency for interconnecting lines & transformers and should have enough space to accommodate future expansion i.e. addition of bays, transformation capacity and reactive compensation, etc. to prevent the need of another substation in the nearby area. Additionally, OPTCL should regularly coordinate with CTU and DISCOMs for the execution of the intra-state transmission system so that upstream and downstream infrastructures are developed in matching time frames for smooth flow of power and to avoid stranding & underutilization of assets created by OPTCL. The development of transmission and distribution systems should be taken up in a coordinated manner adhering to matching timelines (a) for optimum use of transmission and distribution assets (b) to address low voltage issues and (c) to meet load growth. In no case, the transmission assets should remain idle because of no matching development of the downstream network by DISCOMs. Therefore, the Commission directs OPTCL to hold monthly coordination meetings with DISCOMs to ensure the smooth operation of the power sector and optimum utilization of the transmission assets and the minutes of the same meetings should be furnished to the OERC.

121. The Commission feels that one of the reasons for the increase in ARR of OPTCL year after year is the high capital investment in the creation of a lot of stranded/under-utilized assets. The creation of more under-utilized transmission assets adds to increase in fault level, losses, O&M expenses of transmission elements and ultimately increases the burden on consumers. The commission vide its investment proposal orders and ARR order, has been directing OPTCL repeatedly not to execute any project (>10 Cr.) without the approval of the Commission. However, it was found that OPTCL has started the execution of some of the projects without the approval of the Commission. In view of the above, the Commission directs OPTCL that no transmission system strengthening and expansion project shall be executed without prior approval of the Commission. Further, even the projects that are being executed under the 100% grant should also be approved by the Commission as such projects have an impact on ARR due to O&M expenses. Observing the underutilisation of transmission assets, the Commission directs OPTCL to provide the following information:

a) Actual load on each existing Grid Substation and expected load growth in the next 10-year time frame.

b) List of 132/33 kV or 220/33 kV Substations without the downstream load because of the absence of Distribution infrastructure.

c) Number of Transmission lines at different voltage levels (400 kV, 220 kV and 132 kV) with the percentage of loadings with respect to rated capacity.

122. The Commission observes that currently there are 21 Nos of projects that have not been completed as per the scheduled date of completion and are being substantially delayed. The details are given below:

Table -12
Status of Ongoing Projects

Sl. No.	Name of the Project	Scheduled date of completion	% of Progress	Time Overrun (Months)
1	132kV DC line from **Boudh to Phulbani** with associated bay extension work at both ends.	03/2018	85%	**83**
2	2x20MVA, 220/33kV S/S at **Baliguda** and 220kV **Kesinga- Baliguda** DC line & 220kV bay extn. at **Kesinga**	06/2017	S/S-95% Line-65%	**92**
3	Installation of 3rd ICT with 400kV & 220kV bay extension at **New Duburi**	06/2018	90%	**80**
4	2x20 MVA, 220/33kV S/S at **Dasapalla** and associated LILO line (**JICA**)	01/2020	S/S-90% Line-90%	**61**
5	2x160MVA + 1x20MVA, 220/132/33kV S/S at **Kiakata** and associated 220kV & 132kV lines **(JICA)**	01/2020	S/S-95% Line- 132kV: 93% 220kV: 70%	**61**
6	132kV D/C line from Parlakhemundi **to R.Udayagiri**.	03/2020	85%	**59**
7	**Diversion of 400kV & 220kV** lines with 220kV LILO arrangement for connectivity with 400/220kV GIS at **Meramundali-B**.	03/2020	75%	**59**
8	2X160MVA 220/132kV & 2X63MVA 132/33kV, 220/132/33 kV GIS at **Balianta (Benupur)**, BBSR and associated line	09/2020	S/S-70% Line:90%	**53**
9	2X20MVA, 132/33kV Grid S/S **Lamtaput** with SAS and its associated 132kV LILO line.	12/2020	S/S-93% Line-100%	**50**
10	2X63MVA, 132/33kV GIS at **Satyanagar**, BBSR (**SCRIPS**)	02/2021	Satyanagar S/S-5% Badagada S/S-NIL UG-70%	**48**
11	2X63MVA, 132/33kV GIS at **Badagada**, BBSR (**SCRIPS**)	02/2021		
12	220kV LILO line from one circuit of existing 220kV **TTPS-JODA** D/C	02/2021	60%	**48**

Sl. No.	Name of the Project	Scheduled date of completion	% of Progress	Time Overrun (Months)
	Line (Circuit-II) to 220/33kV GIS Substation, **Keonjhar**			
13	132kV DC line from 220/132/33kV S/S **Baner (Jaipatna)** to 132/33kV S/S at **Junagarh** along with associated bay extension work at **Jaipatna & Junagarh** S/S.	08/2021	50%	**42**
14	Pkg-I: GSS 2x500MVA, 400/220/33kV GIS at **Ersama, Paradeep**. Pkg-II: Associated lines Pkg-III: Associated lines	Pkg I : 12/2022	50%	**26**
		Pkg II : 12/2023	15%	**14**
		Pkg III: 12/2023	40%	**14**
15	2x20MVA,132/33kV Grid S/S at **Tarbha** with associated 132kV line.	06/2023	S/S: 75% Line: 60%	**20**
16	2x20MVA,132/33kV Grid S/S at **Athamalik** with associated 132kV line.	10/2024	S/S: 65% Line: 17%	**04**
17	2x20MVA,132/33kV Grid S/S at **Jharbandh** with associated 132kV line.	11/2024	S/S: 30%	**03**
18	132 kV LILO of one circuit of **Budhipadar** to **Sundergarh** line at 220/132/33 kV S/S, **Bamra**	11/2024	40%	**03**
19	132 kV SC line from **Patnagarh** S/S to **Kantabhanji** S/S	11/2024	15%	**03**
20	132 kV SC line from **Padampur** S/S to **Ghens** S/S	11/2024	50%	**03**
21	132kV DC line between existing 220/132/33 kV S/S at **Turumunga** and 132/33kV S/S at **Dhenkikote**	02/2025	15%	**01**

123. The above substantial delay in the commissioning of transmission projects in remote areas like Baliguda, Paralakhemundi, Kiakata, Daspalla, Lamtaput, Jharbandh has become a matter of concern to mitigate the low voltage issues. 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 & time overrun and ultimate tariff burden to the consumers. OPTCL should give more emphasis on Project management and monitoring which is one of the most important aspects of project execution on schedule with control on cost overrun. The project management should start from the beginning of the project concept provided with a detailed Master Network incorporating all the activities involved and the time for completion of each activity. Project monitoring (financial as well as physical progress) is to be regularly carried out

by a dedicated cell of OPTCL through review meetings and status reports are to be put up to the management. In the review meetings, OPTCL should identify various bottlenecks or constraints that hinder the execution of transmission projects. These issues should be resolved at the earliest to avoid any delays in the completion of the projects. Delay in execution of the projects leads to cost and time overruns, which cause an unnecessary burden on the consumers of the State. Therefore, the Commission directs OPTCL to submit the cost overrun due to delays in the execution of projects. The time and cost overrun are an inefficiency in the Project management & Monitoring and control of the expenditure of OPTCL which must be curbed.

124. OPTCL has to prepare manuals covering all areas of site construction activities to ensure that uniform approaches in various site activities are followed by site staff and contractors. These manuals should be well coordinated with the provisions of specification and field quality plans.

125. The intra-state transmission system has a major share in the transmission sector in the country. Adoption of Tariff Based Competitive Bidding (TBCB) in the development of intra-state transmission systems can effectively reduce the burden on State Governments' finances as well as reduce tariffs of intra-state transmission systems, leading to consumer benefit. The Commission has published the OERC (Development of Intra-state Transmission Projects through Tariff Based Competitive Bidding in the state of Odisha) Order, 2022 for the execution of transmission projects through the TBCB process. In this regard, OPTCL has intimated that they have already initiated for execution of one no. 400/220/132/33KV transmission project at Joda/Barbil under TBCB. M/s PFC Consulting has been appointed as the BPC for the project. The Request for Proposal (RFP) document for the project has been finalized and floated. The Cost Committee, Bid Opening Committee & Bid Evaluation Committee have been formed by the GoO. The Transmission Service Agreement (TSA) for the project is currently under scrutiny. Further, in view of the recently approved revised 14th Transmission plan, OPTCL is directed to submit an action taken report towards execution of new transmission projects under TBCB/ cost plus basis by 15th May 2025.

126. OPTCL has submitted that it has standardized the specifications for Transmission lines towers/Steel poles, power transformers, switchgear, Surge Arrester, CT, PT/CVT, conductor, insulators, firefighting systems, lighting systems, AC/DC systems, etc. and also incorporating continuous improvements in technical specifications as and when found out for further refinement. Considering the above, the Commission directs OPTCL to prepare the DPR based on the Standardisation of the maximum MVA capacity of the

sub-station, rating of the Power Transformer including the foundation of the transformer, (N-1) contingency criteria for lines and transformers, maximum line length & the power flow per circuit in the lines under different configuration, span length overhead lines, size of the conductor, Rating of Switchgears, rating of Shunt Reactor, etc. while submitting the same for investment approval of the transmission projects.

127. The transmission asset mapping is essential for an efficient way of monitoring & maintaining the existing transmission assets for healthy operation. OPTCL has submitted that 155 Nos. of Sub-stations, 33046 Nos. of EHT Towers & 9290.44 route km. transmission assets have already been mapped to the GIS portal and the balance transmissions assets mapping of 42 Nos. of Sub-stations, 5058 Nos. of EHT Towers & 1300 route km. are under progress. Considering the above, the Commission directs OPTCL to complete the balance mapping within a specified time and furnish a report on the effective utilization of the above assets mapped to the GIS portal on day-to-day monitoring & maintenance of the assets.

128. The O&M of substations and switchgear are pivotal for ensuring the reliability, efficiency and longevity of power systems. By transitioning from reactive to proactive maintenance strategies, OPTCL can significantly reduce unplanned downtime, optimize resource utilization and extend the lifespan of critical assets. OPTCL has intimated that they are using modern diagnostic tools for monitoring the healthiness of transmission elements to minimize outage of transmission assets and ensure reliability & availability of transmission systems for uninterrupted power supply to the ultimate consumer. Further, OPTCL is advised to prepare a comprehensive condition-based maintenance schedule for all the equipment provided in the switchyard to assess the condition of the equipment & carry out maintenance as required and integrate the same with their ERP/SAP system for monitoring the scheduled tests to be carried out for each equipment.

129. OPTCL should establish independent testing laboratories accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) for testing relays, meters, transformer oil, etc. to cater to its own needs and other organizations.

130. Odisha is a cyclone-prone area and the transmission & distribution network along the coastline is being affected very frequently because of cyclones. 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. OPTCL had directed to keep provision of adequate spares, Emergency Restoration System (ERS) and mobile sub-stations should be made in line with CEA guidelines/regulations for faster

restoration of the system and to meet the contingency situation during the cyclone. In the above context, OPTCL has submitted that they have already started implementing the transmission tower designs based on Wind Zone-VI, making it more resilient to Cyclones. Further, OPTCL has already created material bank of critical components like ERS towers, spare transformers of various MVA ratings, EHT conductors, insulators, DG Sets & De-watering pumps and other critical transmission elements for quick post-disaster restoration only. These critical components are stored at different accessible locations of OPTCL under the DRC (Disaster Response Centre) scheme. The Government of Odisha-funded Schemes like the "Disaster Resilient Power System" (DRPS) and "Disaster Response Centre" (DRC) are being implemented by OPTCL to meet the natural calamities. Further, OPTCL has sought Government assistance under Disaster Resilient Power System phase-II for the UG cabling as well as strengthening of a few existing overhead lines at certain selected places in the Coastline area and also 33 kV truck-mounted mobile Sub-station etc. to be established in & around the cyclone-prone districts. Considering the above, the Commission directs OPTCL to submit a detailed document on their Cyclone Mitigation Plan along with the provision of adequate spares, and mobile sub-station for faster restoration of the system and to meet the contingency situation during cyclone.

131. It is observed that in the transmission system of OPTCL, about 61 Nos. of Grid Substations and 100 Nos. of lines have been completed the lifespan of 25 years and 35 years respectively. OPTCL has submitted that the aforesaid Grid Sub-station and EHT lines are still being kept in service by regularly monitoring the condition of equipment and replacing the defective/ outdated items based on test reports. As a result, the equipment is either new or has a useful remaining life. The Substation control room building and other civil infrastructures are repaired/ maintained so that all facilities remain in good condition. Further, OPTCL has initiated the use of 400 kV, 220 kV & 132 kV multi-circuit & multi-voltage compact transmission lines, insulated cross arms, mono poles, HTLS conductors, etc. to optimize RoW and increase power flow. Considering the above initiative by OPTCL, the Commission directs to carry out RLA study of major equipment and plan accordingly for the replacement of such equipment. Further, to extend the life of a unit of the transmission system beyond its useful life, OPTCL should pursue Renovation and Modernization (R&M) instead of piecemeal repairs and replacements. Further, the Renovation and Modernization (R&M) works should be done as per the provisions of the Regulations.

132. Regarding the Cyber Security audit, OPTCL has submitted that the work order towards implementation of the Information Security and Management System (ISMS) as per ISO 27001:2022 standard in Information Technology (IT) & Operation Technology (OT) infrastructure of OPTCL was awarded to M/s KPMG Assurance and Consulting Service LLP on March 2024. The Vulnerability Assessment and Penetration Testing (VAPT) audit of the website, webmail applications of OPTCL and the primary Data Center of OPTCL was completed in June 2024. However, the VAPT audit of the grid infrastructure of OPTCL is still pending. Further, OPTCL has submitted that all the advisories from CERT-In, CERT-GO & CSK (Cyber Swachhata Kendra) have been compiled for this period and the other ISMS audit activities are in process. Considering the above requirement, OPTCL is directed to complete the balance works and implement regular cyber security audits and other proactive steps to prevent the possibility of Cyber intrusion attempts and security of the transmission system.

133. OPTCL has submitted that it forms different internal audit groups periodically to conduct audits of the relay/protection system within the OPTCL network for efficient and effective operation. Additionally, when necessary, OPTCL seeks assistance from the protection sub-committee of the Eastern Region Power Committee (ERPC) and the Central Power Research Institute (CPRI) to audit the relay/protection system of the transmission system within the state. According to the Minutes of the 140th Protection Coordination Sub-committee (PCC) meeting of ERPC held on 24.10.2024, a list of critical substations of OPTCL has been identified for a third-party protection audit. Moreover, OPTCL has indicated that, as advised by the PCC, it will soon submit its third-party protection audit plan to the ERPC to carry out a protection audit either through an ERPC-coordinated third-party audit or by third-party designated agencies. In light of the above, the Commission directs OPTCL to expedite the process, complete the third-party audit and a copy of the report to be submitted to the Commissionon the deficiencies observed by the protection audit and the corrective measures taken by OPTCL based on the recommendation of the audit team. Further, in line with the above, the Commission directs OPTCL to submit the action taken report for the condition assessment of the earthing system of grid substations and transmission line towers.

134. OPTCL has submitted that they have already signed an MoU with POWERGRID on 29.09.2022 for the proposed State Transmission Assets Management System (STAMS) Project. As per the MoU, PGCIL has consented to provide consultancy services for setting up STAMS on a cost-plus basis. However, the source of funding for the project is yet to be finalized. Considering the present, the Commission directs OPTCL to seek prior

approval from the Commission through an Investment Proposal before incurring any expenses, once the source of funding is finalized. The proposal must include its benefit in terms of ease of operation and reduction of manpower and other cost. OPTCL is further directed to submit a report on manpower planning of STU consequential to the implementation of STAMS.

135. Electrical safety hazards are increasingly posing risks to people and property in the form of shocks, injury, fire, and explosion leading to fatal/non-fatal accidents. OPTCL submitted that there was no accident or near miss accident in the OPTCL work field during last year i.e. 01.04.2023 to 31.03.2024. The Safety department of OPTCL has prepared a comprehensive audit system for operating grid substations and transmission lines as well as the construction sites. The availability and use of Safety Gadgets are being enforced and meticulously followed up, regular meetings and sensitization programs are also being held in all work sites. OPTCL has its own safety manual as well as O&M and Construction manuals and Zone heads are being regularly informed to ensure its implementation. All Engineers and staff are being regularly trained through refresher courses at least once in a year apart from orientation programs for newly joined Engineers and Technicians. Engineers and Technicians are also being trained in-house and sent out for external training in ESIC, PMI Noida, CBIP and other such programs. Safety weeks are also being observed twice in a year in all worksites and offices for sensitization and observation of safety practices. OPTCL already uses Safety harnesses, safety helmets, boots, and gloves while performing maintenance activities at high altitudes. As advised, OPTCL has also initiated the process of acquiring elevated platforms and T&P for live line maintenance. Further, OPTCL has also submitted that, Engineers and Technicians shall be sent to the Hotline training centre, NPTI Bangalore.

