

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

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

CASE No. 113 OF 2023

DATE OF HEARING : 01.02.2024

DATE OF ORDER : 13.02.2024

IN THE MATTER OF: An application for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2024-25 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 2024-25 along with its Truing up of expenses for the FY 2022-23 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 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 consequent issuance of vesting orders by the Commission, Bulk Power Transmission and SLDC Agreements have been signed between OPTCL and the new Distribution Companies.

A. PROCEDURAL BACKDROP (Para 2 to 9)

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 in each year in the prescribed format. OPTCL as a deemed licensee had submitted its ARR application for FY 2024-25 along with Truing up for FY 2022-23 before the Commission on 30.11.2023, and the said application was registered as Case No.113 of 2023. After due scrutiny and admission of the matter, the Commission directed OPTCL to publish its ARR & Transmission tariff application for FY 2024-25 along with Truing up of the Application for FY 2022-23 in the approved format in the leading and 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 on serving a copy each on them.
3. Accordingly, OPTCL published the said public notice in the leading daily English and Odia newspaper in one issue each. The Commission issued notice to the applicant, each Objector and also the Government of Odisha represented by Department of Energy for deputing their authorized representative to take part in the ensuing tariff proceedings.
4. In response to the aforesaid public notice of the applicant, the Commission received 14 number of objections/suggestions from the following persons/ associations/ institutions/ organizations.
 1. Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President, Upobhokta Mahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012,
 2. M/s.Utkal Chamber of Commerce & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015,
 - 3.M/s. Tata Steel Ltd.,Kalinga Nagar Industrial Complex,Duburi,JK Road,Dist.-Jajpur-755026,
 - 4.M/s.Grinity Power Tech Ltd.,at-K-8-82,Kalinga Nagar, Ghatikia, Bhubaneswar-751029,
 5. M/s. Ferro Alloys Corporation Limited (FACOR), D.P.Nagar, Randia, Dist-Bhadrak-756135,
 6. M/s. Vedanta Limited,1st Floor, C-2 Fortune Tower, Chandrasekharapur, Nandanakanan Road, Bhubaneswar-751023,
 7. Shri Soumya Ranjan Patnaik,S/o Late Brajabandhu Patnaik, MLA, Khandapada, Plot No. 185, VIP Colony, Nayapalli, Bhubaneswar-15,
 - 8.M/s. Jindal Steel & Power Ltd., Chhendipada Road, SH 63, P.O:Jindal Nagar, Angul-759111,
 9. M/s. Visa Steel Ltd., Kalinganagar, Industrial Complex, At/P.O; Jakhapura, Dist.-Jajpur-755026,
 10. M/s. Jindal Stainless Ltd., Kalinganagar Industrial Complex Jajpur-755026,

11. M/s. TPWODL,, At/P.O: Burla,Dist.-Sambalpur-768017, 12. M/s. TPNODL, At/P.O: Januganj, Dist.-Balasore-756019 ,13.M/s. TPCODL, 2nd Floor, IDCO Towers, Janpath, Bhubaneswar-751022, & 14. M/s. TPSODL, At/P.O: Courtpetta, Dist.-Berhampur-760004. The Representative of Department of Energy, Govt. Of Odisha. All the above-named Objectors/their Representatives along with the representative of Department of Energy, Government of Odisha were present during tariff hearing through hybrid mode and their written submissions being taken on record were considered by the Commission.

5. 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 put during hearing.
6. 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 World Institute of Sustainable Energy (WISE), Pune, as Consumer Counsel for objective analysis of the licensee's Aggregate Revenue Requirement and Determination of Transmission Tariff proposal for FY 2024-25. The Consumer Counsel presented its views in the hearing.
7. The date for hearing of the matter was fixed for 01.02.2024 at 11.00 AM and it was duly notified in the leading newspaper mentioning the list of the objectors. The Commission has also issued individual notices to the objectors and the Department of Energy, Government of Odisha, informing them about the date and time of hearing through hybrid mode (physical & virtual).
8. In its consultative process, the Commission conducted a public hearing of the case at its office premises on 01.02.2024 at 11.00A.M.and heard the applicant, objectors, WISE-the Consumer Counsel, appointed by the Commission to analyze the ARR & Transmission Tariff application of OPTCL for FY 2024-25 and the Representative of the Department of Energy, Government of Odisha at length.
9. The Commission convened the State Advisory Committee (SAC) meeting through virtual mode on **07.02.2024 at 11.00 A.M** at its premises to discuss about the Aggregate Revenue Requirement applications and tariff proposals of licensees for FY 2024-25. 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 by the Commission.

B. OPTCL's ARR & TARIFF PROPOSAL FOR THE FY 2024-25 & TRUING UP FOR FY 2022-23 (PARA 10 TO 49)

10. As provided under Regulation 53 (1) at 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 number 72 of 2019, exercising the power conferred under Regulation 9.1 of the aforesaid Regulation, had extended the applicability of OERC's Transmission Tariff Regulations, 2014 until further orders. In compliance to the provisions of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, OPTCL has submitted its Aggregate Revenue Requirement & Transmission Tariff application for the FY 2024-25 along with truing-up application for the FY 2022-23 before the Commission for approval.

Categorization of Customers

11. 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 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 and BEL happen to be the long-term customers of OPTCL.
 - b. **Medium Term Open Access Customers (MTOA Customers):** Medium Term Open Access means the open access for a period exceeding three (3) months but not exceeding three (3) years.
 - c. **Short Term Open Access Customers (STOA Customers):** Short Term Open Access means open access for a period up to one (1) month at a time.

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

ARR & TARIFF PROPOSAL FOR FY 2024-25

Formulation and Computation of Transmission Charges:

12. The Commission has framed OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 (hereinafter called “OERC Transmission Tariff Regulations, 2014”) which has been 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 2024-25 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 FY 2024-25 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:

13. 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 2024-25 are as under:

Salaries, wages, pension contribution and other employee costs:

14. 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 recruitment, Staff Welfare expenses, Ex-gratia, other expenses etc, Terminal benefit liability (Pension, Gratuity and Leave Salary) and employer contribution to NPS.
15. Accordingly, OPTCL proposes **Rs.582.06 Cr.** under the head Employees Cost for the FY 2024-25. The component wise details are shown in the Table below.

Table - 1
Employee Cost Proposed by OPTCL for FY 2024-25

(Rs. in Crore)	
Particulars	Amount
Employee cost including Salary, Dearness Allowance etc.	354.34
Terminal Benefit Liability of Employees and Existing Pensioners	244.12
Less: Capitalization	16.40
Total	582.06

Administrative and General (A&G) Expenses:

16. OPTCL has proposed **Rs. 51.13 Cr.** towards A&G Expenses for FY 2024-25. The A&G Expenses include property-related expenses, communication, professional charges, conveyance and traveling, SLDC charges, license fees and material related expenses. The

A&G expenses show an increasing trend in recent years due to 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:

17. OPTCL has stated that, 188 Nos. Grid Sub-Stations at different voltage levels and EHT transmission lines of 16,029.381 ckt. kms are in operation as on 31.03.2023. The details are given in the Table below.

Table - 2
Sub-stations and Lines of OPTCL as on 31.03.2023

Sub-Station and Line Details		
400/220/33kV S/S		2
400/220/132/33kV S/S		3
220/132/33kV S/S		27
220/33kV S/S		17
220/132kV S/S		1
132kV Sw. Stn.		26
132/33kV S/S		112
Total No. of Sub-Stations		188
Voltage Level	Lines (ckt. km.)	No of Bays
400kV	1,196.872	70
220kV	6,675.772	451
132kV	8,156.737	1244
33kV	-	1472
TOTAL	16,029.381	3237

18. Further, OPTCL has proposed that, around 18 Nos. of new grid substations under execution to be commissioned during the year FY 2023-24 and FY 2024-25. The R&M works are being undertaken under different activities namely O&M, Telecom, Civil Works and Information Technology (IT). Accordingly, OPTCL has proposed R&M Expenses of **Rs. 169.30 Cr.** for the FY 2024-25. The details of R & M expenses are given in the Table below:

Table - 3
Repairs and Maintenance (R&M) Expenses Proposed by OPTCL for the FY 2024-25
(Rs. in Crore)

Particulars	OERC Approval (FY 2022-23)	OERC Approval (FY 2023-24)	Projection (FY 2024-25)
(i) O&M	110.50	135.00	144.25
(ii) Telecom			3.30
(iii) Civil Works			15.65
(iv) Information Technology & Others			6.10
Total R & M Expenses			169.30

Grid Coordination Committee (GCC) Expenses:

19. OPTCL has proposed **Rs. 0.35 Cr** towards annual GCC Expenses for FY 2024-25 in line with the matters specified in Chapter-11(2)(2) of the Odisha Grid Code (OGC) Regulations, 2015.
20. Accordingly, OPTCL has proposed **Rs.802.83 Cr** towards O&M Expenses for the FY 2024-25, details of which are given in the Table below:

Table - 4
O&M Expenses Proposed by OPTCL for the FY 2024-25
(Rs. in Crore)

Particulars	Amount
(i) Employees Cost including Terminal Benefits	582.06
(ii) A&G Expenses	51.13
(iii) R&M Expenses	169.30
(iv) GCC Expenses	0.35
Total O&M Expenses	802.83

Interest and Financial Charges:**Interest on Loan**

21. OPTCL has proposed **Rs.148.95 Cr.** towards interest on loan capital for the FY 2024-25.

Interest on Working Capital

22. OPTCL has submitted that, it has estimated working Capital requirement of Rs. 325.83 Cr as per Regulation 8.25 of the OERC Transmission Tariff Regulations, 2014. Further, as per Regulation 8.26 of aforesaid Regulation, the rate of interest for working capital shall be on normative basis and shall be equal to the SBI Base Rate plus 300 basis points as on 1st January of the preceding year for which tariff is determined. Accordingly, OPTCL has computed interest on working capital of Rs. 40.40 Cr. for FY 2024-25 by considering rate of interest @12.40%. It is further stated that, in case of STU (OPTCL), the Commission has not allowed any interest on working capital in the ARR on the ground that OPTCL has positive cash flow. In line with above observation of the Commission, OPTCL has not proposed any amount towards interest on working capital for FY 2024-25. However, OPTCL has requested the Commission to consider the interest on working capital if any availed during FY 2024-25 in the truing up exercise.

Rebate:

23. As per Regulation 8.49 of the OERC Transmission Tariff Regulations, 2014, OPTCL has proposed **Rs. 27.61 Cr.** towards rebate @ 2% on the projected ARR for the FY 2024-25.

New Projects:

24. OPTCL has proposed **Rs. 1,552.14 Cr.** for FY 2024-25 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 is given in the Table below.

Table - 5
CAPEX Proposed by OPTCL for FY 2024-25

		(Rs. in Crore)
Sl. No	Particulars	Amount
1	New Transmission Projects (Construction Wing)	1135.97
2	Existing Assets (O&M Wing)	251.44
3	Telecom Wing	29.78
4	Information Technology (IT Wing)	10.76
5	Civil Wing	124.19
	Total	1,552.14

Depreciation:

25. OPTCL has submitted that after excluding the grant, beneficiary & deposit works assets of Ra. 1711.45 Cr. and fully depreciated (90% of Asset value) assets value of Rs. 1631.99 Cr. from the gross original book value of fixed assets of Rs. 8274.51 Cr., its own transmission assets become Rs.4931.07 Cr. (including up valued assets of Rs.512.71 Cr.) as on 01.04.2022. 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 26 years from 1996. Further, net fixed assets of Rs.741.50 Cr. (Rs.751.03Cr.-Rs.9.53 Cr.) have been added during FY 2022-23 which includes assets value of Rs. 198.59 Cr. towards grant, beneficiary and deposit works. OPTCL has reported that during FY 2022-23, fixed assets of Rs. 232.97 Cr. have been fully depreciated (90%). Accordingly, OPTCL has estimated the gross original book value of fixed assets as Rs. 5241.01 Cr. (Rs. 4931.07 Cr. + Rs. 741.50 Cr. – Rs. 198.59 Cr. – Rs. 232.97 Cr.) as on 31.03.2023 excluding the grant, beneficiary & deposit works and fully depreciated assets.

Further, OPTCL has projected the addition of transmission assets (excluding Deposits works & Grant assets etc.) of Rs.631.99 Cr. and Rs.694.13 Cr. during FY 2023-24 and FY 2024-25 respectively. Considering the same, the original book value of transmission fixed assets will become Rs. 5873.00 Cr. as on 31.03.2024 and Rs. 6567.13 Cr. as on 31.03.2025.

Considering the above-projected capitalisation, OPTCL has proposed Rs. 320.03 Cr. towards depreciation for FY 2024-25.

Return on equity (RoE):

26. 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 Crore. Thereafter, the State Government has infused equity share capital of Rs.2206.10 Cr. till date against various transmission projects including Rs.647.00 Cr. towards conversion of bonds with interest into equity. Further, it has projected that another Rs.100.00 Cr. will be received in Jan-2024 from the planned budget of the Energy Department for FY 2023-24 and as committed, the State Government will further infuse Equity Share Capital of Rs.113.92 Cr. during FY 2024-25 against the various transmission projects. Considering the above, OPTCL has projected that its total Equity Capital will be Rs. 2480.09 Cr as on 31.03.2025.

However, based on the projected original book value of transmission fixed assets of Rs. 5873.00 Cr. as on 31.03.2024, OPTCL has proposed Return on Equity (RoE) of Rs. 273.09 Cr. (@ 15.5% on 30% of Rs. 5873.00Cr) for the FY 2024-25. Further, it has submitted that aforesaid assets have been created through share capital infused by the State Government, long-term loans from Banks/Financial institutions and internal accrual.

Income Tax:

27. As per the Regulation 8.43 of OERC's Transmission Tariff Regulations, 2014, Income tax of the Transmission Licensee shall be recovered from the beneficiaries. As per the Audited Accounts of the FY 2022-23, OPTCL has paid Income Tax of Rs.36.69 Cr. Accordingly, it has proposed the same amount of Rs. 36.69 Cr. towards income tax for FY 2024-25. 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 the Regulation 8.43 and 8.44.

Incentive for System Availability:

28. The Regulation 6.4 of OERC's Transmission Tariff Regulations, 2014 specifies the "Operational Norm" applicable for the transmission system for recovery of the full annual transmission charge by the Transmission Licensee. Further, the Normative Annual Transmission System Availability Factor (NATAF) shall be 98.50% for AC system for recovery of full Annual Transmission Charges. OPTCL has filed the calculation of TAFY for the FY 2022-23 as 99.97%. The computation and TAFY figure have been verified and certified by SLDC. In accordance with the formula prescribed in Regulation 6.5, OPTCL has worked out incentive of Rs.12.42 Cr. towards system availability for the year 2022-23.

Accordingly, OPTCL proposed Rs.12.42 Cr. towards Incentive for System Availability for the ensuing FY 2024-25.

Total Transmission Cost:

29. Considering the proposed cost / expenses under different heads and incentives, OPTCL has submitted that, the total transmission cost will be Rs. 1621.63 Cr. for the ensuing FY 2024-25.

Miscellaneous Receipts:

30. OPTCL has submitted that, in line with the trend of revenue of previous years and earning during 1st six months of FY 2023-24, it has proposed Rs.240.94 Cr. for the FY 2024-25 towards Miscellaneous Receipts such as Inter-State Transmission charges, STOA & STU charges, Bank interest, Supervision Charges, Scrap Sale and Other receipts.

Summary of ARR proposed by OPTCL for the FY 2024-25

31. Considering all the aforesaid proposed transmission costs and miscellaneous receipts, OPTCL has proposed its Net Aggregate Revenue Requirement (ARR) of **Rs.1380.69 Cr.** for the FY 2024-25 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 2024-25

		(Rs. in Crore)
Particulars	Amounts	
1. O&M Expenses (a+b+c+d)		802.83
(a) Employees Cost including Terminal Benefits	582.06	
(b) A&G Cost	51.13	
(c) R&M Cost	169.30	
(d) Other misc. expenses, statutory levies and taxes (GCC)	0.35	
2. Interest & Financial Charges (e+f)		176.56
(e) Interest on Loan Capital	148.95	
(f) Rebate	27.61	
3. Depreciation		320.03
4. Return on Equity		273.09
5. Income Tax		36.69
6. Incentive for system availability		12.42
7. Total Transmission Cost (1+2+3+4+5+6)		1,621.63
8. Less: Miscellaneous Receipt		240.94
9. Net ARR proposed to recover from LTA Customers (7-8)		1,380.69

Transmission Loss

32. OPTCL has submitted that, the transmission loss is purely a technical loss and dependent on the location of generation sources, system configuration and power flow requirements at

different load centres. Further due to increasing demand of power on account of industrialization and implementation of central & state sponsored schemes like ODSSP, SCRIPS, RRCP, LVMS, DRPS etc. in Odisha, flow of power in the transmission network contributing to increased transmission loss. OPTCL further mentioned that, its transmission loss is already very low and further reduction in loss becomes difficult. OPTCL has been able to reduce the transmission loss over the years by commissioning number of new transmission projects strategically and adopting innovative schemes under Master Maintenance Plan during last few years. The actual transmission loss in the OPTCL's transmission system from April-2023 to September-2023 is 3.12% against Commission's approval of 3.00% for FY 2023-24. OPTCL expects the loss level to remain around 3.10% in the current year. Accordingly, OPTCL proposes 3.05% transmission loss during FY 2024-25.

OPTCL Revenue Receipt and Deficit in the Proposed ARR for the FY 2024-25:

33. OPTCL has stated that, it has taken the recent realistic demand projections of all four DISCOMs **36,252 MU (4138.35 MW)** for FY 2024-25. Further the energy of 360 MU (41.09 MW) is likely to be transacted in 33kV & 11kV network of DISCOMs for which OPTCL is not entitled to get any transmission charge as per the Commission's order. Hence, excluding this, the petitioner has estimated that, net 35892 MU (i.e., 36,252 MU - 360 MU) will be transmitted over the OPTCL's network for DISCOMs. Further OPTCL has projected 753 MU (85.95 MW) for wheeling and supply of Emergency/Back-up power to IMFA, NALCO, ABREL & BEL. Accordingly, the projected energy transaction over its network would be about **36,645 MU** (i.e., 35,892 MU+ 753 MU).

Further, OPTCL has projected energy transmission of **115.491 MU** (35.491 MU for M/s ABReL (Odisha) SPV Limited and 80 MU for M/s MCL) through OPTCL network for FY 2024-25 which will get an exemption of twenty (20) paise 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 **36760.49 MU** (36,645 MU + 115.49 MU) over its network.

34. Regarding recovery of transmission charges from the LTA Customers during FY 2024-25, OPTCL has proposed as follows:
 - i. By charging at the rate applicable to DISCOMs for wheeling of 35892 MU (4097.26 MW).
 - ii. By charging at the rate applicable to LTA customers like IMFA, NALCO, ABREL & BEL for wheeling and supply of Emergency/Back-up power of 753 MU (85.95 MW)

- iii. By charging at the rate (exemption of twenty 20 paisa per unit) applicable to LTA customers like M/s ABREL (Odisha) SPV Limited and M/s MCL as per Odisha Renewable Energy Policy-2022 for wheeling and supply of Emergency/Back-up power of 115.49 MU.

OPTCL has estimated that, the existing transmission tariff @ 24 P/U would generate revenue of Rs. 879.48 Cr. from the projected units of 36645 MU and @ 04 P/U (after 20 P/U exemption) can earn Rs. 0.46 Cr from projected units of 115.49 MU. Accordingly, OPTCL has estimated to earn total revenue of Rs. 879.94 Cr. from LTA customers by transmitting 36760.49 MU during FY 2024-25.

Excess/Deficit of Revenue Requirement:

35. OPTCL has projected revenue deficit of Rs. 500.75 Cr. for FY 2024-25 by considering the proposed ARR of Rs.1380.69 Cr and the estimated revenue of Rs.879.94 Cr to be earned at the existing transmission tariff @24 P/U.

Proposal for revision of Transmission Tariff/ Wheeling Charges:

36. 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.1380.69 Cr,
 - Recovery of Transmission Charge @ Rs. 9042 /MW/Day or 37.68 P/U and
 - Transmission Loss for wheeling as 3.05% on energy drawl for FY 2024-25.

Open Access Charges:

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

- a) 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 2024-25, the DISCOMs projection 35892 MU (4097.26MW)]**
and

- b) From other LTA customers (i.e. NALCO, IMFA, ABREL & BEL) as per OERC (Terms and conditions of Intra state open access) Regulations 2020.
[For FY 2024-25, NALCO, IMFA, ABREL & BEL have projected their demands as 147.6 MU (16.85 MW), 375 MU (42.81 MW), 164.25 MU (18.75 MW) and 65.70 MU (7.50 MW)]

39. OPTCL has proposed the Open Access charges for the FY 2024-25 as shown in the Table below.

Table - 7
Open Access Charges proposed by OPTCL for the FY 2024-25

Particulars	Per Unit Approach
Net Aggregate Revenue Requirement (Rs. Cr.)	1380.69
Proposed Energy to be transmitted in OPTCL Network (MU)	36645
Power Flow in MWs (36645MU)	4183.22
Proposed Transmission Tariff (Rs. /MW/Day)	9042
Proposed Transmission Charges (Paise/unit)	37.68

Reactive Energy Charges:

40. 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 2024-25.

Levy of Grid Support Charges (GSC):

41. OPTCL has submitted that, an application was filed before the OERC on 23.09.2020 for determination and approval for levy of GSC for industries having Captive Generating / Cogeneration plants and running in parallel with the Grids of OPTCL subsequent to para 264 of ARR & Transmission Tariff Order for FY 2017-18. The same was registered as OERC Case No. 52/2020. However, the said Application of OPTCL was challenged before the Hon'ble Orissa High Court in W.P(C) No-2220 of 2021 & W.P(C) No-16513 of 2021 filed by M/s Vedanta Limited and M/s CCPPO Odisha respectively. Hon'ble High Court in their Order dated 06.07.2023 at para 35 have rendered observation as stated herein after: "if

OPTCL files a separate application urging Hon'ble Commission for examining whether the levy of GSC/POC is justifiable and if found justifiable, to frame the appropriate regulation in exercise of the powers conferred upon the Hon'ble Commission, in that event, the Hon'ble Commission shall examine the matter, not initiating a proceeding, but by invoking its powers as provided under Section 181, EA. ”. 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 further reduction in transmission cost.

Rebate:

42. As per 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.
43. 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. OPTCL prays for issuance of necessary directions in this regard.

Late Payment Surcharge:

44. 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:

45. 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 2022-23:

46. 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 2022-23 and has prayed the Commission to carry-out truing-up exercise.

47. The petitioner has further submitted that the truing-up of annual fees and charges of SLDC functions shall be carried out as per Regulation-4 of the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010. OPTCL has stated that, the deficit of **Rs.0.81 Cr.** from SLDC Transaction during the FY 2022-23 has been transferred to profit & Loss Account of OPTCL.
48. OPTCL has submitted that during FY 2022-23, it has incurred a net deficit of Rs.41.67 Cr. Therefore, the petitioner requests the Commission to consider the surplus/deficit against each item for truing-up of ARR for FY 2022-23. 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 2022-23 is shown in the Table below:

Table - 8
Truing-up Proposed by OPTCL for the FY 2022-23

(Rs. in Crore)

Sl No	Particulars	OERC Approved	Actual as per audited accounts of OPTCL	Truing up Proposed	Surplus/ (Deficit)
1	Employee Cost (Net)	477.19	558.12	585.08	(107.89)
2	R & M Cost	110.50	114.15	114.15	(3.65)
3	A& G Cost (Including SLDC charges and GCC)	38.08	39.83	38.88	(0.80)
4	Depreciation	233.57	388.16	288.47	(54.90)
5	Interest on long-term liability	110.29	97.64	97.64	12.65
6	Rebate	16.64	17.92	17.92	(1.28)
7	Incentive for system availability	5.00	-	12.42	(7.42)
8	Return on Equity	141.67	-	243.71	(102.04)
9	Income tax	2.16	-	36.68	(34.52)
10	Total Transmission Cost (1 to 9)	1,135.10	1,215.82	1,434.95	(299.85)
11	Less: Inter-state wheeling & Misc. Revenue	303.15	555.55	440.13	136.98
12	Net Transmission Cost (10-11)	831.95	660.27	994.82	(162.87)
13	Revenue from Transmission Charges	831.88	953.15	953.15	121.27
14	Gap - Surplus/(Deficit) (13-12)	(0.07)	292.88	(41.67)	(41.60)

49. Further OPTCL has submitted that, a Review Application, vide Case No. 61/2022 against the order dated 12.07.2022 in Case No-119/2021 in the matter of truing-up of the ARR of OPTCL has been filed for the FY 2020-21. In the said Petition, OPTCL had requested the Commission to consider Rs.106.14 Cr., which was not considered appropriately in the truing-up order for FY 2018-19 even though the Commission had assured to consider the same in the truing up order for FY 2020-21. While disposing of Case No. 61/2022, the Commission, vide its order dated 11.04.2023 in para 14, observed as under:

“ xxx, After analyzing the above request of the petitioner, the Commission observes that as this order is limited to the review of our truing up order for FY 2020-21 passed in Case No. 119/2021, any matter related to FY 2018-19 cannot be considered in the present proceeding. However, this will not prevent the Petitioner to raise the issue in the future tariff proceeding.”

Preferring to the above earlier observations of the Commission, OPTCL has pleaded before the Commission to consider Rs. 106.14 Cr. in the current truing-up order for the FY 2022-23 as the same was not considered in truing-up exercise for the FY 2018-19.

