



ANALYSIS OPTCL'S ARR AND TRANSMISSION TARIFF FY 2024-25

BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY, PUNE
(CONSUMER COUNSEL)

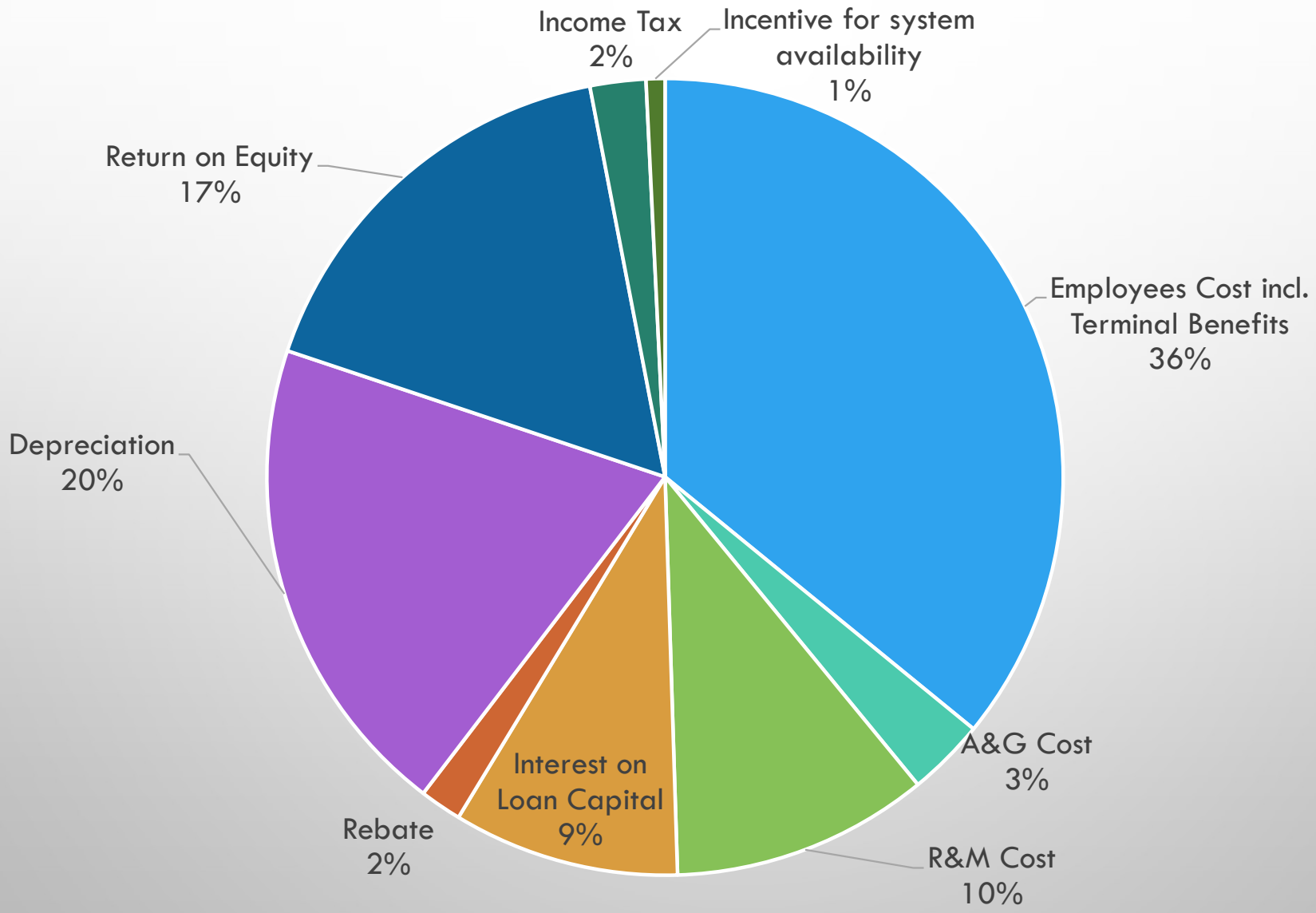
1 FEBRUARY, 2024

EXECUTIVE SUMMARY

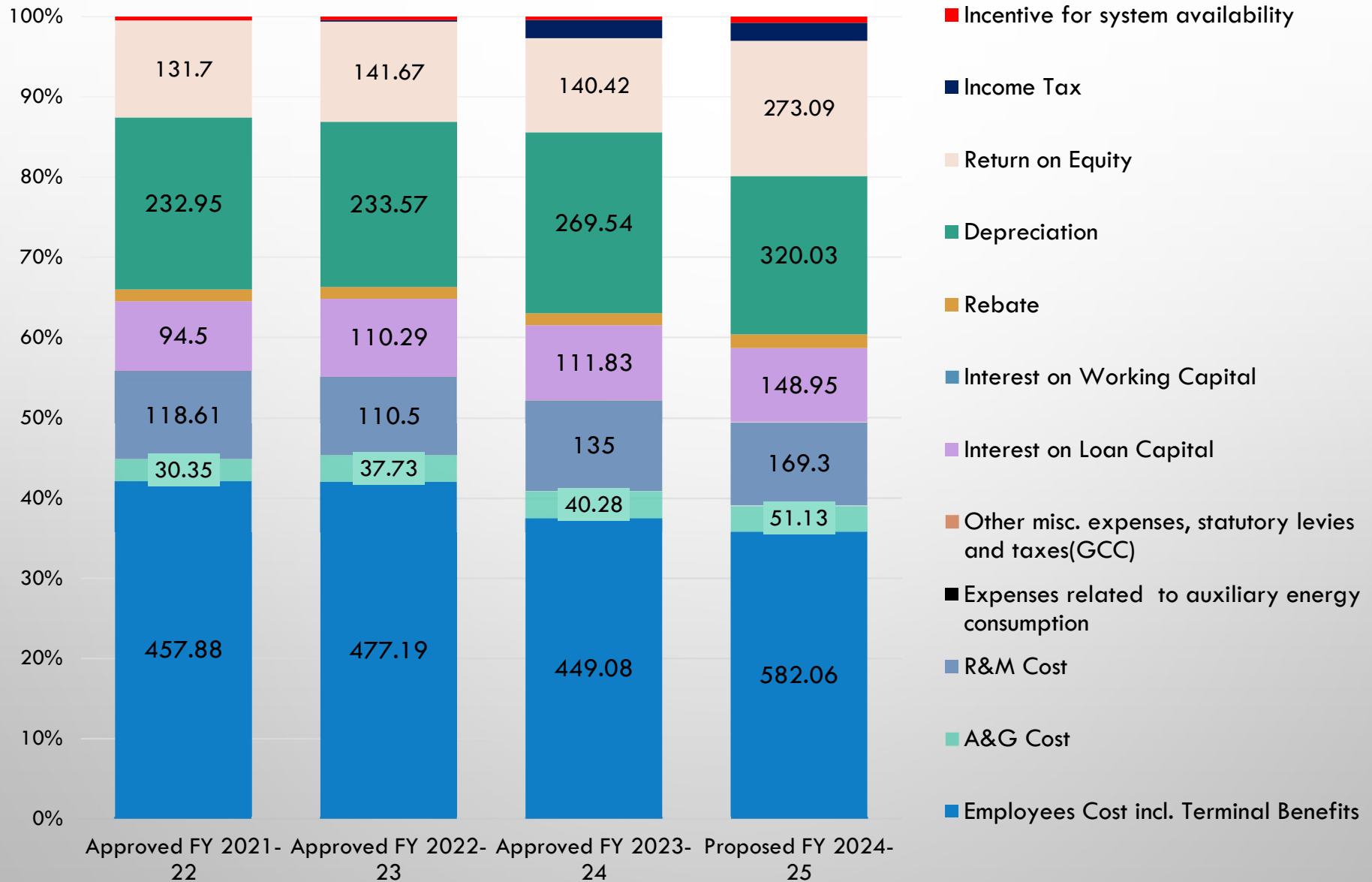
CONSUMER COUNSEL

- OPTCL HAS PROPOSED;
 - AGGREGATE REVENUE REQUIREMENT OF **RS. 1380.69 CR.**
 - RECOVERY OF TRANSMISSION CHARGE@ **RS. 9042/MW-DAY (I.E. EQUIVALENT OF 37.68 P/U ON THE BASIS OF ENERGY TRANSMITTED).**
 - TRANSMISSION LOSS FOR WHEELING AS **3.05%** ON ENERGY DRAWL
 - OPTCL PROPOSED TO CONSIDER **RS.41.67 CR.** DEFICIT GAP IN THE TRUING UP PROPOSAL FOR THE FY 2022-23 AND THE CUMULATIVE DEFICIT OF **RS.56.39CR.** (91.42-41.67-106.14)
- INCREASE IN TRANSMISSION TARIFF OVER PREVIOUS APPROVED OF 24 P/U IS DUE TO INCREASE IN EMPLOYEE COST INCL. TERMINAL BENEFITS, DEPRECIATION, ROE AND REBATE.

PROPOSED REVENUE REQUIREMENT FY 2024-25 (RS. CRORE)