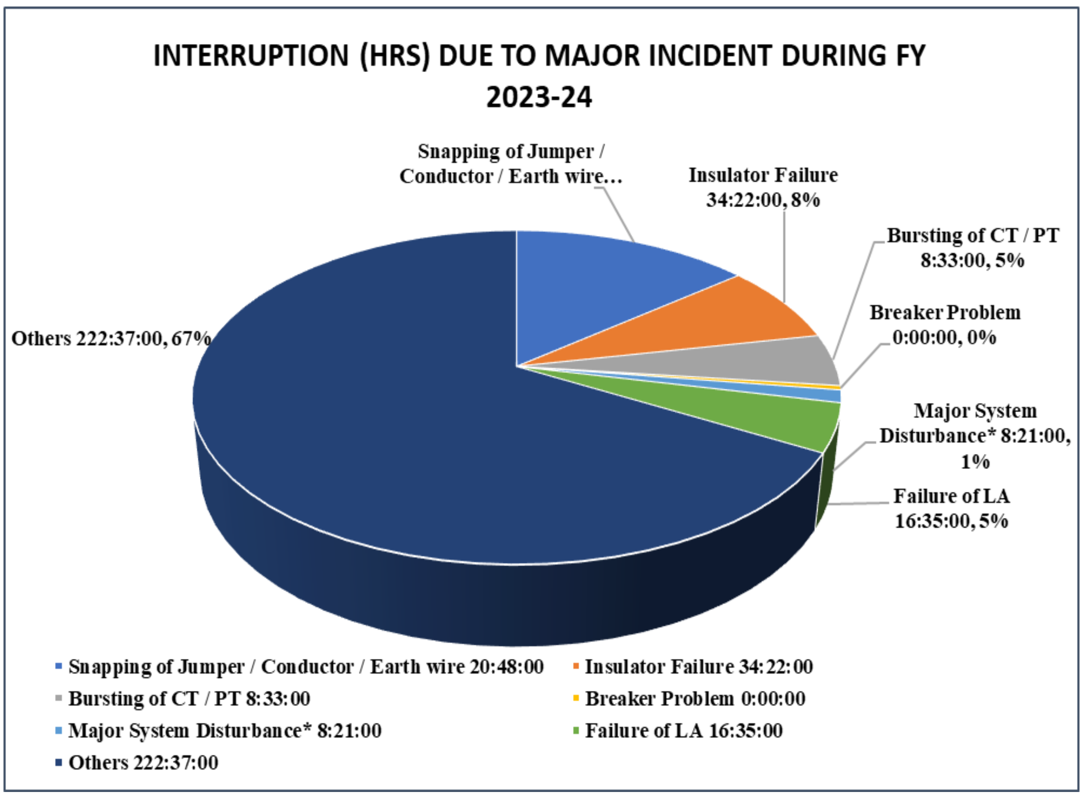
System Interruptions due to Major Incident and Voltage Profile:

136. OPTCL's system experienced 311.16 Hours of power interruption during the FY 2023-24 due to failure/ outage of various transmission system elements, i.e., on account of conductor/jumper/earth wire snapping, insulator failure, bursting of Current Transformer/ Potential Transformer, failure of Lightening Arrester and other major system disturbances (large command area affected due to outage of transmission lines and generators). However, OPTCL has claimed that it has arranged to maintain the power supply (without resorting to total power failure due to the non-availability of transmission capacity) of other nearby transmission facilities. OPTCL has claimed that the rescheduling of Generation due to transmission constraint is 'NIL'. However, there were 14.58 Hours of load restriction imposed in the State during FY 2023-24 on a rotation

basis to curtail demand due to the non-availability of generation/ failure of generating stations and transmission capacity. Further, OPTCL claimed that there was no blackout experienced in the State during FY 2023-24. The duration of interruption in the year is given in the Table below:

Table - 13
Interruption due to Major Incident

Incident	Duration of Interruption	No. of Interruption	Percentage
Snapping of Jumper / Conductor / Earth wire	20:48:00	70	14.14%
Insulator Failure	34:22:00	38	7.68%
Bursting of CT / PT	8:33:00	25	5.05%
Breaker Problem	0:00:00	2	0.40%
Major System Disturbance*	8:21:00	6	1.21%
Failure of LA	16:35:00	23	4.65%
Others	222:37:00	331	66.87%
Total	311:16:00	495	100.00%
The duration of interruption indicated above is the sum total of interruptions that occurred in different areas(S/s) during the year. However, there was no total blackout experienced for the State during the year 2023-24.			



137. The EHT voltage, as per Regulations 3(1)(b) of Central Electricity Authority (Grid Standards) Regulations, 2010 should be in the range of 122-145 kV at 132 kV level, 198-245 kV at 220 kV level and 380-420 kV at 400 kV level. As reported, at 132 kV level,

OPTCL had experienced lower voltage beyond the permissible limit at 11 Nos. Grid Substations. However, the voltage at the Narendrapur and Therubali Substations had marginally gone beyond 145 kV. The voltage profile at 220 kV level was quite satisfactory except at the Meramundali Grid Substation where the voltage (197.22 kV) had marginally gone below the permissible limits. Therefore, the OLTC of the power transformers should be in healthy condition and should be operated on auto mode to maintain the voltage within the permissible limits in addition to other measures including reactive compensation. Further, OPTCL should carry out a reactive compensation study for better voltage control and reliable operation of its transmission system. Further, the reactive load of DISCOMs is to be monitored regularly and OPTCL shall take up the matter with DISCOMs for providing adequate compensation in the distribution system as remedial measures and required system studies may also be carried out for advising DISCOMs to resolve such issues.

138. It is observed from the above System Interruptions Table that the maximum number of interruptions and duration of interruptions are mainly on account of conductor/jumper/earth wire snapping, insulator failure and others which are contributed by the transmission lines. The cause of such occurrences needs to be analysed and any actions taken/required to be taken to avoid repetition of such incidents may be intimated to the Commission. Therefore, Proper maintenance of transmission lines helps to reduce scheduled outages and increase the stability and reliability of the power system. Systematic and regular maintenance work is a prerequisite for a healthy power system. In order to avoid any unforeseen, it is necessary to have transmission line patrolling protocol/ guidelines which shall also take into account the terrain, forest cover and reach in that area and ensure regular monitoring as per requirement in that area to ensure efficient operation. Hence, OPTCL is directed to chalk out a detailed schedule of patrolling for each line by various levels (From work man to Executive). The person carrying out patrolling has to check various items as per the standard checklist and indicate the same in the format. These checks, the next level person verifies, when he goes patrolling.

139. Power quality is vital for electrical system dependability and efficiency. Poor power quality management may cause energy losses, equipment failures, and grid instability. Power quality is affected by harmonic distortions, voltage variations, and transient disturbances. Further, variability from renewable energy sources integrated with the grids may worsen power quality issues if not properly monitored and handled. Thus, in order to tackle these elements, OPTCL should explore for installation of power quality meter to

collect proper data as per the mandate of CEA regulation in consultation with DISCOMs and all Bulk Consumers connected with the Transmission system. Further, 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 the replacement of reactive compensation devices (like line reactors, bus reactors, STATCOM etc.) at suitable locations for better voltage control and reliable operation of its transmission system. The reactive load of DISCOMs is to be monitored regularly and OPTCL should take up the matter with DISCOMs to provide adequate compensation in the distribution system as remedial measures and required system studies may also be carried out for advising DISCOMs to resolve such issues.

140. 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 timeline.

141. OPTCL has submitted that the SLDC publishes monthly, quarterly and annual reports on its website which include details of the failure of equipment including the Transformer. It is observed that even though there were substantial no. of failures of CTs, PTs/CVTs, LAs and towers (400 kV, 220 kV and 132 kV), the said report lacks event-wise failure analysis report and corrective actions taken by OPTCL. Therefore, OPTCL is directed to submit a report to SLDC/CEA/ERPC on the failure of major equipment and tower collapse along with their failure analysis report and corrective actions taken to avoid the recurrence of the same. On a case-to-case basis, OPTCL may appoint a group of experts for investigation and analysis and the representatives of CEA and manufacturers may also be invited to participate in such analysis. The recommendations of the expert committee accepted by OPTCL shall be implemented and circulated to all within the organisation to prevent the recurrence of similar failures.

142. Even though OPTCL has claimed that there was no blackout experienced in the State during the FY 2023-24, there were incidents of total failure of grid Substation(s) due to cascade tripping and making blackout of a major part of that feeding system. Bringing back the normal operation of the grid substations as quickly as possible requires coordination with SLDC. The cause of such occurrences needs to be analysed and any

actions taken/required to be taken to avoid repetition of such incidents may be intimated to the Commission.

143. OPTCL should explore to adopt Reliability Centred Maintenance (RCM) to improve maintenance and reliability and to minimize equipment life-cycle costs and risks. This will improve reliability and availability of the system.

144. OPTCL has submitted that OHPC has already taken steps for the development of Pumped Storage Plants at Upper Indravati (600 MW), Upper Kolab (600 MW) and Balimela (500 MW) which are expected to be operational from 2030-31 onwards and will utilise excess Solar generation during solar hours which could be utilized during night time to meet peak demand. Further, OPTCL has submitted that a proposal of 200MW x 4 hr = 800MWhr of BESS is actively being considered by GRIDCO. Considering the above, the Commission directs OPTCL to evaluate the adequacy and availability of transmission systems for the evacuation of power from the proposed Pumped Storage Plants & BESS which are expected to be executed in future.

145. OPTCL has already submitted the study report with detailed justification for determination and approval for the levying Grid Support Charges for industries having Captive Generating / Cogeneration plants and running in parallel with the Grids. The Commission will take up the issue separately in line with the direction/order dated 06.07.2023 of the Hon'ble Orissa High Court in W.P(C) No. 2220 of 2021 & W.P(C) No. 16513 of 2021.

146. OPTCL has already created Chair in IIT, Bhubaneswar to strengthen the industry-academia relationship. OPTCL is therefore directed to intimate the benefits gained through this collaboration. Further, OPTCL had earlier submitted that steps have been taken for the establishment of a Centre of Excellence in the OPTCL Training Centre. OPTCL should clearly define its overall vision and specific strategies and actions taken so far in the creation of CoE.

Finance

Truing up of OPTCL for the FY 2023-24

147. OPTCL has proposed its truing-up application for the FY 2023-24 in compliance with Regulation 7.1 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 along with the present ARR & Transmission Tariff application for the FY 2025-26. The analysis of expenditure and income under various heads proposed in the truing-up application of OPTCL is discussed in the following paragraphs.

148. OPTCL has submitted that the income and expenditure relating to SLDC have been segregated as a part of true up from the consolidated account of OPTCL and consequential surplus of Rs.0.17 Cr. of SLDC 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 – 14
OPTCL & SLDC Income & Expenditure Break up of FY 2023-24
(Rs. in Crore)

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	502.19	9.57	492.62
2	R & M Cost	131.61	0.77	130.84
3	A & G Cost (Including GCC Expenses)	48.20	1.37	46.83
4	Depreciation	406.56	0.87	405.69
5	Interest on Loan Capital	120.96	-	120.96
6	Rebate	16.34	0.12	16.22
7	Provisions for Tax & Other	251.59	-	251.59
8	**Total Expenditure (1+2+….+7))**	**1,477.45**	**12.70**	**1,464.75**
B	**Income**			
9	Revenue from Operations	885.84	12.49	873.35
10	Other Income	413.05	0.38	412.67
11	**Total Income (9+10)**	**1,298.89**	**12.87**	**1,286.02**
C	**Gap - Surplus/(Deficit) (11-8)**	**(178.56)**	**0.17**	**(178.73)**

Employees Cost including Terminal Benefits:

149. OPTCL has submitted that the Commission had allowed Rs.449.08 Cr. towards Employee Cost including Terminal Benefits liabilities for the FY 2023-24. It has submitted that as per audited accounts of OPTCL for the FY 2023-24, employees cost including terminal benefit liabilities & capacity building expenses of OPTCL is Rs.493.67 Cr. excluding the SLDC's employees cost of Rs.9.68 Cr.

150. 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, Bhudev Chatterjee International Consultants (BCIC), Kolkata, OPTCL has made provision of

Rs.192.22 Cr. towards terminal liabilities in the statement of P&L A/c for FY 2023-24. Besides that, the actual expenditure toward the employer's contribution in the NPS and NP categories is Rs.21.91 Cr. (against the approved amount of Rs.14.47 Cr.). Accordingly, OPTCL has requested the Commission to consider Rs.214.13 Cr. (Rs.192.22 Cr.+ Rs.21.91 Cr.) in the truing-up of FY 2023-24.

151. The Commission has analysed the proposals and submissions made by the petitioner regarding the employee 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 are trued up based on the respective year-audited accounts of OPTCL. The total terminal benefit approved by the Commission in the truing up orders is Rs.3172.33 Cr. up to the FY 2022-23. The details of which are shown in the Table below:

Table –15
Approved Terminal Benefit

(Rs. In Crore)

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
2022-23	201.16
Total upto 31.03.2023	**3,172.33**
Approved in ARR order of FY 2023-24	168.03
Total upto 31.03.2024	**3,340.36**

152. Further, by analysing the audited accounts of Terminal Benefits Trust Fund for the FY 2023-24, the Commission observes that as per the actuarial valuation up to 31.03.2024, the total Corpus requirement is Rs.3312.48 Cr. and the value of corpus investment is Rs.3268.05 Cr. Accordingly, the gap between Actuarial valuation and investment up to 31.03.2024 is around Rs.44.42 Cr. However, as per the audited account of the Trust for the FY 2023-24, an amount of Rs.191.76 Cr. is to be payable by OPTCL to the Trust

account. Therefore, the Commission directs OPTCL to invest the said gap amount of Rs.44.42 Cr. in the trust accounts. The details of trust account are shown in the Table below:

Table - 16
Terminal Benefits Trust Fund Accounts as on 31.03.2024

(Rs. In Crore)

Trust	Corpus Requirement up to 31.03.2024	Actual Investment up to 31.03.2024	Gap in Investment as on 31.03.2024	Payable by OPTCL to trust as on 31.03.2024	Trust Deficit of FY 2023-24		
					Expenditure	Income	Surplus/ (Deficit)
1	**2**	**3**	**4=2-3**	**5**	**6**	**7**	**8 = 7-6**
Pension	3040.82	2977.12	63.71	200.40	247.30	188.09	(59.21)
Gratuity	117.67	108.22	9.45	(12.07)	17.33	8.93	(8.40)
Leave	153.98	182.72	(28.74)	3.42	12.89	23.35	10.46
Total	**3312.48**	**3268.05**	**44.42**	**191.76**	**277.51**	**220.36**	**(57.15)**

153. Considering the above facts and figures in the Trust audited accounts, the Commission now approves Rs.189.93 Cr. (Rs.168.03 Cr. towards Pension, Gratuity & Leave salary of and Rs.21.90 Cr. towards NPS and NP category) towards Terminal benefit in truing-up for the FY 2023-24 against the amount already approved (Rs.182.50 Cr.) in the Transmission tariff order for FY 2023-24. The details are mentioned in the Table below:

Table – 17
Terminal benefit allowed for FY 2023-24

(Rs. In Crore)

Particulars	Amount
Terminal benefit liabilities towards Pension, Gratuity & Leave Salary	168.03
Employer's Contributions to NPS &NP category	21.90
Total	**189.93**

154. Further, the Commission scrutinized the other employee costs as per the Audited Accounts for FY 2023-24 in line with the Commission's approval in the ARR and tariff order of FY 2023-24. The Commission has also considered the proposal of OPTCL towards capacity building expenses of Rs.1.05 Cr. which has been booked under the head of other A&G expenses as per the audited account. However, the Commission had allowed Rs.1.02 Cr. towards capacity building expenses under employees cost in the tariff order for the FY 2023-24 with a direction to restrict the same within the approved limit. Accordingly, the Commission now approves **Rs.461.86 Cr.** towards the employee cost of OPTCL for truing up for the FY 2023-24 as against the earlier approval of Rs.449.08 Cr. in the ARR & tariff Order for FY 2023-24. The details are shown in the Table below:

Table - 18
Employees Cost Approved for Truing-up for FY 2023-24

(Rs. in Crore)

Sl No	Particulars	Approved in ARR	Total as per Audited Accounts	SLDC's Portion	OPTCL's Portion	Proposed for Truing-up	Approved in Truing Up
1	**2**	**3**	**4**	**5**	**6=4-5**	**7**	**8**
A	**Salary & Allowance**						
1	Basic Pay	153.12	161.87	5.16	156.71	156.70	156.71
2	Dearness Allowance	68.90	71.73	2.41	69.32	69.32	69.32
3	House Rent Allowance	24.36	23.97	0.79	23.18	23.18	23.18
4	Other Allowance	0.98	1.37	0.09	1.28	1.28	0.98
5	Bonus	-	0.01	-	0.01	0.01	0.01
6	Stipend for New Recruitment	5.30	8.49	-	8.49	8.49	8.49
	Stipend to Apprentice	-	1.64	-	1.64	1.64	1.64
	Sub-total (A)	**252.66**	**269.07**	**8.45**	**260.62**	**260.62**	**260.33**
B	**Additional Employee Cost**						
1	Outsource Engagement	3.30	3.66	0.19	3.47	3.46	3.46
	Sub-total (B)	**3.30**	**3.66**	**0.19**	**3.47**	**3.46**	**3.46**
C	**Other Employee Cost**						
1	Medical Expenses (allowance + Reimbursement)	7.66	7.77	0.26	7.51	7.51	7.51
2	Leave Travel Concession	0.50	0.09	0.01	0.08	0.08	0.08
3	Honorarium	0.10	0.09	-	0.09	0.09	0.09
4	Ex-gratia	5.00	7.33	0.12	7.21	7.21	5.00
5	Staff Welfare Expenses	6.50	11.10	0.03	11.07	11.07	6.50
6	Conveyance expenses (allowance + Reimbursement)	3.35	2.93	0.09	2.84	2.84	2.84
7	Capacity building charges	1.02	-	-	-	1.05	1.02
8	Other employees Cost	-	0.52	-	0.52	0.52	-
	Sub-total (C)	**24.13**	**29.83**	**0.51**	**29.32**	**30.37**	**23.04**
D	**Terminal Benefits**						
1	Pension	146.98	165.77	-	165.77	165.77	

