

ANALYSIS OPTCL'S ARR AND TRANSMISSION TARIFF FY 2023-24

BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY, PUNE
(CONSUMER COUNSEL)

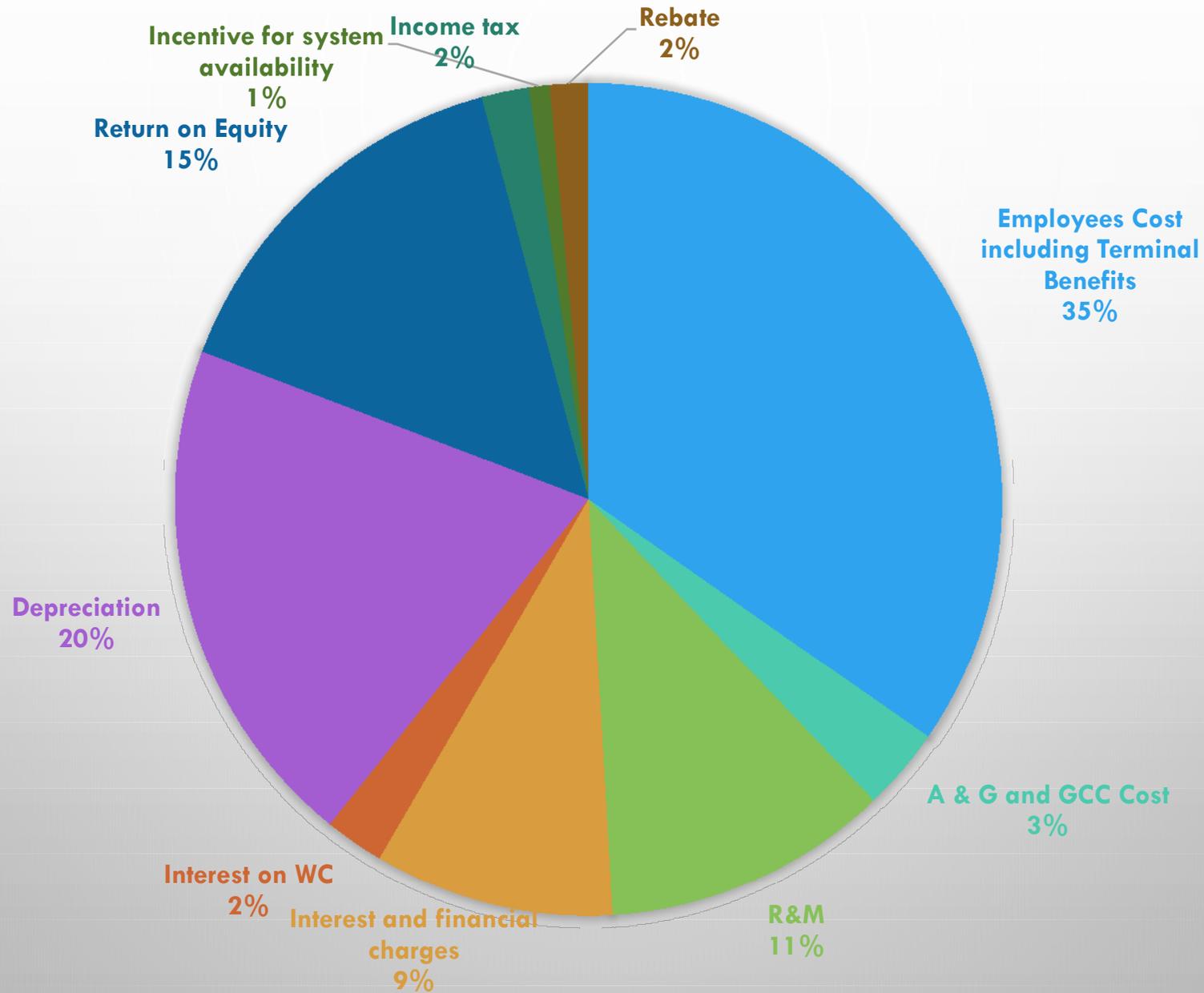
14 FEBRUARY, 2023

EXECUTIVE SUMMARY

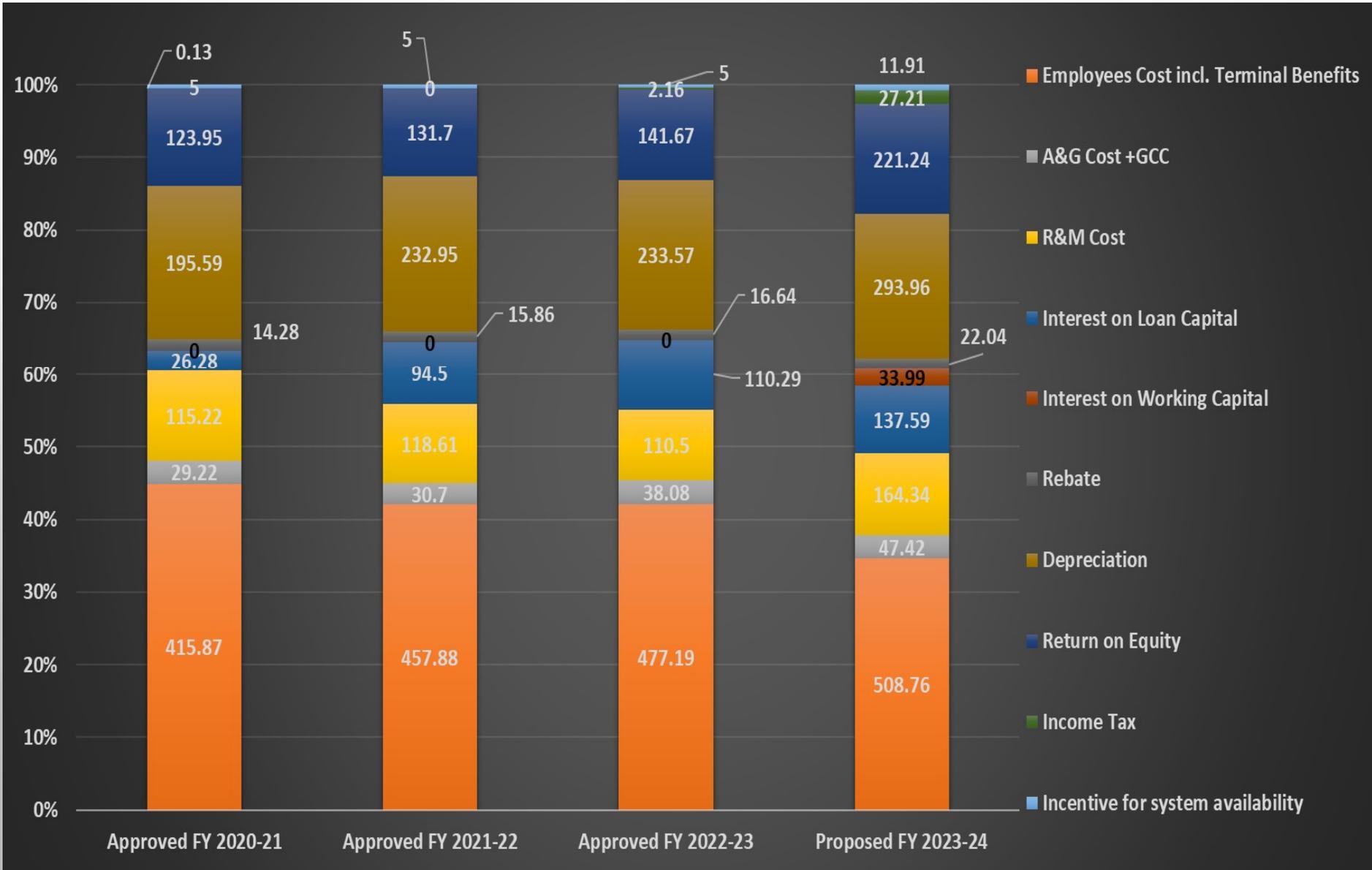
CONSUMER COUNSEL

- OPTCL HAS PROPOSED;
 - AGGREGATE REVENUE REQUIREMENT OF **RS. 1102.00 CR.**
 - RECOVERY OF TRANSMISSION CHARGE@ **RS. 7725.20 /MW-DAY (I.E. EQUIVALENT OF 32.19 P/U ON THE BASIS OF ENERGY TRANSMITTED).**
 - TRANSMISSION LOSS FOR WHEELING AS **3.10%** ON ENERGY DRAWL
 - OPTCL PROPOSED TO CONSIDER **RS.25.16 CR.** DEFICIT GAP IN THE TRUING UP PROPOSAL FOR THE FY 2021-22 AND THE CUMULATIVE DEFICIT OF **RS.254.13CR.** (228.97+25.16) TILL FY 2021-22.
 - HOWEVER, AS PER OPTCL SUBMISSION, GAP (EXPENDITURE – REVENUE) IS **RS 76.15 CR** FOR FY 2021-22.
- INCREASE IN TRANSMISSION TARIFF OVER PREVIOUS APPROVED OF 28 P/U IS DUE TO INCREASE IN EMPLOYEE COST INCL. TERMINAL BENEFITS, DEPRECIATION, ROE AND REBATE.