C. VIEWS OF CONSUMER COUNSEL, ON TRANSMISSION TARIFF PROPOSAL OF OPTCL FOR 2024-25 (PARA 50 TO 52)

50. 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 2024-25 along with truing-up of FY 2022-23 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

51. In FY 2023-24, the total ARR was increased by 5.42% only over the approved ARR of FY 2022-23. However, the revenue requirement projected by OPTCL for the FY 2024-25 is about 35.52% more than that approved for the FY 2023-24. This increment is due to an increase in Employee Cost (29.61%) R&M Cost (25.41%), A&G cost (26.94%), interest on loan capital (33.19%), depreciation (18.73%) and incentive (148.40%). The comparative figures of components of ARR are given in the table below.

Table-9
Comparative Annual Revenue Requirement of OPTCL

(Rs. Crore)

Particulars	Approved FY 2022-23	Approved FY 2023-24	Proposed FY 2024-25	Increase/ (Decrease) (in %) FY 2023-24 vs FY 2022-23	Increase/ (Decrease) (in %) FY 2024-25 vs FY 2023-24
Employees Cost incl. Terminal Benefits	477.19	449.08	582.06	(5.89)	29.61
A&G Cost	37.73	40.28	51.13	6.76	26.94
R&M Cost	110.5	135	169.3	22.17	25.41
Expenses related to auxiliary energy consumption	-	-	-	-	-
Other misc. expenses, statutory levies and taxes (GCC)	0.35	0.35	0.35	0.00	0.00
Interest on Loan Capital	110.29	111.83	148.95	1.40	33.19
Interest on Working Capital	-	-	-	-	-
Rebate	16.64	17.92	27.61	7.69	54.07
Depreciation	233.57	269.54	320.03	15.40	18.73
Return on Equity	141.67	140.42	273.09	(0.88)	94.48
Income Tax	2.16	27.21	36.69	1159.72	34.84
Incentive for system availability	5.00	5.00	12.42	-	148.40
Total	1135.1	1,196.63	1,621.63	5.42	35.52
Less Misc. Receipts	303.15	300.45	240.94	(0.89)	(19.81)
Less Surplus True up	-	-	-	-	-
ARR to be recovered from LTOA Customers i.e. OPTCL's Aggregate Revenue Requirement	831.95	896.18	1,380.69	7.72	54.06
Transmission Charges (P/U)	28.00	24.00	37.68	(14.29)	57.00

52. 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 expenses with respect to Employee costs including terminal benefits, R&M expenses, A&G expenses, Interest on new loans to be disbursed to OPTCL, depreciation, RoE, and Interest on working capital for the benefit of the consumers:

D. VIEWS OF OBJECTORS ON THE TRANSMISSION TARIFF APPLICATION OF OPTCL FOR FY 2024-25 AND REJOINDER SUBMITTED BY OPTCL (PARA 53 TO 149)

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

53. The summary of Employee expenses, R&M expenses, and A&G expenses of the last fourteen years in terms of approved and actual expenses have been submitted by the Objectors.
54. OPTCL is to submit reasons for the non-utilization of funds allocated under O&M work and proper maintenance is not carried out by OPTCL as near about 58% of regular posts are lying vacant.
55. The Petitioner is to produce the detailed expenditure incurred in R&M work – (i) O&M, (ii) Telecom, (iii) Civil, (iv) Technical since 2010 to 2023.

Submission by OPTCL

56. Year-wise OERC approval and actual expenditure towards R&M for the period from 2013-14 to 2023-24 (up to date) as provided by OPTCL are given in the Table below.

Table-10
OPTCL submission on approved and actual O&M expenses
(Rs. in Crore)

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 (up to December, 2023)	135.00	77.37

57. From the above, it is observed that OPTCL has been effectively utilizing the R&M expenditure approved by the Commission except for FY 2020-21 & FY 2021-22 and achieved Transmission system availability more than specified norms. Fund allotted for

R&M expenditure for FY 2020-21 & FY 2021-22 couldn't be achieved due to the pandemic situation. However, the differential amount shall be adjusted during the true-up exercise based on audited accounts of FY 2022-23.

58. 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.
59. The detailed expenditure incurred towards R&M works under different heads executed by OPTCL from FY 2010-11 to FY 2022-23 has been provided.

Monitoring the operation of the transmission system

Views of Objectors

60. 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.

Submission by OPTCL

61. To prevent overloading, regular system study is being carried out and the network capacity as when required by OPTCL is augmented accordingly. Priority has been given to the use of an underloaded network. As directed by the Commission regular meetings are being conducted with DISCOMs for the development of matching downstream infrastructure for the optimum utilization of transmission networks

Energy audits and standard of performance

Views of Objectors

62. The proposition of loss figure as per the business plan is meaningless. There is enough measure by which OPTCL could reduce the Transmission loss. OPTCL should conduct energy audits and their standard of performance should be monitored by a third-party auditor appointed by the Commission to assess the actual performance of the licensees.
63. The Commission should direct that no transmission system strengthening proposals should be executed without the prior approval of the Commission. OPTCL should submit the comprehensive system study along with requirements as specified in the license conditions of OPTCL and tariff regulations for approval of the Commission before proceeding with the execution of the project.

Submission by OPTCL

64. OPTCL 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 14th Intra State Transmission Plan of Odisha is being revisited considering 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 which will be shortly submitted before the Commission for approval.

Loading in the transmission system and open access charges

Views of Objectors

65. To have an insight on the loading of existing transmission systems corresponding to the system peak demand of 5103 MW as touched on 19th October 2021, the Commission has desired OPTCL to submit 400 kV, 220 kV, 132 kV Power Transformer and EHT lines loading. However, OPTCL has only submitted the Power flow data for the 400 and 220 kV lines. The 132 kV line load has not been furnished. OPTCL has not submitted all the Power Transformer and ICT loading data. Moreover, only submitting the power transmitted on the peak demand day will not serve the purpose.
66. Further, in order to ascertain the margin availability, OPTCL may be directed to submit the maximum power handling capability, power flow, and % loading of all the 400 kV, 220 kV, 132 kV line and Power Transformer, Auto Transformer, ICT. Once these data are made available, it can be ascertained that there are sufficient margins available in the transmission network and in order to utilize it fully, short-term open access (STOA) should be promoted and the charges for the same may be kept at 1/4 of the medium-term open access (MTOA) and long-term open access (LTOA) charges and therefore, necessary amendments in the regulations may be made.

Submission by OPTCL

67. OPTCL has submitted that the system peak demand of 5103 MW was not on 19.10.2021 but on 19.10.2020 and the corresponding loading data of important transmission elements (EHT Lines and Transformers) were furnished earlier during the process for determination of ARR of OPTCL for FY 2021-22.
68. Further, the statement on the loading pattern of the existing transmission system (400kV, 220kV, 132kV power transformers and EHT lines) corresponding to the peak demand has already been submitted before the Commission vide Compliance Report to the queries raised by the Commission. Further, STOA charges are being charged as per the Open Access Regulations, 2020.

Annual Revenue Requirement

Views of Objectors

69. The Annual Revenue Requirement of OPTCL for FY 2024-25 may be approved through a prudence check and based on the submission made by the Respondents.

70. The revenue requirement projected by the applicant for the FY 2024-25 is about 54% more than that approved for the FY 2023-24.

Submission by OPTCL

71. OPTCL has adopted the principles enunciated in the Transmission Tariff Regulations, 2014 for proposing the different components of ARR for FY 2024-25 in the present application. Except for return on equity, all the components allowed in the ARR are subject to truing up, which is carried out based on actual expenses booked in the Audited books of Accounts of OPTCL. Considering the requirement for expenses on operation and maintenance, debt service obligation, and other expenditures as per the provision stipulated in the Regulations, 2014 the transmission tariff is projected with justifications.

Truing up Application and Business Plan approval

Views of Objectors

72. Each year truing up exercise and business plan approval should be carried out by the Commission through a process of public hearing.

Submission by OPTCL

73. OPTCL has submitted that the Truing up application for the FY 2022-23 has been filed along with the present ARR application for approval of the Commission. Similarly, the 03-year Business Plan of OPTCL for the 3rd Control Period: FY 2024-25 to 2026-27 will be filed shortly. The Commission through a process of hearing will approve all Petitions.

Transmission Tariff/Transmission charges

Views of Objectors

74. The proposed Transmission Charge of 37.68 P/U is very high and should not be permitted. This will adversely affect the RST of the DISCOMS and will be a huge burden on the consumers of Odisha.
75. OPTCL has submitted that the total energy to be handled by OPTCL in FY 2024-25 including loss is around 35892 MU. The Commission has accorded in-principle approval of the Long-Term Demand Forecast (LTDF) for the period FY 2015-16 to 2023-24 vide Common Order dated 03.05.2016 in Case No. 32/2015. Further, the Long-Term Demand Forecast and Business Plan of OPTCL have been approved by the Commission and hence the total energy to be handled by OPTCL should be considered accordingly. The transmission charges of OPTCL should have been computed considering energy projection based on the Commission's approval in LTDF order and approved Business Plan of OPTCL.

76. The significant increase in expenses 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. Therefore, the Commission may critically examine the proposal of OPTCL and take necessary steps in approving transmission charges.
77. OPTCL has proposed transmission charges @ 37.68 P/U for FY 2024-25 against 24 P/Unit as approved by the Commission during FY 2023-24. The proposed Transmission Tariff of 37.68 P/U is very high on account of the proposal of R & M Cost of Rs169.30 Cr, and ROE of Rs 273.09 Cr. The Objector prayed before the Commission to consider these expenses based on actual expenditure and actual equity infusion.

Submission by OPTCL

78. The proposed Transmission Charge of 37.68 p/u has been derived by considering the recent realistic energy demand projections made by all the LTOA customers (four DISCOMs & four CGPs).
79. OPTCL has also submitted additional information/clarifications to the queries raised by the Commission.
80. Subsequent to the in-principle approval of the LTDF order dated 03.05.2016 in Case No. 32/2015 (period FY 2015-16 to FY 2024-25), the Commission has already accorded in-principle approval of the LTDF order dated 15.01.2019 in Case No. 47/2018 (period FY 2017-18 to FY 2026-27). Further, the commission vide para 40 (page 15) of the order dated 03.11.2021 in Case No. 63/2020 (Business Plan of OPTCL for the period FY 2019-20 to 2023-24) is of the view that the demand may undergo a change in case of any delay in commissioning of the projects and load growth. In the same para, the Commission has very precisely observed that it is not inclined to revisit the demand and it will properly scrutinize the demand year-wise while approving the ARR of OPTCL.
81. OPTCL has submitted that the ARR application for FY 2024-25 has been filed on 30.11.2023 considering the recent realistic energy demand projections of 35892 MU as communicated by the DISCOMs.
82. Thus, mere apprehension of the TPWODL towards the imposition of excessive burden on the consumer seems to be inappropriate and unacceptable. Moreover, the stakeholders i.e. DISCOMs operating in the value chain of the electricity, need to appreciate the cost recovery in full so as to make the sector sustainable.

Transmission Loss

Views of Objectors

83. OPTCL has proposed the transmission loss of 3.05%; however, in conformity with the power sector reform, OPTCL needs to reduce the transmission loss significantly. Further, OPTCL should provide the details of the identified areas where loss is maximum. OPTCL shall have to mention the methodology adopted to estimate the transmission loss for every year. OPTCL has proposed transmission loss without giving the breakup of the losses in different components of the transmission system i.e. lines, substations, power transformers and autotransformers, etc. OPTCL should have to submit the energy audit report and their standard performance should be monitored by a third-party auditor as appointed by the Commission.
84. The Objector proposed to approve the transmission loss of OPTCL at 2.5% instead of OPTCL's proposed transmission loss of 3.05%. Further, OPTCL has not yet identified the areas where loss is maximum, so as to formulate action plans for loss reduction. OPTCL should inform the methodology adopted to estimate the transmission loss for every year. OPTCL should have undertaken energy audits of lines and substations to know the quantum of transmission loss in the system. Proposing the transmission loss arbitrarily, without giving the breakup of the losses in different components of the transmission system i.e. lines, substations, power transformers and auto transformers, etc, are not appropriate for the S.T.U.
85. 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).

Submission by OPTCL

86. OPTCL mentioned that OPTCL has already complied with the queries raised by the Commission related to Transmission Loss which may be referred by the Objectors.
87. Further, as per the All-India Electricity Statistics, General Review 2023 published by CEA, the region-wise transmission loss for FY 2021-22 is cited as under which were more than the OPTCL's loss (i.e. 3.18%).

Table-11
Region-wise transmission loss for FY 2021-22

Region	Energy Available in the Region (GWh)	Transmission Losses (GWh)	Transmission Losses (%)
Northern Region	204182.88	7921.86	3.88
Western Region	274384.88	9713.10	3.54
Southern Region	165603.60	5976.26	3.61
Eastern Region	130523.81	4560.71	3.49
North Eastern Region	19577.15	828.50	4.23

88. OPTCL submitted that the transmission loss (technical) is bound to happen as per the law of physics and is very difficult to reduce after a certain level. 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 like system Automation, load bifurcation, modification in system configuration, procurement of more efficient equipment, Digitalization of grids by using Bay Control units, Protection system improvement using Busbar protection and Event Logger, Conversion of Radial to Ring system, Advanced Metering Infrastructure etc. to bring it to 3.05% by FY 2024-25
89. The prayers made by the Objector to reduce the transmission loss at 2.5% are not based on any justifiable reason and are liable to be rejected.

Excessive Burden on consumer

Views of Objectors

90. The proposed Transmission tariff is abnormally high and should not be permitted. This will adversely affect the RST of the DISCOMs and will be a huge burden on the consumers of Odisha.
91. That, the significant increase in transmission expenses 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. Therefore, the Commission may critically examine the proposal of the applicant and take necessary steps in approving transmission charges.

Submission by OPTCL

92. Being the STU, OPTCL is primarily responsible for transmitting electricity from power generation companies to the distribution companies within the State. The transmission infrastructures have been created based on the requirement/recommendation of Distribution Companies considering the following components mainly: -
- To provide the power supply to the upcoming Industrial hub.
 - To strengthen the Inter-State Power connectivity for the import/export of power.
 - To improve the voltage profile in the low voltage area/pockets.
 - To provide uninterrupted power to the EHT, HT, and LT Consumers of the state
 - Availability of alternate power supply and also meet the N-1 Transmission planning criteria
 - To improve the system availability, reliability & quality of the power supply.
 - To meet the future load growth.
 - To improve the socio-economic status of peripheral inhabitants.
 - To reduce Transmission Losses.

93. OPTCL has submitted that their system availability of above 99.97% is always above the normative system availability of 98.50%.
94. Except NALCO & IMFA, all the open access customers are the consumers of Distribution Companies. Therefore, the consumers of Odisha are the ultimate beneficiaries of all the transmission infrastructure created by OPTCL (STU).
95. In the regulatory process all the controllable/uncontrollable cost incurred by the licensee needs to be recovered through tariff to make it cost-effective without burdening future consumers. It is obligatory for the transmission licensee (STU) to conduct its operation through the amount approved by the Commission. Also, it caters to the growing demand of the state at optimal cost. Being the transmission licensee, OPTCL endeavours to exercise to control its expenditure on different heads to the minimum possible extent. It may be pertinent to mention that projection has been made on the actual expenditure incurred in 1st half of FY 2023-24 along with the likely expenditure to be incurred in FY 2024-25.
96. Due to the impact of the inflationary effect the increase in cost is quite inevitable, which needs to be considered in the transmission tariff process by the Commission. It is pertinent to mention that the STU charges in the state are comparably low with respect to CTU charges and STU charges in other states.
97. Thus, mere apprehension of the TPWODL towards the imposition of excessive burden on the consumer seems to be inappropriate and unacceptable which deserves to be rejected at this threshold. Moreover, the contention of the stakeholders i.e. DISCOMs operating in the value chain of the electricity need to appreciate the cost recovery in full to make the sector sustainable.

Rebate

Views of Objectors

98. OPTCL has proposed to disallow the rebate on prompt payment to Open Access customers. OPTCL proposed that Long & Medium-Term Open Access Customers other than DISCOMs shall pay the transmission charges within Seven (07) days from the date of receipt of the bill and there is no provision for rebate for early payment in the Open Access Regulations 2020. However, earlier, rebate @ 2% was available for payment within 2 days.
99. The Open Access Regulations, 2020 treat the DISCOMs and other Open Access users like CGP, and Industrial Consumers on the same footing. However, an exception is being carved out, wherein the DISCOMs need not submit their contracted quantity and are allowed to pay Transmission Charges on the actual energy transacted, whereas the other OA customers like CGPs, Industries are being forced to pay the Transmission Charges on

the Contracted Quantity. Further, OPTCL has proposed to do away with the prompt payment rebate for OA customers like CGPs and Industries while allowing the prompt payment rebate benefit to DISCOMs. This type of differential treatment is against the Open Access Regulation, Grid Code, and statutory provision under the Electricity Act 2003. Therefore, the Objector (M/s UCCI) requested the Commission to treat all the Transmission Users i.e. CGPs, Industries, and DISCOM on the same footing with provision for charges, and rebates on the same principle without any discrimination.

Submission by OPTCL

100. The new OERC (Terms and Conditions of Intra State Open Access) Regulations, 2020 is effective from 18th November 2020 and applicable to open access for use of intra-state transmission & distribution systems in the state including when such system is used in conjunction with inter-state transmission system. Under Chapter 8 of said regulations, it is specified that the long-term & medium-term open access customers shall pay the open access charges within 7 (seven) days from the date of receipt of the bill. Further late payment surcharges (LPS) @ 1.25 % per month shall be levied in case of the payment of any open access bill beyond the due date.
101. As far as DISCOMs are concerned it is clarified by the Commission that, transmission charges to DISCOMs are covered under OERC (Terms and Conditions of Determination of Transmission Tariff) Regulations, 2014 where it has been mentioned that the due date is 30 (Thirty) days and the rebate of 2% & 1% shall be allowed considering the date of payment. Late payment surcharges (LPS) @ 1.25 % per month shall be levied in case of the payment of any transmission charges by the DISCOMs beyond the due date.
102. Since, the due date in the case of DISCOMs is 30 (Thirty) days, to meet the working capital, it has been encouraged for prompt payment by availing the rebate as DISCOMs are the major contributors of OPTCL revenue, and benefits are passed on to the consumers directly. In the case of open access customers, since the due date is 07 (seven) days, it will have not much impact on working capital requirements as the period as well as volume are very less. However, allowing a 2% rebate (i.e. 24% annually) to open access consumers having due date of 7 days means an extra burden to consumers at large. Therefore, OPTCL has proposed to allow rebates only to DISCOMs under Transmission Tariff regulations, 2014.

Introduction of Grid Support charge for connectivity

Views of Objectors

103. OPTCL has submitted an application to the Commission on September 23, 2020, to determine and approve the imposition of Grid Support Charges for industries with Captive

Generating/Cogeneration plants that operate alongside the OPTCL grids. However, Vedanta Limited and CCPPO Odisha filed Petitions in the Odisha High Court. In an order dated 6th July 2023, the High Court suggested that if OPTCL wishes to pursue the imposition of grid support charge, they should file a separate application before OERC. The Court emphasized that OERC under Section 181 of the Act, should examine the justifiability of such charges. Accordingly, the regulation has to be framed first for the same, and then only OPTCL shall file for approval of such charges before OERC in a subsequent tariff order. Hence, the proposal of OPTCL to levy grid support charges for connectivity may be rejected.

Submission by OPTCL

104. OPTCL has submitted that the benefits derived by the CGPs with co-located loads are enormous. The benefits are like ancillary services which are not paid till now. The Grid support charges (GSC)/Parallel operation charge has been levied by different state Regulatory Commissions and upheld by APTEL and the Supreme Court of India through various orders and hence OPTCL shall propose the GSC through a separate petition
105. Further, it is expected that the Commission may come out with a regulation on Grid Support Charges in the near future. Considering the above, OPTCL has not proposed any amount under GSC but wants to intimate that if the levy of GSC is decided in favour of OPTCL, the major portion of accrual from GSC shall be passed on to the end users resulting further reduction in transmission cost.

Funding of economically unviable projects

Views of Objector

106. 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.

Submission by OPTCL

107. Since the creation of a transmission infrastructure requires huge investments, OPTCL always requests state Government for financial support. The state Govt. has been contributing 100% financial assistance in the shape of grants in case of non-remunerative projects and contributing 30% equity support in case of remunerative projects.

RE Open Access charges

Views of Objectors

108. It would be imperative to submit that all CGPs and open-access consumers situated in the State of Odisha must mandatorily procure renewable power to fulfill their RPO in terms of Regulation 3.1 of the OERC RPO Regulations, 2021.

109. Regulation 4.2 of the said Regulations further stipulates a mandated quantum of electricity which is to be procured from renewable sources by CGPs and Open Access consumers against the consumption of thermal power procured under Open Access in the State of Odisha along with other Obligated Entities, which is a percentage of the total consumption by such entity in kWh.
110. For the current financial year, CGPs and Open Access Consumers are obligated to fulfil its RPO to the tune of 16.00%, which comprises solar power (8.75%) and total non-solar RPO (7.25%). against the consumption of thermal power availed under the Open Access regime by the obligated entity.
111. Govt of India has set an ambitious target to install 500 GW of Renewable Power by FY 2030. Further, National Tariff Policy 2016, under clause 6.4 “Renewable sources of energy generation including Co-generation from renewable energy sources:” provides various guidelines to promote procurement of Renewable energy.
112. The State of Odisha is a manufacturing hub of India due to its vast reserves of minerals and industrial-friendly policy made by Govt of Odisha. The state is the largest producer of iron and steel, stainless steel, primary Aluminium, and thermal power in the country. These sectors are power-intensive sectors, which need to be transitioned from thermal to green power in an economically viable manner to be globally competitive. However, the imposition of 100% transmission charges on availing green power from outside of the state by the industries is making the cost of power highly uneconomic.
113. As the state has limited potential for solar and wind power which are commercially proven RE sources, it becomes vital for the industries to buy RE power from other states to comply with RPO and use green power to make greener products. In line with Odisha Renewable Energy Policy, dated 30.11.2022, the Commission has already provided exemption on intra-state transmission charges, waiver on electricity duty, and 50% waiver on CSS on the renewable power generated within the state. This is a welcome step that helps to promote the share of renewable energy in power mix within the state. Thus, increasing the consumption of green power by industries is very critical thereby providing certain waivers/exemptions in CSS would ultimately motivate industries to increase RE power consumption. The Objector requested to provide at least 50% waiver on transmission charges levied on the procurement of green power outside of the state under any open access arrangement.

Submission by OPTCL

114. OPTCL has submitted that with waiver of transmission charges for open access power sourced from outside the state, the revenue receipt of OPTCL towards Short Term Open

Access will decrease appreciably. OPTCL submitted that the Commission may consider the request of reduction in transmission charges with due diligence.

Reactive Energy Charges

Views of Objectors

115. OPTCL has proposed to introduce Reactive Energy Charges of 3 Paise / KVARh, which is very high and should be reduced in consultation with various stakeholders. There is no such provision in the Transmission Tariff Regulation and the same is against the spirit of the Electricity Act 2003 and hence the proposal of OPTCL is required to be straight away rejected.
116. Further, OPTCL is requested to clarify whether the final justification in consultation with stakeholders regarding the reactive energy charges as proposed by OPTCL is submitted as per the Commission's order dated 05.02.2019 in case no. 50/2017. OPTCL may clarify the necessary steps taken to reduce the reactive energy.

Submission by OPTCL

117. OPTCL has submitted that 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.
118. The Commission in Para 16 of the order dated 05.02.2019 in Case No. 50/2017 has approved the provisional reactive energy charges of 3 paise/KVArH till a final justification is submitted by OPTCL in consultation with the stakeholders. In view of the above, OPTCL proposed that 3paise/KVARh may be approved provisionally as Reactive Energy Charges FY 2024-25. Hence, the rejection of the proposal of OPTCL with regard to Reactive Energy Charges as suggested by the Objector is not just and proper.

Outsourcing / Contractual workers

Views of Objectors

119. OPTCL management is not paying equal salaries to the outsourced/ contractual workers with regular workers in a similar category. They should be paid an equal salary as they are doing hazardous work.
120. OPTCL management has not yet prepared a regulation for regularising the contractual/outsourced workers and has not even prepared the yardstick. The management has to produce the list of outsourced workers category-wise and division-wise with the name of the contractor engaged in OPTCL before allowing the O&M expenses.

Submission by OPTCL

121. The outsourced/ contractual workers are paid/ remitted minimum rate of wages as notified by the labour & ESI department, Govt. of Odisha from time to time, or consolidated remuneration as fixed by the management of OPTCL. The list of outsourced workers engaged in OPTCL has been provided by OPTCL.
122. Contractual/outsourced workers are engaged in OPTCL on an as-and-when requirement basis through manpower/job outsourced basis. Each of the Contractors / Agencies is selected through a tender basis annually / biennially
123. All the project's related works are being taken up post approval of the same by OERC through the Intra State Transmission Plan of Odisha based on OGC Regulations 2015 along with License Conditions of OPTCL, 2010 and Business Plan of OPTCL based on Transmission Tariff Regulations 2014 respectively.

Substations and lines

Views of Objectors

124. OPTCL may be directed to give an undertaking through an affidavit that they will supply quality power with proper voltage. Many areas of the state are under brownout or blackout for substandard work at 33/11 kV substations under the ODSSP scheme constructed by OPTCL. The Objector has requested to furnish a detailed list of substations and lines more than 40 years old. Further, the Objector requested OPTCL to mention what action OPTCL has taken for renovation & modernization of such lines, and substations & should provide details of expenditure incurred till 2023.
125. OPTCL should furnish the list of 33/11 kV substations already been constructed, and commissioned and consumers are getting quality voltage along with the amount spent on those projects. The Objector submitted that most of the 33/11 kV substations are constructed without any power demand of the area by which the aim of reduction of AT&C loss is not fulfilled. The AT&C loss is increasing day by day for such mismanagement. The Objector requested to submit the detailed list of such types of S/s, division-wise.
126. OPTCL management has mentioned near about 165 nos. of sub-station & 14804 kms. of lines are now available for operation. OPTCL should produce the detailed list of substations & lines those who are outlived & not in a position to work. The action taken by OPTCL for renovation & modernization should be submitted.
127. OPTCL has mentioned that some of the substations are operating in underloaded conditions because of the absence of downstream infrastructure of DISCOMs. The Commission should direct OPTCL to take action for a coordinated development of the

intra-state network, ISTS, and downstream distribution network. The timeframe of execution of the transmission system should be discussed with DISCOMs & CTU in order to avoid stranded assets and idle investments.