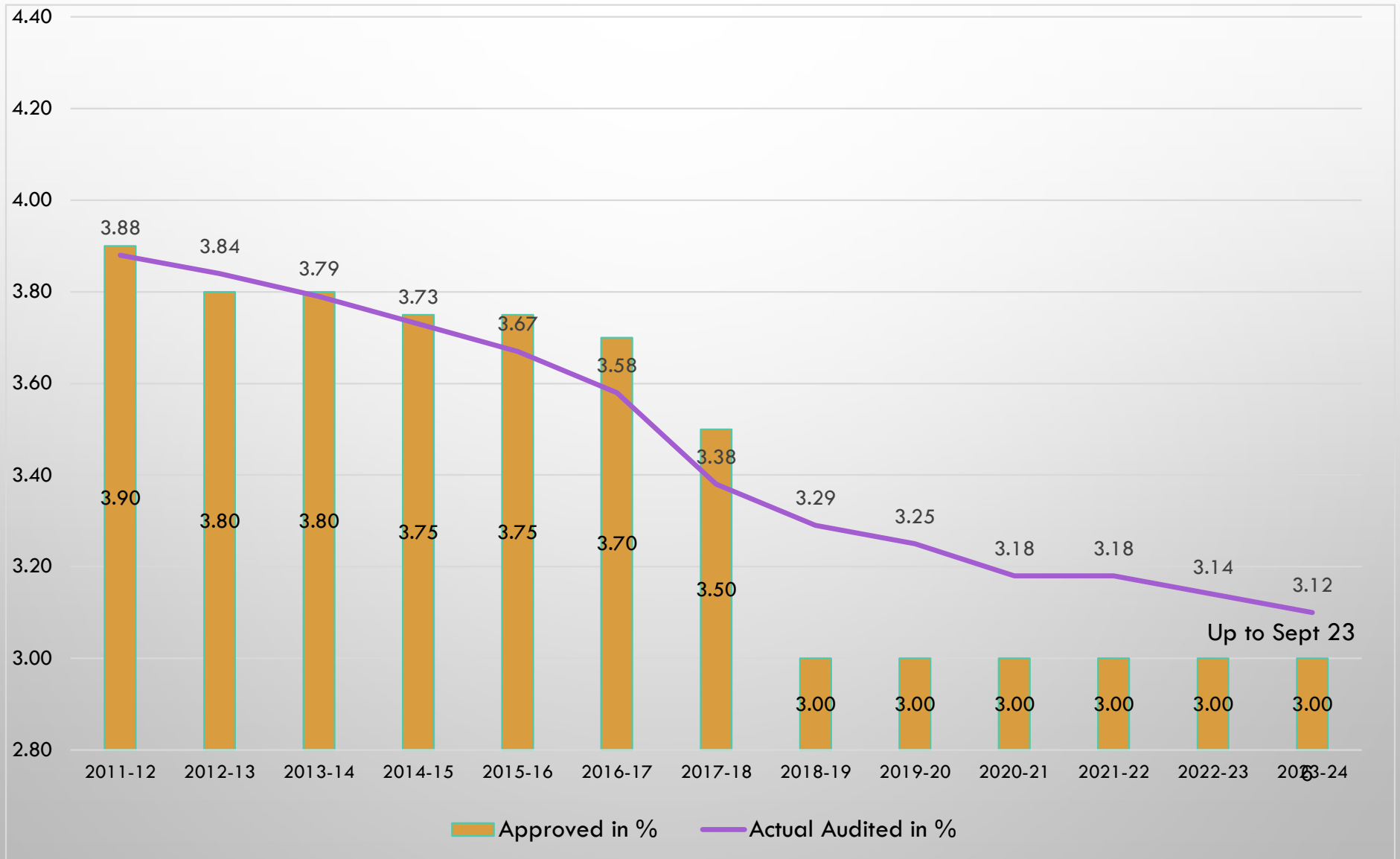
PROPOSED REVENUE REQUIREMENT TREND





ANALYSIS OF ARR AND TRANSMISSION TARIFF

TRANSMISSION LOSS



EMPLOYEE COST FY 2024-25 (RS. CRORE)

Particulars	Approved 2021-22	Approved 2022-23	Proposal 2023-24	Approved 2023-24	Ensuring 2024-25	% Increase 24-25 against 23-24
Salary & Allowance						
Basic Pay and Grade Pay	167.48	151.67	157.58	153.12	160.65	4.92%
Dearness Allowance	48.57	56.12	70.91	68.90	88.36	28.24%
House Rent Allowance	15.02	13.04	25.45	24.36	25.32	3.94%
Other Allowance and Bonus	0.83	1.00	1.22	0.98	1.61	64.29%
Stipend for New Recruitment and apprentice	7.26	8.46	5.30	5.30	20.45	285.84%
Arrear Salary for 7th Pay Commission	0	15.61	-	-	6.65	-
Sub-total (Salary and Allowance)	239.16	245.90	260.46	252.66	322.93	27.81%
Out Sources Engagement	2.57	2.94	3.30	3.30	6.03	82.73%
Other Employee Cost (LTA, Ex- gratia etc)	16.88	22.33	31.75	24.13	25.38	5.18%
Terminal Benefits incl. Pension Arrear for 7th Pay Commission	214.35	219.27	226.76	182.50	244.12	33.76%
Total Employees Cost	472.96	490.43	522.27	462.59	598.46	29.37%
Less: Employees Cost Capitalized	15.08	13.24	13.51	13.51	16.40	21.39%
Net Employee Cost	457.88	477.19	508.76	449.08	582.06	29.61%

EMPLOYEE COST INCL. TERMINAL BENEFITS

(REMARKS AND SUBMISSION)