PROPOSED REVENUE REQUIREMENT FY 2023-24 (RS. CRORE)

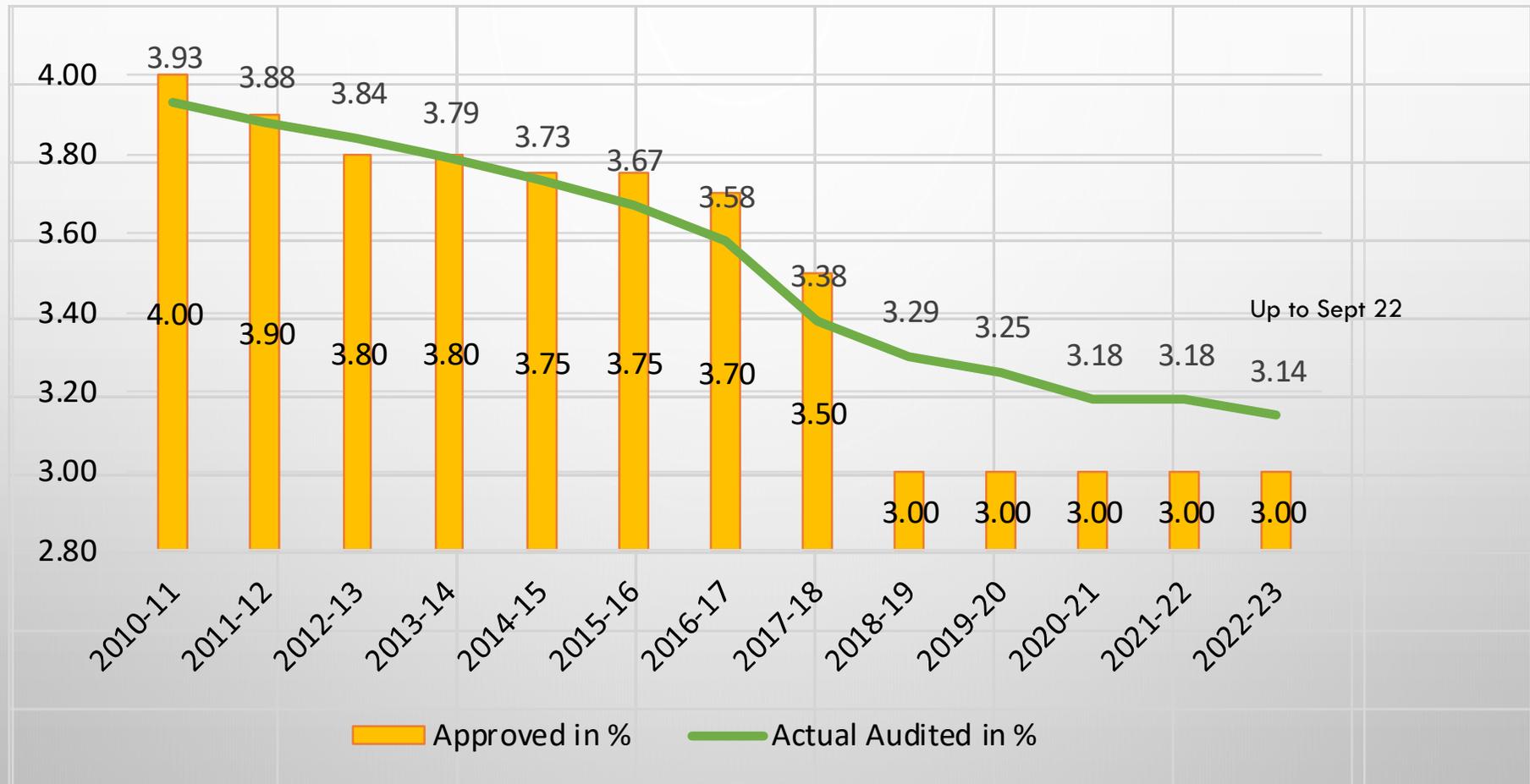


PROPOSED REVENUE REQUIREMENT TREND



ANALYSIS OF ARR AND TRANSMISSION TARIFF

TRANSMISSION LOSS



EMPLOYEE COST FY 2023-24 (RS. CRORE)