Submission by OPTCL

128. Over the years OPTCL has been continuously planning and implementing substantial numbers of projects to strengthen its transmission system for ensuring quality, adequacy & reliability of power supply in the State based on requisition of DISCOMs and by Transmission Planning through system study. However, if there still remain any area/areas of the State under brownout or blackout condition due to want of lines and Substations of STU, the objector may please specify the same so that the same shall be considered by OPTCL with due prudence.
129. Further, as desired by the Objectors, the list of Substations and lines having more than 40 years of life period has been submitted by OPTCL, as per details mentioned in Tables below.

Table-12
Sub-stations having more than 40 years of life period

Sl. No	Sub-Stations	Voltage Level (kV)	Year of Commissioning
40 - 45 Years of Service (13 Nos.)			
1	Chhatrapur	132/33 kV	1982
2	Dhenkanal	132/33 kV	1982
3	Kesinga	220/132/33kV	1982
4	Balasore	220/132/33kV	1981
5	Bolangir	132/33kV	1981
6	Paradeep	220/132/33kV	1981
7	Polasponga	132/33kV	1981
8	Rairangpur	132/33kV	1981
9	Tarkera	220/132kV	1981
10	Jayanagar	220/132/33kV	1980
11	Bargarh	132/33kV	1979
12	Bhubaneswar	132/33kV	1979
13	Kendrapara	132/33kV	1979
45 - 50 Years of Service (4 Nos.)			
1	Aska	132/33kV	1975
2	Therubali	220/132/33kV	1974
3	Mohana	132/33kV	1973
4	Rajgangpur	132/33kV	1973
> 50 Years of Service (12 Nos.)			
1	Chainpal	132/33kV	1972
2	Brajarajnagar	132/33/11kV	1969
3	Jajpur Road	132/33kV	1969
4	Khurda	132/33kV	1969
5	Ganjam	132/33kV	1967

Sl. No	Sub-Stations	Voltage Level (kV)	Year of Commissioning
6	Berhampur	132/33/11kV	1964
7	Sunabeda	132/33kV	1964
8	Rayagada	132/33kV	1962
9	Joda	220/132/33kV	1959
10	Jharsuguda	132/33kV	1958
11	Rourkela	132/33kV	1958
12	Choudwar	132/33kV	1956

Table-13
EHT lines having more than 40 years of lifespan

Sl. No	Name of EHT Line	Voltage Level (kV)	Year of Commissioning
40 - 45 Years of Service (29 Nos.)			
1	220 kV Balimela PH - U.Sileru SC	220	1982
2	220 kV Jayanagar - Balimela - III SC	220	1982
3	132 kV Aska - Chhatrapur DC	132	1982
4	132 kV Chhatrapur - Balugaon SC	132	1982
5	132 kV Kesinga – Powmax (Turla) SC	132	1982
6	132 kV Machkund PH - Jayanagar (RE Line) SC	132	1982
7	132 kV Therubali - Kesinga SC	132	1982
8	132 kV Bargarh - Bolangir SC	132	1981
9	132 kV Chhatrapur- IRE DC	132	1981
10	132 kV Joda - Palasponga - Rairangpur SC (Loc. No. 1 to 111)	132	1981
11	132 kV Kendrapara - Paradeep DC	132	1981
12	132 kV Polasponga LILO DC (Loc. No. 73/1 to 73/6)	132	1981
13	132 kV Tarkera - RSP DC	132	1981
14	132 kV Aska - Berhampur SC	132	1980
15	132 kV Balasore - Bhadrak SC	132	1980
16	132 kV Bhanjanagar - Aska DC	132	1980
17	132 kV Bolangir - Saintala SC	132	1980
18	132 kV Kesinga - Saintala SC	132	1980
19	132 kV Polasponga - Rairangpur SC (Loc. No. 111 to 336)	132	1980
20	132 kV TTPS - Chainpal - II & III DC	132	1980
21	220 kV Rengali - Tarkera DC (Loc. 1 to 187)	220	1979
22	220 kV Tarkera - Rengali DC (Loc. No. 188 to 645)	220	1979
23	132 kV Burla PH - Chiplima PH DC	132	1979
24	132 kV Chandaka - Bhubaneswar Ckt-I SC	132	1979
25	132 kV Chandaka - Bhubaneswar Ckt-II SC	132	1979
26	132 kV Chiplima PH - Bargarh SC	132	1979
27	132 kV Jaipur Road - Bhadrak SC	132	1979
28	132 kV Jajpur Road - Kendrapara DC	132	1979
29	132 kV Khurda - Balugaon SC	132	1978
45 - 50 Years of Service (8 Nos.)			

Sl. No	Name of EHT Line	Voltage Level (kV)	Year of Commissioning
1	132 kV Chainpal - FCI DC	132	1975
2	220 kV Bhanjanagar - Meramundali DC (Loc. No. 197 to 470)	220	1974
3	220 kV Jayanagar - Balimela DC	220	1974
4	220 kV Jayanagar - Therubali DC	220	1974
5	220 kV Therubali - Bhanjanagar DC (Loc. No. 471 to 827)	220	1974
6	220 kV Therubali - Bhanjanagar DC (Loc. No. 828 to 1049)	220	1974
7	132 kV Rajgangpur - OCL SC	132	1973
8	132 kV Rajgangpur - Traction DC	132	1973
50 - 55 Years of Service (11 Nos.)			
1	132 kV Chainpal - Choudwar Ckt - II SC (Loc. No. 1 to 151)	132	1972
2	132 kV Chainpal - Choudwar Ckt - II SC (Loc. No. 152 to 314 via ICCL)	132	1972
3	132 kV Jayanagar - Sunabeda SC	132	1970
4	132 kV Bidanasi - Chandaka SC (Loc. 1 - 51)	132	1969
5	132 kV Bidanasi - Chandaka SC (Loc. 52 to 90)	132	1969
6	132 kV Chandaka - Khurda SC	132	1969
7	132 kV Choudwar - Bidanasi SC (Loc. No. 22 - 23 - 91 to 118)	132	1969
8	132 kV Duburi - Jajpur Road DC	132	1969
9	132 kV TTPS - Duburi DC	132	1969
10	132 kV Chhatrapur - Ganjam SC	132	1968
11	132 kV TTPS - Chainpal - I SC	132	1968
55 - 60 Years of Service (8 Nos.)			
1	220 kV Bhanjanagar - Meramundali DC (Loc. No. 196 up to Meramundali)	220	1967
2	220 kV TTPS - Joda DC (Loc. No. 1 to 234)	220	1967
3	220 kV TTPS - Joda DC (Loc. No. 235 to 503)	220	1967
4	220 kV TTPS - Meramundali DC	220	1967
5	132 kV Therubali - Rayagada SC	132	1967
6	132 kV Angul - Boinda SC	132	1963
7	132 kV Angul - TTPS SC	132	1963
8	132 kV Burla PH - Boinda SC	132	1963
> 60 Years of Service (20 Nos.)			
1	132 kV Berhampur - Mohana SC	132	1962
2	132 kV Rayagada - Akhusingh – Mohana SC	132	1962
3	132 kV Joda - Nalda - Bhalulata SC	132	1959
4	132 kV Rourkela - Nalda SC (Up to Bhalulata, Loc. No. 1 to 78)	132	1959
5	132 kV Budhipadar - Tarkera Ckt - I SC (Rajgangpur to Tarkera, Loc. No. 1 to 88)	132	1958

Sl. No	Name of EHT Line	Voltage Level (kV)	Year of Commissioning
6	132 kV Budhipadar - Tarkera Ckt - II SC (Rajgangpur to Tarkera, Loc. No. 1 to 89)	132	1958
7	132 kV Budhipadar - Tarkera DC (Bamra to Rajgangpur, Loc. No. 283 to 410)	132	1958
8	132 kV Budhipadar - Tarkera DC (Up to Bamra, Loc. No. 164 to 283)	132	1958
9	132 kV Burla PH - Budhipadar DC	132	1958
10	132 kV Burla PH - HINDALCO DC	132	1958
11	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. 171 - 294)	132	1958
12	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. 294 - 430 - 526, Bamra to Rourkela)	132	1958
13	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. J1 - J65)	132	1958
14	132 kV Burla PH - Rajgangpur - Rourkela Ckt (Loc. J65 – 171)	132	1958
15	132 kV Chainpal - Choudwar Ckt - I SC (Loc. No. 1 to 147)	132	1958
16	132 kV Chainpal - Choudwar Ckt - I SC (Loc. No. 148 to 285)	132	1958
17	132 kV Tarkera - Rourkela Ckt - I SC	132	1958
18	132 kV Tarkera - Rourkela Ckt - II SC	132	1958
19	132 kV Jayanagar - Rayagada SC	132	1956
20	132 kV Machkund PH - Jayanagar SC	132	1956

130. As on 31.12.2023, 445 nos. 33/11kV Substations have been completed & commercially commissioned. The list of 445 nos. commercially commissioned Substations has been submitted. The expenditure incurred as on Dt. 31.12.2023 is Rs. 3,631.50 Cr.
131. As regards voltage improvement in the area where the Substation has been constructed, the same may be collected from DISCOMs.
132. At present OPTCL is operating with 193 numbers of GSS and around 16368.259 Ckt.kms. of EHT lines. Regular maintenance of all the GSS along with the associated lines is carried out through 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 to the load demand reliably. Also, the upgradation 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.

Supreme Court order

Views of Objectors

133. The Supreme Court of India, while disposed of the Civil Appeal No. 1933 of 2022 (TPCL Transmission vrs MERC), have held that Section 61 of the Act is mandatory for ERCs and accordingly directed the State Electricity Regulatory Commissions (SERCs) for compliance of the guiding principles of Section 61 of the Act in making/notifying the desired regulations within three months from the Date of the said Order. The Objector submitted that OERC does not carry out MYT principles provided u/s 61(f) in real sense resulted the other eight principles (under Section 61) have become void and for which, Odisha Retail Tariff has been uncompetitive, absurd and hence illegal.

Submission by OPTCL

134. OPTCL has not submitted any specific reason.

Multi-year Tariff (MYT) Principle

Views of Objectors

135. The State Commission seeks public comments on the Tariff Petitions filed by GENCOs & Licensees to safeguard the interest of Consumers as per the obligation specified in Section 64(2) & 61(d) of the Act. Three crucial issues along with other issues, in view of the provisions of the Act, are not being addressed yet by OERC. The issues are: (a) Failure of OERC to work out the Multiyear Tariff (MYT) principles in the proceedings to approve the five-year's Business Plan and Annual Tariff, (b) Arbitrary and illegal RST Schedule attached to the RST Order, and (c) non-refund of excess tariff billed/collected by DISCOMs to the Consumers along with interest. The unaddressed crucial issues put questions on the functions of the State Commission.
136. OERC should initiate remedial measures in order to make the tariff exercises effective & fruitful so as to upkeep the confidence of the Stakeholders in the lawful functioning of OERC.
137. Further, the Truing up, Review & Determination of Tariff proceedings has been carried out by OERC without following the Multiyear Tariff (MYT) principles as provided in section 61(f) of the Act & the Tariff Policy thereof. This is nothing but clearly an illegal act defeating the very aims & objectives of the Act provided in the Preamble. The fact is that along with the MYT principles, there are other eight mandatory principles specified u/s 61 of the Act guiding OERC to regulate Power Tariffs. Therefore, section 61 of the Act is considered as the MAGNA CARTA governing the Power Tariff determined by OERC.

138. MYT Principles provided in the National Tariff Policy specify a span period of five years for deciding on power tariffs by ERCs. OERC approved the five-year Business Plan for the Licensees from FY04 to FY08. The first five years Business Plan and MYT generation tariff approved for the Licensees & GENCOs by OERC were very much effective in all respects covering tariff, investment, loss reduction, reliability of power supply, etc. The astounding performance of the first Business Plan (FY04 to FY08) was completely ignored by OERC then and there & for which the State Commission failed to approve 2nd five years business plan. The instant tariff proceeding falls under the 5th Business Plan period from FY24 to FY28 & MYT generation tariff for FY24 to FY29 but OERC again fails to approve the same. However, to avoid criticisms, OERC approved illusory business plans for a period of one year or two years in advance instead of five years in advance since FY09. Tariff has been determined without any valid business plan & MYT since FY09. This is nothing but a sheer violation of section 61(f) of the Act and the policy there under. The Respondent urged upon the Commission to initiate expeditious remedial measures to work out MYT in the true sense as provided in the Act and Policy.
139. The national tariff policy has been the guiding policy for all the SERCs including OERC and they are doing MYT in letter and spirit but OERC has been an exception. The guiding factors, MYT Principles and national tariff policy provided respectively u/s 61(f) & 61(i) of the Act have been well elaborated in the National tariff Policy.
140. The ARR & Tariff Petitions filed by the Licensees & GENCOs consider the approved business plan, true up, performance review, and MYT generation tariff for the purpose of reviewing the current year's tariff and if required the existing tariff is revised for the ensuing year. Moreover, the span of the Business Plan & MYT Generation Tariff Period is required to be equal and consistent between the various Licensees DISCOMs, OPTCL & SLDC, GRIDCO and GENCOs OPGC, OHPC, Vedanta, etc. for vibrant application of MYT.

Submission by OPTCL

141. OPTCL has not submitted any comments.

Upgraded Regulations

Views of Objectors

142. The present annual tariff proceeding has been carried out for review of existing tariff for FY24 & determination of generation tariff, transmission tariff, bulk price, and RST for FY25 without any valid Generation Tariff and Transmission Tariff Regulations. The Commission cannot extend the validity of the 3rd MYT Transmission Regulations and 4th

MYT Generation Regulations indefinitely without their upgradation. Extending the above-named two regulations for the 5th MYT period FY25 to FY29 is not only unfair and undesirable but also indicates the inefficiency of the regulatory regime of electricity in the State. So, the Respondent urged upon the Commission to initiate necessary action for framing upgraded Generation Tariff & Transmission Tariff Regulations for the 5th MYT period of FY25 to FY29.

Submission by OPTCL

143. OPTCL has not submitted any specific comments.

Uniform MYT Period

Views of Objectors

144. The 4th MYT period as per generation & transmission Tariff Regulations is specified for the tariff period from FY20 to FY24 whereas under the RST Regulations, it has been specified as FY19 to FY23. So, there is inconsistency in MYT period between the regulations notified by the OERC. Therefore, the Objector urged upon the Commission to pass out desired tariff regulations for GENCOs, TRANSCO & DISCOMs in a consistence manner so that the MYT period for the Licensees and GENCOs will be uniform.

Submission by OPTCL

145. OPTCL has not submitted any specific comment.

Introduction of e-Filing in the Secretariat of OERC

Views of Objectors

146. The Constitutional bodies like CERC, APTEL, High Courts & Supreme Court have introduced effectively the electronic filing of Petitions, Appeals, Cases etc. Therefore, the Objector urged the Commission to issue an order for the commissioning of an electronic filing (e-filing) system.

Submission by OPTCL

147. OPTCL has not submitted any comment.

Other Issues

Views of Objectors

148. The Commission is requested to direct OPTCL to share the Audited Balance sheet 2023-24 so that the Respondent shall submit an additional rejoinder.

Submission by OPTCL

149. OPTCL submitted that the accounts of FY 2023-24 will be closed on 31.03.2024. Therefore, the audited balance sheet for FY 2023-24 can't be provided now.

E. OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC) (PARA 150 TO 151)

150. The Commission convened the 36th State Advisory Committee (SAC) meeting on 07.02.2024 at 11:00 A.M. through hybrid mode. Various issues related to the power sector and the Annual Revenue Requirement of different licensees were discussed, including the levy of Grid Support Charges (GSC) on CGPs. Members of SAC raised their concern about the high employee cost of OPTCL and its rising trend. The Members opined that the transmission loss of 3.05% proposed for FY 2024-25 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. The majority of SAC Members opined in favour of levy of GSC on CGPs as the same is implemented by some of the States in the country. Further, the CGPs synchronised with State Grid are able to operate steadily and supply reliable power to their industries. It was also pointed out that, in view of order of the Hon'ble High Court, OPTCL should file a separate application with justification on levy of GSC before the Commission. If the Commission is satisfied, Regulation regarding the GSC may be framed first. Further, some Members were not in favour of the levy of GSC on CGP as those are being paid in the form of Contract Demand (CD) charges to concerned DISCOMs. Some Members pointed out that DISCOMs are getting rebate on Open Access charges for timely payment whereas there is no such provision of rebate for other Long Term Open Access (LTOA) Customers as per OERC (Terms & Condition of Intrastate Open Access) Regulations, 2020. Therefore, such rebate provision should be extended to all LTOA & MTOA customers. SAC members urged the Commission to re-examine the new proposals of OPTCL due to lack of coordination between OPTCL, GRIDCO and DISCOMs, which resulted in stranded assets. Further, many transmission assets are proposed for evacuation of green power for establishment of Green Ammonia and Green Hydrogen projects. It was advised that OPTCL should sign an agreement with such Green Ammonia and Green Hydrogen production entities prior to execution of such transmission projects to ensure the success of those projects and avoid stranded assets. Further, some members suggested that OPTCL should go for 132/33kV portable sub-stations for Disaster Management and take steps for charging of 132/33kV Grid Sub-station at R.Udayagiri which has been completed since last five years.
151. In response, CMD, OPTCL submitted that the increase in employee costs is mainly due to increase in numbers of pensioner and their terminal liabilities, rise in DA & other allowance as applicable. Further, there is wage revision of non-executives pending since 2020 and cadre restructuring of executives in parallel with government electrical cadre. Regarding transmission loss, OPTCL has already taken a host of system improvement

measures such as replacing of 35-40-year-old conductors, old Transformers, and optimally loaded or overloaded lines with HTLS conductors which resulted in reduction of transmission loss from 4.82 % (2007-08) to 3.12% (upto Sept-2023-24) and further proposed 3.05 % for FY 2024-25. He further added that the major concerning issue is the lopsided loading of the lines and assets created which are utilized up to 45% for which the GCC and Inter Co-Ordination Committee with the DISCOMs have decided for proper utilization of 33KV feeders. Further referring to the 765 kV transmission network plan, CMD informed that 2 Nos. of 765 kV ISTS lines, i.e. Angul to Gopalpur and Angul to Paradeep, have been planned under ISTS which are in tendering process. He mentioned that another 765 KV sub-station is planned in the Kolabira area, to tap the power from various sources like: RE power coming through Floating Solar, a new power plant by NLC and augmentation of capacity (Unit-5&6) by OPGC. The 765 kV Kolabira S/S will be connected to Duburi Grid S/S which is the load center and shall cater to the upcoming demand of industries. He further submitted about the transmission projects of Paradeep-Mahakalpada 765KV line, 400KV Sub-station at Joda, Ersama near Paradeep and near Neulapoi. He informed that the revised transmission plan till FY 2026-27 shall be submitted shortly.

F. VIEWS OF STATE GOVERNMENT (PARA 152)

152. The Department of Energy, Government of Odisha vide their letter No. ENG-TDER-OERC-0001-2021/1704, dated 09.02.2024 has stated as follows:
- State Govt. has no plans to provide any direct subsidy to any class of consumers, since Govt. have been providing adequate budgetary support over the years for the creation of Capital Assets in order to keep the tariff low.
 - In the matter of adequate coal supply to Vedanta for availing full entitlement of power as per PPA, GRIDCO has been advised to take necessary action. Further, the matter of JITPL is sub-judice with Hon'ble High Court, Orissa. GRIDCO has been advised to approach the Hon'ble Court for increase of the share from JITPL.
 - Govt. can't provide any support for smart meters. The Commission may consider recovery of the smart meter cost over an extended period. so that, there is no additional burden on Consumers. The backend infrastructure for smart metering may be allowed in the CA PEX of DISCOMs.
 - Interest burden of GRIDCO needs to be fully recognized in its ARR. The reason advanced by OERC for not recognizing the interest cost of loans incurred beyond FY 2015-16 is not reasonable as per the recent judgment dated 04.10.2023 of Hon'ble Supreme Court in Civil appeal No. 414 of 2007. On the other hand, Govt.

has been supporting GRIDCO through various means. State Govt. has provided soft loans of Rs.700 Cr. each to GRIDCO during FY 2022-23 & FY 2023-24 and another trache of Rs.700 Cr. of soft loan is proposed to be provided during FY 2024-25. State Govt. has also converted Rs. 2,039.39 Cr. of loan to equity in FY 2021 -22.

- BSP of 3 DISCOMs namely TPCODL, TPNODL & TPWODL may be decided as thought prudent by the Commission, to the extent not to increase RST during FY 2024-25. Remaining unrealized cost may be recognized as Regulatory Asset of GRIDCO to be recovered during subsequent years. The RST for FY 2024-25 may not be increased from present level.
- As intimated already vide this Department letter No.3333 dated 24.03.2021. Govt. has agreed to extend the status-quo on up-valuation of assets till FY 2025-26.
- Commission would have taken note of the submission made by the Department's representatives during public hearings as well as SAC meeting. Hence, it is not necessary to provide further details in this regard.

Also, the following specific suggestions may kindly be considered.

- Damage to Power Distribution infrastructure due to natural calamities are not covered under Insurance Schemes. Therefore, a "Contingency Reserve Fund", preferably one fund for all DISCOMs need to be created to have a self-insurance fund to insure against probable damage to Distribution Network. The Commission may create provisions in the ARR of DISCOMs in this regard including the administration of the "Contingency Reserve Fund" under the Commission.
- Large-scale green energy. particularly Solar power, has been added in the generation capacity for energy transition across the Country. Availability of the peak power during the evening time is reducing and market price of peak power is very high. Hence the Commission is requested to introduce necessary measures for demand side management and as well as designing the TOD tariff (both with incentives and penalty) to discourage large consumers to consume power during peak evening hours. This will help in flattening demand curve as well as reduce the overall cost of power. Further. GRIDCO can be encouraged to procure more green power by sharing the additional revenue of green tariff introduced by the Commission.

G. COMMISSION'S VIEWS AND ORDER (PARA 153 TO 319)

153. 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 is 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. In addition to the above, the Commission, vide their order in Case No. 72/2019 exercising power under Regulation 9.1, had also extended the definition of controllable and uncontrollable cost enumerated in the above Regulations until further order. The Regulations of the Commission remain in force until it is specifically repealed by the Commission. The Regulations empower the Commission to define control periods from time to time.

154. Shri Soumya Ranjan Patnaik, Hon’ble MLA, Khandapada has raised some objections regarding the implementation of the Multi-year Tariff Principle. However, a similar objection was addressed by this Commission in para 217 of Case No. 76/2022 dated 23.03.2023 while approving the ARR and transmission tariff of OPTCL for FY 2023-24.
155. Some objectors have pointed out that, the transmission is often considered the “backbone” of the electricity delivery system and many of transmission assets have exceeded their useful service life. 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 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 "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, etc. to ensure adequate margin/capacity in the transmission network and allow required R&M expenses to maintain a healthy transmission system. Additionally, most Renewable Energy generators are expected to be connected to the STU network, which will further enhance the intra-state transmission network for smooth flow/evacuation of power. As on 31.03.2023, OPTCL owns 188 Nos. of Grid Sub-stations of different voltage classes having 25344.50 MVA transformation capacity and EHT transmission lines of 16029.38 Ckm.
156. The tariff policy notified by the Ministry of Power on dated 28.01.2016 stipulates the following objectives of transmission system:

- (i) Ensuring optimal development of the transmission network ahead of generation with adequate margin for reliability and to promote efficient utilization of generation and transmission assets in the country;
 - (ii) Attracting the required investments in the transmission sector and providing adequate returns.
157. 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.
158. 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.
159. It is observed that during FY 2022-23, the daily peak demand touched 6424 MW with a minimum demand of 3810 MW. The peak demand in FY 2022-23 was about 779 MW (13.80%) more than the peak demand experienced during the previous year 2021-22 (5645 MW). The total energy drawn was about 34041 MU in FY 2022-23 against 27627 MU in 2021-22, which indicates the increase in electricity handled in the transmission system of around 6414 MU (23.24%) in the State.

Computation of Transmission Loss for FY 2024-25

160. 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 based on the principle of 'As the System Operates'.
161. OPTCL 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 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. 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 for most of the time 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 the year FY 2017-18. The actual transmission loss in the OPTCL's transmission system for FY 2018-19, FY 2019-20, FY 2021-22 & FY 2022-23 was 3.28%, 3.25 %, 3.22%, 3.18% & 3.15% respectively as against Commission's approval of 3.00%.

162. The approved and actual transmission loss for the year 2014-15 to 2023-24 is furnished in the Table below:

Table-14

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%	3.12% (1 st six months)

163. 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 availability of a higher percentage of 132 kV lines (in Ckm) than that of total lines (Ckm) in the OPTCL system and under loading of Grid Sub-station. OPTCL further submitted that the actual transmission loss of similar types of utilities in India such as UPPCL (Uttar Pradesh) and (GETCO) Gujarat for the FY 2022-23 is more than 3%. It is the responsibility of the OPTCL to reduce its transmission loss in a time-bound manner. 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 Bay Control units, 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.

164. In view of this trend of transmission loss level and adoption of various loss reduction strategies, OPTCL has proposed 3.05% transmission loss during FY 2024-25. However, the Commission emphasizes the reduction in loss level to 3%.
165. 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. 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. However, 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% and average transmission loss of 3%. Further, the transmission losses approved by the respective Electricity Regulatory Commissions for other neighbouring states like West Bengal, Madhya Pradesh, Bihar, and Chhattisgarh with similar types of infrastructure are in the range of 2.23% to 3%. Hence, keeping in view the licensees' track record in reduction of the losses, the huge investment made in the transmission network for system strengthening, automation, 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 FY 2024-25 which is same as that of the previous year.
166. Further, the Commission directs 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. Moreover, 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 transmission system. OPTCL may plan to expand its 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.
167. OPTCL is also responsible for providing reliable, 24x7 quality power to all consumers of the State by maintaining high system availability. OPTCL is directed 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.