- **BASIC PAY AND GRADE PAY:** BASIC PAY AND GRADE PAY PROPOSED FOR FY 24-25 = RS. **160.65** CR. IS BASED ON ACTUAL CASH FLOW FOR FY 23-24 WITH ADDITIONAL INCREMENT OF 3% AND AVERAGE NUMBER OF EMPLOYEE. OPTCL PROPOSED NEW EMPLOYEE ADDITION (REGULARIZED) DURING FY 24-25 AS 371, WHICH IS ON THE HIGHER SIDE IN COMPARISON TO PAST DATA (104 (FY 22-23) AND 111 (FY 23-24)). THE PRESENT STATUS OF INDUCTION OF 371 EMPLOYEES IN FY 2023-24 MAY BE EXPLAINED. PROPOSED INCREASE IN BASIC PAY OF NON-EXECUTIVE EMPLOYEES MAY BE VERIFIED.
- **DA:** OPTCL PROPOSED 55% DA FOR FY 2024-25, CONSIDERING FINANCE DEPT GUIDELINES. HOWEVER, ACTUAL INCREASE IN DA MAY BE REVIEWED.
- **HRA:** OPTCL PROPOSED HRA @19% ON 85% OF THE EMPLOYEES. ACTUAL CASH FLOW MAY BE CONSIDERED.
- **OUTSOURCING:** OPTCL IS FUNCTIONING WITH 50% OF MANPOWER AND HAS OUTSOURCED SERVICES. ACCORDINGLY, RS. 6.03 CR. HAS BEEN PROPOSED TOWARDS PAYMENT TO OUTSOURCED PERSONNEL ,WHICH IS 83% MORE THAN LAST YEAR APPROVED. THE SUDDEN INCREASE SHOULD BE REVIEWED.
- OPTCL IS PLANNING TO RECRUIT 371 NOS. EMPLOYEES DURING FY 2023-24 AND 467 NOS. IN FY 2024-25 AND HAS PROPOSED RS.14.06 CR. TOWARDS STIPEND FOR THE NEW RECRUITERS. CONSIDERING THE PAST TREND OF RECRUITMENT (INDUCTED IN FY 22-23: 111 AND FY 23-24: PROPOSED 371) THE SAME MAY BE REVIEWED. STIPEND TO APPRENTICE SHOULD BE REVIEWED.
- ACTUAL ADDITION OF EMPLOYEES IS LESSER THAN THE APPROVED (NEARLY 50%). STIPEND AND EMPLOYEE COST SHOULD BE APPROVED BY REVIEWING PROPOSED ADDITION OF EMPLOYEES.
- **TERMINAL BENEFITS** SHOULD BE REVIEWED ON THE BASIS OF ALREADY APPROVED TOTAL TERMINAL BENEFIT.