Particulars	Approved 2020-21	Approved 2021-22	Proposal 2022-23	Approved 2022-23	Ensuring 2023-24	% Increase 23-24 against 22-23
Salary & Allowance						
Basic Pay and Grade Pay	162.35	167.48	158.56	151.67	157.58	3.90%
Dearness Allowance	43.83	48.57	60.25	56.12	70.91	26.35%
House Rent Allowance	15.07	15.02	25.61	13.04	25.45	95.17%
Other Allowance and Bonus	1.03	0.83	1.00	1.00	1.22	22.00%
Stipend for New Recruitment	5.71	7.26	8.46	8.46	5.30	-37.35%
Arrear Salary for 7th Pay Commission	8.82	0	26.01	15.61	-	
Sub-total (Salary and Allowance)	236.81	239.16	279.89	245.90	260.46	5.92%
Out Sources Engagement	3.17	2.57	2.94	2.94	3.30	12.24%
Other Employee Cost (LTA, Ex- gratia etc)	13.56	16.88	28.82	22.33	31.75	42.19%
Terminal Benefits incl. Pension Arrear for 7th Pay Commission	177.40	214.35	228.11	219.27	226.76	3.42%
Total Employees Cost	430.94	472.96	539.76	490.43	522.27	6.49%
Less: Employees Cost Capitalized	15.08	15.08	13.24	13.24	13.51	2.04%
Net Employee Cost	415.87	457.88	526.52	477.19	508.76	6.62%

EMPLOYEE COST INCL. TERMINAL BENEFITS (REMARKS AND SUBMISSION)

- **BASIC PAY AND GRADE PAY:** BASIC PAY AND GRADE PAY PROPOSED FOR FY 23-24 = RS. **157.58** CR. IS BASED ON ACTUAL CASH FLOW FOR FY 22-23 WITH ADDITIONAL INCREMENT OF 3% AND AVERAGE NUMBER OF EMPLOYEE. OPTCL PROPOSED NEW EMPLOYEE ADDITION AS 342 (FY 22-23) AND 397 (FY 23-24), WHICH IS ON THE HIGHER SIDE IN COMPARISON TO PAST DATA (FY 20-21: 27, FY 21-22: 254).
- **DA:** OPTCL PROPOSED 45% DA FOR FY 2023-24, CONSIDERING FINANCE DEPT GUIDELINES. HOWEVER, ACTUAL INCREASE IN DA MAY BE REVIEWED.
- **HRA:** OPTCL PROPOSED HRA @19%. ACTUAL CASH FLOW MAY BE CONSIDERED.
- **OUTSOURCING:** OPTCL IS FUNCTIONING WITH 50% OF MANPOWER AND HAS OUTSOURCED SERVICES. ACCORDINGLY, RS. 3.30 CR. HAS BEEN PROPOSED TOWARDS PAYMENT TO OUTSOURCED PERSONNEL. THE SAME CAN BE REVIEWED.
- OPTCL IS PLANNING TO RECRUIT 342 NOS. EMPLOYEES DURING FY 2022-23 AND 63 NOS. IN FY 2023-24 AND HAS PROPOSED RS.5.30 CR. TOWARDS STIPEND FOR THE NEW RECRUITERS. CONSIDERING THE PAST TREND OF RECRUITMENT (FY 21-22: ACTUAL 254 AND FY 22-23: PROPOSED 342) THE SAME MAY BE REVIEWED.
- ACTUAL ADDITION OF EMPLOYEES IS LESSER THAN THE APPROVED. STIPEND AND EMPLOYEE COST SHOULD BE APPROVED BY REVIEWING PROPOSED ADDITION OF EMPLOYEES.
- TERMINAL BENEFITS SHOULD BE REVIEWED ON ACTUAL CASH FLOW BASIS.