168. It was reported that OPTCL has already installed 2200 nos. of 0.2s accuracy class, ABT Compliant Energy Meters at identified points to meet the requirement for Energy Auditing as well as billing. The monthly data enables OPTCL to assess losses in the individual Transmission element (i.e. across Power Tfr., Auto Tfr. & EHT lines etc.). Further, 655 Nos. of 0.2s accuracy class, ABT-compliant new energy meters have been procured by OPTCL. Tendering for procurement of new 2000 nos. 0.2s accuracy class ABT-compliant energy meters are in process which will be installed in balance metering points under the PSDF-funded SAMAST scheme being implemented by SLDC, Odisha. With the installation of these new meters under the SAMAST scheme, all the existing old audit and billing energy meters will be replaced and element-wise transmission loss can be accurately addressed. Considering the above, the Commission directs OPTCL to submit the transmission loss of the Substations & Transmission lines wherever meters have already been installed and to take remedial measures to reduce the same. Further, OPTCL should submit the timeline for installation of all meters, based on which OPTCL would be able to calculate the Transmission loss of individual Substation and Transmission line. 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

169. 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 24X7 quality power to the consumers.

170. 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 upto 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 summary of the study report for the time frame shall bring out

- a) List of existing lines getting over loaded at 132 kV, 220 kV & 400 kV level
 - b) List of existing sub-stations with overloaded transformers
 - c) Requirement of additional lines & sub-stations
 - d) Requirement of compensation to address over-voltage problem
 - e) Technical loss etc.
171. OPTCL has submitted that PRDC have been engaged for re-visiting the 14th inter-state transmission system plan (FY 2022-23 to FY 2026-27) considering 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 and to carry out a long-term load flow study. OPTCL may extend such a study for a longer time frame (not less than 10 years) based on expected future load growth. Such a study shall take into account the under-utilized existing transmission assets and lower operating temperature of the transmission line conductor during evening peak hours to optimize the requirement of transmission assets (lines and substations). The revised 14th inter-state transmission plan of OPTCL should be submitted early before the Commission for approval. Further, OPTCL should develop self-sufficiency in its system study group for planning the transmission system on rolling basis. The in-house study group should prefer to use PSSE software for the load flow study of the transmission system which is being used at the national level.
172. 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 400kV/220kV/132kV level) to meet the projected demand in different time frames. Thereafter, OPTCL should formulate the stage-wise implementation plan accordingly.

173. The Commission is of the opinion that a robust and reliable transmission network is essential for the overall development of the power sector in the state aiding in providing last-mile connectivity. Further, with the push of the Government of India and the State Government in its Renewable Policy 2022 for large scale integration of Renewable Energy, it is imperative that there is a requirement for a robust transmission infrastructure in place to facilitate the evacuation of such renewable power. The Commission opined that OPTCL being the STU is responsible for the integrated, planned, and coordinated development of the Transmission network of the State. Considering different load scenario which has an impact on the loss level and consequently on the sale, the OPTCL is directed to approach the Commission with DPR along with the report of long-term transmission system studies (considering various generation and load scenarios under peak and off-peak period) in line with the Licence Conditions and Tariff Regulations and Transmission Planning Criteria-2023 of CEA and the cost-benefit analysis before going ahead with capital investment.
174. 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 losses as well as O&M expenses of transmission elements and ultimately increases the burden on consumers. The commission vide its investment proposal orders and ARR order, has directed OPTCL not to execute any project (>10 Cr.) without the approval of the Commission. However, it was found that OPTCL has initiated some of the projects without the approval of the Commission. In view of the above, the Commission once again 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 impact on ARR due to O&M expenses.
175. OPTCL should plan the expansion of the transmission network based on system study for a longer time frame 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.
176. When creating a new substation, it is important to consider the expected load growth and the amount of power that needs to be handled, in order to determine the appropriate

voltage level. OPTCL should consult with DISCOMs to estimate demand growth. The new substation should also have enough space to accommodate future expansion, such as the addition of bays, transformation capacity, and reactive compensation, to prevent the need for another substation in the nearby area. Additionally, the development of the intra-state transmission system should be in sync with the downstream distribution network, to avoid under-utilization of transmission assets and increased transmission loss. However, OPTCL has not been able to achieve this objective. Therefore, the Commission directs OPTCL to hold monthly coordination meetings with DISCOMs to ensure the smooth operation of the power sector and proper utilization of stranded assets and the minutes of the same meetings should be furnished to the OERC.

177. The Commission observes that currently there are 23 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 -15
Status of Ongoing Projects

Sl. No.	Name of the Project	Scheduled date of completion	% of Progress	Time Overrun (Months)
1	132kV Jayanagar-Sunabeda line (Existing S/C Tower) (39.24 kms.)	01/2016	94%	97
2	2x20MVA, 132/33kV R.Udyagiri S/S and 132kV LILO of 132kV Mohana-Digapahandi SC line.	03/2017	S/S-100% Line-100%	82
3	132kV DC line from Boudh to Phulbani with associated bay extension work at both ends.	03/2018	84%	70
4	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%	79
5	Installation of 3rd ICT with 400kV & 220kV bay extension at New Duburi	06/2018	90%	57
6	2x20 MVA, 220/33kV S/S at Dasapalla and associated LILO line (JICA)	01/2020	S/S-90% Line-90%	48
7	2x160MVA + 1x20MVA, 220/132/33kV S/S at Kiakata and associated 220kV & 132kV lines (JICA)	01/2020	S/S-95% Line-132kV: 92%, 220kV: 65%	48
8	132kV D/C line from Parlakhemundi to R.Udayagiri .	03/2020	82%	46
9	Diversion of 400kV & 220kV lines with 220kV LILO arrangement for connectivity with 400/220kV GIS at Meramundali-B .	03/2020	75%	46

Sl. No.	Name of the Project	Scheduled date of completion	% of Progress	Time Overrun (Months)
10	220kV LILO line from 220kV Theruvalli-Narendrapur DC line to 220/132/33kV Grid S/S at Aska along with 2 nos. 220kV feeder bay extension at Aska.	06/2020	90%	43
11	132kV DC line from 132/33kV GIS Chandbali to 220/132/33kV Grid S/S at Balimunda, Dhamara.	07/2020	95%	42
12	2X63MVA, 132/33kV GIS at Nayapalli, BBSR (SCRIPS)	09/2020	S/S-55% U/G cable:35%	40
13	2X160MVA 220/132kV & 2X63MVA 132/33kV, 220/132/33kV GIS at Balianta (Benupur), BBSR and associated line	09/2020	S/S-30% Line:45%	40
14	2X20MVA, 132/33kV Grid S/S Lamtaput with SAS and its associated 132kV LILO line.	12/2020	S/S-90% Line-100%	37
15	2X 40MVA 220/33kV Grid S/S at Palei, Balichandrapur with associated 220kV LILO line.	02/2021		35
16	2X160MVA, 220/132kV and 2X20MVA, 220/33kV Grid S/S, Turumunga with associated 220kV & 132kV line. (JICA)	02/2021	S/S-75% Line- 220KV- 60%, 132KV-99%	35
17	2X63MVA, 132/33kV GIS at Satyanagar, BBSR (SCRIPS)	02/2021	S/S-NIL UG-60%	35
18	2X63MVA, 132/33kV GIS at Badagada, BBSR (SCRIPS)	02/2021		
19	220kV LILO line from one circuit of existing 220kV TTPS-JODA D/C Line (Circuit-II) to 220/33kV GIS Substation, Keonjhar	02/2021	65%	35
20	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%	29
21	2x20 MVA, 132/33kV Grid S/S at Brundabahal with associated Line	10/2022	S/S: 90% Line: 96%	15
22	Pkg-I:GSS 2x500MVA, 400/220/33kV GIS at Ersama, Paradeep. Pkg-II: Associated lines Pkg-III: Associated lines	Pkg I : 12/2022		13
		Pkg II : 12/2023		1
		Pkg III: 12/2023		1
23	2x20MVA,132/33kV Grid S/S at Tarbha with associated 132kV line.	06/2023	S/S: 45% Line: 20%	7

178. OPTCL has to take steps for faster and timely execution of the transmission projects, already approved by the Commission, with optimization of cost and to avoid cost and time overrun & ultimate tariff burden to the consumers. OPTCL should identify the 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 of aforesaid delayed projects due to time & cost. The cost over run is an inefficiency in the control of expenditure of OPTCL which must be curbed.
179. Intra-state transmission system has a major share in the transmission sector in the country. Adoption of tariff-based 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 consumers 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. OPTCL is directed to submit an action taken report towards execution of new transmission projects under TBCB by 30th April, 2024.
180. The concept of dynamic line ratings may also be considered during planning to accommodate additional power flow during night peak hours when the ambient temperature is lower than the daytime temperature. Further, the requirement of additional transmission network for meeting GNA requirements as per the plan of CEA, CERC (Connectivity and General Network Access to the Inter-state Transmission System) Regulations and Generation Resource Adequacy need to be taken into account, while planning the transmission system of the State. In the above context, OPTCL needs to submit the action taken report before the Commission.
181. The Commission directed 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 Switchgears, rating of Shunt Reactor, etc. Further, the specifications for Transmission line towers/Steel poles, power transformers, switchgear, Surge Arrester, CT, PT/CVT, conductor, insulators, firefighting systems, lighting systems, AC/DC systems, etc. need to be standardized keeping in view the development of cyclone resilient transmission

infrastructure, wherever required. Given the above, the Commission directs OPTCL to submit the status of standardization as mentioned above.

182. 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 38 Nos. of Sub-stations, 4598 Nos. of EHT Towers & 113 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 same on day-to-day monitoring and maintaining of the assets.
183. OPTCL has intimated about monitoring the healthiness of transmission elements using modern diagnostic tools to minimize outage of transmission assets and ensure reliability & availability of transmission systems for uninterrupted power supply to the ultimate consumer. OPTCL is also directed to include the following modern diagnostic tools for condition monitoring of transmission assets.
- (a) Sweep Frequency Response Analyser (SFRA) for transformers & reactors.
 - (b) Dynamic Contact Resistant Measurement (DCRM) tool for circuit breakers.
 - (c) 3rd Harmonic leakage current monitor for Surge Arresters.
 - (d) Relay test kit for modern numerical relays.
 - (e) Digital Fiber Optic Sensors to monitor hotspots along the cable route and at cable joints for XLPE cables to be installed at 132 kV & above voltage level.
 - (f) Offline fault locator for overhead transmission lines to locate the fault with greater accuracy.
184. OPTCL may set up independent testing laboratories accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) for testing relays, meters, transformer oil, etc.
185. 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. The effect of cyclonic storms is largely felt within the belt of 60 kms from the coastline. A document prepared by the task force constituted by the MoP, GoI on “Cyclone Resilient Robust electricity transmission and distribution infrastructure in coastal area” is available in the public domain for reference. The said document has clearly elaborated about the design aspects and various measures etc. to be considered to reduce the impact of cyclones in coastal areas. Provision of adequate spares, Emergency Restoration System (ERS) and mobile

sub-station should be made in line with CEA guidelines/regulations for faster restoration of 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, and purchased 30 nos. Emergency Restoration System (ERS) & stored at different locations of OPTCL. Further, they have sought Government assistance of around Rs.1700.00 Cr. for 18 Nos. of UG cabling proposals to be established in & around the cyclone-prone districts. Considering the above, the Commission directs OPTCL to submit a detailed document on the 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. OPTCL need to design the towers of transmission lines in line with the recommendation of above-mentioned task force instead of going for design with higher wind zone.

186. It is observed that in the transmission system of OPTCL, about 29 nos. of substations (at 132 kV and 220 kV level) have crossed 40 years of their service life (against useful life of 35 years) and more than 76 transmission lines are in operation for more than 40 years (against useful life of 35 years). Most of the substations/transmission lines belong to 132 kV levels. Hence it is high time and is an opportunity for OPTCL to plan and explore the possibility of uprating (by replacing conventional ACSR/AAAC conductor with HT/HTLS conductor) / upgradation of such transmission elements to next higher voltage level based on transmission system studies so that more power can be handled at reduced losses. The possibility of conversion of the existing transmission line to the double circuit/multi-circuit/multi-circuit & multi-voltage configuration may also be explored for optimum use of row as Right of Way (RoW) is going to be one of the major challenges in the construction of new transmission line(s) in future. Use of multi-circuit, multi-circuit & multi-voltage, compact transmission lines using insulated cross arm and use of steel poles, use of high-temperature conductors, FACTS devices, etc. are the need of the hour to optimize RoW and increase power flow per meter of RoW. In this connection, the MoP document on the reduction in RoW in urban and forest areas which is available in the public domain may be referred.
187. MoP has advised to conduct cyber security audit of the entire cyber infrastructure including websites at regular intervals through CERT-In (Indian Computer Emergency Response Team) empanelled auditors to identify the gap and take appropriate corrective actions. OPTCL is therefore directed to implement regular cyber security audits and other proactive steps to prevent the possibility of Cyber intrusion attempts and security of the transmission system.

188. OPTCL shall conduct protection audits internally on a regular basis for the efficient and healthy operation of its system. They should also do the independent protection audit of important installations on a rolling basis through reputed agencies like Eastern Region Power Committee (ERPC) and Central Power Research Institute (CPRI) and submit their suggestions & action taken in this direction to the Commission.
189. 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 above, 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 implementation of STAMS.
190. 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. The primary reasons of such incidents are basically due to non-adherence to safety rules, no/improper maintenance of transmission system elements, non-compliance of safety clearances, lack of proper use of safety gadgets by the employees etc. Further, appropriately trained/licensed personnel are not being entrusted to work in the field. CEA (Measures relating to Safety and Electric Supply) Regulations, 2022 has vividly dealt with all these matters i.e., relating to the issue of the certificate of competency /electrical work permit, engagement of personnel having undergone appropriate training, engagement of safety officer, maintaining equipment/material in healthy condition, maintenance of required safety clearances etc. In this connection, the Commission has framed a Regulation on compensation to electrical accident victims. The Commission, therefore, directs the licensee to deploy modern PPE & safety tools and explore to use of Aerial Work Platform (AWP), especially for working at high elevations like 220 kV and above system. Further, OPTCL should submit the safety audit report along with its safety manual.

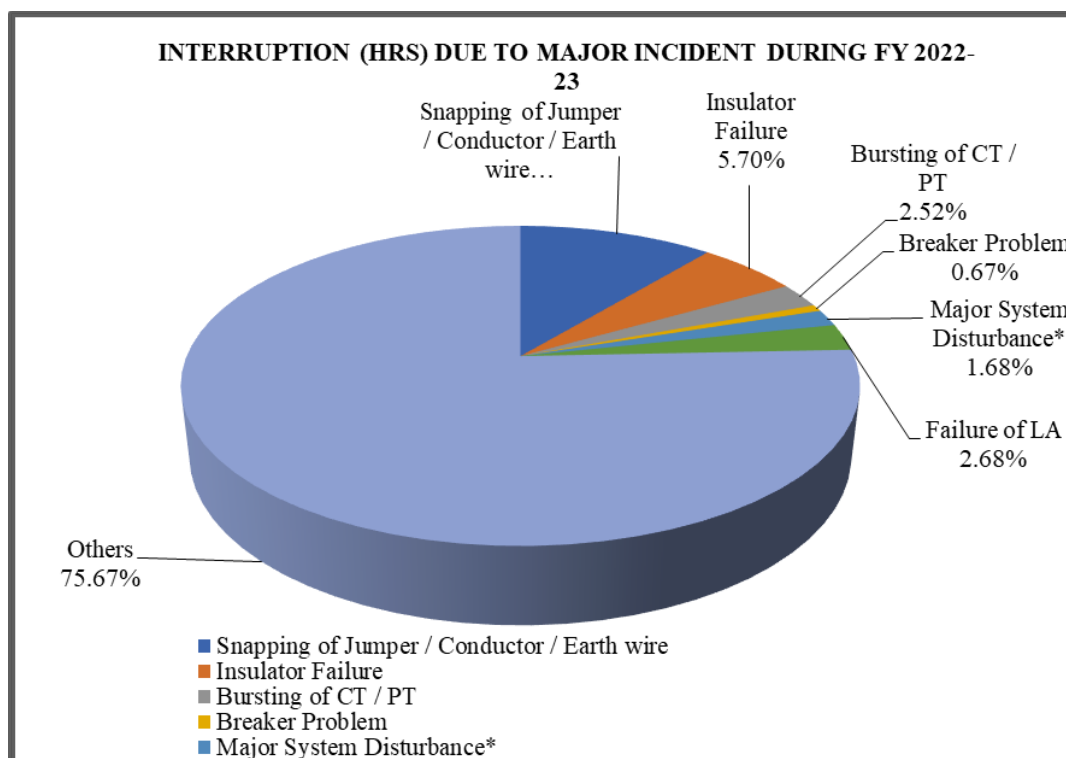
System Interruptions due to Major Incident and Voltage Profile:

191. OPTCL's system has faced aggregated Annual interruptions varying from 6 hours to 30 hours at different locations on account of conductor/jumper/earth wire snapping, insulator failure, bursting of Current Transformer/ Potential Transformer, breaker problem, system disturbance, Lightning Arrester failures, etc. The duration as mentioned below is the sum

total of interruptions that occurred in different areas (s/s) during the FY 2022-23. However, OPTCL has claimed that it has arranged to maintain power supply (without resorting to total power failure due to non-availability of transmission capacity) from other nearby transmission facilities. The effort has been made by OPTCL to maintain an uninterrupted power supply even in the event of generation failures. It has been reported that the load restriction has been imposed to curtail demand due to the non-availability of generation/failure of generating stations. OPTCL claimed that there was no blackout experienced in the State during the FY 2022-23. The duration of interruption in the year is given in the Table below:

Table - 16
Interruption due to Major Incident

Incident	Duration of Interruption	No. of Interruption	Percentage
Snapping of Jumper / Conductor / Earth wire	30:36:00	66	11.07%
Insulator Failure	10:37:00	34	5.70%
Bursting of CT / PT	6:08:00	15	2.52%
Breaker Problem	0:14:00	4	0.67%
Major System Disturbance*	6:23:00	10	1.68%
Failure of LA	6:49:00	16	2.68%
Others	230:37:00	451	75.67%
Total	291:24:00	596	100.00%
The duration of interruption indicated above is the sum total of interruptions that occurred at different areas(S/s) during the year. However, there was no total blackout experienced for the State during the year 2022-23.			



192. 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 for system voltage of 132 kV, 198-245 kV for system voltage of 220 kV and 380-420 kV for system voltage of 400 kV. OPTCL has experienced minimum & maximum operating voltage of 111.30 kV & 153.00 kV in its 132 kV system. The voltage profile at 220 kV level was quite satisfactory except at Bhanjanagar, Malkangiri, Balimela and Budhipadar Substations where the voltage has gone beyond the maximum permissible limit of 245 kV and touched 258.70 kV, 250.33 kV, 246.75 kV & 246.17 kV respectively. The maximum operating voltage in one of its 400 kV substations i.e. Meramundali has touched 427 kV.
193. 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.
194. 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 vide aforesaid letter dated 03.01.2007 within the timeline as specified in the aforesaid letter.
195. OPTCL is also directed to submit a quarterly report on failure of major equipment like CT, PT, CB, LA and transformers, etc. in grid Sub-stations along with their failure analysis report and corrective actions taken/ required to be taken to mitigate such failures in future.
196. Even though, OPTCL has claimed that there was no black out experienced in the State during the FY 2022-23, there were incidents of total failure of grid Sub-station (s) due to cascade tripping and making black out of a major part of that feeding system. Bringing the grid substation back into the system within a minimum time requires coordination with SLDC/ ERLDC. Therefore, SLDC shall prepare Standard Operating Procedure (SOP) of grid Substations for efficient management and restoration of the system and submit the report to the Commission.

197. 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 using analyses based on actual asset health and risk to determine maintenance actions. Early identification of type of issues would reduce unplanned outages and reduce unplanned expenses and increased benefits & value of planned work.
198. In line with Odisha Renewable Energy Policy 2022 of Govt. of Odisha, OPTCL was directed to consult Grid connected Renewable Purchase Obligated entities for providing storage facility in the form of BESS and plan in co-ordination with GRIDCO for the development of PSP in the state to meet Energy Storage Obligation (ESO) and accommodate intermittency & variable nature of generation from RE sources which is the trend of the future. In response to the above, OPTCL has submitted that as per Odisha RE Policy, 2022, OPTCL will install BESS to mitigate issues of intermittency and enhance grid stability. Considering the above the Commission directs OPTCL to submit the details report and status of the installation of BESS. Further, OPTCL should evaluate the adequacy and availability of transmission systems for pumping of water/evacuation of power from the proposed Pumped Storage Plants (PSPs) at Upper Kolab (600 MW), Upper Indravati (500 MW) and Balimela (600 MW) which are expected in 4-5 years time frame.
199. OPTCL has proposed for determination and approval for the levy of Grid Support Charges for industries having Captive Generating / Cogeneration plants and running in parallel with the Grids. In view of the 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, the Commission directs OPTCL to file a separate study report with detailed justification for levy of the Grid support charges, along with supporting data and the consequential benefits it will bring to the consumers of the State and OPTCL / State Grid as a whole.
200. OPTCL has submitted that quarters in the residential Colonies and the quarters attached to the Grid substations in OPTCL have become very old. At present, 60% of quarters are in inhabitable and not-reparable condition, and only 8-10% of quarters are occupied by the employees of different power sector organizations of Odisha. Considering the above, the Commission directs OPTCL to submit the future planning to deal with these 60% quarters and submit a complete consolidated report on all quarters in the residential Colonies and the quarters attached to the Grid substations. Further, OPTCL has initiated for construction of a Multi-storeyed quarter complex within the campus of Bhoi Nagar, BBSR. Furthermore, such projects have been envisaged to be replicated throughout the state such that the HRA burden can be subsequently reduced in the upcoming years.

201. OPTCL has submitted that they are performing periodic audits of the relay/protection system of the transmission system/ distribution system within the State Transmission System for quality and reliable operation. The Commission, therefore, directs OPTCL to submit the outcome of the protection audit and the measures taken based on the same. Further, OPTCL should submit the action report for the condition assessment of the earthing system of grid substations and transmission line towers.
202. OPTCL had earlier submitted that the steps have been taken for the establishment of a Centre of Excellence in the OPTCL Training Centre. In the above connection, the Commission directs OPTCL to submit the status on the availability of stimulators for the training of the trainees in OPTCL's Training Centre. Further, OPTCL has already created Chair in IIT, Bhubaneswar to strengthen industry-academia relationship. OPTCL is therefore directed to intimate the support gained by OPTCL towards the collaborative domains.

Finance

Truing up of OPTCL for the FY 2022-23

203. OPTCL in the present application, along with ARR & tariff application of FY 2024-25, has proposed for truing-up for the FY 2022-23 in compliance with Regulation 7.1 of the OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014. The analysis of element wise expenditure and income proposals and the proposal for truing up of OPTCL are discussed in the following paragraphs.
204. OPTCL has submitted that the income and expenditure relating to SLDC has been segregated as a part of true up from the consolidated account of OPTCL and consequential deficit of Rs.0.80 Crore has been transferred to SLDC Development Fund as per provisions stipulated in the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010. The details are shown in the Table below:

Table - 17
OPTCL & SLDC Income & Expenditure Break up of FY 2022-23
(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	567.60	9.48	558.12
2	R & M Cost	114.64	0.49	114.15
3	A & G Cost (Including GCC Expenses)	41.25	1.42	39.83

Sl No	Particulars	Actual as per Audited Accounts		
		Consolidated OPTCL Account	SLDC	Transmission
1	2	3	4	5=3-4
4	Depreciation	389.27	1.11	388.16
5	Interest on Loan Capital	97.64	-	97.64
6	Rebate	18.02	0.10	17.92
7	Provisions for Tax & Other	236.71	-	236.71
8	Total Expenditure (1+2+.... +7))	1,465.13	12.60	1,452.53
B	Income			
9	Revenue from Operations	1,259.73	11.55	1,248.18
10	Other Income	260.77	0.25	260.52
11	Total Income (9+10)	1,520.50	11.80	1,508.70
C	Gap - Surplus/(Deficit) (11-8)	55.37	(0.80)	56.17

Employees Cost including Terminal Benefits:

205. OPTCL has submitted that, the Commission had allowed Rs.477.19 Cr. towards Employee Cost including Terminal Benefits liabilities for the FY 2022-23. As per the audited accounts, excluding Rs.9.48 Cr. of SLDC, the employees cost including terminal benefit liabilities of OPTCL is Rs. 558.12 Cr.

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

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

As per IND AS-19 issued by MCA, employee benefit liabilities shall be assessed through actuarial valuation. Based on the report of Independent Actuary Dr. R. Kannan, BCIC, Kolkata, OPTCL has made provision of Rs.285.35 Cr. towards terminal liabilities in the statement of P&L A/c for FY 2022-23. Besides that, the actual expenditure toward employer's contribution in case of NPS and NP category is Rs.17.59 Cr. against approved amount of Rs.18.11 Cr. Hence, OPTCL has requested the Commission to consider Rs.302.94 Cr. (Rs. 285.35 Cr.+ Rs.17.59 Cr.) in the truing-up of FY 2022-23.