Sl No	Particulars	Approved in ARR	Total as per Audited Accounts	SLDC's Portion	OPTCL's Portion	Proposed for Truing-up	Approved in Truing Up
2	Gratuity	12.57	11.66	-	11.66	11.66	168.03
3	Leave Salary	8.48	14.79	-	14.79	14.79	
4	Other (including contribution to NPS)	14.47	22.32	0.42	21.90	21.90	21.90
	Sub-total (D)	**182.50**	**214.54**	**0.42**	**214.12**	**214.12**	**189.93**
E	**Total Employees Cost (A+B+C+D)**	**462.59**	**517.09**	**9.57**	**507.52**	**508.57**	**476.76**
F	**Less:** Employees Cost Capitalized	13.51	14.90	-	14.90	14.90	14.90
G	**Net Employee Cost (E- F)**	**449.08**	**502.19**	**9.57**	**492.62**	**493.67**	**461.86**

Repair & Maintenance (R&M) Expenses:

155. OPTCL has stated that the Commission had allowed Rs.135.00 Cr. towards R&M Expenses in the Transmission Tariff Order for FY 2023-24. As per the audited accounts for FY 2023-24, the R&M Expenditure is Rs.131.61 Cr. as detailed in the Table below:

Table - 19
Actual R&M Cost as per the audited accounts for the FY 2023-24

(Rs. in Crore)

Sl. No.	Particular	Total	SLDC's portion	OPTCL's portion
1	Building	12.78	-	12.78
2	Plant and machinery	76.51	-	76.50
3	Lines, cables and network assets	28.14	-	28.14
4	Electrical installations (Includes inspection fees Rs.7.09 Cr,)	9.07	0.12	8.96
5	Vehicle	0.06	0.00	0.06
6	Furniture and fixtures	0.03		0.03
7	Office equipment	5.02	0.65	4.37
	TOTAL	**131.61**	**0.77**	**130.84**

156. OPTCL has requested the Commission to consider Rs.130.84 Cr. as R&M expenses for FY 2023-24 excluding Rs.0.77 Cr. of SLDC portion. The commission scrutinised the audited accounts of OPTCL and observed that the actual inspection fees amounting of Rs.7.09 Cr. has been considered under R&M expenses against the Commission's approval of the same under the head A&G expenses (Rs.4.06 Cr.). Accordingly, the Commission approves Rs.130.84 Cr. (including inspection fees of Rs.7.09 Cr.) towards R & M expenses for truing-up of FY 2023-24 against the earlier approval of Rs.135.00 Cr in the ARR & tariff Order of FY 2023-24.

Administration & General (A&G) Expenses:

157. OPTCL has stated that, the Commission had allowed Rs.40.28 Cr. under A&G expenses, which includes Rs.32.73 Cr. towards normal A&G expenses, Rs.2.50 Cr. towards Licensee Fees to the OERC, Rs.4.06 Cr. towards Inspection Fees and Rs.0.99 Cr. towards SLDC Charges. As per the audited accounts of OPTCL for FY 2023-24, the actual A&G Expenses is Rs.46.83 Cr. (normal A&G expenses of Rs.41.25 Cr., other adjustments & provisions of Rs.2.61 Cr. & Corporate Social Responsibility expenses of Rs.2.97 Cr.) excluding A&G expenses of SLDC of Rs.1.37 Cr. Further, OPTCL has stated that Rs.1.05 Cr. relating to training expenses has been included in the other general expenses and the same has been considered as capacity building expenses under employees cost for FY 2023-24. Accordingly, OPTCL has requested to consider Rs.42.81 Cr. (Rs.46.83 Cr. - Rs.1.05 Cr.- Rs.2.97 Cr.) under A&G expenses for FY 2023-24 excluding Rs.1.05 Cr. relating to training expenses for capacity building & Rs.2.97 Cr. relating to Corporate Social Responsibility expenses,

158. The Commission has scrutinised the above submission of OPTCL towards A&G expenses with the audited Accounts of OPTCL and observed that the actual A&G expenses of OPTCL is Rs.40.20 Cr. (Rs.46.83 Cr. - Rs.2.61 Cr. - Rs.2.97 Cr. - Rs.1.05 Cr.) excluding Rs.1.05 Cr. relating to training expenses for capacity building, Rs.2.97 Cr. relating to Corporate Social Responsibility expenses and Rs.2.61 Cr. relating to other adjustments & provisions. However, the Commission while approving the ARR & Transmission tariff of OPTCL, had approved Rs.40.28 Cr. (Normal A&G expenses & SLDC charges of Rs.36.22 Cr. and inspection fees of Rs.4.06 Cr.) under A&G expenses for the FY 2023-24. Further, it is to be noted that, based on the proposal of OPTCL the Commission has already considered the actual inspection fees of the FY 2023-24 under R&M expenses. Since the A&G expenses is controllable in nature, the Commission accordingly approves Rs.36.22 Cr. (Rs.40.28 Cr. - Rs.4.06 Cr.) under A&G expenses for the truing-up of FY 2023-24.

Depreciation:

159. OPTCL has submitted that, the Commission had allowed an amount of Rs.269.54 Cr. towards depreciation in the Transmission Tariff Order for FY 2023-24. As per the audited accounts for FY 2023-24, the total depreciation and amortization expense is shown at Rs.406.56 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 - 20
Depreciation as per Audited Accounts of OPTCL for FY 2023-24

(Rs. in Crore)

Sl No	Description	Total	SLDC's portion	OPTCL's portion
1	Amortization of leasehold assets	1.92	-	1.92
2	Depreciation on Buildings	6.48	-	6.48
3	Depreciation on Electrical Installation	0.81	0.02	0.79
4	Depreciation on Other civil works	4.11	0.00	4.11
5	Depreciation on Plant and Machinery	260.51	0.00	260.51
6	Depreciation on Lines, Cable Network, etc.	117.42	0.00	117.42
7	Depreciation on Vehicles	0.11	-	0.11
8	Depreciation on Furniture and Fixtures	0.56	0.02	0.55
9	Depreciation on Office Equipment	12.07	0.82	11.25
10	Amortisation of Computer Software	2.58	0.00	2.57
	TOTAL	**406.56**	**0.87**	**405.70**

160. OPTCL has submitted that the depreciation needs to be calculated as per Regulation 8.38 & 8.34 of OERC Transmission Tariff Regulations, 2014. Accordingly, it has been submitted that the depreciation on Transmission Activities is Rs.405.70 Cr., including Rs.112.36 Cr. towards the depreciation made on account of assets created by the beneficiary and the Government on deposit work basis. The net depreciation on own assets of OPTCL is Rs.293.34 Cr. (Rs.405.70 Cr. - Rs.112.36 Cr.). However, it has requested the Commission to allow Rs.294.71 Cr towards depreciation in the truing-up for FY 2023-24.

161. Based on the above submission of the OPTCL for truing-up of depreciation for FY 2023-24, the Commission has scrutinised the audited accounts for the FY 2023-24 and observes that, during the FY 2023-24, it has added total transmission assets of Rs.538.29 Cr. including assets created out of grant, beneficiary & deposit works of Rs.206.09 Cr. However, in the last truing-up Order for the FY 2022-23 of OPTCL, the Commission had considered the total original book value of fixed assets of transmission systems as Rs.9014.70 Cr. (Rs.7133.61 Cr. at Deemed Cost) as on 31.03.2023. Considering the additional transmission assets of Rs.538.29 Cr. created during FY 2023-24, the total original book value of transmission fixed assets over the periods as per audited accounts of OPTCL as on 31.03.2024 is Rs.9552.99 Cr. (Rs.7671.90 Cr. at Deemed Cost) which are shown in the Table below:

Table - 21
Book Value of Fixed Assets of Transmission Systems as on 31.03.2024
(Rs.in Crore)

Assets Added during Financial Year	Original Book Value	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)	**3,471.27**	**1590.18**
2015-16	768.81	768.81
2016-17	683.82	683.82
2017-18	447.00	447
2018-19	665.94	665.94
2019-20	535.73	535.73
2020-21	665.01	665.01
2021-22	1,035.62	1,035.62
2022-23	741.50	741.5
Sub-Total (up to 31.03.2023)	**9,014.70**	**7,133.61**
2023-24	**538.29**	**538.29**
Total (up to 31.03.2024)	**9,552.99**	**7,671.90**

162. Further, in the last Truing-up Order for the FY 2022-23, after deducting Up-valued assets of Rs.512.71 Cr, fully depreciated assets of Rs.1864.95 Cr & assets created out of grant, beneficiary & deposit works of Rs.1910.04 Cr., the Commission had calculated OPTCL’s own asset value at Rs.4727.00 Cr. (Rs.9014.70 Cr. - Rs.512.71 Cr.- Rs.1864.95 Cr. - Rs.1910.04 Cr.) as on 31.03.2023. The details are shown in the Table below:

Table -22

Audited Book value of Fixed Assets of Transmission systems as on 31.03.2023

(Rs.in Crore)

Sl No	Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Gross Fixed Assets as per audited accounts as on 31.03.2023	Up-valued Assets	Original book value of Grant & Beneficiary /Deposit Assets as on 31.03.2023	Original Book Value of Fixed Assets Fully Depreciated up to 31.03.2023	Original Book Value of Own Fixed Assets as on 31.03.2023 for Calculation of Depreciation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8=4-5-6-7**
1	Freehold Land	-	54.94	6.26	6.29	-	42.39
2	Leasehold Land	3.34	57.31	-	5.63	-	51.68
3	Building	3.34	164.99	15.10	8.20	0.23	141.46
4	Electrical Installation	5.28	12.36	-	3.95	0.49	7.92
5	P&M (Other Civil Works)	3.34	108.90	0.91	7.66	-	100.33
6	Plant & Machinery	5.28	5,373.88	266.02	1,089.52	811.64	3,206.70
7	P&M (Line, Cable & Network)	5.28	3,109.02	221.17	771.52	1,033.28	1,083.05
8	Vehicles	9.50	2.35	-	-	1.43	0.92
9	Furniture & Fixture	6.33	9.47	0.46	0.52	1.43	7.06
10	Office Equipment	6.33	103.90	2.79	6.06	16.45	78.60
11	Intangible Assets	15.00	17.58	-	10.69	-	6.89
	Total		**9,014.70**	**512.71**	**1,910.04**	**1,864.95**	**4,727.00**

163. Considering the above facts and observations for calculation of depreciation for truing-up of FY 2023-24, the Commission has taken the above original book value of own assets of Rs.4727.00 Cr. as on 01.04.2023 and assets value of Rs.538.29 Cr. (including grant, beneficiary & deposit works assets of Rs.206.09 Cr.) added during FY 2023-24. Besides that, taking in to account the book value of assets of Rs.39.62 Cr. which has fully depreciated during FY 2022-23, the Commission calculates the transmission assets of OPTCL as Rs.5019.52 Cr. (Rs.4727.00 Cr. + Rs.538.29 Cr. - Rs.206.09 Cr. - Rs.39.62 Cr.) as on 31.03.2024. Considering the above opening & closing assets of FY 2023-24 and the applicable rate of depreciation, the Commission approves **Rs.250.34 Cr.** towards depreciation for truing-up of FY 2023-24. The details are shown in the Table below:

Table -23
Depreciation trued up for FY 2023-24

(Rs. in Crore.)

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Own Fixed Assets as on 01-04-2023	Book Value of Fixed Assets added in FY 2023-24	Book Value of Grant, Beneficiary & Deposit works Fixed Assets Added in FY 2023-24	Book Value of Fixed Assets Fully depreciated in FY 2023-24	Book value of Own Fixed Assets as on 31.03.2024	Depreciation for FY 2023-24
1	**2**	**3**	**4**	**5**	**6**	**7=3+4-5-6**	**8=(3+7) /2 X 2**
Freehold Land	-	42.39	2.55	-	-	44.94	-
Leasehold Land	3.34	51.68	1.24	-	1.04	51.88	1.73
Building	3.34	141.46	57.75	4.72	-	194.49	5.61
Electrical Installation	5.28	7.92	0.27	-	-	8.19	0.43
P&M (Other Civil Works)	3.34	100.33	17.29	0.70	-	116.92	3.63
Plant & Machinery	5.28	3,206.70	281.30	79.87	7.10	3,401.03	174.44
P&M (Line, Cable & Network)	5.28	1,083.05	157.68	118.24	31.54	1,090.95	57.39
Vehicles	9.50	0.92	0.31	-	-	1.23	0.10
Furniture & Fixture	6.33	7.06	1.01	0.06	-	8.01	0.48
Office Equipment	6.33	78.60	18.82	2.50	-	94.92	5.49
Intangible Assets	15.00	6.89	0.07	-	-	6.96	1.04
Total		**4,727.00**	**538.29**	**206.09**	**39.68**	**5,019.52**	**250.34**

Finance Cost:

Interest on Loan:

164. OPTCL states that the Commission had allowed Rs.111.83 Cr. towards interest on the loan in the Transmission Tariff Order for FY 2023-24. As per the audited accounts of FY 2023-24, the net interest is Rs.120.96 Cr. after capitalisation of Rs.19.38 Cr. Accordingly, the commission was requested to consider Rs.120.96 Cr. towards interest on the loan in the truing up of FY 2023-24.

165. The Commission examined the audited books of accounts of OPTCL for FY 2023-24 and observed that after capitalisation net interest on loan is Rs.120.96 Cr. Accordingly, the Commission approves Rs.120.96 Cr. towards interest on the loan for the truing-up of

FY 2023-24 as against the Rs.111.83 Cr. approved in the Transmission Tariff Order for FY 2023-24.

Rebate:

166. OPTCL has stated that, the Commission has allowed Rs.17.92 Cr. towards rebate in the Transmission Tariff Order for FY 2023-24. As per the audited accounts for FY 2023-24, the actual rebate is Rs.16.23 Cr. excluding the SLDC rebate of Rs.0.12 Cr. Therefore, OPTCL has requested the Commission to consider Rs.16.23 Cr. towards rebate in the truing-up of FY 2023-24. After examining the audited book of Accounts of OPTCL for FY 2023-24, the Commission observed that the actual rebate is Rs.16.34 Cr. Excluding the SLDC rebate of Rs.0.12 Cr.) the Commission approves Rs.16.22 Cr. towards rebate in truing up for the FY 2023-24 as against the Rs.17.92 Cr. approved in the ARR & Transmission Tariff Order for FY 2023-24.

Incentive for System Availability:

167. OPTCL has submitted that the Commission in the Transmission Tariff Order for FY 2023-24 has allowed Rs.5.00 Cr. towards incentive for system availability. The Petitioner states that for FY 2023-24, the system availability was 99.98% as verified by SLDC. Accordingly, the incentive against system availability is calculated as Rs.13.46 Cr. and OPTCL requests the Commission to consider the said amount in truing-up for the FY 2023-24. Further, OPTCL has submitted that it has used this incentive for the solarisation of 19 nos. of GSS & PTC, Chandaka and external training programmes for employees as per the direction of the Commission. Considering the above, the Commission approves **Rs.5.00 Cr.** towards Incentive for System Availability in this truing up for FY 2023-24, in line with the approval given in the Transmission tariff order for FY 2023-24.

Return on Equity (RoE):

168. OPTCL has submitted that the Commission had approved RoE of Rs. 140.42 Cr. (@ 15.5% on the equity value of Rs.905.91 Cr.) in the Transmission Tariff order for FY 2023-24. Further, OPTCL has submitted that some projects that are equity funded (Rs.209.93 Cr.) by the Government of Odisha have been completed prior to 31.03.2023. Considering the above, OPTCL has claimed Rs.172.21 Cr. under RoE for the FY 2023-24.