R & M EXPENSES

FY 2023-24 (RS. CRORE)

- OPTCL HAS PROPOSED INCREASE OF 49% OVER APPROVED R&M EXPENSES OF FY 22-23.
- ACTUAL EXPENDITURE IS RS 54.75 CR IN FIRST SIX MONTHS OF FY 2022-23 AND PROPOSED RS 114.69 CR FOR FY 2022-23.
- PROPOSED EXPENSES SHOULD BE REVIEWED BASED ON ADDITION TO FIXED ASSETS, ACTUAL EXPENDITURE, AND EXPENDITURE PROPOSED FOR EACH WING.
- UNDER CIVIL WING, REPAIR OF OTHER BUILDINGS, STAFF QUARTERS, AND OFFICE BUILDING MAY BE REVIEWED.
- ENGAGEMENT OF SECURITY PERSONNEL OF RS 39 CR AND GPS BASED LINE PATROLLING SYSTEM OF RS 8.92 CR MAY BE REVIEWED.

Year	Approved by OERC	Actual
2015-16	108	113.35
2016-17	110.59	149.53
2017-18	124.97	137.83
2018-19	111	111.76
2019-20	115.22	126.10
2020-21	115.22	103.91
2021-22	118.61	98.86
2022-23	110.50	114.69(est.)
2023-24	164.34	

Particulars	OERC Approval (FY 2021-22)	OERC Approval (FY 2022-23)	Projection (FY 2023-24)
(i) O&M	118.61	110.50	140.23
(ii) Telecom			01.80
(iii) Civil Works			16.34
(iv) Information Technology			05.97
Total R&M			164.34 Cr.

A & G EXPENSES

FY 2023-24 (RS. CRORE)

- OPTCL HAS ESTIMATED A&G EXPENSES OF **RS 47.07 CR** FOR FY 23-24.
- HOWEVER, HON'BLE COMMISSION IN ITS TRANSMISSION REGULATIONS, HAS LINKED THE YEARLY ESCALATION IN A&G EXPENSES WITH GROWTH IN WPI. WITH APPROVED AMOUNT OF PREVIOUS YEAR.
- THE HON'BLE COMMISSION MAY REVIEW THE INSPECTION FEE EXPENSES AND TRAINING EXPENSES. DETAILS OF TRAINING CALENDAR AND ITS BENEFITS MAY BE CHECKED.

Year	Approved by OERC	Actual
2011-12	18.00	20.18
2012-13	21.25	30.5
2013-14	22.39	146.17
2014-15	24.01	45.48
2015-16	24.37	41.67
2016-17	20.40	31.61
2017-18	25.60	48.06
2018-19	27.55	38.55
2019-20	28.07	44.18
2020-21	28.72	33.30 (E)
2021-22	30.35	28.42
2022-23	37.73	41.27
2023-24		47.07

Particulars	Projection (FY 2023-24)
Property Related Expenses	6.57
Communication	0.87
Professional Charges	7.23
Conveyance & Travelling	14.67
Electricity & Water Charges	2.92
Fees & Subscription	0.10
Books & Periodicals	0.09
Printing & Stationery	0.55
Advertisement	1.35
Entertainment	0.22
Watch & Ward	3.23
Miscellaneous	3.73
Training	2.14
Office Maintenance	2.51
Material Related Expenses	0.10
SLDC Charges	0.84
Total	47.07

SUMMARY O & M EXPENSES OPTCL

FY 2023-24 (RS. CRORE)

Summary of O&M Expenses for FY 2023-24	
Particulars	Amount (Rs. Cr.)
(i) Employees Cost including Terminal Benefits	508.76
(ii) A&G Cost	47.07
(iii) R&M Cost	164.34
(iv) Other miscellaneous expenses, Statutory levies and taxes (GCC expenses)	0.35
Total O&M Expenses	Rs. 720.51Cr.

LOAN LIABILITY

FY 2023-24

Sl. No.	Particular	Rate of Interest	Principal as on 01.04.23	Interest payment (FY 23-24)
1	JICA	5.00%	542.11	21.88
2	Bank of India	8.35%	18.09	1.23
3	REC Loan	10.83% (Avg.)	100.67	10.77
4	Union Bank of India-I	7.25%	432.16	29.64
5	Union Bank of India-II	7.25%	598.35	37.94
6	UCO Bank	6.75%	274.33	25.27
7	New Loan	6.75%	73.68	10.86
8		Grand Total	2039.39	137.59