207. The Commission has analysed the proposals and submission made by the petitioner towards 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 trued up based on the respective year audited accounts of OPTCL. Over the periods up to FY 2021-22, the total terminal benefit approved by the Commission in the truing up orders is Rs. 2971.17 Cr. The details are shown in the Table below:

Table –18
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
Total up to 31.03.2022	2971.17
Approved in ARR Order of FY 2022-23	201.16
Total up to 31.03.2023	3172.33

208. Further, by analysing the audited accounts of Terminal Benefits Trust Fund for the FY 2022-23, the Commission observes that as per the actuarial valuation up to 31.03.2023, total Corpus requirements is Rs.3181.07 Cr. whereas value of corpus investment is Rs.2711.68 Cr. only. When the Commission has already approved sufficient funds (i.e., Rs.3172.33 Cr.) to meet the corpus requirements, still there is a shortfall in Corpus investment amounting of Rs.469.39 Cr. (Rs.3181.07 Cr.- Rs.2711.68 Cr.) till 31.03.2023. The true up deficit requirement of the trust for the FY 2022-23 is Rs.79.97 Cr. The details are shown in the Table below:

Table - 19
Terminal Benefits Trust Fund Accounts as on 31.03.2023

(Rs. In Crore)

Trust	Corpus Requirement up to 31.03.2023	Actual Investment up to 31.03.2023	Gap in Investment as on 31.03.2023	OPTCL payable to trust as on 31.03.2023	Trust Deficit of FY 2022-23		
					Expenditure	Income	Surplus/ (Deficit)
1	2	3	4=2-3	5	6	7	8 = 7-6
Pension	2,925.73	2,431.15	494.59	628.66	237.42	171.81	(65.60)
Gratuity	116.28	123.32	(7.04)	(12.35)	17.47	6.84	(10.63)
Leave	139.06	157.22	(18.16)	2.59	14.01	10.28	(3.74)
Total	3,181.07	2,711.68	469.39	618.89	268.90	188.93	(79.97)

209. The Commission in their Transmission Tariff Order dated 23.03.2023 for the FY 2023-24, had directed OPTCL to invest Rs.632.29 Cr. to maintain the corpus requirement at par with actuarial valuation of Rs.2903.00 Cr up to 31.03.2022. Further, the Commission had

approved Rs. 201.16 Cr. towards terminal benefits for FY 2022-23. It is observed that during FY 2022-23 the trust revenue deficit is Rs.79.97 Cr. In view of the above, OPTCL is required to invest Rs. 753.48 Cr. (Rs. 632.29 Cr. + Rs. 201.16 Cr.- Rs.79.97 Cr.) by 31.03.2023. However, against the same, OPTCL has invested only Rs.440.97 Cr. which causing a shortfall in corpus investment of Rs.312.51 Cr. (Rs.753.48 Cr. - Rs. 440.97 Cr.) as approved by the Commission up to 31.03.2023. As the OPTCL is not investing in the corpus as per the approval of the Commission which is resulting in widening of the trust revenue deficit. Further, the Commission had approved Rs.168.03 Cr. towards Terminal benefits for FY 2023-24. Considering the above. OPTCL is required to invest Rs. 480.54 Cr. (Rs.312.51 Cr. + Rs.168.03 Cr.) in the corpus account by 31.03.2024 in line with the Commission's approval.

210. Considering the above facts and figures in the Trust audited accounts, the Commission now approves Rs.218.75 Cr. (consisting of Rs.201.16 Cr. towards Terminal benefit liabilities and Rs.17.59 Cr. towards NPS and NP category) for truing-up of the period FY 2022-23 in contrast to the amount already approved in the Transmission tariff order for FY 2022-23. The details are mentioned in the Table below:

Table – 20
Terminal benefit allowed for FY 2022-23

		(Rs. In Crore)
Particulars	Amount	
Terminal benefit liabilities towards Pension, Gratuity & Leave Salary	201.16	
Employers Contributions to NPS &NP category	17.59	
Total	218.75	

211. Further, the Commission scrutinised other employees cost as per the Audited Accounts for the FY 2022-23. Accordingly, the Commission now approves **Rs.499.37 Cr.** towards the employee cost of OPTCL for truing up for the FY 2022-23 as against the earlier approval of Rs.477.19 Cr in the ARR & tariff Order for FY 2022-23. The details are shown in the Table below:

Table - 21
Employees Cost Approved for Truing-up for FY 2022-23

		(Rs. In Crore)					
Sl. No.	Particulars	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	Salary & Allowance						
1	Basic pay	151.67	167.64	5.44	162.20	162.20	162.20
2	Dearness Allowance	56.12	53.61	1.96	51.65	51.65	51.65

Sl. No.	Particulars	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
3	House Rent Allowance	13.04	28.14	0.76	27.38	27.38	27.38
4	Other Allowance	0.98	1.18	0.09	1.09	1.09	1.09
5	Bonus	0.02	0.02	-	0.02	0.02	0.02
6	Stipend for MT	8.46	10.34	-	10.34	10.34	10.34
7	Arrear salary-7th pay Commission	15.61			-	26.01	26.01
	Sub-total (A)	245.90	260.93	8.25	252.68	278.69	278.69
B	Additional Employee Cost						
8	Out Source Engagement	2.94	2.71	0.15	2.56	2.56	2.56
	Sub-total (B)	2.94	2.71	0.15	2.56	2.56	2.56
C	Other Employee Cost						
9	Medical Allowance & Reimbursement	8.13	7.70	0.28	7.42	7.42	7.42
10	Leave Travel Concession	0.50	0.22	0.01	0.21	0.21	0.21
11	Honorarium	0.06	0.13	-	0.13	0.13	0.13
12	Ex-Gratia	5.00	5.70	0.13	5.57	5.57	5.00
13	Staff welfare Expenses	3.38	0.29	-	0.29	0.29	0.29
14	Conveyance Allowance & Reimbursement	4.24	2.81	0.09	2.72	2.72	2.72
15	Capacity Building Expenses	1.02	-	-	-	0.95	-
	Sub-total (C)	22.33	16.85	0.51	16.34	17.29	15.77
D	Terminal Benefits & NPS						
16	Pension fund	185.48	257.48	-	257.48	257.48	201.16
17	Gratuity fund	10.43	12.63	-	12.63	12.63	
18	Leave Encashment	5.25	15.24	-	15.24	15.24	
19	Provident fund (Including Contribution to NPS)	18.11	18.16	0.57	17.59	17.59	17.59
	Sub-Total (D)	219.27	303.51	0.57	302.94	302.94	218.75
E	Total Employee Cost (A+B+C+D)	490.43	584.00	9.48	574.52	601.48	515.77
F	Less: - Employee Cost Capitalised	13.24	16.40	-	16.40	16.40	16.40
G	Net Employees cost (E-F)	477.19	567.60	9.48	558.12	585.08	499.37

Repair & Maintenance (R&M) Expenses:

212. OPTCL has stated that, the Commission had allowed Rs.110.50 Cr. towards R&M Expenses in the Transmission Tariff Order for FY 2022-23. As per the audited accounts for FY 2022-23, the R&M Expenditure is Rs. 114.15 Cr. as detailed in the Table below:

Table - 22
Actual R&M Cost for the FY 2022-23

(Rs. In Crore)				
Sl. No.	Particular	Actual	SLDC	Transmission
1	Building	8.60	-	8.60
2	Plant and machinery	75.07		75.07
3	Lines cables and network assets	23.24		23.24
4	Electrical installations	1.76	0.10	1.66
5	Vehicle	0.11	0.00	0.11
6	Furniture and fixtures	0.02		0.02
7	Office equipment	5.84	0.39	5.45
	TOTAL	114.64	0.49	114.15

213. OPTCL has requested the Commission to consider Rs.114.15 Cr. as R&M expenses for FY 2022-23. The commission scrutinised the audited accounts of OPTCL and accordingly approves Rs. 114.15 Cr. towards R & M expenses for truing-up of FY 2022-23 as against the earlier approval of Rs.110.50 Cr in the ARR & tariff Order of FY 2022-23.

Administration & General (A&G) Expenses:

214. OPTCL has stated that, the Commission had allowed Rs. 37.73 Cr. under A&G expenses which consists of Rs. 31.19 Cr. towards normal A&G expenses, Rs.1.90 Cr. towards Licensee Fees to Commission, Rs.3.72 Cr. towards Inspection Fees and Rs.0.92 Cr. towards SLDC Charges. It has submitted that, as per the audited accounts of OPTCL for FY 2022-23, the A&G Expenses is Rs.39.83 Cr. (normal A&G expenses of Rs.31.82 Cr. & other adjustments & provisions of Rs. 8.01 Cr.) excluding SLDC A&G expenses of Rs.1.42 Cr. Further, OPTCL has stated that Rs. 0.95 Cr. relating to training expenses has been included in the other general expenses. Accordingly, OPTCL has requested to consider Rs. 38.88 Cr. (Rs. 39.83 Cr.- Rs. 0.95 Cr.) under A&G expenses and Rs. 0.95 Cr. relating to training expenses as capacity building expenses under employees cost for FY 2022-23.
215. The Commission, after scrutinising the A&G expenses in the audited Accounts of OPTCL, has observed that the actual A&G expenses of OPTCL is Rs.32.21 Cr. (normal A&G expenses of Rs.31.82 Cr. & CSR expenses of Rs.0.39 Cr.) as against the earlier approval of Rs.37.73 Cr. in the ARR for FY 2022-23. Since the Commission has been truing-up the expenses on the basis of audited accounts of OPTCL, its requests to consider Rs.0.95 Cr. relating to training expenses as capacity building expenses under employees cost for FY 2022-23 has not accepted. Therefore, the Commission approves Rs.32.21 Cr. towards actual A&G expenses which is within the approved limit for the FY 2022-23 as per the

Regulations 6.3 of OERC (Terms and Condition for Determination of Transmission Tariff)
Regulation, 2014. The details are shown in the Table below:

Table – 23
A & G Expenses approved by the Commission for Truing-up for FY 2022-23
(Rs. in Crore)

Sl. No.	Description	Actual as per Audited Accounts	SLDC Portion	Transmission Portion	Proposed for Truing-up	Approved in Truing-up
A	Actual A & G Expenses					
1	Power and fuel consumed	3.82	0.41	3.41	3.41	3.41
2	Hire charges on vehicle	10.95	0.23	10.72	10.72	10.72
3	Legal and professional fees	1.92	0.04	1.88	1.88	1.88
4	Rent	3.28	0.01	3.27	3.27	3.27
5	Watch and ward expenses	3.22	0.30	2.92	2.92	2.92
6	License and other fees	2.06	-	2.06	2.06	2.06
7	Rates and taxes	0.28	-	0.28	0.28	0.28
8	Insurance charges	0.02	-	0.02	0.02	0.02
9	Fees and subscription	0.05	-	0.05	0.05	0.05
10	Advertisement for tenders	0.27	0.01	0.26	0.26	0.26
11	Corporate Social Responsibility expenses	0.39	-	0.39	0.39	0.39
12	Travelling expenses	2.12	0.17	1.95	1.95	1.95
13	Communication expenses	0.68	0.04	0.64	0.64	0.64
14	Office maintenance charges	0.83	0.07	0.76	0.76	0.76
15	Auditors' remuneration and out-of-pocket expenses	0.15	-	0.15	0.15	0.15
16	Other General expenses	7.26	0.15	7.11	7.11	7.11
	Sub-total (A)	37.30	1.42	35.88	35.88	35.88
B	Provisions & Other Adjustment under A&G					
17	Impairment loss recognized on non-financial assets	0.21	-	0.21	0.21	-
18	Impairment loss recognized on PPE	0.01	-	0.01	0.01	-
19	Loss on theft/ Shortage/ Obsolete of material and others	1.07	-	1.07	1.07	-
20	Other Losses	6.33	-	6.33	6.33	-
	Sub-total (B)	7.62	-	7.62	7.62	-
C	Total (A+B)	44.92	1.42	43.50	43.50	35.88
D	Less: Capitalised	3.67	-	3.67	3.67	3.67
E	Less: Training Expenses	-	-	-	0.95	-
F	Total A & G Expenses	41.25	1.42	39.83	38.88	32.21

Depreciation:

216. OPTCL has submitted that, the Commission had allowed an amount of Rs.233.57 Cr. towards depreciation in the Transmission Tariff Order for FY 2022-23. As per the audited accounts for FY 2022-23, the total depreciation and amortization expense is shown at Rs. 389.27 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 - 24
Depreciation as per Audited Accounts of OPTCL for FY 2022-23

(Rs. In Crore)				
Sl No	Description	Actual	SLDC	Transmission
1	Amortisation of leasehold assets	2.02		2.02
2	Depreciation on Buildings	5.29		5.29
3	Depreciation On Electrical Installation	0.70	0.02	0.68
4	Depreciation on Other civil works	3.29	0.00	3.29
5	Depreciation on Plant and Machinery	249.92	0.00	249.92
6	Depreciation on Lines, Cable Network etc.	113.01	0.00	113.01
7	Depreciation on Vehicles	0.09	-	0.09
8	Depreciation on Furniture and Fixtures	0.48	0.02	0.46
9	Depreciation on Office Equipment	11.90	1.06	10.84
10	Amortisation of Computer Software	2.57	0.00	2.57
	TOTAL	389.27	1.11	388.16

217. The petitioner has submitted that the depreciation on Transmission Activities is Rs.388.16 Cr. including Rs.99.69 Cr. towards the depreciation made on account of assets created by the beneficiary and Govt. on deposit work basis. The net depreciation on own assets of OPTCL is Rs.288.47 Cr. (Rs.388.16 Cr. - Rs.99.69 Cr.). The petitioner has submitted that the depreciation needs to be calculated as per the Regulation 8.38 & 8.34 of OERC Transmission Tariff Regulations, 2014 and has requested the Commission to allow Rs.288.47 Cr towards depreciation in the truing-up for FY 2022-23.
218. Basing on the above submission of the Petitioner for truing-up of depreciation for FY 2022-23, the Commission has scrutinised the audited accounts of OPTCL for FY 2022-23 and observes that, during the year the Petitioner has added total transmission assets of Rs.741.50 Cr including assets created out of grant, beneficiary & deposit works of Rs.198.59 Cr. Further, in the last truing-up Order for the FY 2021-22 of OPTCL, the Commission had considered the total original book value of fixed assets of transmission systems as Rs.8273.20 Cr. (Rs.6391.11 Cr. at Deemed Cost) as on 31.03.2022. Considering the additional transmission assets of Rs.741.50 Cr. created during FY 2022-23, the total original book value of transmission fixed assets over the periods as per audited accounts of

OPTCL as on 31.03.2023 is Rs. 9014.70 Cr. (Rs.7133.61 Cr. at Deemed Cost) which are shown in the Table below:

Table - 25
Book Value of Fixed Assets of Transmission systems as on 31.03.2023
(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)	3471.27	1590.18
2015-16	768.81	768.81
2016-17	683.82	683.82
2017-18	447.00	447.00
2018-19	665.94	665.94
2019-20	535.73	535.73
2020-21	665.01	665.01
2021-22	1,035.62	1,035.62
Sub-total (up to 31.03.2022)	8,273.20	6392.11
2022-23	741.50	741.50
Total (up to 31.03.2023)	9014.70	7133.61

219. Further, in the last Truing-up Order for the FY 2021-22, after deducting Up-valued assets of Rs. 512.71 Cr, fully depreciated assets of Rs.1631.99 Cr & assets created out of grant, beneficiary & deposit works of Rs.1711.45 Cr., the Commission had calculated OPTCL's own asset value at Rs.4,417.05 Cr. (Rs.8273.20 Cr - Rs.512.71Cr.-Rs.1631.99 Cr. - Rs.1711.45 Cr.) as on 31.03.2022. The details are shown in the Table below:

Table -26
Audited Book value of Fixed Assets of Transmission systems as on 31.03.2022
(Rs.in Crore)

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Gross Fixed Assets as per audited accounts as on 01-04-2022	Up-valued Assets	Original book value of Grant & Beneficiary /Deposit Assets as on 01-04-2022	Fully (90%) Depreciated Assets as on 01.04.2022	Original Book Value of Own Fixed Assets as on 01.04.2022
2	3	4	5	6	7	8=4-5-6-7
Free Hold Land	-	54.94	6.26	6.29	-	42.39
Leasehold Land	3.34	57.19	-	5.58	-	51.61
Building	3.34	149.62	15.10	7.01	0.22	127.29
Electrical Installation	5.28	10.95	-	3.67	0.52	6.76
Plant & Machinery: (Other Civil Works)	3.34	90.77	0.91	4.85	-	85.01
Plant & Machinery	5.28	4,832.67	266.02	972.06	700.46	2,894.13
Plant & Machinery: (Line, Cable & Network)	5.28	2,958.19	221.17	697.40	913.56	1,126.06
Vehicles	9.50	2.38	-	-	1.38	1.00
Furniture & Fixture	6.33	8.54	0.46	0.44	1.38	6.26
Office Equipment	6.33	90.37	2.79	3.46	14.47	69.65
Intangible Assets	15.00	17.58	-	10.69	-	6.89
Total		8,273.20	512.71	1,711.45	1,631.99	4,417.05

220. Considering the above facts and observations for calculation of depreciation for truing-up of FY 2022-23, the Commission has taken the above original book value of own assets of Rs.4417.05 Cr. as on 31.03.2022 and assets value of Rs.741.50 Cr (including grant, beneficiary & deposit works assets of Rs.198.59 Cr.) added during FY 2022-23. Besides that, taking in to account the book value of assets of Rs.232.96 Cr. which has fully depreciated during FY 2022-23, the Commission calculates the transmission assets of OPTCL as Rs.4727.00 Cr. (Rs.4417.05 Cr. + Rs.741.50 Cr. - Rs.198.59 Cr. - Rs.232.96 Cr.) as on 31.03.2023. Considering the above assets and applicable rate of depreciation, the Commission arrives at a value of Rs.235.31 Cr. towards depreciation for truing-up of FY 2022-23. The details are shown in the Table below:

Table -27
Depreciation trued up for FY 2022-23

(Rs. in Crore.)

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Own Fixed Assets as on 01.04.2022	Book Value of Fixed Assets added in FY 2022-23	Book Value of Grant, Beneficiary & Deposit works Added in FY 2022-23	Book Value of Fixed Assets Fully depreciated in FY 2022-23	Book value of Own Fixed Assets as on 31.03.2023	Depreciation for FY 2022-23
1	2	3	4	5	6	7=3+4-5-6	8= (3+7)/2 X 2
Free Hold Land	-	42.39	-	-	-	42.39	-
Leasehold Land	3.34	51.61	0.12	0.05	-	51.68	1.72
Building	3.34	127.29	15.37	1.19	0.01	141.46	4.49
Electrical Installation	5.28	6.76	1.41	0.28	(0.03)	7.92	0.39
P&M (Other Civil Works)	3.34	85.01	18.13	2.81	-	100.33	3.10
Plant & Machinery	5.28	2,894.13	541.21	117.46	111.18	3,206.70	

Particulars	Depreciation Rate as per OERC Regulation (%)	Original Book Value of Own Fixed Assets as on 01.04.2022	Book Value of Fixed Assets added in FY 2022-23	Book Value of Grant, Beneficiary & Deposit works Added in FY 2022-23	Book Value of Fixed Assets Fully depreciated in FY 2022-23	Book value of Own Fixed Assets as on 31.03.2023	Depreciation for FY 2022-23
							161.06
P&M (Line, Cable & Network)	5.28	1,126.06	150.83	74.12	119.72	1,083.05	58.32
Vehicles	9.50	1.00	(0.03)	-	0.05	0.92	0.09
Furniture & Fixture	6.33	6.26	0.93	0.08	0.05	7.06	0.42
Office Equipment	6.33	69.65	13.53	2.60	1.98	78.60	4.69
Intangible Assets	15.00	6.89	-	-	-	6.89	1.03
Total		4,417.05	741.50	198.59	232.96	4,727.00	235.31

Finance Cost:

Interest on Loan:

221. OPTCL states that the Commission had allowed Rs.110.29 Cr. towards interest on loan in the Transmission Tariff Order for FY 2022-23. As per the audited accounts of FY 2022-23, the net interest is Rs. 97.64 after capitalisation of Rs.22.55 Cr. Accordingly, the commission was requested to consider Rs. 97.64 Cr towards interest on loan in the truing up of FY 2022-23.
222. The Commission examined the audited books of accounts of OPTCL for FY 2022-23 and observed that after capitalisation net interest on loan is Rs.97.64 Cr. Accordingly, the Commission approves Rs.97.64 Cr. towards interest on loan for the truing-up of FY 2022-23 as against the Rs.110.29 Cr approved in the Transmission Tariff Order for FY 2022-23.

Rebate:

223. OPTCL has stated that, the Commission has allowed Rs.16.64 Cr. towards rebate in the Transmission Tariff Order for FY 2022-23. As per the audited accounts for FY 2022-23, the actual rebate is Rs.17.92 Cr. excluding SLDC rebate of Rs.0.10 Cr. Therefore, OPTCL has requested the Commission to consider Rs.17.92 Cr. towards rebate in the truing-up of FY 2022-23. After examining the audited book of Accounts of OPTCL for FY 2022-23, the Commission approves **Rs.17.92 Cr.** (excluding SLDC rebate of Rs.0.10 Cr.) towards rebate in truing up for the FY 2022-23 as against the Rs.16.64 Cr. approved in the Transmission Tariff Order for FY 2022-23.

Incentive for System Availability:

224. OPTCL has submitted that the Commission in the Transmission Tariff Order for FY 2022-23 has allowed Rs.5.00 Cr. towards incentive for system availability. The petitioner states that for FY 2022-23 the system availability was 99.98% as verified by SLDC. Accordingly, the incentive against system availability is calculated as Rs.12.42 Cr. and OPTCL requests

the Commission to consider said amount in truing up for the FY 2022-23. The use of the fund against incentive has not been submitted by OPTCL for FY 2022-23. Considering the above, the Commission approves **Rs.5.00 Cr.** towards Incentive for System Availability in this truing up for FY 2022-23 in line with the approval given in the Transmission tariff order for FY 2022-23.

Return on Equity (RoE):

225. OPTCL has submitted that the Commission had approved RoE of Rs.141.67 Cr. (@ 15.5% on equity value of Rs.913.99 Cr.) in the Transmission Tariff order for FY 2022-23. As per the audited accounts for the FY 2022-23, the total equity capital is Rs.2071.47 Cr. which includes Rs.60.07 Cr. inherited by OPTCL at the time of demerger of GRIDCO into GRIDCO & OPTCL and Rs.647.00 Cr. towards conversion of Bond along with interest on equity. But OPTCL has stated that, as per Regulation 8.27 & 8.28 of OERC Transmission tariff Regulation, 2014, return on equity capital is to be allowed at the rate of 15.5% on the amount of equity capital determined in accordance with the regulations 4.8 to 4.22 and 8.17 to 8.24.
226. The Petitioner has submitted that, total Gross Fixed Assets (GFA) of OPTCL as on 31.03.2023 is Rs.5241.01 Cr. and after deduction of 90% depreciated assets and Grant, Beneficiary& Deposit Asset. Considering the same, the Petitioner has estimated RoE @15.50% on 30% of GFA as on 31.03.2023 and accordingly claimed Rs.243.71 Cr. (Rs.5241.01 Cr. X 30% X 15.5%) under RoE for truing-up of FY 2022-23.
227. The Commission has examined the submission of OPTCL. As per Regulation 8.29 of the OERC Transmission Tariff Regulation, 2014, stipulated 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 normative basis by the Petitioner has not considered by the Commission at present.
228. Further, replying to the quires of the Commission the Petitioner has submitted that, as per audited accounts, Rs.145.70 Cr. equity capital infused by the State Government during FY 2022-23 are under the head of other equity capital. Considering the above, total equity capital is Rs.2157.09 Cr. (Rs.2071.47 Cr. + Rs.145.70 Cr- Rs.60.07 Cr.) infused by the State Government till 2022-23. The details of sanction orders and dates of equity capital infused by the State Govt. till FY 2022-23 are shown in the Table below:

Table – 28
Details of equity capital infused by the State Govt. till FY 2022-23
(Rs. in Crore)

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
1	R&R-I-01/2009-3560 dt.25.03.09	23.04
2	R&R-I-01/2009-2003 dt.24.02.09	0.01
3	R&R-I-01/2009-9464 dt.11.09.09	5.00
4	R&R-I-01/2009-4826 dt.01.06.10	20.00
5	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6	R&R-6/12-685 dt.31.01.2012	1.00
7	R&R-6/12-690 dt.31.01.2012	39.00
8	R&R-6/12-695 dt.31.01.2012	3.00
9	R&R-6/12-629 dt.22.01.2013	25.76
10	R&R-6/12-634 dt.22.01.2013	16.60
11	R&R-6/12-624 dt.22.01.2013	7.64
12	R&R-6/12-5693 dt.18.07.2013	29.19
13	R&R-6/12-5698 dt.18.07.2013	11.97
14	R&R-6/12-5703 dt.18.07.2013	8.84
15	R&R-69/14-10445 dt.29.12.2014	10.50
16	R&R-69/14-10450 dt.29.12.2014	27.50
17	R&R-69/14-10455 dt.29.12.2014	12.00
18	R&R-69/14-6823 dt.06.08.2015	19.68
19	R&R-69/14-6818 dt.06.08.2015	17.22
20	R&R-69/14-6813 dt.06.08.2015	20.03
21	BT(P)-15/15-10291 dt.21.12.2015	0.07
22	R&R-69/14-5364 dt.18.7.2016	10.00
23	R&R-69/14-5369 dt.18.7.2016	20.00
24	R&R-69/14-5374 dt.18.7.2016	20.00
25	BT(P)-04/2018/En-1786 dt. 26.02.18	15.00
26	BT(P)-04/2018/En-1791 dt. 26.02.18	20.00
27	BT(P)-04/2018/En-1796 dt. 26.02.18	15.00
28	R&R -54/2015/En-5458 dt. 23.06.15	20.00
29	R&R -54/2015/En-737 dt. 28.01.16	10.00
30	R&R -54/2015/En-4348 dt. 07.06.16	20.00
31	R&R -54/2015/En-466 dt. 17.01.17	60.00
32	R&R -17/2017/En-2895 dt. 22.04.17	20.00
33	R&R -17/2017/En-10216 dt. 27.12.17	50.00
34	R&R -40/2018/En-3902 dt.28.04.2018	15.00
35	R&R -40/2018/En-4632 dt.24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En dt. 19.12.2018	15.00
37	BT(P)-04/2018(pt)-10439/En dt. 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En dt. 19.12.2018	15.00
39	R&R-40/2019-5100/En TD.27.06.2019	3.67
40	R&R-40/2019-6530/En dtd.6.08.2019	11.03
41	201915819273 dtd.27.02.2020	55.00
42	202018025467 dtd.13.10.2020	50.00
43	202019752418 dtd.26.03.2021	5.29
44	202019704714 dtd.23.03.2021	9.00