169. The Commission has examined the submissions & the audited accounts of OPTCL for FY 2023-24 and observed that during the year an amount of Rs.371.31 Cr. equity infused by GoO and considering the same total equity capital of OPTCL infused by the GoO is Rs. 2382.71 Cr. as on 31.03.2024. The details of which are shown in the Table below:

Table – 24
Details of equity capital infused by the State Govt. till FY 2023-24
(Rs. in Crore)

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
1	R&R-I-01/2009-3560 Dated 25.03.2009	23.04
2	R&R-I-01/2009-2003 Dated 24.02.2009	0.01
3	R&R-I-01/2009-9464 Dated 11.09.2009	5.00
4	R&R-I-01/2009-4826 Dated 01.06.2010	20.00
5	R&R-I/73/2010-2438 Dated 23.03.2011	51.95
6	R&R-6/12-685 Dated 31.01.2012	1.00
7	R&R-6/12-690 Dated 31.01.2012	39.00
8	R&R-6/12-695 Dated 31.01.2012	3.00
9	R&R-6/12-629 Dated 22.01.2013	25.76
10	R&R-6/12-634 Dated 22.01.2013	16.60
11	R&R-6/12-624 Dated 22.01.2013	7.64
12	R&R-6/12-5693 Dated 18.07.2013	29.19
13	R&R-6/12-5698 Dated 18.07.2013	11.97
14	R&R-6/12-5703 Dated 18.07.2013	8.84
15	R&R-69/14-10445 Dated 29.12.2014	10.50
16	R&R-69/14-10450 Dated 29.12.2014	27.50
17	R&R-69/14-10455 Dated 29.12.2014	12.00
18	R&R -54/2015/En-5458 Dated 23.06.2015	20.00
19	R&R-69/14-6823 Dated 06.08.2015	19.68
20	R&R-69/14-6818 Dated 06.08.2015	17.22
21	R&R-69/14-6813 Dated 06.08.2015	20.03
22	BT(P)-15/15-10291 Dated 21.12.2015	0.07
23	R&R -54/2015/En-737 Dated 28.01.2016	10.00
24	R&R -54/2015/En-4348 Dated 07.06.2016	20.00
25	R&R-69/14-5364 Dated 18.7.2016	10.00
26	R&R-69/14-5369 Dated 18.7.2016	20.00
27	R&R-69/14-5374 Dated 18.7.2016	20.00
28	R&R -54/2015/En-466 Dated17.01.2017	60.00
29	R&R -17/2017/En-2895 Dated 22.04.2017	20.00
30	R&R -17/2017/En-10216 Dated 27.12.2017	50.00
31	BT(P)-04/2018/En-1786 Dated 26.02.2018	15.00
32	BT(P)-04/2018/En-1791 Dated 26.02.2018	20.00
33	BT(P)-04/2018/En-1796 Dated 26.02.2018	15.00
34	R&R -40/2018/En-3902 Dated 28.04.2018	15.00
35	R&R -40/2018/En-4632 Dated 24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En Dated 19.12.2018	15.00
37	BT(P)-04/2018(pt)-10439/En Dated 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En Dated 19.12.2018	15.00
39	R&R-40/2019-5100/En Dated 27.06.2019	3.67
40	R&R-40/2019-6530/En Dated 6.08.2019	11.03
41	S.O. No: 201915819273 Dated 27.02.2020	55.00
42	S.O. No: 202018025467 Dated 13.10.2020	50.00
43	S.O. No: 202019704714 Dated 23.03.2021	9.00
44	S.O. No: 202019752418 Dated 26.03.2021	5.29

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
45	S.O. No: 202019747311 Dated 26.03.2021	647.00
46	S.O. No: 202121454297 Dated 06.09.2021	50.00
47	S.O. No: 202122892459 Dated 18.12.2021	30.00
48	S.O. No: 202122892550 Dated 18.12.2021	30.00
49	S.O. No: 202124034526 Dated 03.03.2022	6.65
50	S.O. No: 202124047110 Dated 04.03.2022	55.00
51	S.O. No: 202124048923 Dated 04.03.2022	4.00
52	S.O. No: 202124049541 Dated 04.03.2022	140.00
53	S.O. No: 202227471951 Dated 18.11.2022	9.69
54	S.O. No: 202227471252 Dated 18.11.2022	22.83
55	S.O. No: 202227471090 Dated 18.11.2022	92.24
56	S.O. No: 202227471290 Dated 18.11.2022	10.00
57	S.O. No: 202227471194 Dated 18.11.2022	50.00
58	S.O. No: 202227470743 Dated 17.11.2022	26.58
59	S.O. No: 202227470711 Dated 17.11.2022	119.12
60	S.O. No.202331276395 Dated 14.09.2023	18.00
61	S.O.No.202331276355 Dated 14.09.2023	5.00
62	S.O.No.202331276284 Dated 14.09.2023	12.10
63	S.O.No.202331297833 Dated 26.09.2023	13.92
64	S.O.No.202333681995 Dated 23.02.2024	36.61
65	S.O.No.202334084744 Dated 12.03.2024	40.00
66	S.O. No.202334195334 Dated 20.03.2024	100.00
	Total (up to FY 2023-24)	**2382.71**

170. Further, OPTCL was asked to submit detailed information about Capital Work-in-Progress (CWIP) as on 31.03.2024. Based on their submission, the Commission observes that out of the above equity capital received from the Government of Odisha, equity capital of Rs.657.30 Cr. is still under CWIP by the end of FY 2023-24, details of which are shown in the Table below:

Table – 25
Equity infused by GoO under CWIP as on 31.03.2024

(Rs. in Crore)

Sl. No.	Name of Project	Scheme	Equity received but under CWIP as on 31.03.2024 (Rs. Cr.)
1	2X 40MVA 220/33kV Grid S/S at **Palei, Balichandrapur** and associated line.	SSP-30% GoO Equity	12.53
2	2X40MVA, 132/33kV Grid S/S at **Bhatli** along with line	SSP-30% GoO Equity	15.69
3	2X20MVA, 132kV Grid S/S **Lamtaput** with SAS and associated line.	SSP-30% GoO Equity	7.90
4	132kV DC line from 220/132/33kV S/S **Baner (Jaipatna)** to 132/33kV S/S at	SSP-30% GoO Equity	10.94

Sl. No.	Name of Project	Scheme	Equity received but under CWIP as on 31.03.2024 (Rs. Cr.)
	Junagarh		
5	2x20MVA, 132/33kV Grid S/S at **Boriguma** and associated line	Rs. 300 Cr GoO Equity	7.59
6	**Baliguda**-220/33 KV Grid S/s with DC line from Baliguda to Kesinga	Rs. 300 Cr GoO Equity	37.43
7	2x500MVA, 400/220/33kV GIS at **Paradeep** and associated line	30% GoO Equity	191.24
8	2X20MVA, 132/33KVGSS at **Brundabahal** with associated line	100% GoO Equity	58.12
9	132/33 KV S/S at **Tarabha** with associated 132kV LILO Line	100% GoO Equity	31.69
10	5 Nos of Projects under Scheme **RRCP-II**	RRCP-II-30% GoO Equity Support	28.74
11	5 Nos of Projects under **LVMS** Scheme	30% GoO Equity	63.92
12	220/132/33 KV GSS, Kiakata	SASCI Scheme	37.52
13	132/33 KV GSS at Athamalik and associated line.	SASCI Scheme	14.00
14	8 Nos of AIS Project Under OTSSP Ph-I	100% GoO Equity	40.00
15	21 Nos of Project Under OTSSP Ph-I	30% GoO Equity	100.00
	Total		**657.30**

171. Further, the Government of Odisha specifically in 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 Cr., which relates to the sanction of the Government towards the conversion of bond to the equity. Excluding the aforesaid amounts of Rs.657.30 Cr. & Rs.647.00 Cr. from the total equity capital of Rs.2382.71 Cr. infused by the Government of Odisha, the Commission has considered the equity capital of Rs.1078.17 Cr. (i.e., Rs.2382.71 Cr. - Rs.657.30 Cr.- Rs.647.00 Cr.) as on 31.03.2024. Further, the Commission had considered Rs.995.93 Cr. equity capital as on 31.03.2023 in the truing-up order for the FY 2022-23. Therefore, the Commission has evaluated the average equity capital of Rs.1037.17 Cr. {(Rs.995.93 Cr. + Rs.1078.17 Cr.)/2} for the FY 2023-24 and accordingly, approves Rs.160.76 Cr. (i.e. @15.5% of Rs.1037.17 Cr.) towards Return on Equity in this truing-up for the FY 2023-24 against Rs.140.42 Cr. approved in the Transmission tariff Order of FY 2023-24.

Income Tax:

172. As per Regulation 8.43 of OERC Regulations, 2014, the Income tax of the Transmission Licensee shall be recovered from the beneficiaries. OPTCL has stated that the Commission had allowed Rs 27.21 Cr. towards Income Tax in the ARR of FY 2023-24 in anticipation of payment made under the head income tax subject to actual payment which will be verified during the trued-up exercise of that year. However, OPTCL has calculated and paid Income Tax of Rs.10.77 Cr. during FY 2023-24 under MAT and requested the Commission to approve the same for FY 2023-24. The Commission has examined the documents provided by the OPTCL and accordingly allows Rs.10.77 Cr. towards Income tax for the truing up of FY 2023-24.

Misc. Receipts:

173. OPTCL states that as against its proposal of Rs.366.45 Cr. the Commission had approved Rs.300.45 Cr. towards Misc. Receipt in the Transmission tariff order of FY 2023-24 from inter-state wheeling, Short Term Open Access and STU charge, Bank Interest and other miscellaneous income. As per audited accounts of FY 2023-24, OPTCL has estimated Rs.282.59 Cr. (excluding Deferred Income on account of Govt & Beneficiary Assets of Rs.112.00 Cr. and Provision Written Back of Rs.18.08 Cr.) towards the Misc. receipt which includes Short Term Open Access Charges, Interest on term deposits/ fixed deposits, Supervision charges, other miscellaneous income, etc. and has requested the Commission to consider same in the truing up of FY 2023-24.

174. The Commission has scrutinised the submission of the Petitioner and observes that Deferred Income on account of Govt grant & Beneficiary Assets of Rs.112.00 Cr. and Provision Written Back of Rs.18.08 Cr. included in the other income head as per audited accounts of OPTCL for the FY 2023-24. Therefore, the Commission has not considered the same while calculating the actual miscellaneous receipt of OPTCL for the FY 2023-24. Accordingly, the Commission approves Rs.282.59 Cr. (Rs.412.67 Cr.- Rs.112.00 Cr. – Rs.18.08 Cr.) for the truing up of FY 2023-24 as proposed by the OPTCL. The details are shown in the Table below:

Table – 26
Actual Misc. Receipts of OPTCL for the FY 2023-24

(Rs. in Crore)

Sl No.	Description	Approved in ARR	Actual As per Audited Accounts	SLDC Portion	Transmission Portion	Proposed for Truing-up	Approved in Truing-Up
1	2	3	4	5	6=4-5	7	8
A	**Misc Receipts**						
1	Short-term Open Access Charges (STOA)	271.00	162.84	-	162.84	162.84	162.84
2	Inter-state Wheeling Charges	9.45	-	-	-	-	-
3	Supervision Charges	-	22.10	-	22.10	22.10	22.10
4	Interest from advances to suppliers	-	1.53	-	1.53	1.53	1.53
5	Interest from Bank deposits	15.00	74.34	-	74.34	74.34	74.34
6	Net gain/(loss) on disposal of Assets	-	1.51	-	1.51	1.51	1.51
7	Other miscellaneous income	5.00	20.29	0.02	20.27	20.27	20.27
	Sub-total (A)	**300.45**	**282.61**	**0.02**	**282.59**	**282.59**	**282.59**
B	**Other**						
8	Deferred Income on account of Govt & Beneficiary Assets	-	112.36	0.36	112.00	-	-
9	Provision Written Back	-	18.08	-	18.08	-	-
	Sub-total (B)	**-**	**130.44**	**0.36**	**130.08**	**-**	**-**
C	**Total (A+B)**	**300.45**	**413.05**	**0.38**	**412.67**	**282.59**	**282.59**

Transmission Charges

175. OPTCL has stated that while approving the ARR & Transmission Tariff for FY 2023-24, the Commission had approved total ARR of Rs.896.18 Cr. to be recovered from LTA customers. The petitioner has submitted that as per the audited accounts of FY 2023-24, the revenue from transmission charges recovered from the LTA is Rs.873.35 Cr. Accordingly, the petitioner has requested the Commission to consider Rs.873.35 Cr in the truing up for the FY 2023-24.

176. The Commission has examined the audited accounts of OPTCL for the FY 2023-24 and has found that during that year, the petitioner has recovered transmission charges of an

amount of Rs.873.35 Cr. from the LTA customers and accordingly approves the same amount for the truing-up of FY 2023-24.

SLDC Development Fund:

177. 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, the surplus derived from SLDC transactions during FY 2023-24 amounting to Rs.0.17 Cr. has been transferred to SLDC Development Fund.

Summary of Truing-up approved for FY 2023-24

178. Considering the above facts and figures, the Commission approves Rs.37.03 Cr. towards truing-up deficit as against OPTCL's deficit proposal of Rs.139.71 Cr. for the FY 2023-24. The details are shown in the Table below:

Table - 27
Summary of Truing-up approved by the Commission for FY 2023-24

(Rs. in Crore)

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)
1	2	3	4	5	6	7=3-6
A	**Gross Revenue Requirement**					
1	Employee Cost	449.08	493.67	493.67	461.86	(12.78)
2	R & M Cost	135.00	130.84	130.83	130.84	4.16
3	A & G Cost	40.28	46.83	42.81	36.22	4.06
4	Depreciation	269.54	405.69	294.71	250.34	19.20
5	Interest on Loan Capital	111.83	120.96	120.96	120.96	(9.13)
6	Return on Equity	140.42	-	172.21	160.76	(20.34)
7	Incentive for System Availability	5.00	-	13.46	5.00	-
8	Rebate	17.92	16.22	16.23	16.22	1.70
9	GCC Expenses	0.35	-	-	-	0.35
10	Provisions for Tax & Other	27.21	251.59	10.77	10.77	16.44
11	**Sub-total (1+2+….+10)**	**1,196.63**	**1,465.80**	**1,295.65**	**1,192.97**	**3.66**
12	**Less:** Misc Receipts (Including STOA)	300.45	412.67	282.59	282.59	17.86
13	**Net Revenue Requirement 11-12)**	**896.18**	**1,053.13**	**1,013.06**	**910.38**	**(14.20)**

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)
1	2	3	4	5	6	7=3-6
B	**Revenue from operations**					-
14	LTOA_DISCOMs	880.08	873.35	873.35	873.35	(6.73)
15	LTOA_CGPs & Others	16.27	-	-	-	(16.27)
16	**Total (14+15)**	**896.35**	**873.35**	**873.35**	**873.43**	**(23.00)**
C	**Gap - Surplus/(Deficit) (16-13)**	**0.17**	**(179.78)**	**(139.71)**	**(37.03)**	**(37.20)**

179. The summary of the truing-up approved by the Commission and cumulative surplus over the years is **Rs.80.57 Cr.** as on 31.03.2024. The details are shown in the Table below:

Table –28
Summary of Cumulative Truing-up Surplus/(deficit) of OPTCL approved by the Commission up to FY 2023-24

(Rs. in Crore)

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 ***(Order dated 15.01.2022 in Case No.***	706.71	772.81	706.71	621.73	(66.10)	(84.98)	(151.08)	10.85

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)
125/2021)								
2020-21 ***(Order dated 21.04.2023 in Case No. 61/2022)***	713.84	741.03	713.84	633.03	(27.19)	(80.81)	(108.00)	(97.15)
2021-22	792.92	669.44	792.92	785.84	123.48	(7.08)	116.40	19.25
2022-23	Adjusted amount in Truing-up Order of FY 2022-23						(103.64)	(84.39)
2022-23	831.95	751.16	831.95	953.15	80.79	121.20	201.99	117.60
2023-24	896.18	910.38	896.18	873.35	(14.20)	(22.83)	(37.03)	80.57

ARR & Tariff for the FY 2025-26:

180. The Commission has analysed the application of OPTCL for Aggregate Revenue Requirement (ARR) for FY 2025-26 according to OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 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

181. Operation and Maintenance expenses include (1) Salaries, Wages, 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:

182. OPTCL has proposed employee cost of Rs.554.05 Cr. for the FY 2025-26 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.