• **SUBMISSION:**

- THE INTEREST ON GOO BONDS SHOULD NOT BE CONSIDERED AS PER EARLIER OERC ORDERS.
- INTEREST ON LOANS FROM PFC, UNION BANK AND BANK OF INDIA AS ON 1.4.2023 FOR SANCTIONED PROJECTS ONLY CAN BE APPROVED. LOAN PROJECTED TO BE TAKEN DURING REMAINING PERIOD OF FY 2022-23 MAY BE REVIEWED.
- THE LOANS TO BE TAKEN FROM UCO BANK AND NEW LOAN DURING FY 2023-24 SHOULD BE REVIEWED.
- THE INTEREST IMPACT OF NEW LOANS TO BE RECEIVED IN FY 2023-24 SHALL NOT BE ALLOWED IN THE ARR; AS PER EARLIER ORDERS.

CAPEX PLAN

FY 2023-24_(RS. CRORE)

Particulars	<u>FY 2020-21</u>	<u>FY 2021-22</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>
(i) Telecom Wing	133.22	28.30	29.30	54.70
(ii) Existing Assets (O&M Wing)	48.83	55.87	169.12	197.19
(iii) Information Technology (IT Wing)	39.88	28.95	25.34	30.51
(iv) Civil Wing	55.29	18.57	57.99	78.19
(v) New Transmission Projects (Construction Wing)	879.19	1229.67	1560.88	646.00
Total Capital Expenditure [(i)+(ii)+(iii)+(iv)+(v)]	1156.41	1361.36	1842.63	1006.59

As per directive of the Hon'ble Commission, for each project, details of source of funding may be submitted. Whether approval of the Commission has been taken for those projects?

GROSS FIXED ASSETS AND DEPRECIATION

FY 2023-24 (RS CR)

	Book Value of FA as on 1-4-2021 including Upvalued and Grant/Deposit Assets	Book Value of FA as on 01-4-2021 Depreciated (90%)	Upvaluation effect	Book Value of FA as on 01-4-2021 (Grant, Beneficiary & Deposit Assets)	Book value of own Assets as on 1-4-2021 (on which Dep. Calculated)	Addition during FY 2021-22 (Approved)	Book value of own Assets as on 01-04-2022	Book value of FA added in FY 22-23	Book value of FA added in FY 23-24
Approved by OERC	7237.58	1562.57	534.58	1450.59	3689.84	877.83	4567.67		
Submission					3689.84	767.52*	4457.36	824.17	847.58

*Book value of FA added in FY 21-22: 1035.62 Cr – FA depreciated 90% in FY 21-22: 69.42 CR – Grant etc added in FY 21-22: 198.68 Cr.

- THE BOOK VALUE OF TRANSMISSION FIXED ASSETS OF OPTCL IS RS. 7237.58 CR. ON AS ON 01-04-2021. DEPRECIATION WAS CALCULATED FOR FY 22-23 ON ASSETS OF RS 3689.84 CR.
- ACTUAL ADDITION AS PER AUDITED ACCOUNT IS RS 767.52 CR, ON WHICH DEPRECIATION SHOULD BE CALCULATED.
- OPTCL PROPOSED ASSET ADDITION OF RS 824.17 CR AND RS 847.58 CR FOR FY 22-23 AND FY 23-24 RESPECTIVELY.
- BOOK VALUE OF ASSET AS ON 1.4.2022 SHOULD BE CONSIDERED FOR DEPRECIATION AFTER REVIEW OF ASSET ADDITION DURING FY 21-22.
- NORMS OF TARIFF REGULATIONS AND RATES AS SPECIFIED IN THE TRANSMISSION TARIFF REGULATIONS, SHOULD BE CONSIDERED.
- ACTUAL GROSS FIXED ASSET AND THE DEPRECIATION SHOULD BE DETERMINED AFTER DUE SCRUTINY.

RETURN ON EQUITY, RESERVE AND OTHERS FY 2023-24 (RS. CRORE)

RETURN ON EQUITY

- OPTCL PROPOSES **ROE OF RS. 221.24 CR.** FOR FY 2023-24 @15.5% AS PER THE CLAUSE 8.28 OF REGULATIONS, 2014 ON RS. 1427.33 CR. (EQUITY CAPITAL AS ON 31.3.2024: 2,134.40 – EQUITY AT THE TIME DEMERGER: 60.07- CONVERSION OF BOND: 647.00) I.E. ON OPENING BALANCE OF FY 2023-24.
- GOVERNMENT OF ODISHA HAS ALREADY INFUSED RS. 184.76 CR. DURING FY 2022-23 AND RS. 62.93 CR WILL BE INFUSED DURING FY2023-24. THE ACTUAL EQUITY RECEIVED SHOULD BE CONSIDERED.