Sl. No.	Sanction Order No. and Date	Amount (Rs. Cr.)
45	202019747311 dtd.26.03.2021	647.00
46	202121454297 dtd.06.09.2021	50.00
47	202122892459 dtd.18.12.2021	30.00
48	202122892550 dtd.18.12.2021	30.00
49	202124034526 dtd.03.03.2022	6.65
50	202124047110 dtd.04.03.2022	55.00
51	202124048923 dtd.04.03.2022	4.00
52	202124049541 dtd.04.03.2022	140.00
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
	Total (up to FY 2022-23)	2157.09

229. Further, OPTCL was asked to submit the detail information about capital work-in-progress as on 31.03.2023. But in its reply OPTCL has not furnished the required information as desired by the Commission. But after analysing the same, the Commission observes that out of the above equity capital received from the Government of Odisha, equity capital of Rs.514.16 Cr. are still under Capital Work-in-Progress (CWIP) by the end of FY 2022-23, details of which are shown in the Table below:

Table – 29
Equity infused by GoO under CWIP as on 31.03.2023

(Rs. in Crore)

Sl. No.	Name of Project	Scheme	Amounts
1	2X 40MVA 220/33kV Grid S/S at Palei, Balichandrapur with line.	SSP-30% GoO Equity	12.53
2	2x160MVA+2x40MVA, 220/132/33kV Grid S/S, Dhamara with line	SSP-30% GoO Equity	26.85
3	2X40MVA, 132/33kV Grid S/S at Bhatli along with line	SSP-30% GoO Equity	15.69
4	2X20MVA, 132kV Grid S/S Lamtaput with SAS and associated line.	SSP-30% GoO Equity	7.90
5	132kV DC line from 220/132/33kV S/S Baner (Jaipatna) to 132/33kV S/S at Junagarh	SSP-30% GoO Equity	10.94
6	2x20MVA, 220/33kV S/S at Baliguda and associated line	Rs. 300 Cr GoO Equity	37.43
7	2x20MVA, 132/33kV R.Udyagiri S/S and associated line	Rs. 300 Cr GoO Equity	16.79
8	2x20MVA, 132/33kV Grid S/S at Boriguma and associated line	Rs. 300 Cr GoO Equity	7.59

Sl. No.	Name of Project	Scheme	Amounts
9	132kV Jayanagar-Sunabeda line	Rs. 300 Cr GoO Equity	7.73
10	2X20MVA, 132/33kV Grid Sub- station at Lakhanpur along with associated its transmission line.	30% Equity Support for JICA	8.49
11	220/132/33 KV GRID S/S, Kiakata	30% Equity Support for JICA	37.52
12	2x500MVA, 400/220/33kV GIS at Paradeep and associated line	30% GoO Equity	186.24
13	2X20MVA, 132/33KVGSS at Brundabahal with associated line	100% GoO Equity	58.12
14	132/33 KV S/S at Tarabha with associated 132kV LILO Line	100% GoO Equity	13.69
15	5 Nos of Projects under Scheme RRCP-II	RRCP-II-30% GoO Equity Support	16.65
16	5 Nos of Projects under LVMS Scheme	30% GoO Equity	50.00
	Total		514.16

230. Further, the Government of Odisha specifically in its letter No...3333 dated 24.03.2021 had communicated the Commission that no return on equity shall be paid on the equity of Rs.647.00 Cr. which is relating to the sanction of Government towards conversion of bond to the equity. Excluding the aforesaid amounts from the total equity capital infused by the Govt. of Odisha, the Commission allows the equity capital as at Rs. 995.93 Cr. (i.e., Rs.2157.09 Cr. -Rs.514.16 Cr.- Rs.647.00 Cr.) as on 31.03.2023 and accordingly approves **Rs.154.37 Cr.** (@15.5% of Rs.995.93 Cr.) towards Return on Equity in this truing-up for the FY 2022-23 as against Rs.141.67 Cr. approved in the Transmission tariff Order of FY 2022-23.

Income Tax:

231. As per the Regulation 8.43 of OERC Regulations, 2014, Income tax of the Transmission Licensee shall be recovered from the beneficiaries. OPTCL has stated that, it had proposed Income Tax of Rs.2.16 Cr. in the ARR of FY 2022-23 based on provision made in the audited account of FY 2020-21. Basing on the same, the Commission had allowed Rs.2.16 Cr towards income tax in the transmission tariff orders for FY 2022-23. The Petitioner has submitted that, it has calculated and paid Income Tax of Rs. 36.89 Cr. during FY 2022-23 under MAT. The Commission has examined the documents provided by the petitioner and accordingly allows **Rs.36.89 Cr.** towards Income tax for the truing up of FY 2022-23.

Misc. Receipts:

232. OPTCL states that as against its proposal of Rs.263.83 Cr., the Commission had approved Rs.303.15 Cr. towards Misc. Receipt in the Transmission tariff order of FY 2022-23 from inter-state wheeling, Short Term Open Access and STU charge, Bank Interest, Supervision Charges, Net gain/(loss) on disposal of Assets (Scraps) and other miscellaneous income etc. As per audited accounts of FY 2022-23, OPTCL has estimated Rs.440.13 Cr. towards the Misc. receipt which includes the differential amount of Rs.0.27 Cr. (Rs.99.96 Cr. -Rs.99.69 Cr. adjusted in depreciation) booked under deferred income on account of Government & Beneficiary Assets on account of depreciation and accordingly OPTCL has requested the Commission to consider same in the truing up of FY 2022-23.
233. The Commission has scrutinised the submission of the petitioner with the audited accounts for the FY 2022-23. The Commission has observed that the actual deferred income on account of Govt & Beneficiary Assets is Rs.98.10 Cr. instead of Rs.99.72 Cr. claimed by OPTCL. Therefore, the Commission approves **Rs.441.48 Cr** including differential amount of Rs.1.62 Cr. (Rs.99.72 Cr. -Rs.98.10 Cr.) booked under deferred income on account of Government & Beneficiary Assets in misc. receipts for the truing up of FY 2022-23. The details are shown in the Table below:

Table – 30
Actual Misc. Receipts of OPTCL for the FY 2022-23

(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)	212.64	295.03	-	295.03	295.03	295.03
2	Inter-state Wheeling Charges	17.50	-	-	-	-	-
3	Supervision Charges	1.47	31.08	-	31.08	31.08	31.08
4	Interest from advances to suppliers	-	1.36	-	1.36	1.36	1.36
5	Interest from Bank deposits	23.21	59.57	-	59.57	59.57	59.57
6	Net gain/(loss) on disposal of Assets (Scraps)	12.48	35.32	-	35.32	35.32	35.32
7	Other miscellaneous income	35.85	17.51	0.01	17.50	17.50	17.50
	Sub-total (A)	303.15	439.87	0.01	439.86	439.86	439.86

B	Other						
8	Deferred Income on account of Govt & Beneficiary Assets	-	99.96	0.24	99.72	0.27	1.62
9	Provision Written Back	-	15.97	-	15.97	-	-
	Sub-total (B)	-	115.93	0.24	115.69	0.27	1.62
C	Total (A+B)	303.15	555.80	0.25	555.55	440.13	441.48

Transmission Charges

234. OPTCL has stated that while approving the ARR & Transmission Tariff for FY 2022-23, the Commission has approved total ARR of Rs.831.95 Cr. to be recovered from LTA customers. The petitioner has submitted that as per the audited accounts of FY 2022-23, the revenue from transmission charges recovered from the LTA is Rs.953.15 Cr. Accordingly, the petitioner has requested the Commission to consider Rs.953.15 Cr. in the truing up for the FY 2022-23.
235. The Commission has examined the audited accounts of OPTCL for the FY 2022-23 and has found that during that year, the petitioner has recovered transmission charges of an amount of Rs.953.15 Cr. from the LTA customers and accordingly approves the same amount for the truing-up of FY 2022-23.

SLDC Development Fund:

236. 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, Deficit derived from SLDC transactions during FY 2022-23 amounting to Rs.0.81 Cr. has been transferred to SLDC Development Fund.
237. The Commission has analysed this submission of the petitioner and observes that the book of accounts of SLDC is yet to be separated from OPTCL. Besides that, the Commission has scrutinised the audited accounts of OPTCL and it is seen that SLDC transactions are segregated from OPTCL and the deficit derived from SLDC transactions during FY 2022-23 amounting to Rs.0.81 Cr. is considered by OPTCL for the truing-up of FY 2022-23. The comparative statement of Commission's approval and actual transaction of SLDC during FY 2022-23 is shown in the Table below:

Table - 31
SLDC Transaction during FY 2022-23

(Rs in Crore)

Sl. No	Particulars	Approved by OERC in ARR	Actual as per Audited Accounts	Approved in Truing-up
A	Expenditure			
1	Employee Cost	8.74	9.48	9.48
2	R & M Cost	0.89	0.49	0.49
3	A & G Cost	1.05	1.42	1.42
4	Depreciation	0.81	1.11	1.11
5	Rebate	-	0.10	0.10
6	Total (1+2+.... +5))	11.50	12.60	12.60
B	Income			
7	Revenue from SOC &MOC	11.50	11.55	11.55
8	Other Income	-	0.25	0.25
9	Total (7+8)	11.50	11.80	11.80
C	Gap - Surplus/(Deficit) (9-6)	-	(0.80)	(0.80)

Summary of Truing-up approved for FY 2022-23

238. Considering the above facts and figures, the Commission approves Rs.201.99 Cr. towards truing-up surplus as against OPTCL's deficit proposal of Rs.41.67 Cr. for the FY 2022-23. The details are shown in the Table below:

Table - 32
Summary of Truing-up approved by the Commission for FY 2022-23

(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	6
A	Gross Revenue Requirement					
1	Employee Cost	477.19	558.12	585.08	499.37	(22.18)
2	R & M Cost	110.50	114.15	114.15	114.15	(3.65)
3	A & G Cost	37.73	39.83	38.88	32.21	5.52
4	Depreciation	233.57	388.16	288.47	235.31	(1.74)
5	Interest on Loan Capital	110.29	97.64	97.64	97.64	12.65
6	Return on Equity	141.67	-	243.71	154.37	(12.70)
7	Incentive for System Availability	5.00	-	12.42	5.00	-
8	Rebate	16.64	17.92	17.92	17.92	(1.28)
9	GCC Expenses	0.35	-	-	-	0.35
10	Provisions for Tax & Other	2.16	236.71	36.68	36.68	(34.52)
11	Sub-total (1+2+.... +10)	1,135.10	1,452.53	1,434.95	1,192.64	(57.54)

11	Less: Misc Receipts (Including STOA)	303.15	555.55	440.13	441.48	138.33
12	Net Revenue Requirement 10-11)	831.95	896.98	994.82	751.16	80.79
B	Revenue from operation					
14	LTOA_DISCOMs	817.60	932.18	932.18	932.18	114.58
15	LTOA_CGPs & Others	14.28	20.97	20.97	20.97	6.69
16	Total (14+15)	831.88	953.15	953.15	953.15	121.27
C	Gap - Surplus/(Deficit) (16-13)	(0.07)	56.17	(41.67)	201.99	202.06

239. Further OPTCL has submitted that, a Review Application, vide Case No. 61/2022 against the order dated 12.07.2022 in Case No-119/2021 in the matter of truing-up of the ARR of OPTCL filed for the FY 2020-21. In the said Petition, OPTCL had requested the Commission to consider Rs.106.14 Cr., which were not considered appropriately in the truing-up order for FY 2018-19 even though the Commission had assured to consider the same in the truing up order for FY 2020-21. While disposing of Case No. 61/2022, the Commission, vide its order dated 11.04.2023 in para 14, observed as under:

“ xxx, After analyzing the above request of the petitioner, the Commission observes that as this order is limited to the review of our truing up order for FY 2020-21 passed in Case No. 119/2021, any matter related to FY 2018-19 cannot be considered in the present proceeding. However, this will not prevent the Petitioner to raise the issue in the future tariff proceeding.”

Considering the above earlier observations of the Commission, OPTCL has pleaded before the Commission to consider Rs. 106.14 Cr. in the current truing-up order for the FY 2022-23 as the same was not considered in truing-up exercise for the FY 2018-19. The details are given in the Table below:

Table-33

Sl. No.	Particulars	Amounts (Rs. in Cr)
1	STOA Revenue Considered twice	58.71
2	SLDC Income of FY 2018-19 should not be a part of Transmission Charges	11.86
3	SLDC Surplus transferred to SLDC Development Fund Account	34.43
4	A&G (Including SLDC & GCC) Expenses	1.14
	Total	106.14

240. Basing on the direction in order dated 21.04.2023 in Case No 61/2022, the Commission has reviewed the above claims of OPTCL regarding STOA revenue and SLDC income considered as Transmission Revenue in the Truing-up order for FY 2018-19. The

comparative statement considering the audited accounts and approval given in the Truing-up order of FY 2018-19 are shown in the Table as under:

Table-34
Comparative Statement of Revenue during FY 2018-19
(Rs. in Crore)

Sl No	Source Wise	OERC Approved in ARR	Actual as per Audited Accounts of OPTCL	True up proposed by OPTCL	True up Approved by OERC	Diff
1	2	3	4	5	6	7=6-5
A	Revenue from Operation					
1	Transmission Charges from four DISCOMs	644.75	633.82	633.82	633.82	-
2	Wheeling Charges from CGP/Industries (NALCO & IMFA)	15.20	9.45	9.45	9.45	-
3	Sub-total (1&2)	659.95	643.27	643.27	643.27	-
4	Revenue from Transmission charges - inter state		10.08		10.08	10.08
5	Short-Term Open Access & IEX/PXIL	-	47.00	-	47.00	47.00
6	Supervision Charges	-	1.63	-	1.63	1.63
7	Sub-total (4 to 6)	-	58.71	-	58.71	58.71
8	SLDC Fees & Charges	-	11.86	-	11.86	11.86
9	Sub-total of A (3+7+8)	659.95	713.84	643.27	713.84	70.57
B	Other Income					
10	Interest From Bank Deposit	19.21	26.61	26.62	26.62	-
11	Interest from Others	-	4.99	4.99	4.99	-
12	Sale of tender papers and other miscellaneous receipt	5.58	18.83	18.83	18.83	-
13	Supervision Charge	1.64	22.05	22.05	22.05	-
14	Net gain/(loss) on disposal of Property, Plant & Equipment	-	14.86	14.86	14.86	-
15	Sub-total (10 to 14)	26.43	87.34	87.35	87.35	-
16	Inter-State Wheeling	27.56	-	10.08	10.08	-
17	Short-Term Open Access & IEX/PXIL	40.96	-	47.00	47.00	-
18	Other Operating Revenue including NALCO & IMFA	21.82	-	1.63	1.63	-
19	Sub-total (16 to 18)	90.34	-	58.71	58.71	-
20	Deferred Income on for Assets received from Customer	-	54.88	-	-	-

Sl No	Source Wise	OERC Approved in ARR	Actual as per Audited Accounts of OPTCL	True up proposed by OPTCL	True up Approved by OERC	Diff
1	2	3	4	5	6	7=6-5
21	Provision Written Back	-	22.05	-	-	-
22	Sub-total of B (15+19+20+21)	116.77	164.27	146.06	146.06	-
23	Total (A+B)	776.72	878.11	789.33	859.90	70.57

241. From the above comparative Table, it is observed that Rs. 58.71Cr. has been taken as revenue from operation as well as miscellaneous receipts. Further, Rs. 11.86 Cr. towards SLDC fees and charges has been considered as transmission revenue instead of SLDC revenue. Further, as verified from the SLDC submission the Commission observed that OPTCL has transferred the regulatory surplus of Rs.34.43 Cr. up to FY 2017-18 to SLDC development fund account in compliance to the OERC (Fees and Charges of SLDC and other Related matters) Regulations, 2010. In the earlier Truing-up Orders of OPTCL up to FY 2017-18, the above surplus has been considered as transmission revenue. Regarding Rs.1.14 Cr. towards A&G (including SLDC charges and GCC) expenses as claimed by OPTCL, the Commission has verified and accordingly considered the same. Further, during the review the above, the Commission observes that, Rs.2.50 Cr. of A&G expenses capitalised during FY 2018-19, but has not been taken into account while determination of A &G Expenses. Considering the above observations, the Commission now considers the amount of **Rs. 103.64 Cr.** (Rs.58.71 Cr. + Rs.11.86 Cr. + Rs.34.43 Cr. + Rs.1.14 Cr. - Rs.2.50 Cr.) in favour of OPTCL towards past years adjustment in this order.
242. The summary of the truing-up approved by the Commission and cumulative surplus over the years is **Rs.117.60 Cr.** as on 31.03.2023. The details are shown in the Table below:

Table –35
Summary of Cumulative Truing-up Surplus/(deficit) of OPTCL approved by the Commission up to FY 2022-23

(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

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)
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. 125/2021)	706.71	772.81	706.71	621.73	(66.10)	(84.98)	(151.08)	10.85
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

ARR & Tariff for the FY 2024-25:

243. The Commission has analysed the application of OPTCL for Aggregate Revenue Requirement (ARR) for FY 2024-25 according to OERC (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2014. As per Regulation 8.1, the ARR for Transmission Business for each year shall contain the following items.

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

Operation and Maintenance Expenses

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

Employees Cost:

245. OPTCL has proposed employee cost of Rs.582.06 crore for FY 2024-25 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.
246. OPTCL has considered the following assumptions while proposing the employee cost for the ensuing FY 2024-25:
- i. **Basic Pay:** The actual cash outflow on this head from April-23 to Oct-23 has been extrapolated to arrive at basic pay for FY 2023-24 at Rs.145.80 Cr. considering the average no. of employees during the periods FY 2023-24 (2491 nos.) and FY 2024-25 (2601 nos.) and a 3% hike in annual increment, the basic pay will be **Rs.156.80 Cr.** (i.e., $145.80/2491 \times 2601 \times 1.03$). Further OPTCL has stated that, the Wage Board of Non-Executive employees is due from 01.04.2020 & under negotiation process. For which it has proposed additional basic pay of Rs.3.85Cr (8% on basic pay of non-executive employees). Altogether, the basic pay of Rs.160.65Cr has proposed by OPTCL
 - ii. **Dearness Allowance (DA):** With reference to Finance Department, Government of Odisha letter dated 10.11.2023, OPTCL has considered DA rate @ 55% for FY 2024-25 and accordingly **Rs. 88.36 Cr.** proposed towards DA.
 - iii. **House Rent Allowance (HRA):** OPTCL has submitted that the rate of HRA is 18 - 20% depending on the type of city/town they are residing in. OPTCL has estimated HRA of **Rs.25.32 Cr** by considering 85% of the employees and average rate @ 19% of the basic pay.
 - iv. **Medical Allowance & Reimbursement of Medical Expenses:** OPTCL has submitted that the employees of OPTCL are entitled to get Medical Allowance @

5% on basic pay for outdoor medical expenses including reimbursement of medical expenses of Rs.0.40Cr. and accordingly has proposed **Rs.8.24 Cr.** under this head.

- 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 which is under active consideration by the management of OPTCL to revise it shortly. Accordingly, OPTCL has proposed **Rs.11.64 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.8.40 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 checkup etc., OPTCL has proposed **Rs.3.41 Cr.** Accordingly, all together **Rs. 12.81 Cr.** proposed towards staff welfare expenses.
- vii. **Other Allowance:** OPTCL has proposed **Rs.1.59 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.6.03 Cr.** proposed towards payment to outsourced personnel.
- ix. **Stipend for New Recruitment:** OPTCL has proposed that it is planning to recruit 371 Nos. of employees in FY 2023-24 and 467 Nos. in FY 2024-25, Accordingly, **Rs.14.06 Cr.** proposed towards stipend for the new recruits.
- x. **Capacity Building:** OPTCL has proposed Rs.2.40 Cr. for capacity building of employees to enhance their knowledge and development of skill.

xi. **Other Employees Cost:** OPTCL has proposed Rs. 10.19 Cr. towards other employee cost which includes Ex-gratia-Rs.9.06 Cr, LTC-Rs.0.72 Cr, Honorarium-Rs.0.20 Cr, Bonus Rs.0.02 Cr .and other is Rs. 0.19 Cr.

xii. **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.218.66 Cr.** towards terminal liabilities (Pension, Gratuity & Leave Encashment) for the FY 2024-25 which is 3% escalation over the projection for FY 2023-24.

Further, **Rs. 25.46 Cr.** is proposed towards employer's matching contribution for employees who have joined under NPS and Non-Pensioner Category.

xiii. **Capitalisation of Employee cost:** OPTCL has proposed that out of the total employee cost, Rs. 16.40 Cr. to be capitalised during FY 2024-25.

247. The Commission has reviewed the OPTCL's submission regarding above employees' cost. OPTCL has submitted that 371 number of employees are to be recruited during FY 2023-24 and they will be regularised during FY 2024-25. Out of which, it has recruited 303 Nos. of

employees till date and balance recruitment is under process. While computing the average number of employees for FY 2024-25, 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 2024-25 is shown in the Table below:

Table - 36
Number of Employees of OPTCL

Particulars	Proposed	Approved
No. of employees as on 01.04.2023	2508	2508
Add: Addition during 2023-24	111	111
Less: Retirement/Expired Resignation during 2023-24	146	146
No. of employees expected as on 01.04.2024	2473	2473
Add: New employees to be inducted during FY 2023-24 & regularized during FY 2024-25	371	371
Less: Retirement/Expired/ Resignation during year 2024-25	116	116
No. of employees as on 01.04.2025	2728	2728
Average no. of employees for FY 2023-24	2491	2491
Average no. of employees for FY 2024-25	2601	2601

Basic Pay:

248. The average cash outflow towards basic pay during April, 2023 to December, 2023 is Rs. 12.14 Cr. per month and the prorated basic pay will be Rs.145.72 Cr. for FY 2023-24. By considering the above prorated basic pay of Rs.145.72 Cr. for FY 2023-24, the estimated average number of employees for FY 2023-24 (i.e., 2491 Nos) and FY 2024-25 (i.e., 2601 Nos) and 3% annual increment, the basic pay estimated by the Commission is Rs.156.72 Cr. (i.e., $145.72/2491 \times 2601 \times 1.03$). Further, the Commission has considered the additional basic pay of Rs.3.85 Cr. towards Wage Board pay revision of non-executive employees as proposed by OPTCL. Accordingly, the Commission approves the basic pay of Rs.160.57 Cr. (Rs.156.72 Cr. + Rs.3.85 Cr.) as against OPTCL's proposal of Rs. 160.65 Cr for the FY 2024-25. The details are shown in the Table below:

Table – 37
Basic Pay estimated for FY 2024-25

Cash outflow	OPTCL submission in ARR	(Rs. Crore)
		Considered by OERC
Apr-2023	12.12	12.12
May-2023	12.04	12.04
Jun-2023	12.26	12.26
Jul-2023	12.17	12.17
Aug-2023	12.15	12.15
Sep-2023	12.12	12.12
Oct-2023	12.18	12.18
Nov-2023	-	12.11
Dec-2023	-	12.14
Avg. Basic Pay per month	12.15	12.14

Pro-rated for FY 2023-24	145.78	145.72
Estimated for FY 2024-25	156.80	156.72
Additional Basic pay (Wage Board pay revision)	3.85	3.85
Total Basic Pay	160.65	160.57

Dearness Allowance (DA):

249. OPTCL has considered rate of dearness allowance @ 55% for FY 2024-25 with reference to Finance Department, Government of Odisha letter dated 10.11.2023. The Commission has observed that, considering the present DA rate (@ 46% effective from 01.07.2023) sanctioned by Govt. of Odisha and assuming increase of DA by another 4% w.e.f. 01.01.2024 & 5% from 01.07.2024, the DA rate proposed by OPTCL for FY 2024-25 is considered. Accordingly, the Commission approves dearness allowances of **Rs.88.31 Cr.** (i.e., 55% on approved basic pay of Rs.160.57 Cr.) as against Rs.88.36 Cr. proposed by OPTCL for the FY 2024-25.

House Rent Allowance (HRA):

250. The Commission analysed the cash outflow on account of Basic Pay & HRA during April 2023 to December 2023 of FY 2023-24 and observed that, the rate of HRA is 16% of the Basic Pay. Considering the same, the Commission approves **Rs.25.69 Cr.** under the head HRA (@ 16% on approved basic pay of Rs.160.57 Cr.) for the FY 2024-25 as against OPTCL proposed HRA of Rs.25.32 Cr.

Medical Allowance & Reimbursement of Medical Expenses:

251. OPTCL has submitted that its employees are entitled to get Medical Allowance @ 5% on basic pay for outdoor medical expenses and reimbursement of medical expenses of Rs.0.40 Cr. Accordingly, OPTCL has proposed Rs.8.24 Cr. under this head. The Commission observes that when group health insurance policy for the employees 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. 8.04 Cr** (@5% of approved basic pay of Rs.160.57 Cr.) towards Medical Allowances for FY 2024-25 against OPTCL proposed amount of Rs.8.24 Cr.

Conveyance allowance/reimbursement:

252. The Commission did analyse the proposal of OPTCL and observed that management is yet to revise the conveyance allowance / reimbursement till date. Considering the above, in line with approval of last FY 2023-24, the Commission approves **Rs.3.35 Cr.** against OPTCL proposed amount of Rs.11.64 Cr. under this head.