183. OPTCL has considered the following assumptions while proposing the employee cost for the ensuing FY 2025-26:

i. **Basic Pay:** The actual cash outflow on this head from April-24 to Oct-24 has been extrapolated to arrive at basic pay for FY 2024-25 at Rs.147.44 Cr. considering the average no. of employees during the periods FY 2024-25 (2581 Nos.) and FY 2025-26 (2722 Nos.) and a 3% hike in annual increment, the basic pay will be Rs.160.16 Cr. (i.e., 147.44/2581*2722*1.03). Accordingly, OPTCL has proposed the basic pay of Rs.160.16 Cr. for FY 2025-26.

ii. **Dearness Allowance (DA):** With reference to the Finance Department, Government of Odisha letter dated 02.11.2024, OPTCL has considered a DA rate of 61% for the FY 2025-26 and accordingly proposed Rs. 97.70 Cr. 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 reside in. Accordingly, OPTCL has estimated HRA of Rs.25.87 Cr. by considering HRA for 85% of the employees at average rate of 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. Accordingly, OPTCL has projected Rs.8.41 Cr. which includes Rs. 0.40 Cr. towards reimbursement of medical expenses.

v. **Conveyance allowance/reimbursement:** OPTCL has stated that at present the employees are getting conveyance allowance/reimbursement in the range of Rs.800/- to Rs.2500/- per month on the basis of eligibility. Accordingly, OPTCL has proposed Rs.3.88 Cr. under this head.

vi. **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.6.50 Cr. towards premium of Group Insurance Scheme and Group Personal Accident Insurance Scheme. It has proposed Rs.1.00 Cr. towards financial assistance (@ 10 lakhs) to the family of deceased employee. Further, towards Uniform & Liveries, Sports, Recreations & Cultural Activity, Hospital expenses & Health check-up etc., OPTCL has proposed

Rs.3.31 Cr.. Accordingly, OPTCL has proposed Rs. 10.81 Cr. towards staff welfare expenses.

vii. **Other Allowance:** OPTCL has proposed Rs.1.96 Cr. towards other allowance such as Night Shift Allowances, Physical Handicap Allowances, ABT Allowances / Metering Allowance, Cash Allowances, Computer Allowances Arrears, Estimator Allowance, Gas Allowances, Green Card Allowances, Non-Recurring Miscellaneous Allowances, Recurring Miscellaneous Allowances, Shift Allowances, Special Allowances, Training Allowances, Typing Allowance, Washing Allowances, Remote posting allowance, Education Allowances etc.

viii. **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.6.81 Cr. has been proposed towards payment to outsourced personnel.

ix. **Stipend for New Recruitment:** OPTCL has proposed that it is planning to recruit 172 Nos. of employees in the FY 2024-25 and 280 Nos. in the FY 2025-26, Accordingly, Rs.10.53 Cr. has been proposed towards stipend for the new recruits.

x. **Stipend to Apprentice:** Under the Apprentice Act, 1961, every employer or establishment having a workforce (regular and contract employees) of 30 or more is mandated to undertake Apprenticeship Programs in a range from 2.5% to 15% of its workforce (including direct contractual employees) every year. Therefore, OPTCL engages apprentices under the National Apprenticeship Promotion Scheme (NAPS) and the National Apprenticeship Training Scheme (NATS) scheme. Accordingly, OPTCL has proposed Rs.2.74 Cr. towards stipend of apprentice for the FY 2025-26 and the amount to be received from the Government of India in lieu of apprentice has been considered as Miscellaneous Income.

xi. **Capacity Building:** OPTCL has proposed Rs.2.40 Cr. for capacity building of employees to enhance their knowledge and development of skills.

xii. **Other Employees Cost:** OPTCL has proposed Rs.9.63 Cr. towards other employee cost which includes Ex-gratia of Rs.8.84 Cr, LTC of Rs.0.63 Cr, Honorarium of Rs.0.12 Cr, Bonus of Rs.0.01 Cr. and other is Rs. 0.02 Cr.

xiii. **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.203.51 Cr. towards terminal liabilities (Pension, Gratuity & Leave Encashment) for the FY 2025-26 which is 3% escalation over the projection for FY 2024-25.

Further, Rs.24.52 Cr. is proposed towards the employer's matching contribution for employees who have joined under the NPS and Non-Pensioner Category.

xiv. **Capitalisation of Employee cost:** OPTCL has proposed that out of the total employee cost, Rs.14.90 Cr. to be capitalised during the FY 2025-26.

184. The Commission has reviewed the OPTCL's submission regarding the above employees' cost. OPTCL has submitted that 172 number of employees are to be recruited during the FY 2024-25 and they will be regularised during the FY 2025-26. While computing the average number of employees for FY 2025-26, the Commission has considered the same. The average number of employees proposed by OPTCL and approved now by the Commission for determination of basic pay for the FY 2025-26 is shown in the Table below:

Table - 29
Number of Employees of OPTCL

Particulars	Proposed	Approved
No. of employees as on 01.04.2024	**2,469**	**2,469**
Add: Addition during 2024-25	350	350
Less: Retirement/Expired Resignation during 2024-25	127	127
No. of employees expected as on 01.04.2025	**2,692**	**2,692**
Add: New employees to be inducted during FY 2024-25 & regularized during FY 2025-26	172	172
Less: Retirement/Expired/ Resignation during year 2025-26	112	112
No. of employees as on 01.04.2026	**2,752**	**2,752**
Average no. of employees for FY 2024-25	2,581	2,581
Average no. of employees for FY 2025-26	2,722	2,722

Basic Pay:

185. The average cash outflow towards basic pay from April, 2024 to December 2024 is Rs.12.28 Cr. per month and the prorated basic pay will be Rs.147.39 Cr. for the FY 2024-25. By considering the above prorated basic pay of Rs.147.39 Cr. for the FY 2024-25, the estimated average number of employees for FY 2024-25 (i.e., 2581 Nos) & FY 2025-26 (i.e., 2722 Nos) and 3% annual increment, the basic pay estimated by the Commission is Rs.160.13 Cr. (i.e., 147.39/2581*2722*1.03). Accordingly, the Commission approves the basic pay of **Rs.160.13 Cr.** as against OPTCL's proposal of Rs.160.16 Cr for the FY 2025-26. The details are shown in the Table below:

Table – 30
Basic Pay estimated for FY 2025-26

(Rs. Crore)

Cash outflow	OPTCL submission in ARR	Considered by OERC
Apr-2024	12.43	12.43
May-2024	12.39	12.39
Jun-2024	12.27	12.27
Jul-2024	12.18	12.18
Aug-2024	12.11	12.11
Sep-2024	12.19	12.19
Oct-2024	12.43	12.43
Nov-2024	-	12.12
Dec-2024	-	12.42
Avg. Basic Pay per month	12.29	12.28
Pro-rated for FY 2024-25	147.44	147.39
Estimated for FY 2025-26	**160.16**	**160.13**

Dearness Allowance (DA):

186. OPTCL has considered the rate of Dearness Allowance @ 61% for FY 2025-26 with reference to the Finance Department, Government of Odisha letter dated 02.11.2024. As per the guidelines for the preparation of the budget proposal for the Administrative Expenditure of the Government of Odisha and the submission of OPTCL, the DA rate

proposed by OPTCL for the FY 2025-26 is considered. Accordingly, the Commission approves Dearness Allowances of **Rs.97.68 Cr.** (i.e., 61% on approved basic pay of Rs.160.13 Cr.) as against Rs.97.70 Cr. proposed by OPTCL for the FY 2025-26.

House Rent Allowance (HRA):

187. The Commission analysed the actual Basic Pay & HRA during FY 2023-24 and observed that the rate of HRA is 14.79% of the Basic Pay. Considering the same, the Commission approves **Rs.23.69 Cr.** under the head HRA (@ 14.79% on approved basic pay of Rs.160.13 Cr.) for the FY 2025-26 as against OPTCL's proposed HRA of Rs.25.87 Cr.

Medical Allowance & Reimbursement of Medical Expenses:

188. OPTCL has submitted that its employees are entitled to get Medical Allowance @ 5% on basic pay for outdoor medical expenses. Accordingly, OPTCL has proposed Rs.8.41 Cr. under this head including Rs.0.40 Cr. towards reimbursement of medical expenses. The Commission observes that when the group health insurance policy for the employees of OPTCL is in force and also getting Medical Allowance @ 5% on basic pay, further claim of reimbursement for medical expenses of Rs.0.40 Cr. is not proper. Accordingly, the Commission approves **Rs.8.01 Cr** (@5% of approved basic pay of Rs.160.13 Cr.) towards Medical Allowances for the FY 2025-26 against OPTCL's proposed amount of Rs.8.41 Cr.

Conveyance allowance/reimbursement:

189. OPTCL has proposed Rs.3.88 Cr. towards conveyance allowance/reimbursement for the FY 2025-26. The Commission analyzed the actual expenditure of FY 2023-24 & approval given during FY 2024-25 under this head and accordingly approves **Rs.3.35 Cr.** for conveyance allowance/reimbursement against OPTCL's proposed amount of Rs.3.88 Cr. under this head.

Staff Welfare Expenses:

190. In the previous tariff order for the FY 2024-25, the Commission had approved Rs. 07.00 Cr. only under the head staff welfare expenses with a direction to restrict the staff welfare expenses within the limit. Further, the Commission observed that group health/medical insurance policy has been implemented by OPTCL for the employees. But it is essential to control staff welfare expenses as far as possible. After analysing the above, the Commission approves **Rs.8.00 Cr.** against OPTCL's proposed amount of Rs.10.81 Cr. under Staff welfare expenses and directs OPTCL to restrict the staff welfare expenses within the approved limit.

Other Allowance:

191. OPTCL has proposed Rs.1.95 Cr. towards other allowances for the FY 2025-26. The Commission analyzed the actual expenditure of FY 2023-24 and approval given during the FY 2024-25 under this head and accordingly approves the amount of **Rs.1.59 Cr.** for the FY 2025-26 towards other allowances such as Night Shift Allowances, Physical Handicap Allowances, ABT Allowances / Metering Allowance, Cash Allowances, Computer Allowances Arrears, Estimator Allowance, Gas Allowances, Green Card Allowances, Non-Recurring Miscellaneous Allowances, Recurring Miscellaneous Allowances, Shift Allowances, Special Allowances, Training Allowances, Typing Allowance, Washing Allowances, Remote posting allowance, Education Allowances, etc.

Engagement of Outsourced Personnel:

192. OPTCL has stated that it is functioning with 50% of manpower against sanctioned strength for which OPTCL has proposed Rs.6.81 Cr. towards payment to outsourced personnel. The Commission observes that, as per audited accounts the actual expenditure under this head is Rs.3.46 Cr. during the FY 2023-24. Further, for FY 2024-25, the Commission had approved Rs.3.30 Cr. Considering the above, the Commission approves **Rs.3.63 Cr.** (10% increment over last year's approval) as against OPTCL's proposal of Rs.6.81 Cr. under this head and directs OPTCL to restrict the engagement of outsourced personnel and expenses within the approved limit.

Stipend for New Recruitment:

193. OPTCL proposes that it has planned to recruit 172 Nos of employees in the FY 2024-25 and 280 Nos in FY 2025-26, Accordingly, Rs.10.53 Cr. (Rs.4.86 Cr. against 172 Nos. & Rs.5.67 Cr. against 280 Nos. of employees) is proposed towards stipend for the new recruits for the FY 2025-26. The Commission has observed that stipend/emoluments to 172 Nos. of employees those are recruited during the FY 2024-25 and regularised in FY 2025-26 have already been considered in the calculation of basic pay of FY 2025-26. Therefore, the Commission disallows the stipend proposed by OPTCL against these 172 Nos. of employees. Further, the Commission allows the induction of 200 Nos. of employees against the proposed recruitment of 280 Nos. of employees for the FY 2025-26. Accordingly, the Commission approves **Rs.4.05 Cr.** (Rs.5.67 Cr./280x200) under this head and directs OPTCL to restrict the recruitment as approved.

194. In previous Transmission Tariff orders, the Commission has highlighted that efficient manpower planning is crucial for the growth of any organization. With advancements in automation and technology, the requirements for manpower also evolve. Therefore, the

Commission had instructed OPTCL to seek prior approval before hiring additional staff, including outsourced personnel. OPTCL must adhere to this directive from the Commission.

Stipend to Apprentices:

195. OPTCL has proposed an amount of Rs.2.74 Cr. towards stipend to apprentices for the FY 2025-26. Based on the same, the Commission allows the same amount of Rs.2.74 Cr. for the FY 2025-26.

Capacity Building:

196. To enhance the knowledge and skill development of employees, OPTCL has proposed Rs.2.40 Cr. under the capacity building head. The Commission observes that, as per audited accounts, the actual expenditure under this head is Rs.1.05 Cr. during the FY 2023-24 and for the FY 2024-25, the Commission has approved Rs.1.10 Cr. Further, the Commission observes that training to employees is essential to update their knowledge and skills with the change in technological advancement. Considering the above, the Commission approves **Rs.2.00 Cr.** for the FY 2025-26 as against OPTCL's proposal of Rs.2.40 Cr. under this head. OPTCL is directed to appraise the Commission about the training modalities and benefits.

Other Employee related Cost:

197. OPTCL has proposed Rs.9.63 Cr. towards other employee-related Costs such as Ex-gratia, LTC, Honorarium, Bonus, etc. After analysing the submission of OPTCL, the Commission is not inclined to approve any amount towards Ex-gratia. However, OPTCL may submit any incentive and disincentive scheme before the Commission to improve the productivity of employees. Accordingly, the Commission approves Rs.0.63 Cr. (LTC-Rs.0.50 Cr, Honorarium- Rs.0.12 Cr. and Bonus- Rs.0.01 Cr.) for FY 2025-26.

Terminal Benefits including NPS:

198. While truing-up of the FY 2023-24 in this petition, the Commission has approved Rs.3340.36 Cr. up to 31.03.2024 towards terminal benefit liabilities 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 2024-25, the Commission has already approved total terminal benefit of **Rs. 3508.39 Cr.** The details are shown in the Table below:

Table - 31
Approved Terminal Benefit

(Rs. Crore)

Financial Year	Amounts
upto 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
2022-23	201.16
2023-24	168.03
Total up to 31.03.2024	**3,340.36**
Approved in ARR order of FY 2024-25	168.03
Total up to 31.03.2025	**3,508.39**

199. After investment in corpus as per the approval of the Commission up to 31.03.2025, the Commission assumes that there may not be any revenue deficit on account of terminal benefit liabilities.

200. Further, as per the Actuary valuation report, the Commission has observed that since FY 2020-21, the trend of total pensionary has been reduced gradually till FY 2023-24 which is shown in the Table below:

Table-32
Actual Pensionary position during FY 2020-21 to FY 2023-24

(in Nos.)

Financial Year	Employee	Pensioner	Family Pensioner	Total
2020-21	1,017	4,168	3,442	**8,627**
2021-22	864	3,994	3,310	**8,168**
2022-23	733	3,965	3,433	**8,131**
2023-24	594	3,895	3,544	**8,033**

Considering the above downward trends of pensioners, the Commission assumes that the corpus requirement may not increase substantially henceforth. Therefore, the Commission expects OPTCL should ensure prudent Actuary valuation for Terminal benefit liabilities.

201. In view of the above observations, the Commission approves **Rs.168.00 Cr.** against the OPTCL's proposal of Rs.203.51 Cr., toward Terminal benefit liabilities for the FY 2025-26. Besides the above, the Commission approves **Rs.24.52 Cr.** towards employer's matching contribution for NPS and Non-Pensioner Category as proposed by OPTCL for the FY 2025-26.

202. Considering the above observations relating to employees' Costs, the Commission approves **Rs.493.12 Cr.** (against OPTCL's proposed amount of Rs.554.05 Cr.) for the ensuing FY 2025-26. The details are shown in the Table below:

Table – 33
Employees Cost Approved by the Commission for the FY 2025-26
(Rs. in Crore)

Sl. No	Particulars	Actual for FY 2023-24	Approved for FY 2024-25	Proposed for FY 2025-26	Approved for FY 2025-26
A	**Salary & Allowance**	**1**	**2**	**3**	**4**
1	Basic Pay and Grade Pay	156.70	160.57	160.16	160.13
2	Dearness Allowance	69.32	88.31	97.70	97.68
3	House Rent Allowance	23.18	25.69	25.87	23.69
4	Medical Allowances (allowance + Reimbursement)	7.51	8.03	8.41	8.01
5	Conveyance Expenses (allowance + Reimbursement)	2.84	3.35	3.88	3.35
6	Other Allowance	1.28	1.59	1.96	1.59
7	Bonus	0.01	0.02	0.01	0.01
8	Stipend for New Recruitment	8.49	2.98	10.53	4.05
9	Stipend to Apprentice	1.64	3.95	2.74	2.74
	Sub-total (A)	**270.97**	**294.49**	**311.27**	**301.25**
B	**Additional Employee Cost**				
1	Outsource Engagement	3.46	3.30	6.81	3.63
2	**Sub-total (B)**	**3.46**	**3.30**	**6.81**	**3.63**
C	**Other Employee Cost**				
1	Leave Travel Concession	0.09	0.50	0.63	0.50
2	Honorarium	0.09	0.15	0.12	0.12
3	Ex-gratia	7.20	5.00	8.84	-
4	Staff Welfare Expenses	11.07	7.00	10.81	8.00
5	Other Employee Cost	0.52	-	0.02	-
6	Capacity Building Charges	1.05	1.10	2.40	2.00
7	**Sub-total (C)**	**20.02**	**13.75**	**22.83**	**10.62**
D	**Terminal Benefits**				
1	Pension	165.77	146.98	175.53	140.01
2	Gratuity	11.66	12.57	12.37	12.37
3	Leave Salary	14.79	8.48	15.62	15.62
4	Other (including contribution to NPS)	21.91	25.46	24.52	24.52
5	**Sub-total (D)**	**214.12**	**193.49**	**228.03**	**192.52**
E	**Total Employees Cost (A+B+C+D)**	**508.57**	**505.03**	**568.95**	**508.02**

Sl. No	Particulars	Actual for FY 2023-24	Approved for FY 2024-25	Proposed for FY 2025-26	Approved for FY 2025-26
F	Less: Employees Cost Capitalised	14.90	16.40	14.90	14.90
G	**Net Employee Cost (E-F)**	**493.67**	**488.63**	**554.05**	**493.12**

Repair & Maintenance (R&M) Expenses:

203. OPTCL has submitted that 194 Nos. Grid Sub-Stations and 16,508.068 ckt. Kms of transmission lines are in operation at different voltage levels (132 kV, 220 kV & 400 kV)) as on 31.03.2024 and 8 Nos. and 10 Nos. of Grid Substations are likely to be commissioned during the FY 2024-25 and 2025-26 respectively for which the R&M works are to be undertaken in different wings namely O&M, Telecom, Civil Works and Information Technology (IT). It has projected a sum of Rs.217.70 Cr. towards R&M expenses and the summary of proposed R&M expenses under these four heads is shown in the Table below:

Table – 34
R&M expenses Proposed by OPTCL for the FY 2025-26

(Rs. in Crore)

Particulars	OERC Approval (FY 2023-24)	OERC Approval (FY 2024-25)	Projection (FY 2025-26)
(i) O&M wing	135.00	135.00	192.46
(ii) Telecom wing			3.73
(iii) Civil Works wing			11.80
(iv) Information Technology & Others			9.71
Total R & M Expenses			**217.70**

204. The OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations at Regulations 8.15 and 8.16 provide the following with regard to the 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.’