INCOME TAX

- AS PER CLAUSE 8.43 OF REGULATIONS, 2014, INCOME TAX OF THE TRANSMISSION LICENSEE SHALL BE RECOVERED FROM BENEFICIARIES.
- AS PER THE AUDITED ACCOUNTS FOR THE FY 2021-22, OPTCL HAS MADE PROVISION OF RS. 27.21 CR AS INCOME TAX . THE SAME AMOUNT OF RS. 27.21 CR. HAS BEEN PROPOSED FOR FY 2023-24. IN FY 22-23, APPROVED AMOUNT WAS RS 2.16 CR ONLY.
- ACTUAL INCOME TAX AMOUNT BOOKED IN THE AUDITED ACCOUNT SHOULD BE

MISC INCOME PROPOSED FOR FY 23-24 (RS CR)

	Particulars	Approved Financial Year 2022-23	Revised estimation Financial Year 2022-23	Estimates for ensuing year 2023-24 with current rate
i)	Short term Open Access	212.64	212.64	337.00
ii)	Transmission Charges for Inter State Sale	17.505	10.12	9.45
iii)	Income from Investment of fixed & call deposits & bank balance	23.205	23.21	15.00
iv)	Other Misc.Receipt	49.8	37.32	5.00
	Total of (i to iv)	303.15	283.29	366.45

SUMMARY AND TREND OF ARR

FY 2023-24 (RS. CRORE)

	Approved FY 2021-22	Approved FY 2022-23	Proposed FY 2023-24	Increase % 22-23 vs 21-22	Increase % 23-24 vs 22-23
Employees Cost incl. Terminal Benefits	457.88	477.19	508.76	4.22%	6.62%
A&G Cost	30.35	37.73	47.07	24.32%	24.75%
R&M Cost	118.61	110.50	164.34	-6.84%	48.72%
Expenses related to auxiliary energy consumption	0		0.00		
Other misc. expenses, statutory levies and taxes(GCC)	0.35	0.35	0.35	0.00	0.00
Interest on Loan Capital	94.50	110.29	137.59	16.71%	24.75%
Interest on Working Capital	0	-	33.99		
Rebate	15.86	16.64	22.04	4.92%	32.45%
Depreciation	232.95	233.57	293.96	0.27%	25.86%
Return on Equity	131.70	141.67	221.24	7.57%	56.17%
Income Tax	0	2.16	27.21	#DIV/0!	1159.72%
Incentive for system availability	5.00	5.00	11.91	0.00	138.20%
Total	1087.20	1135.1	1,468.45	4.41%	29.37%
Less Misc. Receipts	243.28	303.15	366.45	24.61%	20.88%
Less Surplus True up	51.00	-			
ARR to be recovered from LTOA Customers i.e. OPTCL's Aggregate Revenue Requirement	792.93	831.95	1,102.00	4.92%	32.46%
Transmission Charges (P/U)	25	28.00	32.19	12.00%	14.96%

DEFICIT OF REVENUE REQUIREMENT

FY 2023-24

Deficit of Revenue Requirement as per existing transmission tariff @ 28 p/u (Rs. Cr.)	
Total Aggregate Revenue Requirement	1102.00
Less: Revenue earned from Long Term Open Access Customer	958.61
Deficit in revenue requirement for FY 2023-24	-143.39

Sl. No.	Customer	Commission's approval (MU) (FY <u>22-23</u>)	Energy demand (MU) as per DISCOMs estimation (FY <u>23-24</u>)	Amount (Rs. Cr.)
1	TPCODL	9790	10999	939.62
2	TPNODL	6020	7750	
3	TPWODL	9300	10500	
4	TPSODL	4390	4609	
5	RAILWAYS	--	-	
6	Total DISCOMs	29500	33858	
7	Less: Drawal in 33kV & 11kV network	300	300	
8	Energy transmitted for DISCOM	29200	33558	
9	Wheeling to industries from CGPs & Emergency Sale to CGPs	510	678	18.98 ¹⁸
	Total	29710	34236	958.61