Staff Welfare Expenses:

253. In the previous tariff order for FY 2023-24, the Commission had approved Rs. 6.50 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. 7.00 Cr.** against OPTCL proposed amount of Rs.12.81 Cr. under Staff welfare expenses and directs OPTCL to restrict the staff welfare expenses within the approved limit.

Other Allowance:

254. The Commission has analysed the proposal of OPTCL and approves the same amount of **Rs.1.59 Cr.** 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:

255. OPTCL has stated that it is functioning with 50% of manpower against sanctioned strength for which OPTCL proposed Rs.6.03 Cr. towards payment to outsourced personnel. As per audited accounts the actual expenditure under this head is Rs.2.56 Cr. during FY 2022-23. Further, for the FY 2023-24, the Commission had approved Rs.3.30 Cr. Accordingly, in line with approval in last FY 2023-24, the Commission approves **Rs.3.30 Cr.** as against OPTCL proposal of Rs.6.03 Cr. under this head and directs OPTCL to restrict the engagement of outsourced personnel and restrict the expenses within the approved limit.

Stipend for New Recruitment:

256. OPTCL proposes that it has planned to recruit 371 Nos of employees in FY 2023-24 and 467 Nos in FY 2024-25, Accordingly, Rs.14.06 Cr. (Rs. 7.11 Cr. against 371 Nos. & Rs. 6.95 Cr. against 467 Nos. of employees) is proposed towards stipend for the new recruits for the FY 2024-25. The Commission has observed that stipend/emoluments to 371 Nos. of employees those are recruited during FY 2023-24 and regularised in FY 2024-25 has already been considered in the calculation of basic pay of FY 2024-25. Therefore, the Commission disallows the stipend proposed by OPTCL against these 371 Nos. of employees. Further, the Commission allows induction of 200 Nos. of employee against the

proposed recruitment of 467 Nos. of employee for the FY 2024-25. Accordingly, the Commission approves **Rs.2.98 Cr.** (Rs.6.95 Cr./467x200) under this head.

257. In the last Transmission Tariff order dated 23.03.2023 for FY 2023-24, the Commission had observed that effective manpower planning is essential for the growth of any organisation. With automation and technology intervention, the manpower requirement also undergoes change. Accordingly, the Commission had directed OPTCL to take prior approval of the Commission for recruitment of additional manpower including recruitment of outsourced personnel. OPTCL is required to follow the aforesaid direction of the Commission.

Capacity Building:

258. To enhance the knowledge and skill development of employee, OPTCL has proposed Rs.2.40 Cr. under capacity building head. As per audited accounts the actual expenditure under this head is Rs.0.95 Cr. during FY 2022-23. Further, for the FY 2023-24, the Commission has approved Rs.1.02 Cr. Considering the above, the Commission approves **Rs.1.10 Cr.** as against OPTCL proposal of Rs.2.40 Cr. under this head.

Other Employee related Cost:

259. OPTCL has proposed Rs.10.19 Cr. towards other employee related Cost such as Ex-gratia, LTC, Honorarium, Bonus, etc. The Commission has analysed the actual expenditure as per audited accounts of FY 2022-23 and has approved Rs.5.60 Cr. in the transmission tariff order for FY 2023-24 under above heads. Considering the above, the Commission approves **Rs.5.67 Cr.** (Ex-gratia- Rs.5.00 Cr, LTC- Rs.0.50 Cr, Honorarium- Rs.0.15 Cr. and Bonus- Rs.0.02 Cr.) for FY 2024-25 and directed OPTCL to restrict the above other employees cost within the approved limit

Terminal Benefits including NPS

260. While truing up of FY 2022-23 in this petition, the Commission has approved Rs.3172.33 Cr. up to 31.03.2023 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 2023-24, the Commission has already approved total terminal benefit of **Rs. 3,340.36 Cr.** The details are shown in the Table below:

Table - 38
Approved Terminal Benefit
(Rs. 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 in truing up orders up to 31.03.2023	3,172.33
Approved in ARR Order of FY 2023-24	168.03
Total up to 31.03.2024	3,340.36

261. Further, in the aforesaid truing up order of FY 2022-23, Commission had given direction to OPTCL to invest of **Rs. 480.54 Cr.** to maintain the corpus of Rs. 3192.22 Cr. (Rs. 3,340.36 Cr. – Revenue deficit of Rs. 68.17 Cr. for FY 2021-22 - Revenue deficit of Rs. 79.97 Cr. for FY 2022-23) as per the approval of the Commission up to 31.03.2024. After investment in corpus amounting to Rs.3192.22 Cr., the Commission assumes that there may not be any revenue deficit on account of terminal benefit liabilities annually.
262. Further, as per the Actuary valuation report, the Commission observed that the pensionary employee position during FY 2022-23 has reduced as comparison to FY 2021-22 as per the Table given below:

FY	Employee	Pensioner	Family Pensioner	Total
2021-22	864	3,994	3,310	8,168
2022-23	733	3,965	3,433	8,131

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.

263. In view of the above observations, the Commission approves **Rs.168.03 Cr.** against the OPTCL proposal of Rs.218.66 Cr., toward Terminal benefit liabilities for FY 2024-25

which is equivalent to the approved amount during FY 2023-24. Besides the above, the commission approves **Rs.25.46 Cr.** towards employer's matching contribution for NPS and Non-Pensioner Category as proposed by OPTCL for FY 2024-25.

264. Considering the above observations relating to employees Cost, the Commission approves Rs. 488.63 Cr. (against OPTCL's proposed amount of Rs.582.06 Cr.) for the ensuing FY 2024-25. The details are shown in the Table below:

Table – 39
Employees Cost Approved for the FY 2024-25

(Rs. in Crore)

Sl. No.	Particulars	Actual for FY 2022-23	Approved for FY 2023-24	Proposed for 2024-25	Approved for FY 2024-25
A	Salary & Allowance	1	2	3	3
1	Basic Pay and Grade Pay	162.20	153.12	160.65	160.57
2	Dearness Allowance	51.65	68.90	88.36	88.31
3	House Rent Allowance	27.38	24.36	25.32	25.69
4	Medical Allowances (allowance Reimbursement)	7.42	7.66	8.24	8.03
5	Conveyance Expenses (allowance Reimbursement)	2.72	3.35	11.64	3.35
6	Other Allowance	1.09	0.98	1.59	1.59
7	Bonus	0.02	-	0.02	0.02
8	Stipend for New Recruitment	6.38	5.30	14.06	2.98
9	Stipend to Apprentice	3.95	-	6.39	3.95
10	Arrear Salary 7th Pay	26.01	-	-	-
11	Arrear Salary for Wage Board Revision	-	-	6.65	-
12	Sub-total (A)	288.83	263.67	322.93	294.49
B	Additional Employee Cost				
1	Out Sources Engagement	2.56	3.30	6.03	3.30
2	Sub-total (B)	2.56	3.30	6.03	3.30
C	Other Employee Cost				
1	Leave Travel Concession	0.21	0.50	0.72	0.50
2	Honorarium	0.13	0.10	0.20	0.15
3	Ex-gratia	5.57	5.00	9.06	5.00
4	Staff Welfare Expenses	0.29	6.50	12.81	7.00
5	Other Employee Cost	0.00	-	0.19	-
6	Capacity Building Charges	0.95	1.02	2.40	1.10
7	Sub-total (C)	7.15	13.12	25.38	13.75
D	Terminal Benefits				
1	Pension	257.48	146.98	196.98	146.98
2	Gratuity	12.63	12.57	12.95	12.57
3	Leave Salary	15.24	8.48	8.73	8.48
4	Other (including contribution to NPS)	17.59	14.47	25.46	25.46
5	Sub-total (D)	302.95	182.50	244.12	193.49
E	Total Employees Cost	601.48	462.59	598.46	505.03

Sl. No.	Particulars	Actual for FY 2022-23	Approved for FY 2023-24	Proposed for 2024-25	Approved for FY 2024-25
	(A+B+C+D)				
F	Less: Employees Cost Capitalised	16.40	13.51	16.40	16.40
G	Net Employee Cost (E- F)	585.08	449.08	582.06	488.63

Repair & Maintenance (R&M) Expenses

265. OPTCL has submitted that, the R&M works are undertaken in different streams namely O&M, Telecom, Civil Works and Information Technology (IT). It has projected a sum of Rs.169.30 Cr. towards R&M expenses and the summary of proposed R&M expenses under these four heads is shown in the Table below:

Table – 40
Proposed R&M expenses for FY 2024-25

(Rs. in Crore)			
Particulars	OERC Approval (FY 2022-23)	OERC Approval (FY 2023-24)	Projection (FY 2024-25)
(i) O&M	110.50	135.00	144.25
(ii) Telecom			3.30
(iii) Civil Works			15.65
(iv) Information Technology & others			6.00
Total R&M Expenses			169.30

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

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

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

267. OPTCL was asked to submit the actual expenditure incurred under R&M during the previous year 2022-23 and the current year up to December, 2023 (FY 2023-24). It has submitted that the Actual R&M cost is Rs. 114.15 Cr. during FY 2022-23 and Rs.77.37 Cr. during the period from April, 2023 to December, 2023 of current FY 2023-24. The actual

R& M cost during last four financial years and till December 2023 of current FY 2023-24 as against the Commission's approval are shown in the Table below:

Table - 41
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	77.37 (up to Dec.23)

268. While approving R&M expenditure the Commission always considers the actual R&M expenditure of previous financial year. Taking the actual cost upto December 2023, the Commission extrapolated the R&M expenses of Rs.103.08 Cr. (Rs.77.37 Cr. / 9 x 12) for FY 2023-24. Further, OPTCL has proposed Rs. 10.41 Cr. towards inspection fees under A&G expenses. But as per audited accounts of OPTCL, the inspection fees are always booked under R&M expenses. Therefore, the Commission considers the inspection fees of Rs. 10.41 Cr. under R&M expenses instead of under A&G expenses. Considering the above observations, past trend of actual R&M cost and last year R&M approval, the Commission approves **Rs.135.00 Cr.** towards R&M cost for the FY 2024-25 including inspection fees of Rs. 10.41 Cr.
269. The commission directs OPTCL to ensure that, the expenditure which are capital in nature should not be booked under R&M expense as it will increase the transmission tariff resulting in enhanced burden on the consumers of the State. Further, the health of transmission assets is vital for smooth and reliable operation of the transmission system assets. The Commission therefore desires that OPTCL should incur R&M expenses exclusively for conditions-based maintenance of transmission assets for improving reliability and availability of equipment & material associated with the transmission system for smooth and trouble-free operation of the system.

Administration & General (A&G) Expenses

270. OPTCL has proposed an amount of **Rs.51.13 Cr.** including inspection fees of Rs. 10.41 Cr. under the head A&G expenses for the ensuing FY 2024-25. The component wise break up of expenses is given in Table below:

Table – 42
A&G Expenses Proposed by OPTCL for the FY 2024-25
(Rs. in Crore)

PARTICULARS	Amounts
Property Related Expenses	7.86
Communication	0.73
Professional Charges (Including inspection fees of Rs. 10.41 Cr.)	14.02
Conveyance & travelling	11.82
Electricity & Water Charges	3.97
Fees & Subscription	0.11
Books & Periodicals	0.10
Printing & Stationery	0.59
Advertisement	1.00
Entertainment	0.23
Watch & Ward	3.97
Miscellaneous	3.53
Office Maintenance	2.20
Material Related Expenses	0.01
SLDC Charges	0.99
Total	51.13

271. As per the OERC Regulation, A&G expenses of the previous year is being escalated considering WPI. Therefore, the Commission considers escalation factor of 0.73% (rate of inflation measured by WPI for the month of Dec-2023) over the approved A&G expenses of the previous year. The calculation for determining the A&G expenses is given in Table below:

Table – 43
A&G Expenses Approved for the FY 2024-25
(Rs. in Crore)

Particulars	Amount
A&G expenses approved during FY 2023-24	32.73
Escalation as per WPI (Dec'2023@ 0.73%)	0.24
A&G Expenses for 2024-25	32.97
Add: Licensee fees to Commission & ERPC Charges (Rs.2.50 Cr. +Rs0.30 Cr.)	2.80
Add: SLDC charges	1.28
Total A&G Expenses approved for the FY 2024-25	37.05

272. The Commission approves an amount of **Rs. 37.05 Cr.** towards A&G expenses for the FY 2024-25. The Commission also directs OPTCL to restrict the A&G expenses within the approved limit.

Interest and financial charges

Interest on loan

273. OPTCL has submitted that the opening loan balance was Rs.1731.67 Cr. as on 31.03.2023 and has projected loan of Rs.903.90 Cr. and repayment of load amount of Rs.103.30 Cr. during the FY 2023-24. Accordingly, the estimated opening loan balance would be Rs.2532.28 Cr. as on 31.03.2024. OPTCL has further projected that additional loan of Rs.699.27 Cr. and loan repayment of Rs.145.46 Cr. would be required during the FY 2024-25. Considering above inflow and outflow of loans, OPTCL has proposed interest amount on loan of Rs.148.95 Cr. (excluding interest on proposed new loan to be capitalised of Rs.96.04 Cr.) for the FY 2024-25. The details of loan position as on 01.04.2024 and interest thereon projected by OPTCL is shown in the Table below:

Table - 44
Interest on loan proposed by OPTCL for the FY 2024-25
(Rs. in Crore)

Sl. No.	Particular	Rate of Interest	Principal as on 01.04.24	Loan to be received (FY 24-25)	Loan to be redeemed (FY 24-25)	Interest payment (FY 24-25)	Total Payment (FY 24-25)
1	JICA	5.00%	484.57	-	42.25	23.17	65.42
2	REC Loan	9.50%	86.29	-	14.38	7.26	21.64
3	Union Bank of India-I	8.40%	385.50	-	46.67	30.42	77.09
4	Union Bank of India-II	8.65%	607.12	-	42.16	50.69	37.41
5	UCO Bank	8.00%	467.63	-	-	37.41	92.85
6	New Loan	8.00%	501.17	699.27	-	96.04	96.04
7	Sub-total (1 to 6)		2,532.28	699.27	145.46	244.99	390.45
8	Less: Capitalisation					96.04	96.04
9	Total (7-8))		2,532.28	699.27	145.46	148.95	294.41

274. After scrutiny of the audited accounts of OPTCL, the Commission observes that the outstanding loan was Rs.1731.84 Cr. as on 31.03.2023. Further, from the loan statement submitted by OPTCL, it is observed that actual loan amounting of Rs.402.73Cr has only been availed by OPTCL till December 2023 of FY 2023-24.

275. For calculation of interest on loan, the Commission has considered the actual loan availed & loan repayment by OPTCL during the FY 2023-24 & FY 2024-25. Further, the Commission observed that OPTCL has not proposed any amount towards Interest During Construction (IDC) on the existing loan. However, as per audited accounts OPTCL has booked IDC of Rs. 22.55 Cr. during FY 2022-23. Considering past trend of IDC booked in the audited accounts and the CWIP position, the Commission provisionally considers IDC of **Rs. 15.00 Cr. for FY 2024-25** subject to trued up on actual basis. Taking into account the above observations and loan repayment dues proposed by OPTCL for FY 2023-24 and for FY 2024-25, the Commission estimates interest on loan on the average loan position of FY 2024-25. Accordingly, the Commission approves **Rs.133.95 Cr.** (Rs.148.95 Cr. – Rs.15.00 Cr.) towards interest on loan for the FY 2024-25. The details are shown in the Table below:

Table -45
Interest on loan approved by the Commission for the FY 2024-25
(Rs. in Crore)

Sources	Rate of Interest (%)	FY 2023-24				FY 2024-25		Average Loan for FY 2024-25	Estimated Interest for FY 2024-25
		OB as on 31.03.2023	Received	Repayment	CB as on 31.03.2024	Repayment	CB as on 31.03.2025		
1	2	3	4	5	6=3+4-5	7	8=6-7	9= (6+8)/2	10=9x2
Union Bank of India_I	8.40	432.16	-	46.67	385.49	46.67	338.82	362.16	30.420
Union Bank of India_II	8.65	498.34	108.77	-	607.11	42.16	564.95	586.03	50.690
Uco Bank	8.00	173.67	293.96	-	467.63	-	467.63	467.63	37.410
REC	9.50	100.67	-	14.38	86.29	14.38	71.91	79.10	7.260
JICA	5.00	527.00	-	42.25	484.75	42.25	442.50	463.63	23.170
Sub-total	7.61	1,731.84	402.73	103.30	2,031.27	145.46	1,885.81	1,958.55	148.95
Less: Interest considered for capitalisation									15.00
Total									133.95

276. Further, the Commission directs OPTCL to take needful action regarding swapping of loans across the Banks to reduce the interest burden on consumers.

Interest on Working Capital

277. OPTCL has estimated its working capital requirement at Rs.325.83 Cr. and the interest on working capital is Rs 40.40 Cr for the FY 2024-25. However, it has not proposed any

amount interest on working capital but requested to the Commission may consider the interest on working capital incurred, if any, for FY 2024-25 during the truing up exercise.

278. 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. Accordingly, the Commission has not allowed any amount towards interest on working capital in the ARR for FY 2024-25.

Depreciation

279. OPTCL has submitted that as per the Regulation 8.38 of OERC (Terms & Conditions for determination of Transmission Tariff) Regulation 2014, the depreciation shall be calculated for each year of the control period on the original book value of the assets considering applicable depreciation rate as determined by the Commission from time to time. The Regulations further provides that the depreciation shall not be allowed on the assets funded by Transmission system users and capital subsidies/grants.
280. OPTCL has submitted that its gross original book value of fixed assets was Rs. 8274.51 Cr. as on 01.04.2022. After excluding the grant, beneficiary & deposit works assets of Rs. 1711.45 Cr. and fully depreciated (90% of Asset value) assets value of Rs. 1631.99 Cr., its own transmission assets become Rs.4931.07 Cr. (Rs. 8274.51 Cr. - Rs. 1711.45 Cr. – Rs. 1631.99 Cr.) as on 01.04.2022. Further, it has submitted that net fixed assets of Rs.741.50 Cr. (Rs.751.03Cr.-Rs.9.53 Cr.) has been added during FY 2022-23 which includes assets value of Rs. 198.59 Cr. towards grant, beneficiary and deposit works. Further, it has reported that assets value of Rs. 232.97 Cr. has been fully depreciated (90%) during FY 2022-23. Regarding the up-valued assets of Rs.512.71 Cr., OPTCL has requested the Commission not to deduct while calculating the transmission assets as the same has fully depreciated in 26 years from 1996. Accordingly, OPTCL has estimated its own gross original book value of fixed assets as Rs. 5241.01 Cr. (Rs. 4931.07 Cr. + Rs. 741.50 Cr. – Rs. 198.59 Cr. – Rs. 232.97 Cr.) as on 31.03.2023 excluding the grant, beneficiary & deposit works and fully depreciated assets. In addition to the above own assets of Rs. 5241.01 Cr., has projected addition of transmission assets (excluding Deposits works & Grant assets etc.) of Rs.631.99 Cr. and Rs.694.13 Cr. during FY 2023-24 and FY 2024-25 respectively. Considering the same, the original book value of transmission fixed assets will become Rs. 5873.00 Cr. as on 31.03.2024 and Rs. 6567.13 Cr. as on 31.03.2025. Considering the above projected capitalisation, OPTCL has proposed Rs. 320.03 Cr. towards depreciation for FY 2024-25. The details are shown in the Table below:

Table -46
Depreciation Proposed by OPTCL for the FY 2024-25
(Rs. in Crore)

SL No	Transmissio Assets	Free Hold 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
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	Total Book vale of Assets as on 1-4-2022	54.94	57.18	149.63	10.96	90.78	4,826.77	2,965.44	2.38	8.53	90.32	17.58	8,274.51
3	Book Value of FA Fully Depreciated (90%) till 01-04-2022	-	-	0.22	0.52	-	700.46	913.56	1.38	1.38	14.47	-	1,631.99
4	Book Value of Grant , Beneficiary& Deposit work Assets till 01.04.2022	6.29	5.58	7.01	3.67	3.13	973.78	697.40	-	0.44	3.46	10.69	1,711.45
5	Book value of Own Assets as on 01-04-2022 (2-3-	48.65	51.60	142.40	6.77	87.65	3,152.53	1,354.48	1.00	6.71	72.39	6.89	4,931.07
6	Book Value of FA Added in FY 2022-23	-	1.12	13.46	1.48	15.86	551.33	153.48	-	0.79	13.51	-	751.03
7	Deletion/adjustments	-	(1.00)	1.91	(0.07)	2.27	(10.12)	(2.65)	(0.03)	0.14	0.02	-	(9.53)
8	Book Value of FA Fully Depreciated (90%) in FY2022-23	-	-	0.01	(0.03)	-	111.18	119.72	0.05	0.05	1.98	-	232.97
9	Book Value of Grant , Beneficiary& Deposit work Assets in FY2022-23	-	0.05	1.19	0.28	2.81	117.46	74.12	-	0.08	2.60	-	198.59
10	Book value of Own Assets as on 01-04-2023 (5+6+7-8-9)	48.65	51.67	156.57	7.92	102.97	3,465.10	1,311.46	0.92	7.51	81.34	6.89	5,241.01
11	Book Value of own assets to be added in FY2023-24	5.87	6.24	18.91	0.96	12.43	418.39	158.35	0.11	0.91	9.82	-	631.99
12	Book value of Own Assets as on 01-04-2024 (10+11)	54.53	57.91	175.48	8.88	115.40	3,883.49	1,469.82	1.03	8.41	91.16	6.89	5,873.00
13	Book Value of own assets to be added in FY2024-25	6.45	6.85	20.76	1.05	13.65	459.53	173.92	0.12	1.00	10.79	-	694.13
14	Book value of Own Assets as on 01-04-2025 (12+13)	60.98	64.77	196.24	9.93	129.05	4,343.02	1,643.74	1.16	9.41	101.95	6.89	6,567.13
15	Depreciation proposed {(12+14)/2*1}	-	2.05	6.21	0.50	4.08	217.18	82.20	0.10	0.56	6.11	1.03	320.03

281. The Commission has gone into the details of the submission made by the OPTCL. While approving the Truing-up Oder for FY 2022-23 in this order, the Commission has considered the total original book value of transmission fixed assets of Rs. 8273.20 Cr. (Rs.6391.11 Cr at Deemed Cost) as on 31.03.2022. After considering the assets of Rs.741.50Cr created during FY 2022-23, the total original book value of transmission fixed assets over the periods as per audited accounts of OPTCL as on 31.03.2023 is Rs. 9014.70 Cr. (Rs.7133.61 Cr at Deemed Cost) which are shown in the Table below:

Table - 47
Book Value of Transmission Fixed Assets as on 31.03.2023

		(Rs.in Crore)
Assets Added during Financial Year	Original Book Value	At Deemed Cost (IndAS)
Up to on 31.03.1999 <i>(As per GoO Transfer Scheme Notification dated 26-11-1998)</i>	1,178.93	
1999-00	111.79	
2000-01	115.48	
2001-02	83.75	
2002-03	132.17	
2003-04	69.45	
2004-05	71.72	
2005-06	158.91	
2006-07	144.23	
2007-08	206.10	
2008-09	142.72	
2009-10	188.49	
2010-11	189.80	
2011-12	135.58	
2012-13	219.48	
2013-14	180.05	
2014-15	142.62	
Total (up to 31.03.2015)	3471.27	1590.18
2015-16	768.81	768.81
2016-17	683.82	683.82
2017-18	447.00	447.00
2018-19	665.94	665.94
2019-20	535.73	535.73
2020-21	665.01	665.01
2021-22	1,035.62	1,035.62
Sub-total (up to 31.03.2022)	8,273.20	6392.11
2022-23	741.50	741.50
Total (up to 31.03.2023)	9014.70	7133.61

282. The Commission considers the historical original book value of transmission fixed assets as on 31.03.2023 amounting to Rs 9014.70 Cr. After deduction of fully depreciated assets of Rs.1864.95 Cr. (i.e., Rs.1631.99 Cr. as on 31.03.2022 + Rs.232.96 Cr. of FY 2022-23), Up-

valued assets of Rs. 512.71 Cr., assets created out of grant, beneficiary & deposit works of Rs.1910.04 Cr. (i.e., Rs.1711.45 Cr. as on 31.03.2022 + Rs.198.59 Cr of FY 2022-23), OPTCL's own asset is Rs. 4727.00 Cr. (Rs 9014.70 Cr. - Rs.1864.95 Cr. - Rs. 512.71 Cr, - Rs.1910.04 Cr.) as on 01.04.2023.