205. OPTCL was asked to submit the actual expenditure incurred under R&M during the FY 2023-24 and the current FY 2024-25 (up to December, 2024). Based on its submission, the Commission observes that the Actual R&M cost is Rs.130.83 Cr. (including Licensee fees of Rs.7.04 Cr. which was approved under A&G expenses during FY 2023-24) as per

the audited account for the FY 2023-24 and Rs.114.76 Cr. during the FY 2024-25 (up to December, 2024). Further, the actual R&M cost during the last four financial years and the current FY 2024-25 (up to December 2024) against the Commission's approval are shown in the Table below:

Table - 35
R&M Cost of OPTCL

(Rs. in Crore)

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	114.15
2023-24	164.34	135.00	130.83
2024-25	169.30	135.00	114.76 (Till Dec'2024)

206. While approving R&M expenditure, the Commission always considers the actual R&M expenditure of the previous financial year. Taking the actual cost incurred during the current FY 2024-25 (upto December 2024), the Commission extrapolated the R&M expenses of Rs.153.01 Cr. (Rs.114.76 Cr. / 9 x 12) for the FY 2024-25. Further, considering the above observations, past trend of actual R&M cost and last year R&M approval, the Commission approves **Rs.160.00 Cr.** towards R&M cost for the FY 2025-26 including inspection fees.

207. Further, the Commission observes that OPTCL has been claiming depreciation on the items that are capital in nature, as per the Depreciation Schedule (Appendix-A) of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014. However, during scrutiny, the Commission observed that such types of capital items like CT, PT, CB, LA isolators, Station Transformers, etc. have been proposed under the R&M head of the O&M wing and also similar capital items have already been booked under the fixed assets during the FY 2023-24. Further, the Commission scrutinised the fixed assets register submitted by the OPTCL and observed that in some cases decapitalisation has not been done properly and some capital items are being replaced under R&M head without decapitalisation.

208. Considering the above, the Commission directs OPTCL to ensure that the expenditure, which is capital in nature, should not be booked under R&M expense as it will impact the transmission tariff during that year. Further, the health of transmission assets is vital for the smooth and reliable operation of the transmission system. Considering this fact, the Commission desires that OPTCL should incur R&M expenses exclusively for conditions-

based maintenance of transmission assets to improve the reliability and availability of equipment & material associated with the transmission system for smooth and trouble-free operation of the system.

209. Further, for extension of life beyond the useful life of a unit of the transmission system, OPTCL should go for Renovation and Modernization (R&M). For such investment proposal of Renovation and Modernization (R&M), the OPTCL shall make an application (separately) before the Commission for approval of the same with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component if any, record of consultation with beneficiaries and any other information considered to be relevant by the OPTCL.

210. The Commission further observes that OPTCL has proposed Rs.53.41 Cr. under R&M for the FY 2025-26 towards the engagement of security personnel which seems to be on the higher side. Further, OPTCL has already implemented the GPS-based line patrolling system successfully in some 400 kV transmission lines on a Pilot basis and subsequently, such practice would be extended to all the transmission lines strategically. Taking into account the above fact, the Commission directs OPTCL to focus on GPS-based patrolling system rather than relying on security personnel. Accordingly, the Commission directs OPTCL to optimise the expenses on security personnel and provides norms for the deployment of the security personnel in the Grid Substation as well as the transmission lines.

Administration & General (A&G) Expenses

211. OPTCL has proposed an amount of **Rs.49.20 Cr.** under the head A&G expenses for the ensuing FY 2025-26. The component-wise break-up of expenses is given in the Table below:

Table – 36
A&G Expenses Proposed by OPTCL for the FY 2025-26
(Rs. in Crore)

PARTICULARS	(Rs. Cr.)
Property Related Expenses	8.96
Communication	0.86
Professional Charges	3.22
Conveyance & travelling	18.03
Electricity & Water Charges	4.30
Fees & Subscription	0.09
Books & Periodicals	0.07

PARTICULARS	(Rs. Cr.)
Printing & Stationery	0.67
Advertisement	1.03
Entertainment	0.24
Watch & Ward	4.69
Miscellaneous	4.59
Office Maintenance	1.77
SLDC Charges	1.28
TOTAL	**49.80**

212. Further, OPTCL has submitted that as per Regulation 8.14 of the OERC's Transmission Tariff Regulations, 2014, A&G expenses shall be escalated over previous year considering WPI. However, due to the growth and expansion of the Transmission network, the number of offices in headquarters as well as in the field has increased over the years, which requires the revision in the base A&G expenses over which the WPI factor has to be applied on previous financial year to arrive at the A&G expenses for next financial year. Accordingly, OPTCL has submitted a comparative chart of asset additions and a comparative chart of the number of establishment additions, which are given below.

Table – 37
Comparative chart of Asset addition

Year	No. of Grid Substations	MVA capacity	Ckt. kms. of Line
2012-13	101	11554	11386
2023-24	194	26268	16508

Table – 38
Comparative Chart of Establishments

Financial Year	Subdivisions	Divisions	Circles	Zones (EDs)	CGMs	Directors
2012-13	190	38	11	0	5	4
2023-24	404	64	16	4	9	4

213. Considering the submission of OPTCL, the Commission observes that the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, were notified on 04.10.2014, which was initially for a control period from FY 2014-15 to FY 2018-19. Regulations 8.12 of the said Regulations provides that, "*the A&G expenses of each subsequent year will be determined by escalating the A&G expenses for the base year, at the escalating factor equal to WPI to arrive at permissible A&G expenses for each year of the control period.*". Accordingly, the Commission has been considering the actual A&G expenses of FY 2013-14 as the base year for A&G expenses and escalating the same at the WPI rate for each year of the control period from FY 2014-15 to FY

2018-19 and is being extended beyond the FY 2019-20 without any revision of the base year and revision of the Regulations. Further, the Commission observes that, in the meantime, the number of establishments has increased substantially due to the huge expansion of the transmission network. Accordingly, A&G expenses have also increased over the periods as per its audited accounts. However, the Commission has not revised the Base A&G expenses. Therefore, considering the above facts and the submission of OPTCL, the Commission decides to consider the audited actual A&G expenses of the FY 2023-24 as the base for A&G expenses to derive the A&G expenses for the FY 2025-26.

214. Considering the actual normal A&G expenses of Rs.37.70 Cr. of the FY 2023-24 as the base and the WPI rate of December 2024 (2.73 %), normal A&G expenses for the FY 2025-26 is estimated for Rs.38.59 Cr.. Further, considering the Licensee fees of Rs.2.50 Cr., ERPC charges of Rs.0.30 Cr. and SLDC charges of Rs.1.07 Cr., the Commission approves **Rs.42.46 Cr.** towards A&G expenses for the FY 2025-26 and also directs OPTCL to restrict the A&G expenses within the approved limit, details of which are shown in the Table below.

Table – 39
A&G Expenses Approved for the FY 2025-26

(Rs. in Crore)

	FY 2023-24		FY 2024-25	FY 2025-26
	Approved	**Actual**	**Approved**	**Approved**
Normal A&G approved in PY	**31.19**		**32.73**	**37.70**
WPI Rate of December of PY	4.95%		0.73%	2.37%
Escalation as per WPI	1.54		0.24	0.89
Normal A&G	**32.73**	**37.70**	**32.97**	**38.59**
Add: licensee fees to Commission & ERPC Charges	2.50	2.50	2.80	2.80
Add: Inspection Fees	4.06	-	-	-
Add: SLDC charges	0.99	-	1.28	1.07
Total A&G Expenses approved for the FY 2025-26	**40.28**	**40.20**	**37.05**	**42.46**

Interest and financial charges

Interest on loan

215. OPTCL has estimated that its principal loan will be Rs.2421.36 Cr. as on 01.04.2025. Further, it has projected to raise additional loan of Rs.1,331.08 Cr. and proposed to repay the loan of Rs.178.53 Cr. during the FY 2025-26. Further, OPTCL has projected that interest amounting to Rs.155.93 Cr. to be capitalised during FY 2025-26. Considering the above, OPTCL has proposed net interest amounting of Rs.145.61 Cr. for the FY 2025-26.

The details of loan position as on 01.04.2025 and interest thereon projected by OPTCL are shown in the Table below:

Table - 40
Interest on loan proposed by OPTCL for the FY 2025-26

(Rs. in Crore)

Sl. No	Particular	Rate of Interest	Principal as on 01.04.2025	Loan projected to be received during FY 2025-26	Repayment of loan during FY 2025-26	Interest due for the FY 2025-26	Total payment during FY 2025-26
1	2	3	4	5	6	7	8=6+7
1	JICA	5.00%	442.53		42.25	21.07	63.32
2	Union Bank of India-I	8.80%	338.83		46.67	27.76	74.43
3	Union Bank of India-II	8.90%	548.09		50.59	46.53	97.12
4	UCO Bank	8.25%	450.51		39.02	35.56	74.58
5	New Loan	8.65%	641.40	1,331.08		170.62	170.62
6	**Sub-Total**		**2,421.36**	**1,331.08**	**178.53**	**301.54**	**480.07**
7	**Less:** Capitalisation					155.93	
8	**Grand Total**		**2,421.36**	**1,331.08**	**178.53**	**145.61**	

216. The Commission scrutinised the loan position and observes that the outstanding loan position was Rs.2006.17 Cr. as on 31.03.2024 as per the audited accounts of OPTCL for the FY 2023-24. Further, it is observed that OPTCL has not availed any loan till December 2024 of FY 2024-25.

217. Therefore, the Commission has considered the actual loan availed till December 2024 of FY 2024-25 & loan repayment during FY 2024-25 & FY 2025-26. Further, OPTCL has proposed Rs.155.93 Cr. towards Interest During Construction (IDC) considering the existing and new loans to be availed during FY 2025-26. Since the Commission has not considered the new loan proposed during the FY 2025-26 for calculation of interest of the loan, the Commission has considered provisionally IDC of Rs.20.00 Cr. for the FY 2025-26 taking into account the actual IDC booked in audited accounts of the FY 2023-24. However, during truing-up, the same will be approved on an actual basis. Taking into account the above facts, the Commission estimates interest on the loan by considering the average loan position of FY 2025-26 and accordingly approves **Rs.120.37 Cr.** (Rs.140.37 Cr. – Rs.20.00 Cr.) towards interest on the loan for the FY 2025-26. The details are shown in the Table below:

Table - 41
Interest on loan approved by the Commission for the FY 2025-26

(Rs. in Crore)

Sources	Rate of Interest (%)	FY 2024-25				FY 2025-26		Average Loan for FY 2025-26	Estimated Interest for FY 2025-26
		OB as on 31.03.2024	Received	Repayment	CB as on 31.03.2025	Repayment	CB as on 31.03.2026		
1	2	3	4	5	6=3+4-5	7	8=6-7	9=(6+8)/2	10=9x2
Union Bank of India I	8.80	385.49	-	35.00	350.49	46.67	303.82	327.16	28.79
Union Bank of India_II	8.90	598.68	-	37.94	560.74	50.59	510.15	535.45	47.66
Uco Bank	8.25	450.85	-	-	450.85	39.02	411.83	431.34	35.59
REC	10.50	86.28	-	86.28	-	-	-	-	7.26
JICA	5.00	484.86	-	42.15	442.71	42.25	400.46	421.59	21.07
Sub-total	**8.18**	**2,006.17**	**-**	**201.37**	**1,804.79**	**178.53**	**1,626.26**	**1,715.54**	**140.37**
Less: Interest considered for capitalisation									20.00
Total									**120.37**

Interest on Working Capital

218. OPTCL has estimated its working capital requirement of Rs.332.99 Cr. and the interest on working capital is Rs 44.12 Cr for the FY 2025-26. However, it has not proposed any amount of interest on working capital but requested that the Commission may consider the interest on working capital incurred, if any, for FY 2025-26 during the truing up exercise.

219. The Commission has analysed the Cash flow statements submitted by OPTCL and observed that OPTCL is 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. Since OPTCL has not claimed any amount towards interest on working capital, the Commission has not allowed any amount under this head for the FY 2025-26.

Depreciation

220. OPTCL has submitted that as per 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 the applicable depreciation rate as determined by the Commission from time to time. The Regulations further state that depreciation shall not be allowed on the assets funded by transmission system users and capital subsidies/grants. OPTCL has stated that, after excluding the grant, beneficiary & deposit works assets of Rs.1847.86 Cr. and fully depreciated assets value of Rs.1858.82 Cr. (90% of Asset value) from the gross original book value of fixed assets of Rs.9015.83 Cr., its own transmission assets become

Rs.5309.15 Cr. as on 01.04.2023. OPTCL has requested the Commission not to deduct the up-valued assets of Rs.512.71 Cr. while calculating the transmission assets as the same has fully depreciated in 27 years from 1996. Further, after adjustment/deletion, fixed assets of Rs.538.29 Cr. (Rs.563.38 Cr. - Rs.25.09 Cr.) have been added during the FY 2023-24, including assets value of Rs.206.09 Cr. towards grant, beneficiary and deposit works. Further, it has stated that during the FY 2023-24, fixed assets of Rs.39.68 Cr. have been fully depreciated (90%). Accordingly, OPTCL has estimated the gross original book value of fixed assets as on 31.03.2024 is Rs.5601.67Cr. (Rs.5309.15 Cr. + Rs.538.29 Cr. - Rs.39.68 Cr. - Rs.206.09 Cr.) excluding the grant, beneficiary & deposit works and fully depreciated assets.

Further, OPTCL has submitted that, own transmission assets (excluding Deposits works & Grant assets etc.) of Rs.526.26 Cr. and Rs.1605.73 Cr. to be added during the FY 2024-25 and FY 2025-26 respectively. Considering the same, the original book value of transmission fixed assets will become Rs.6127.93 Cr. as on 31.03.2025 and Rs.7733.67 Cr. as on 31.03.2026. Based on the above-projected capitalisation, OPTCL has proposed **Rs.356.57 Cr.** towards depreciation for the FY 2025-26. The details are shown in the table below:

Table -42
Depreciation Proposed by OPTCL for the FY 2025-26

(Rs. in Crore)

Sl No	Particulars	Freehold Land	Lease Hold Land	Buildings	Electrical Installation	Plant and Machinery (Other Civil Work)	Plant and Machinery	Plant and Machinery (Lines, Cables & Network)	Vehicles	Furniture, Fixture	Office Equipment	Intangible Assets	Total Own Assets
1	Rate of Depreciation		3.34%	3.34%	5.28%	3.34%	5.28%	5.28%	9.50%	6.33%	6.33%	15.00%	
2	Book vale of own Assets as on 01.04.2023	54.94	57.31	165.01	12.36	108.90	5367.97	3116.27	2.34	9.46	103.85	17.42	9015.83
3	Book Value of FA Depreciated (90%) as on 01.04.2023		0.00	0.50	0.52		824.67	1005.27	2.34	1.49	24.04		1858.82
4	Book Value of FA (Grant, Beneficiary & Deposit as on 01.04.2023	6.29	5.63	8.18	3.95	5.94	1056.28	755.01	0.00	0.52	6.06	0.00	1847.86
5	Book value of own Assets as on 01.04.2023 (on which Dep. Calculated) (2-3-4)	48.65	51.68	156.33	7.90	102.96	3487.02	1355.99	0.00	7.45	73.75	17.42	5309.15
6	Book Value of FA Added in FY 2023-24 (As per Audited Accounts)	2.55	1.24	57.75	1.59	17.29	304.91	157.80	0.31	1.01	18.86	0.07	563.38
7	Deletion/ adjustments				1.32	-5.07	-21.30				-0.04		-25.09

Sl No	Particulars	Freehold Land	Lease Hold Land	Buildings	Electrical Installation	Plant and Machinery (Other Civil Work)	Plant and Machinery	Plant and Machinery (Lines, Cables & Network)	Vehicles	Furniture, Fixture	Office Equipment	Intangible Assets	Total Own Assets
8	Book Value of FA Depreciated (90%) in FY 2023-24		1.04				7.10	31.54					39.68
9	Book Value of FA (Grant, Beneficiary & Deposit Assets added in FY 2023-24	0.00	0.00	4.72	0.00	0.70	79.87	118.24		0.06	2.50		206.09
10	Book value of own Assets as on 31.03.2024 (on which Dep. Calculated) (5+6+7-8-9)	51.20	51.88	209.36	10.81	114.48	3683.66	1364.01	0.31	8.40	90.07	17.49	5601.67
11	Book Value of FA Added in FY 2024-25 (Own Assets)	4.83	4.89	19.73	1.02	10.79	347.15	128.55	0.03	0.79	8.49		526.26
12	Book value of own Assets as on 31.03.2025 (on which Dep. Calculated) (10+11)	56.03	56.77	229.09	11.82	125.27	4030.82	1492.55	0.34	9.19	98.56	17.49	6127.93
13	Book Value of FA Added in FY 2025-26 (Own Assets)	14.72	14.92	60.20	3.11	32.92	1059.24	392.22	0.09	2.42	25.90		1605.73
14	Book value of own Assets as on 31.03.2026 (on which Dep. Calculated) (12+13)	70.75	71.69	289.29	14.93	158.19	5090.06	1884.77	0.43	11.61	124.46	17.49	7733.67
15	Depreciation proposed for FY 2025-26 ((12+14)/2*1)	**0.00**	**2.15**	**8.66**	**0.71**	**4.73**	**240.79**	**89.16**	**0.04**	**0.66**	**7.06**	**2.62**	**356.57**

221. The Commission has gone into the details of the submission made by the OPTCL and the audited accounts of the FY 2023-24. While approving the Truing-up of accounts for the FY 2023-24 in this order, the Commission has considered the total original book value of transmission fixed assets of Rs.9552.99 Cr. (Rs.7671.90 Cr. at Deemed Cost) as on 31.03.2024 after considering the assets of Rs.538.29 Cr. created during the FY 2023-24.