OPEN ACCESS CHARGES

FY 2023-24

ABSTRACT OF OA CHARGES PROPOSED BY OPTCL FOR FY 2023-24	
DETAILS	In Rs. Per Unit approach
Net Aggregate Revenue Requirement (Rs. Cr.)	1102.00
Proposed Energy to be transmitted in OPTCL Network (MU)	34236
Power Flow (Equivalent of 34236 MU) in MWs	3908
Proposed Transmission Tariff (Rs./MW-Day)	7725.20
Proposed Transmission Charges (Paise/unit)	32.19
Open Access Charges (Approved 22-23)	Rs. 6720/MW/day (Rs. 280/MWh)

IMPORTANT OBSERVATION OF THE COMMISSION

- THE COMMISSION DIRECTS OPTCL TO CONTINUOUSLY MONITOR THE OPERATION OF TRANSMISSION SYSTEM, **PREVENT OVER LOADING/UNDER LOADING** WHEREVER POSSIBLE BY TAKING SUITABLE MEASURES AND TAKE UP INNOVATIVE ACTION FOR OPTIMUM LOADING OF THE EXISTING NETWORK FOR FURTHER REDUCTION OF LOSS.
- FURTHER, OPTCL HAS MENTIONED THAT SOME OF THE SUBSTATIONS ARE OPERATING IN UNDER LOADED CONDITION BECAUSE OF ABSENCE OF DOWNSTREAM INFRASTRUCTURE OF DISCOMS. THE COMMISSION DIRECTS OPTCL **TO TAKE ACTION FOR A CO-ORDINATED DEVELOPMENT OF INTRA-STATE NETWORK**, ISTS AND DOWNSTREAM DISTRIBUTION NETWORK. THE TIME FRAME OF EXECUTION OF TRANSMISSION SYSTEM SHOULD BE DISCUSSED WITH DISCOMS & CTU IN ORDER TO AVOID STRANDED ASSETS AND IDLE INVESTMENTS.
- THEREFORE, THE COMMISSION DESIRES THAT HENCEFORTH 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 LICENCE CONDITIONS OF OPTCL AND TARIFF REGULATIONS FOR APPROVAL OF THE COMMISSION BEFORE PROCEEDING FOR EXECUTION OF THE PROJECT.
- THE COMMISSION THEREFORE DIRECTS OPTCL TO TAKE UP THE MATTER WITH 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.
- OPTCL IS THEREFORE DIRECTED TO CONSIDER **THE METER DATA TO ASSESS THE MONTH-WISE TRANSMISSION LOSS IN INTRA-STATE TRANSMISSION SYSTEM** INCLUDING LOSSES AT DIFFERENT VOLTAGE LEVELS (I.E. 132 KV, 220 KV AND 400 KV LEVELS). A REPORT ON THE TRANSMISSION LOSS AT DIFFERENT VOLTAGE LEVELS FOR THE FY 2021-22 SHOULD BE FURNISHED LATEST BY 30.06.2022. FURTHER, A REPORT ON THE MONTH WISE TRANSMISSION LOSS IN INTRA-STATE TRANSMISSION SYSTEM AT DIFFERENT VOLTAGE LEVELS (I.E. 132 KV, 220 KV AND 400 KV LEVELS) FOR THE 1ST QUARTER OF FY 2022-23 SHOULD REACH THE COMMISSION BY 31.08.2022.

SUMMARY AND COMMENTS

CONSUMER COUNSEL

- OPTCL HAS PROPOSED TO CONSIDER:
 - AGGREGATE REVENUE REQUIREMENT OF **RS. 1102.00 CR.**
 - RECOVERY OF TRANSMISSION CHARGE @ **RS. 7725.20 /MW-DAY I.E. 32.19 PAISE/UNIT.**
 - TRANSMISSION LOSS FOR WHEELING AS **3.10%** ON ENERGY DRAWL
 - TRUING UP EXERCISE FOR THE FY 2021-22 AND CONSIDER THE DEFICIT AMOUNT OF **RS.25.16 CR.** AND THE CUMULATIVE DEFICIT OF **RS.254.13 CR.** (228.97+25.16) UP TO FY 21-22.
- HON'BLE COMMISSION MAY CONSIDER THE SUBMISSION OF CONSUMER COUNSEL AND FINALIZE THE TRANSMISSION TARIFF AT APPROPRIATE LEVEL.



THANK YOU !