283. Further, OPTCL has submitted that Rs. 631.99 Cr. & Rs.694.13 Cr. of assets (excluding grant, beneficiary & deposit work) are likely to be added during FY 2023-24 & FY 2024-25 respectively. In this respect, OPTCL was asked to submit the detailed information about Capital Work-In-Progress (CWIP) as on 31.03.2023, work started during FY2023-24 and further proposal, if any. But OPTCL has not furnished the required information as desired by the Commission. Therefore, the Commission has provisionally considered addition of asset of Rs.631.99 Cr. during the FY 2023-24 and accordingly, original book value transmission fixed assets is estimated to be Rs.5358.99 Cr. by end of 31.03.2024. The Commission has estimated and approves the depreciation of Rs. 275.67 Cr. for the FY 2024-25 considering assets value of Rs.5358.99 Cr. and the details of which is shown in the Table below:

Table - 48
Depreciation on Transmission Assets approved by the Commission for the FY 2024-25
(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 31-03-2023	Up-valued Assets	Grant & Beneficiary /Deposit Assets as on 31-03-2023	Fully (90%) Depreciated Assets as on 31-03-2023	Original Book Value of Own Fixed Assets as on 31-03-2023	Own assets to be added during FY 2023-24	Original Book Value of Own Fixed Assets as on 31-03-2024.	Estimated Depreciation for FY 2024-24
1	2	3	4	5	6	7=3-(4+5+6)	8	9	10 = 9x2
Free Hold Land	-	54.94	6.26	6.29	-	42.39	5.87	48.26	-
Leasehold Land	3.34	57.31	-	5.63	-	51.68	6.24	57.92	1.93
Building	3.34	164.99	15.10	8.20	0.23	141.46	18.91	160.37	5.36
Electrical Installation	5.28	12.36	-	3.95	0.49	7.92	0.96	8.88	0.47
P&M (Other Civil Works)	3.34	108.90	0.91	5.94	-	102.05	12.43	114.48	3.82
Plant & Machinery	5.28	5,373.88	266.02	1,091.24	811.64	3,204.98	418.39	3,623.37	191.31
P&M (Line, Cable & Network)	5.28	3,109.02	221.17	771.52	1,033.28	1,083.05	158.35	1,241.40	65.55
Vehicles	9.50	2.35	-	-	1.43	0.92	0.11	1.03	0.10
Furniture & Fixture	6.33	9.47	0.46	0.52	1.43	7.06	0.91	7.97	0.50
Office Equipment	6.33	103.90	2.79	6.06	16.45	78.60	9.82	88.42	5.60
Intangible Assets	15.00	17.58	-	10.69	-	6.89	-	6.89	1.03
Total		9,014.70	512.71	1,910.04	1,864.95	4,727.00	631.99	5,358.99	275.67

284. While approving the investment proposals of OPTCL in past, the Commission has observed that, execution of the projects prior to the approval of the investment proposal by the Commission violates the provisions of the licence condition and is improper. OPTCL should stop such practices in future to avoid non-adherence of the statutory provisions. Further, in case of un-viable project, the Commission directs OPTCL to take up the matter with Government to finance such projects through grant to minimise the tariff burden on consumers.
285. In the Transmission Tariff order of OPTCL for FY 2023-24, the Commission was directed OPTCL to submit its Complete Fixed Assets Register at original book value of fixed assets as on 31.03.2023 and addition during FY 2022-23 showing Assets created through Own investment, Grants & from beneficiary deposits and Capital work in progress (CWIP) as on 31.03.2023 in the prescribed format of the Commission.
286. In compliance to the above, OPTCL has submitted the fixed assets register as on 31.03.2023. However, the Commission observed that some important information such as location of assets, assets without physical verification and its operational conditions and separately showing the assets created through Own investment, Grants & from beneficiary deposits works have not been provided in the assets register. Further, OPTCL has not provided the CWIP position as on 31.03.2023 in the prescribed format.
287. In the above context, OPTCL is required to submit the Complete Fixed Assets Register at original book value of fixed assets as on 31.03.2024 and addition during FY 2023-24 showing assets created through Own investment, Grants & from beneficiary deposits works separately in the prescribed format **(Annexure-I)**. Further, OPTCL is required to submit the Capital work in progress (CWIP) position as on 31.03.2024 showing separately for Own investment, Grants & from beneficiary deposits works separately in the prescribed format **(Annexure-II)**.

Return on Equity (RoE):

288. OPTCL has submitted that, the State Government has infused equity share capital of Rs.2206.10 Cr. till date against various transmission projects including Rs.647.00 Cr. towards conversion of bonds with interest into equity. Further, it has projected that another Rs.100.00 Cr. will be received in Jan-2024 from the planned budget of Energy Department for FY 2023-24 and as committed, State Government will further infuse Equity Share Capital of Rs.113.92 Cr. during FY 2024-25 against the various transmission projects. Considering the above, OPTCL has projected that its total Equity Capital will be Rs. 2480.09 Cr (including Rs.60.07 Cr. transferred to OPTCL from De-merger of GRIDCO) as

on 31.03.2025. However, OPTCL has projected original book value of transmission fixed assets of Rs. 5873.00 Cr. as on 31.03.2024. It has submitted that, aforesaid assets have been created through share capital infused by the State Government, long term loans from Banks/Financial institutions and internal accrual. Basing on the same, OPTCL has proposed Return on Equity (RoE) of Rs. 273.09 Cr. (@ 15.5% on 30% of Rs. 5873.00 Cr) for the FY 2024-25.

289. The Commission has examined the submission of OPTCL. As per Regulation 8.29 of the OERC Transmission Tariff Regulation, 2014, stipulated 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 normative basis by the Petitioner has not taken into consideration.
290. As submitted by OPTCL the amount of equity capital infused by State Government till the date of filing application amounts to Rs.2206.10 Cr., the details of which along with the sanction order and date of Government fund as filed by OPTCL is given in the Table below:

Table –49
Equity Capital Infused by the State Government
(Rs.in Crore)

Sl. No.	Sanction Order No. and Date	Amount
1	R&R-I-01/2009-3560 dt.25.03.09	23.04
2	R&R-I-01/2009-2003 dt.24.02.09	0.01
3	R&R-I-01/2009-9464 dt.11.09.09	5.00
4	R&R-I-01/2009-4826 dt.01.06.10	20.00
5	R&R-I/73/2010-2438 dt.23.03.2011	51.95
6	R&R-6/12-685 dt.31.01.2012	1.00
7	R&R-6/12-690 dt.31.01.2012	39.00
8	R&R-6/12-695 dt.31.01.2012	3.00
9	R&R-6/12-629 dt.22.01.2013	25.76
10	R&R-6/12-634 dt.22.01.2013	16.60
11	R&R-6/12-624 dt.22.01.2013	7.64
12	R&R-6/12-5693 dt.18.07.2013	29.19
13	R&R-6/12-5698 dt.18.07.2013	11.97
14	R&R-6/12-5703 dt.18.07.2013	8.84
15	R&R-69/14-10445 dt.29.12.2014	10.50
16	R&R-69/14-10450 dt.29.12.2014	27.50
17	R&R-69/14-10455 dt.29.12.2014	12.00
18	R&R-69/14-6823 dt.06.08.2015	19.68
19	R&R-69/14-6818 dt.06.08.2015	17.22
20	R&R-69/14-6813 dt.06.08.2015	20.03
21	BT(P)-15/15-10291 dt.21.12.2015	0.07
22	R&R-69/14-5364 dt.18.7.2016	10.00

Sl. No.	Sanction Order No. and Date	Amount
23	R&R-69/14-5369 dt.18.7.2016	20.00
24	R&R-69/14-5374 dt.18.7.2016	20.00
25	BT(P)-04/2018/En-1786 dt. 26.02.18	15.00
26	BT(P)-04/2018/En-1791 dt. 26.02.18	20.00
27	BT(P)-04/2018/En-1796 dt. 26.02.18	15.00
28	R&R -54/2015/En-5458 dt. 23.06.15	20.00
29	R&R -54/2015/En-737 dt. 28.01.16	10.00
30	R&R -54/2015/En-4348 dt. 07.06.16	20.00
31	R&R -54/2015/En-466 dt. 17.01.17	60.00
32	R&R -17/2017/En-2895 dt. 22.04.17	20.00
33	R&R -17/2017/En-10216 dt. 27.12.17	50.00
34	R&R -40/2018/En-3902 dt.28.04.2018	15.00
35	R&R -40/2018/En-4632 dt.24.05.2018	40.00
36	BT(P)-04/2018(pt)-10432/En dt. 19.12.2018	15.00
37	BT(P)-04/2018(pt)-10439/En dt. 19.12.2018	15.00
38	BT(P)-04/2018(pt)-10446/En dt. 19.12.2018	15.00
39	R&R-40/2019-5100/En TD.27.06.2019	3.67
40	R&R-40/2019-6530/En dtd.6.08.2019	11.03
41	201915819273 dtd.27.02.2020	55.00
42	202018025467 dtd.13.10.2020	50.00
43	202019752418 dtd.26.03.2021	5.29
44	202019704714 dtd.23.03.2021	9.00
45	202019747311 dtd.26.03.2021	647.00
46	202121454297dtd.06.09.2021	50.00
47	202122892459 dtd.18.12.2021	30.00
48	202122892550 dtd.18.12.2021	30.00
49	202124034526 dtd.03.03.2022	6.65
50	202124047110 dtd.04.03.2022	55.00
51	202124048923 dtd.04.03.2022	4.00
52	202124049541 dtd.04.03.2022	140.00
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: 202331276284 Dated 14.09.2023	12.10
61	S.O. No: 202331276355 Dated 14.09.2023	5.00
62	S.O. No: 202331276395 Dated 14.09.2023	18.00
63	S.O. No: 202331297833 Dated 26.09.2023	13.92
	Total (up to FY 2022-23)	2206.10

291. Further, OPTCL was asked to submit the detailed information about capital work-in-progress as on 31.03.2023. But in its reply OPTCL has not furnished the required information in complete shape as desired by the Commission. But after analysing the same, the Commission observes that out of the above equity capital received from the

Government of Odisha, equity capital of Rs.513.03 Cr. is still under Capital Work-in-Progress (CWIP) by the end of FY 2023-24, details of which are shown in the Table below:

Table –50
Equity infused by GoO but under CWIP up to 31.03.2025
(Rs.in Crore)

Name of Project	Scheme	Upto 31.03.2023	FY 2023-24	Total
2X 40MVA 220/33kV Grid S/S at Palei, Balichandrapur with line.	SSP-30% GoO Equity	12.53	-	12.53
2X20MVA, 132kV Grid S/S Lamtaput with SAS and associated line.	SSP-30% GoO Equity	7.90	-	7.90
132kV DC line from 220/132/33kV S/S Baner (Jaipatna) to 132/33kV S/S at Junagarh	SSP-30% GoO Equity	10.94	-	10.94
2x20MVA, 220/33kV S/S at Baliguda and associated line	Rs. 300 Cr GoO Equity	37.43	-	37.43
2x20MVA, 132/33kV R.Udyagiri S/S and associated line	Rs. 300 Cr GoO Equity	16.79	-	16.79
132kV Jayanagar-Sunabeda line	Rs. 300 Cr GoO Equity	7.73	-	7.73
2X20MVA, 132/33kV Grid Sub-station at Lakhanpur along with associated its transmission line.	30% Equity Support for JICA	8.49	-	8.49
220/132/33 KV GRID S/S, Kiakata	30% Equity Support for JICA	37.52	-	37.52
2x500MVA, 400/220/33kV GIS at Paradeep and associated line	30% GoO Equity	186.24	5.00	191.24
2X20MVA, 132/33KVGSS at Brundabahal with associated line	100% GoO Equity	58.12	-	58.12
132/33 KV S/S at Tarabha with associated 132kV LILO Line	100% GoO Equity	13.69	18.00	31.69
5 Nos of Projects under Scheme RRCP-II	RRCP-II-30% GoO Equity Support	16.65	12.09	28.74
5 Nos of Projects under LVMS Scheme	30% GoO Equity	50.00	13.91	63.91
Total		464.03	49.00	513.03

292. Further, the Government of Odisha, vide its letter No.3333 dated 24.03.2021, had communicated to the Commission that no return on equity shall be paid on the equity of Rs.647.00 crore which is related to the sanction of Government towards conversion of bond to the equity.
293. As per the Regulation 8.28 & 8.29 of OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014, return on equity shall be computed on pre-tax basis @15.50% to be grossed up as per Clause (2) of this Regulation. Accordingly, the

Commission has determined the Equity capital as Rs. 1046.07 Cr (i.e., Rs.2206.10 Cr - Rs.513.03 Cr - Rs.647.00Cr) excluding the above amount from the total equity capital infused by the Govt. of Odisha and approves RoE of **Rs.162.14 Cr.** (against OPTCL's proposal of Rs.273.09 Cr.) for the FY 2024-25 considering RoE @15.5%.

Income Tax:

294. As per the Regulation 8.43 of OERC Regulations, 2014, Income tax of the Transmission Licensee shall be recovered from the beneficiaries. OPTCL has proposed an amount of Rs.36.69 Cr. towards income tax for the FY 2024-25 based on the actual tax paid and income tax return filed for the FY 2022-23 (AY 2023-24). The Commission has examined the income tax return filed by OPTCL for FY 2022-23 and allows **Rs.7.00 Cr.** provisionally in anticipation of payment made under the head income tax subject to actual payment which will be verified during true up exercise of that year.

Grid Co-ordination Committee Expenses:

295. OPTCL proposed an amount of Rs.0.35 Cr. under the head GCC expenses for the FY 2024-25. Even though OPTCL has not spent any amount during FY 2022-23 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 2024-25. OPTCL should convene the GCC meeting on regular basis and discharge its responsibilities as stipulated in the Odisha Grid Code-2015.

Incentive for system availability:

296. OPTCL has submitted that the transmission system availability factor (TAFY) for FY 2022-23 was 99.97%, which is more than Normative Annual Transmission System Availability Factor (NATAF) of 98.50%. Further, the system availability of 99.97% has been duly verified & certified by SLDC. Accordingly, OPTCL has proposed an incentive of Rs.12.42 Cr. to consider in the ARR of FY 2024-25.
297. The Commission has examined the relevant provision of Act & Regulations on payment of incentive to OPTCL. As SLDC has verified the System Availability of 99.97% during the FY 2022-23 and OPTCL is expected to maintain NATAF more than 98.50% during the FY 2023-24. Further, the Commission while appreciating the system availability of 99.97% during the FY 2022-23, approves an amount of Rs.5.00 Cr. as incentive in the ARR of OPTCL for the FY 2024-25 with a stipulation that this incentive amount approved by the Commission should be spent on solarisation of grids and capacity building/efficiency improvement of its employees. The Commission directs the OPTCL to submit the detailed

breakup of the amount spent under system improvement & capacity building otherwise the same will not be allowed during truing-up.

Rebate:

298. 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 of rebate for early payment in the said Regulations 2020. Considering the above, the Commission does not allow the rebate to the Open Access Customers those are governed under OERC (Terms and conditions of Intra state open access) Regulations 2020.
299. As per the Regulation 8.49 of OERC's Transmission Tariff Regulation, 2014, a rebate of 2% is to be allowed by the transmission licensee in case the payment is received within 2 working days. Similarly, as per the Regulations, 8.50, a rebate of 1% is to be allowed by the transmission licensee in case the payment is received after 2 working days and within a period of 30 days. Accordingly, OPTCL has projected an amount of Rs.22.04 Cr. towards rebate for FY 2023-24. The Commission approves an amount of **Rs.17.85 Cr.** (37180 MU x Rs. 0.24 x 2%) under the head rebate (for DISCOMS only) as a pass through in the ARR of FY 2024-25 subject to actual rebate allowed which will be trued up for that year.
300. Further, OPTCL has proposed **115.491 MU** of energy [by M/s MCL & M/s ABReL (Odisha) SPV Ltd.] to be transmitted through OPTCL network for FY 2024-25 which will get an exemption of twenty (20) paise per unit on STU charges as per clause No. 10(4) of the Odisha Renewable Energy Policy-2022. Considering the same, the Commission allows **Rs.2.31 Cr.** (115.491 x 20 Paise/Unit) under the head exemption under Odisha Renewable Energy Policy, 2022 as a pass through in the ARR of FY 2024-25 subject to actual exemption trued up for that year.

Miscellaneous Receipts:

301. OPTCL has proposed an amount of Rs.240.94 Cr. towards miscellaneous receipt from inter-state Transmission charges, short term Open Access & STU charges, Bank interest, scrap sale, supervision charges and other Misc. Receipts which are shown in the Table below:

Table – 51
Miscellaneous Receipts Proposed by OPTCL for FY 2024-25

(Rs. in Crore)	
Source	Amount
Inter-State Transmission charges (POC Mechanism)	7.75
Short-Term Open Access & STU Charges	165.00

Bank Interest	20.00
Scrap Sale	5.00
Supervision Charges	30.00
Other Misc. Receipts	13.19
Total	240.94

302. The Renewable Energy Policy, 2022 formulated by the State Government envisages large scale integration of Renewable Energy (RE) Generation in the State. The Policy suggests for provision of exemption of 20 paise per unit on STU charges to captive /open access consumers and 50% exemption of cross subsidy surcharge to open access consumers on consumption of energy from RE projects commissioned in the state during the policy period of 15 years. Such exemption will be for 20 years in case of the projects commissioned before 31.03.2026. Considering the above, the Commission has examined the submission of OPTCL, actual miscellaneous receipts as per audited accounts of the FY 2022-23 and actual receipts during first 9 month of FY 2023-24. OPTCL has proposed Interest from bank deposit amounting to Rs.20.00 Cr. for the FY 2024-25 whereas actual interest from bank deposit during first 9 month of FY 2023-24 about Rs.60.52 Cr. Considering the same, the Commission estimates interest from bank deposit around Rs 80.00 Cr for the FY 2024-25. Accordingly, the Commission considers **Rs.302.75 Cr.** under miscellaneous receipt for the FY 2024-25 instead of proposed miscellaneous receipt of Rs.240.94 Cr. The details of which are shown in Table below:

Table – 52
Miscellaneous Receipts Approved by the Commission for FY 2024-25
(Rs. in Crore)

Sl. No	Particulars	Approved for FY 2023-24	Proposed for FY 2024-25	Approved for FY 2024-25
1	Short-term Open Access Charges (STOA)	271.00	165.00	165.00
2	Inter-state Wheeling Charges	9.45	7.75	7.75
3	Supervision Charges	-	30.00	30.00
4	Interest from Bank deposits	15.00	20.00	80.00
5	Scrap Sale	-	5.00	5.00
6	Other miscellaneous income	5.00	13.19	15.00
7	Total (1+2+...+6)	300.45	240.94	302.75

Transmission Cost:

303. OPTCL has submitted that, it has taken the recent realistic demand projection of all four DISCOMs to be **36,252 MU (4,138.36 MW)** for FY 2024-25. Further it has projected that, energy of 360 MU (41.10 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 360 MU, the petitioner has estimated that, net **35,892 MU** (i.e., 36252MU - 360 MU) to be transmitted in the OPTCL network for DISCOMs. Further OPTCL has projected 753 MU (85.95 MW) for wheeling and supply of Emergency/Back-up power to IMFA, NALCO, ABREL & BEL. Accordingly, the projected energy transaction over its network would be about **36,645 MU** (i.e., 35,892 MU+ 753 MU).

In addition to above, OPTCL has projected **115.491 MU** {35.491 MU for M/s ABREL(Odisha) SPV Limited and 80 MU for M/s MCL} of Energy to be transmitted through OPTCL network for FY 2024-25 which will get an exemption of twenty (20) paise 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 **36,760.49 MU** (36,645.00 MU + 115.49 MU) over its network.

304. The Commission scrutinized the proposal of OPTCL along with the proposals submitted by the distribution licensees and the total energy to be transmitted over the OPTCL's transmission system is estimated at **38,073.49 MU (4346.29 MW)** for the FY 2024-25, the details of which are given in the Table below:

Table – 53
Energy likely to be Transmitted over OPTCL Transmission Network
during the FY 2024-25 (MU)

Particulars	Proposed by OPTCL	Approved by OERC
(A) Demand of DISCOM	36252.00	37,540.00
(B) Less: Energy transmitted in 33KV & 11 KV network	360.00	360.00
(C) Net Energy Transmitted for DISCOM (A-B)	35,892.00	37,180.00
(D) Wheeling to industries from CGPs & Emergency Sale to CGPs.	753.00	778.00
(E) Sub-total (C+D)	36,645.00	37,958.00
(F) Wheeling to industries at exemption of 20 Paise/unit as per Odisha RE Policy-2022	115.49	115.49
Total (E+F)	36,760.49	38,073.49

305. Having scrutinised each component of the ARR proposed by OPTCL & the total ARR & transmission charges proposed by OPTCL and approved by the Commission for the ensuing FY 2024-25 are shown in the Table below:

Table –54
ARR Proposed by OPTCL and Approved by the Commission for the FY 2024-25
(Rs. in Crore)

Sl. No	Particulars	OERC's approval for FY 2023-24	OPTCL's Proposal for FY 2024-25	OERC's approval for FY 2024-25
1	Employee Cost Including Terminal Benefits	449.08	582.06	488.63
2	R & M Cost	135.00	169.30	135.00
3	A & G Cost	40.28	51.13	37.05
4	Depreciation	269.54	320.03	275.67
5	Interest & Financial Charges	111.83	148.95	133.95
6	Return on Equity	140.42	273.09	162.14
7	Incentive for System Availability	5.00	12.42	5.00
8	GCC Expenses, statutory levies & taxes	0.35	0.35	0.35
9	Rebate & Exemption under Odisha Renewable Energy Policy, 2022	17.92	27.61	20.16
10	Income Tax	27.21	36.69	7.00
11	Annual Revenue Requirements (ARR) (1+2+...+10)	1,196.63	1,621.63	1,264.95
12	Less: Misc Receipts (Including STOA)	300.45	240.94	302.75
13	Less: Regulatory Surplus	-	-	48.50
14	Net Annual Revenue Requirement to be recovered {11-(12+13)}	896.18	1,380.69	913.70
15	No. of Units to be handled (MU)	37,348.00	36,645.00	38,073.49
16	Transmission Charges (Paise/kWh)	24.00	37.68	24.00
17	Expected Revenue from LTA Customers	896.35	879.94	913.76
18	Gap: Surplus/(Deficit) (17-14)	0.17	(500.75)	(0.06)

TARIFF DESIGN

Transmission Tariff:

306. 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:

307. The Commission has followed the same principle of Postage Stamp Method as in earlier years for determination of Transmission Charges of OPTCL system. Accordingly, the

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

308. The Commission has approved the net transmission cost as indicated in the Table above as **Rs.913.70 Cr.** for the FY 2024-25. The aforesaid transmission cost will be recovered from the estimated energy for transmission in OPTCL's system which is **38,073.49 MU** with an average demand of **4,346.29 MW**. The Open Access charges work out to a rounded sum of **Rs.5760.00/MW/day or Rs.240/MWh.**
309. 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.5760.00/MW/day or Rs.240/MWh** towards transmission charges.
310. The Open Access charges i.e. cross subsidy surcharge, wheeling and transmission charges as determined by the Commission in its order passed in Case No.118, 121, 124, & 127 of 2023 for Open Access consumers of 1 MW and above shall be applicable.

Transmission Loss for Wheeling:

311. OPTCL had proposed that out of the energy supplied to transmission licensee, 3.05% shall be deducted towards transmission loss and balance is liable to be delivered at delivery point at 400kV/220kV/132kV level. The Commission has approved the transmission loss of **3.00%** for wheeling for the FY 2024-25.

Reactive Energy Charges:

312. 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 2024-25.
313. The Commission provisionally approves reactive energy charges @ 3 paise/kVARh for the FY 2024-25. However, despite approval of such charges for last four years, OPTCL has not submitted any justification of 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:

314. The letter of credit 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:

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

Rebate:

316. For payment of bills through a letter of credit or NEFT/RTGS or by payment in cash within two working days (except holidays under N.I. Act) from the presentation of bill, a rebate of 2% on current bill shall be allowed to 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 presentation of bills by the DISCOMs, a rebate of 1% shall be allowed.

Late Payment Surcharge:

317. 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 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 the Long- & Medium-Term Open Access Customers other than DISCOMs is delayed beyond a period of 7 days from the date of receipt of bill, a late payment surcharge at the rate of 1.25% per month shall be levied by OPTCL on the unpaid amount.

318. The transmission tariff approved as above in respect of OPTCL will become effective from 01.04.2024 and shall continue to remain in force until further orders.
319. The Application of OPTCL in Case No. 113 of 2023 is disposed of accordingly.

Sd/-
(S. K. Ray Mohapatra)
Member

Sd/-
(G. Mohapatra)
Officiating Chairperson

ANNEXURE-I

Odisha Power Transmission Corporation Limited

Fixed Assets Register for the FY 2023-24 (in Rs.)

Cost Centre/Unit		Description of Assets						Gross Book value of Fixed Assets as on 31-03-2023		Addition & Delitions/transfer/ Adjustment During FY 2023-24		Gross Book value of Fixed Assets as on 31-03-2024		Rate of Depreciation (%)	Accumulated Depreciation as on 31-03-2023		Addition & Delitions/transfer/ Adjustment During FY 2023-24		Accumulated Depreciation as on 31-03-2024		Net Book Value of Assets as on 31-03-2024		Whether Physically verified (Yes/No)	Whether the Asset under operational condition (Yes/No)	Remarks if any
Code	Name	Major Category	Minor Category	Quantity	Account Code	Location of Assets to identify	Used w.e.f Date-DD-MM-YYYY	As per Original Cost	Deemed Cost (IndAS)	Addition	Deletion/ Transfer/ Adjustment	As per Original Cost	Deemed Cost (IndAS)		As per Original Cost	Deemed Cost (IndAS)	Addition	Deletion/ Transfer/ Adjustment	As per Original Cost	Deemed Cost (IndAS)	As per Original Cost	Deemed Cost (IndAS)			
1	2	3	4	5	6	7	8	9	10	11	12	13=9+11-12	14=10+11-12	15	16	17	18	19	20=16+18-19	21=17+18-19	22=13-20	23=14-21	24	25	
Example:																									
002	DDO, Hdqrs	Furniture & Fixtures	Wooden Conference Table with Size 5'' x 15''	1 No	10.220	4th Floor , Corporate Office Building	25-11-2018	3,50,000	3,50,000	-	-	3,50,000	3,50,000	6.33	74,174	74,174	22,155	-	96,329	96,329	2,53,671	2,53,671	Yes	Yes	
001	DFB, BBSR	Office Equipment	Scanner	1 No	10.851	O/o CGM (F), FW	10-08-2012	25,000	21,517	-	-	25,000	21,517	5.28	12,723	9,240	1,320	-	14,043	10,560	10,957	10,957	Yes	Yes	

Note: *Assets created through Own investment, Grants & from beneficiary deposits works should be shown separately in the prescribed format*

ANNEXURE-II

Odisha Power Transmission Corporation Limited

Capital Work-in-Progress (CWIP) position as on 31-03-2024[illegible]

Note: CWIP position created through Own investment, Grants & from beneficiary deposits works should be shown separately in the this prescribed format.