222. Accordingly, the Commission considered the historical original book value of transmission fixed assets of Rs.9552.99 Cr. as on 31.03.2024. After deduction of Up-valued assets of Rs. 512.71 Cr., assets created out of grant, beneficiary & deposit works of Rs.2116.13 Cr. (i.e., Rs.1910.04 Cr. as on 31.03.2023 + Rs.206.09 Cr. of FY 2023-24) and fully depreciated assets of Rs.1904.63 Cr. (i.e., Rs.1864.95 Cr. as on 31.03.2023 + Rs.39.68 Cr. of FY 2023-24), OPTCL's own asset was Rs.5019.52 Cr. (Rs.9552.99 Cr. - Rs.1904.63 Cr. - Rs. 512.71 Cr, - Rs.2116.13 Cr.) as on 01.04.2024.

223. Further, OPTCL has submitted that Rs.526.26 Cr. & Rs.1605.73 Cr. of assets (excluding grant, beneficiary & deposit work) are likely to be added during the FY 2024-25 & FY

2025-26 respectively. However, in line with earlier years approval, the Commission has provisionally considered the proposed asset of Rs.526.26 Cr. to be added during the FY 2024-25 only. Considering the above, the original book value transmission fixed assets would be Rs.5545.78 Cr. as on 31.03.2025. Accordingly, taking the assets value of Rs.5545.78 Cr., the Commission approves the depreciation of **Rs.284.33 Cr.** for the FY 2025-26. The details of which are shown in the Table below:

Table - 43
Depreciation on Transmission Assets approved by the Commission for the FY 2025-26
(Rs.in Crore)

Component of Transmission Assets	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Fixed Assets as per audited accounts as on 31-03-2024	Up-valued Assets	Original book value of Grant & Beneficiary /Deposit Assets as on 31-03-2024	Fully (90%) Depreciated Assets as on 31-03-2024	For the Calculation of Depreciation, the Original Book Value of Own Fixed Assets as on 31-03-2024	Own assets to be added during FY 2024-25	For the Calculation of Depreciation, the Original Book Value of Own Fixed Assets as on 31-03-2025	Estimated Depreciation for FY 2025-26
1	2	3	4	5	6	7=3-(4+5+6)	8	9	10 = 9x2
Freehold Land	-	57.49	6.26	6.29	-	44.94	4.83	49.77	-
Leasehold Land	3.34	58.55	-	5.63	1.04	51.88	4.89	56.77	1.90
Building	3.34	222.74	15.10	12.92	0.23	194.49	19.73	214.22	7.15
Electrical Installation	5.28	12.63	-	3.95	0.49	8.19	1.02	9.21	0.49
P&M (Other Civil Works)	3.34	126.19	0.91	6.64	-	118.64	10.79	129.43	4.32
Plant & Machinery	5.28	5,655.18	266.02	1,171.11	818.74	3,399.31	347.15	3,746.46	197.81
P&M (Line, Cable & Network)	5.28	3,266.70	221.17	889.76	1,064.82	1,090.95	128.55	1,219.50	64.39
Vehicles	9.50	2.66	-	-	1.43	1.23	0.03	1.26	0.12
Furniture & Fixture	6.33	10.48	0.46	0.58	1.43	8.01	0.79	8.80	0.56
Office Equipment	6.33	122.72	2.79	8.56	16.45	94.92	8.49	103.41	6.55
Intangible Assets	15.00	17.65	-	10.69	-	6.96	-	6.96	1.04
Total		**9,552.99**	**512.71**	**2,116.13**	**1,904.63**	**5,019.52**	**526.26**	**5,545.78**	**284.33**

224. While approving the investment proposals of OPTCL in past, the Commission has observed that the 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 so as to avoid non-adherence to the statutory provisions. Further, in case of the unviable project, the Commission directs OPTCL to take up the matter with the Government to finance such projects through grants to minimise the tariff burden on consumers.

225. In the past Transmission Tariff orders, the Commission had directed OPTCL to submit its Fixed Assets Register showing assets created through Own investment, Grants & from beneficiary deposits and Capital work in progress (CWIP) in the prescribed format of the Commission. In compliance with the above direction OPTCL has submitted the Fixed Assets Register. However, some important information, such as the location of assets, assets without physical verification & its operational conditions and separately showing the assets created through Own investment, Grants & from beneficiary deposits, have not been provided in the assets register. Further, OPTCL has not provided the detailed CWIP position in the prescribed format.

226. Since OPTCL is an asset-based company, its primary responsibility is to maintain its Fixed Assets Register unequivocally. Therefore, the Commission directs OPTCL to submit the Complete Fixed Assets Register with the original book value of fixed assets as on 31.03.2025 and assets addition during the FY 2024-25 showing assets created through Own investment, Grants & from beneficiary deposit works separately in the earlier prescribed format. Further, OPTCL is required to submit the Capital work in progress (CWIP) position as on 31.03.2025 showing separately Own investment, Grants & beneficiary deposits work separately in the earlier prescribed format. The same should be submitted by 30.09.2025 before the Commission positively.

227. Further, the Commission directs OPTCL to submit quarterly the details of the scheme-wise assets capitalisation (as per the prescribed format for Fixed Asset Register) along with receipt of the Electrical Inspector certificate (wherever applicable) as per Regulation 4.15 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014.

Return on Equity (RoE):

228. OPTCL has projected total equity capital of Rs.3901.53 Cr. as on 31.03.2026 expecting infusion of equity share capital of Rs.954.53 Cr. from the State Government during FY 2025-26. But based on the projected original book value of transmission fixed assets of Rs.6127.93 Cr. as on 31.03.2025, OPTCL has proposed **Rs.284.95 Cr. (**Rs.6127.93 Cr. X 30% X 15.50%) towards Return on Equity (RoE) for the FY 2025-26 considering 30% equity capital of assets values of Rs.6127.93 Cr. and RoE @15.50%.

229. The Commission has examined the submission of OPTCL. Regulation 8.29 of the OERC Transmission Tariff Regulation, 2014, stipulates that *"In case of STU (OPTCL), RoE shall be computed in rupee terms, on the equity base as determined by the Commission".* Since the Commission in the past Transmission Tariff orders has been allowing RoE on

the equity capital infused by the State Govt., the claims of RoE on the normative basis by the Petitioner have not been taken into consideration.

230. As submitted by OPTCL, the Commission observes that the amount of equity capital infused by the State Government is Rs.2746.62 Cr. till December 2024. The details of such equity capital are shown in the Table below:

Table –44
Equity Capital Infused by the State Government

(Rs.in Crore)

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
1	R&R-I-01/2009-3560 Dated 25.03.2009	23.04
2	R&R-I-01/2009-2003 Dated 24.02.2009	0.01
3	R&R-I-01/2009-9464 Dated 11.09.2009	5.00
4	R&R-I-01/2009-4826 Dated 01.06.2010	20.00
5	R&R-I/73/2010-2438 Dated 23.03.2011	51.95
6	R&R-6/12-685 Dated 31.01.2012	1.00
7	R&R-6/12-690 Dated 31.01.2012	39.00
8	R&R-6/12-695 Dated 31.01.2012	3.00
9	R&R-6/12-629 Dated 22.01.2013	25.76
10	R&R-6/12-634 Dated 22.01.2013	16.60
11	R&R-6/12-624 Dated 22.01.2013	7.64
12	R&R-6/12-5693 Dated 18.07.2013	29.19
13	R&R-6/12-5698 Dated 18.07.2013	11.97
14	R&R-6/12-5703 Dated 18.07.2013	8.84
15	R&R-69/14-10445 Dated 29.12.2014	10.50
16	R&R-69/14-10450 Dated 29.12.2014	27.50
17	R&R-69/14-10455 Dated 29.12.2014	12.00
18	R&R -54/2015/En-5458 Dated 23.06.2015	20.00
19	R&R-69/14-6823 Dated 06.08.2015	19.68
20	R&R-69/14-6818 Dated 06.08.2015	17.22
21	R&R-69/14-6813 Dated 06.08.2015	20.03
22	BT(P)-15/15-10291 Dated 21.12.2015	0.07
23	R&R -54/2015/En-737 Dated 28.01.2016	10.00
24	R&R -54/2015/En-4348 Dated 07.06.2016	20.00
25	R&R-69/14-5364 Dated 18.7.2016	10.00
26	R&R-69/14-5369 Dated 18.7.2016	20.00
27	R&R-69/14-5374 Dated 18.7.2016	20.00
28	R&R -54/2015/En-466 Dated17.01.2017	60.00
29	R&R -17/2017/En-2895 Dated 22.04.2017	20.00
30	R&R -17/2017/En-10216 Dated 27.12.2017	50.00
31	BT(P)-04/2018/En-1786 Dated 26.02.2018	15.00
32	BT(P)-04/2018/En-1791 Dated 26.02.2018	20.00
33	BT(P)-04/2018/En-1796 Dated 26.02.2018	15.00
34	R&R -40/2018/En-3902 Dated 28.04.2018	15.00
35	R&R -40/2018/En-4632 Dated 24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En Dated 19.12.2018	15.00

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
37	BT(P)-04/2018(pt)-10439/En Dated 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En Dated 19.12.2018	15.00
39	R&R-40/2019-5100/En Dated 27.06.2019	3.67
40	R&R-40/2019-6530/En Dated 6.08.2019	11.03
41	S.O. No: 201915819273 Dated 27.02.2020	55.00
42	S.O. No: 202018025467 Dated 13.10.2020	50.00
43	S.O. No: 202019704714 Dated 23.03.2021	9.00
44	S.O. No: 202019752418 Dated 26.03.2021	5.29
45	S.O. No: 202019747311 Dated 26.03.2021	647.00
46	S.O. No: 202121454297 Dated 06.09.2021	50.00
47	S.O. No: 202122892459 Dated 18.12.2021	30.00
48	S.O. No: 202122892550 Dated 18.12.2021	30.00
49	S.O. No: 202124034526 Dated 03.03.2022	6.65
50	S.O. No: 202124047110 Dated 04.03.2022	55.00
51	S.O. No: 202124048923 Dated 04.03.2022	4.00
52	S.O. No: 202124049541 Dated 04.03.2022	140.00
53	S.O. No: 202227471951 Dated 18.11.2022	9.69
54	S.O. No: 202227471252 Dated 18.11.2022	22.83
55	S.O. No: 202227471090 Dated 18.11.2022	92.24
56	S.O. No: 202227471290 Dated 18.11.2022	10.00
57	S.O. No: 202227471194 Dated 18.11.2022	50.00
58	S.O. No: 202227470743 Dated 17.11.2022	26.58
59	S.O. No: 202227470711 Dated 17.11.2022	119.12
60	S.O. No.202331276395 Dated 14.09.2023	18.00
61	S.O.No.202331276355 Dated 14.09.2023	5.00
62	S.O.No.202331276284 Dated 14.09.2023	12.10
63	S.O.No.202331297833 Dated 26.09.2023	13.92
64	S.O.No.202333681995 Dated 23.02.2024	36.61
65	S.O.No.202334084744 Dated 12.03.2024	40.00
66	S.O. No.202334195334 Dated 20.03.2024	100.00
	Total (up to FY 2023-24)	**2382.71**
67	S.O.No.202458578219 Dated 18-09-2024	13.92
68	S.O. No.202450314958 Dated 03-08-2024	70.00
69	S.O. No.202450386885 Dated 03-08-2024	70.00
70	S.O. No.202459219075 Dated 23-09-2024	50.00
71	S.O. No.202465741314 Dated 28-10-2024	70.00
72	S.O. No.202465764845 Dated 28-10-2024	70.00
73	S.O. No.202464565396 Dated 17-10-2024	20.00
	During FY 2024-25 (Up to Dec' 2024)	363.92
	Total Equity up to Dec' 2024	**2746.62**

231. Further, OPTCL was asked to submit detailed information about capital work-in-progress as on 31.03.2024. Based on its submission, the Commission observes that out of the above equity capital received from the Government of Odisha, equity capital of Rs.815.44 Cr. is still under Capital Work-in-Progress (CWIP) by the end of FY 2025-26, details of which are shown in the Table below:

Table –45
Equity infused by GoO but under CWIP up to 31.03.2026

(Rs.in Crore)

Sl. No.	Name of Project	Scheme	Received up to 31.03.2024 (Rs. Cr.)	Received during FY 2024-25 (upto Dec'2024)	Total Equity under CWIP as on 31.03.2026
1	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
2	2x500MVA, 400/220/33kV GIS at **Paradeep** and associated line	30% GoO Equity	191.24	-	191.24
3	Kantabanji to Patnagarh-132kv SC on DC tower	RRCP-II-30% GoO Equity Support	8.53	-	8.53
4	Budhipadar to Sundergarh-132kv SC LILO at Bamra	RRCP-II-30% GoO Equity Support	8.53	-	8.53
5	Ghense to Padampur-132kv SC Line on DC Tower	RRCP-II-30% GoO Equity Support	6.83	-	6.83
6	132/33kv S/s at Athamallick with Asso. Lines	LVMS -30% GoO Equity Support	9.61	2.09	11.70
7	220/33kv S/s at Chitalo with Asso. Lines	LVMS -30% GoO Equity Support	22.17	4.83	27.00
8	132 KV line from Turumunga to Dhenkikote	LVMS -30% GoO Equity Support	7.51	1.64	9.15
9	220/132/33 KV GSS, Kiakata	SASCI Scheme	37.52	-	37.52
10	132/33 KV GSS at Athamalik with Asso. Line	SASCI Scheme	14.00	-	14.00
11	8 Nos of AIS Project Under OTSSP Ph-I	100% GoO Equity	40.00	280.00	320.00
12	21 Nos of Project Under OTSSP Ph-II	30% GoO Equity	100.00	20.00	120.00
13	2 Nos of Projects under GEETC	100% GoO Equity	-	26.50	26.50
14	5 Nos of Projects under GEETC	30% GoO Equity	-	23.50	23.50
	Total		**456.88**	**358.56**	**815.44**

232. Further, the Department of Energy, Government of Odisha, vide their letter No.3333 dated 24.03.2021, had communicated to the Commission that no Return on Equity shall

be allowed on the equity of Rs.647.00 Cr. which is related to the sanction of Government towards the conversion of the bond value of Rs.400.00 Cr. and interest outstanding of Rs.247.00 Cr. to the equity. Subsequently, the Department of Energy, Government of Odisha vide their letter No. 3941 dated 21.03.2025 has communicated to the Commission that, the Government of Odisha has agreed to extend the status -quo on the up-valuation of assets till the FY 2025-26.

233. As per Regulations 8.28 & 8.29 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, return on equity shall be computed at the rate of @15.50% per annum (post-tax) on the equity base as determined by the Commission. Further, as per Regulation 4.11(b) of said Regulations, in the event of the actual equity in excess of 30% of the fund deployed, the excess equity shall be treated as a normative loan. Considering the above, the Commission observes that projects worth Rs.89.81 Cr. (i.e. Brundabahal- Rs.58.12 Cr. & Tarabha- Rs.31.69 Cr.) have been executed through 100% equity support from the Government of Odisha. Therefore, the Commission has considered Rs.26.94 Cr. (30% of Rs.89.81 Cr.) as equity capital and the balance Rs.62.87 Cr. (70% of Rs.89.81 Cr.) as a normative loan as per the provision of the Regulations and accordingly the Commission considered the RoE for said projects. Considering the above, the Commission has determined the Equity capital as Rs.1221.32 Cr (i.e., Rs.2746.62 Cr - Rs.815.14 Cr - Rs.647.00 Cr.- Rs.62.87 Cr.) for calculation of RoE @15.50% and return on normative loan of Rs.62.87 Cr. @8.18% (i.e. estimated weighted average rate of interest for the FY 2025-26). Accordingly, the Commission approves **Rs.194.45 Cr.** (Rs.1221.32 Cr X 15.50% + Rs.62.87 Cr. X 8.18%) towards RoE for the FY 2025-26 as against OPTCL's proposal of Rs.284.95 Cr.

Income Tax:

234. As per Regulation 8.43 of the OERC Regulations, 2014, the income tax of the Transmission Licensee shall be recovered from the beneficiaries. OPTCL has proposed an amount of Rs.10.77 Cr. towards income tax for the FY 2025-26 based on the actual tax (MAT) paid and income tax return filed for the FY 2023-24 (AY 2024-25). The Commission has examined the income tax return filed by OPTCL for the FY 2023-24 and allows **Rs.10.77 Cr**. provisionally for the FY 2025-26 in anticipation of payment made under the head income tax subject to actual payment which will be verified during truing-up exercise of that year.

Grid Co-ordination Committee Expenses:

235. OPTCL proposed an amount of Rs.0.35 Cr. under the head GCC expenses for the FY 2025-26. Even though OPTCL has not spent any amount during the FY 2023-24 under this head, in line with last year's approval in ARR & tariff order, the Commission allows an amount of **Rs.0.35 Cr.** towards GCC expenses for the FY 2025-26. OPTCL should convene the GCC meeting on a regular basis and discharge its responsibilities as stipulated in the Odisha Grid Code-2015.

Incentive for system availability:

236. OPTCL has submitted that the transmission system availability factor (TAFY) for the FY 2023-24 was 99.98%, which is more than the 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.13.46 Cr. to be considered in the ARR of the FY 2025-26.

237. The Commission has examined the relevant provision of the Act & Regulations on payment of incentives to OPTCL. SLDC has verified the System Availability of 99.98% during the FY 2023-24 and OPTCL is expected to maintain NATAF at more than 98.50% during the FY 2024-25. Further, the Commission while appreciating the system availability of 99.98% during the FY 2023-24, approves an amount of Rs.5.00 Cr. as an incentive in the ARR of OPTCL for the FY 2025-26 with a stipulation that this incentive amount approved by the Commission should be spent on solarisation of grids/system improvement 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.

Rebate:

238. OPTCL has submitted that Long & Medium-Term Open Access Customers other than DISCOMs are governed under OERC (Terms and Conditions of Intra state Open Access) Regulations, 2020. They shall pay the transmission charges within seven (07) days from the date of receipt of the bill as mentioned vide Regulation 32(2)(b) of Intra state Open Access Regulations 2020. There is no provision for the rebate for early payment in the said Regulations 2020. Considering the above, the Commission does not allow rebates to open-access customers who are governed by the OERC (Terms and Conditions of Intra state Open Access) Regulations 2020.

239. As per Regulation 8.49 of the 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.27.97 Cr. towards rebate (@ 2%) for the FY 2025-26 on projected ARR of Rs.1398.71 Cr. (38764.29 MU x 36.08 Paise/Unit). However, based on the approved quantum of energy (39542 MU) transmitted to the Distribution Companies, the Commission approves an amount of **Rs.20.17 Cr.** (39542 MU x 25.50 Paise/ Unit x 2%) under the head of the rebate in the ARR of the FY 2025-26 and the same will be trued-up on actual basis.

Exemption as per Odisha Renewable Energy Policy-2022:

240. OPTCL has projected to transmit 104.95 MU (M/s MCL- 80 MU & M/s ABReL (Odisha) SPV Ltd.- 24.95 MU) of energy through its network during the FY 2025-26. As per clause No. 10(4) of the Odisha Renewable Energy Policy-2022, they will get an exemption of twenty (20) paisa per unit on STU charges. Accordingly, OPTCL has proposed Rs.2.10 Cr. as incentive for the FY 2025-26 as an exemption to be provided to captive/open access consumers to pass through in the ARR of the FY 2025-26.

241. The Renewable Energy Policy, 2022, has been formulated by the Government of Odisha, which envisages large-scale integration of Renewable Energy (RE) Generation in the State. Sub-Clause 10.4 under Clause No. 10 "Exemptions and Incentives" of the said policy is depicted as, *"Exemption of twenty (20) paise per unit on STU charges shall be provided to captive /open access consumers on consumption of energy from RE projects commissioned in the State during the policy period for fifteen (15) years. In case a project is commissioned before 31.03.2026, the exemption shall be extended for five (5) more years, i.e., twenty (20) years in total. The OERC shall issue necessary order in this regard.".* Further, as per clause 10 of said Policy, the State Government shall extend the above incentive to promote the development of RE projects in the State.

242. Considering the above provisions of the Odisha Renewable Energy Policy-2022, the Commission directs OPTCL to 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 for fifteen (15) years. In case a project is commissioned before 31.03.2026, the exemption shall be extended for five (5) more years, i.e., twenty (20) years in total. However, the Commission is not inclined to pass through the consequential incentive as proposed by OPTCL in the ARR for FY 2025-26. Accordingly, the Commission directs OPTCL to take the necessary action as per the provision of Odisha Renewable Energy Policy-2022.

Miscellaneous Receipts:

243. OPTCL has proposed an amount of Rs.264.62 Cr. towards miscellaneous receipts from inter-state Transmission charges, short-term Open Access & STU charges, Bank interest, scrap sale, Income from Lease rent (Optical Fibre), supervision charges and other Misc. Receipts which are shown in the Table below:

Table – 46
Miscellaneous Receipts Proposed by OPTCL for FY 2025-26

Source	Amounts (Rs Cr.)
Inter-State Transmission charges	8.14
Short-Term Open Access Charges	176.28
Medium-Term Open Access (Inter State)	12.00
Bank Interest	20.00
Scrap Sale	5.00
Income from Lease rent (Optical Fibre)	10.00
Supervision Charges	20.00
Other Misc. Receipts	13.20
Total	**264.62**

244. The Commission has examined the submission of OPTCL by considering the actual miscellaneous receipts as per audited accounts of the FY 2023-24 and actual receipts during the first 9 months of the FY 2024-25. During the scrutiny, the Commission observed that OPTCL has proposed Rs.20.00 Cr. towards interest from bank deposits and Rs.13.20 Cr. towards other miscellaneous income for the FY 2025-26. Whereas the actual interest from bank deposits is Rs.74.34 Cr. during the FY 2023-24 and Rs.68.30 Cr. during 1st 9 months of the FY 2024-25. Similarly, the actual other miscellaneous income is Rs.20.27 Cr. during the FY 2023-24 and Rs.23.79 Cr. during 1st 9 months of the FY 2024-25. Taking into account the above observation, the Commission considers Rs.50.00 Cr towards interest from bank deposits and Rs.20.00 Cr. towards other miscellaneous income for the FY 2025-26. Furthermore, the Commission observes that OPTCL has proposed Rs.10.00 Cr. for lease rent (optical fibre), while the actual lease rent received during the first nine months of FY 2024-25 is Rs.11.79 Cr. Taking this into account, the Commission estimates Rs.15.00 Cr. for lease rent (optical fibre) for the FY 2025-26. Accordingly, the Commission approves **Rs.306.42 Cr.** under miscellaneous receipt for the FY 2025-26 against OPTCL's proposed miscellaneous receipt of Rs.264.62 Cr. The details of which are shown in the Table below:

Table – 47
Miscellaneous Receipts Approved by the Commission for FY 2025-26

(Rs. in Crore)

Sl. No	Particulars	Approved for FY 2024-25	Proposed for FY 2025-26	Approved for FY 2025-26
1	Short-term Open Access Charges (STOA)	165.00	176.28	176.28
2	Medium-term Open Access (Inter-State)	-	12.00	12.00
3	Inter-state Wheeling Charges	7.75	8.14	8.14
4	Supervision Charges	30.00	20.00	20.00
5	Interest from Bank deposits	80.00	20.00	50.00
6	Lease Rent (Optical Fibre)	-	10.00	15.00
7	Scrap Sales	5.00	5.00	5.00
8	Other miscellaneous income	15.00	13.20	20.00
	Sub-total (1+2+…+8)	**302.75**	**264.62**	**306.42**

Transmission Cost:

245. OPTCL has submitted that it has taken the recent realistic demand projection of all four DISCOMs to be 38537.40 MU (4399.24 MW) for the FY 2025-26. Further, it has projected that the energy of 440 MU (50.23 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 440 MU, the petitioner has estimated that, net 38097.40 MU (i.e., 38537.40 MU - 440 MU) is to be transmitted in the OPTCL network for DISCOMs. Further, OPTCL has projected 561.94 MU (481.94 MU + 80 MU) for wheeling and supply of Emergency/Backup power to IMFA, NALCO, ABREL SPL & BEL. Accordingly, the projected energy transaction over its network would be about 38659.34 MU (i.e., 38097.40 MU + 561.94 MU).

In addition to the above, OPTCL has projected 104.95 MU {24.95 MU for M/s ABREL(Odisha) SPV Limited and 80 MU for M/s MCL} of Energy to be transmitted through OPTCL network for the FY 2025-26 which will get an exemption of twenty (20) paisa per unit on STU charges as per clause No. 10(4) of the Odisha Renewable Energy Policy-2022. Taking the above energy transaction into consideration, OPTCL has projected the transaction of 38764.29 MU (38659.34 MU + 104.95 MU) over its network.

246. The Commission scrutinized the above proposal of OPTCL along with the proposals submitted by the distribution licensees. Accordingly, the Commission estimates **40,228.89 MU** energy to be transmitted over OPTCL’s transmission network for the FY 2025-26. The details of which are given in the Table below:

Table – 48
Energy likely to be Transmitted over OPTCL Transmission Network during the FY 2025-26 (MU)

Particulars	Proposed by OPTCL	Approved by OERC
(A) Demand of DISCOM	38537.4	39,982.00
(B) **Less:** Energy transmitted in 33 kV & 11 kV Network	440	440
(C) Net Energy Transmitted for DISCOM (A-B)	**38,097.40**	**39,542.00**
(D) Wheeling to industries from CGPs	481.94	481.94
(E) Emergency Sale by GRIDCO to CGPs.	80	100
(F) Sub-total (C+D+E)	**38,659.34**	**40,123.94**
(G) Wheeling to industries at exemption of 20 Paise/unit as per Odisha RE Policy-2022	104.95	104.95
Total (F+G)	**38,764.29**	**40,228.89**

Summary of ARR & Transmission Tariff Approved for the FY 2025-26:

247. The summary of ARR proposed by OPTCL and approved by the Commission for the ensuing FY 2025-26 are shown in the Table below:

Table –49
ARR Proposed by OPTCL and Approved by the Commission for the FY 2025-26

(Rs. in Crore)

Sl No	Particulars	OERC's approval for FY 2024-25	OPTCL's Proposal for FY 2025-26	OERC's approval for FY 2025-26
1	Employee Cost Including Terminal Benefits	488.63	554.05	493.12
2	R & M Cost	135.00	217.70	160.00
3	A & G Cost	37.05	49.80	42.46
4	Depreciation	275.67	356.57	284.33
5	Interest & Financial Charges	133.95	145.61	120.37
6	Return on Equity	162.14	284.95	194.45
7	Incentive for System Availability	5.00	13.46	5.00
8	GCC Expenses, statutory levies & taxes	0.35	0.35	0.35
9	Rebate	17.85	27.97	20.17
9	Incentive as per Odisha Renewable Energy Policy, 2022	2.31	2.10	-
10	Income Tax	7.00	10.77	10.77
11	**Total Annual Revenue Requirements (ARR) (1+2+…+10)**	**1,264.95**	**1,663.33**	**1,331.02**
12	**Less:** Misc Receipts (Including STOA)	302.75	264.62	306.42
13	**Less:** Regulatory Surplus	48.50	-	-

Sl No	Particulars	OERC's approval for FY 2024-25	OPTCL's Proposal for FY 2025-26	OERC's approval for FY 2025-26
14	**Annual Revenue Requirement to be recovered from LTA Consumers (i.e. DISCOMs & CGPs) {11-(12+13)}**	**913.70**	**1,398.71**	**1,024.60**
15	**No. of Units to be handled (MU)**	**38,073.49**	**38,764.29**	**40,228.89**
16	Transmission Charges (Paise/kWh)	24.00	36.08	25.50
17	**Expected Revenue from LTA Customers**	**913.76**	**930.34**	**1,025.84**
18	**Gap: Surplus/(Deficit) (17-14)**	**0.06**	**(468.37)**	**1.24**

TARIFF DESIGN

Transmission Tariff:

248. 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:

249. The Commission has followed the same principle of the Postage Stamp Method as in earlier years for the determination of Transmission Charges of the OPTCL system. Accordingly, the Transmission Charges have been worked out as **25.50 paise/kWh** which shall be applicable for transmission of power over OPTCL's EHT Transmission network (Lines and Sub-stations at 400kV/220kV/132kV level) and shall be payable by the DISCOMs.

250. The Commission has approved the net transmission cost as indicated in the Table above as **Rs.1024.60 Cr.** for the FY 2025-26. The aforesaid transmission cost will be recovered from the estimated energy for transmission in OPTCL's system, which is **40,228.89 MU** with an average demand of **4592.34 MW.** The Open Access charges work out to a rounded sum of **Rs.6120/MW/day or Rs.255/MWh.**

251. Accordingly, 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.6120/MW/day or Rs.255/MWh** towards transmission charges.

252. The Open Access charges shall be applicable as determined by the Commission in its Order passed in Case No. 85, 89, 96 & 100 of 2024 for Open Access consumers.

Transmission Loss for Wheeling:

253. OPTCL had proposed that out of the energy supplied to the transmission licensee, 3.05% shall be deducted towards transmission loss and the balance is liable to be delivered at the delivery point (at 400kV/220kV/132kV level). The Commission has approved the transmission loss of **3.00%** for wheeling for the FY 2025-26.

Reactive Energy Charges:

254. OPTCL has submitted that the Commission in Para 16 of the order dated 05.02.2019 in Case No. 50/2017 had 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 2025-26.

255. The Commission provisionally approves reactive energy charges @ 3 paise/kVARh for the FY 2025-26. However, despite the approval of such charges for the last five years, OPTCL has not submitted any justification for reactive energy charges in consultation with the stakeholders. In view of the above, the Commission directs OPTCL to comply with the order dated 05.02.2019 in Case No. 50/2017.

Transmission Charge Payment Mechanism:

256. 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:

257. 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 extended for five (5) more years in case of projects commissioned before 31.03.2026.

Rebate:

258. For payment of bills through a Letter of Credit (LC) 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 the current bill shall be allowed to the Distribution Licensee (DISCOMs). If the payments are made by the mode other than through a Letter of Credit

but within a period of 30 days of the presentation of bills by the DISCOMs, a rebate of 1% shall be allowed.

Late Payment Surcharge:

259. As per Regulation 8.48 of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, in case payment of bills by the Distribution licensees is delayed beyond a period of 30 days from the date of receipt of the bill, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL on the unpaid amount.

Further, as per Regulation 33 of OERC (Terms and conditions of Intra state open access) Regulations, 2020, in case payment of bills by Long- & Medium-Term Open Access Customers other than DISCOMs is delayed beyond a period of 7 days from the date of receipt of the bill, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL on the unpaid amount.

Directions of the Commission:

260. The Commission directs OPTCL to submit a compliance report on or before 30.09.2025 on the observations raised in this order along with the following additional directions:

a) OPTCL is directed to inform about the status of implementation/planning for execution of transmission projects covered/likely to be covered under Intra-state TBCB.

b) OPTCL is also directed to inform about the availability of details of all transmission assets (assets created under own Capex & Govt. grant/equity) in SAP module (if not available, what is the timeline for availability of all details in SAP module).

c) OPTCL is also directed to carry out study and create the effective ring of transmission network at various voltage levels (132 kV & 220 kV and 400 KV) to improve reliability & availability of power supply and at the same time OPTCL is also directed to support/encourage DISCOMs for creating Ring by interconnecting their PSSs although facilitating such system in DISCOM's network may not be economical for OPTCL, but this arrangement should be encouraged to improve the reliability and availability of power supply to ultimate consumer.

d) OPTCL need to declare the availability of spare bays in GSS for connectivity of RE generators at 33 kV/132 kV/220 kV level in order to facilitate RE generators for evacuation of their power and support the policy of Govt. Of Odisha for RE development in the State.

e) Frequency of GCC-level meetings needs to be increased.

f) OPTCL is directed to inform about new initiatives for adopting emergency technology like the adoption of fast erection technology, use of high ampacity conductor (like AL59) as a cost-effective alternative to HTLS conductor etc. for efficient operation and optimization of transmission cost and status of operation of fully unmanned GSS.

g) Duration of interruption due to other incidents and snapping of jumper /conductor/Earth wire is about 70% and 10% of total interruptions respectively, which is quite high during FY 2023-24. A brief note on the nature of other incidents which have caused about 290 hours of power interruption and the reason for the snapping of conductor/earth wire needs to be submitted to the Commission.

h) Steps need to be taken to comply with the requirement of regular cyber security audits to prevent possible cyber-attacks and to ensure security for the smooth operation of the transmission system.

i) Steps being taken for auto operation of OLTC of transformers, particularly for transformers directly linked with the Distribution system at 33 kV level.

j) OPTCL need to explore the possible use of Potential Voltage Transformer (PVT) up to 500 KVA as a pilot project for extending power supply to remote rural areas where GSS of OPTCL or PSS of DISCOM is not available in the nearby area. Stepping down of transmission voltage (132 kV/220 kV/400 kV) directly to low voltage level (415 V) using PVT would be a cheaper & reliable alternative to the extension of the Distribution network to such area.

261. The transmission tariff approved as above in respect of OPTCL will become effective from 01.04.2025 and shall continue to remain in force until further orders.

262. The Application of OPTCL in respect of ARR & Transmission Tariff for the FY 2025-26 and Truing-up of accounts for the FY 2023-24 in Case No. 93 of 2024 is disposed of accordingly.

Sd/-	Sd/-
(S. K. Ray Mohapatra)	**(G. Mohapatra)**
Member	**Officiating Chairperson**