R & M EXPENSES

FY 2024-25 (RS. CRORE)

- OPTCL HAS PROPOSED INCREASE OF 25.41% OVER APPROVED R&M EXPENSES OF FY 23-24.
- ACTUAL EXPENDITURE IS RS 43.73 CR IN FIRST SIX MONTHS OF FY 2023-24 AND PROPOSED RS 90.27 CR FOR NEXT SIX MONTHS OF FY 2023-24.
- 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 47.52 CR AND GPS BASED LINE PATROLLING SYSTEM OF RS 4.92 CR MAY BE REVIEWED.

Year	Approved by OERC	Actual
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	111.16
2023-24	135.00	134.00 (est.)
2024-25		169.30

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

A & G EXPENSES

FY 2024-25 (RS. CRORE)

- OPTCL HAS ESTIMATED A&G EXPENSES OF **RS 51.13 CR** FOR FY 24-25.
- 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 HIRE CHARGES FOR VEHICLES.

Year	Approved by OERC	Actual
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	42.63
2023-24	40.28	43.81 (est.)
2024-25		51.13

Particulars	Projection (FY 2024-25)
Property Related Expenses	7.86
Communication	0.73
Professional Charges	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

SUMMARY O & M EXPENSES OPTCL

FY 2024-25 (RS. CRORE)

Summary of O&M Expenses for FY 2024-25	
Particulars	Amount (Rs. Cr.)
(i) Employees Cost including Terminal Benefits	582.06
(ii) A&G Cost	51.13
(iii) R&M Cost	169.30
(iv) Other miscellaneous expenses, Statutory levies and taxes (GCC expenses)	0.35
Total O&M Expenses	Rs. 802.84 Cr.

LOAN LIABILITY

FY 2024-25

Sl. No.	Particular	Rate of Interest	Principal as on 01.04.24	Loan to be received (FY24-25)	Interest payment (FY 24-25)
1	JICA	5.00%	484.57		23.17
2	REC Loan	9.50%	86.29		7.26
3	Union Bank of India-I	8.40%	385.50		30.42
4	Union Bank of India-II	8.65%	607.12		50.69
5	UCO Bank	8.00%	467.63		37.41
6	New Loan	8.00%	501.17	699.27	96.04
7		Grand Total	2532.28	699.27	148.95 (total 244.99- Capitalization of 96.04)

• **SUBMISSION:**

- INTEREST ON LOANS FROM REC, UNION BANK, JICA AS ON 1.4.2024 FOR SANCTIONED PROJECTS ONLY CAN BE APPROVED. IN F13, NEW LOAN OF RS. 501.17 CR. WAS SHOWN AS DRAWAL DURING JAN-MAR '22. THIS IS NOT MATCHING WITH PRINCIPAL OB AS ON 31.03.2022 AS GIVEN IN LAST YEAR ORDER.
- THE LOANS TO BE TAKEN AS NEW LOAN DURING FY 2024-25 SHOULD BE REVIEWED.
- THE INTEREST IMPACT OF NEW LOANS TO BE RECEIVED IN FY 2024-25 SHALL NOT BE ALLOWED IN THE ARR; AS PER EARLIER ORDERS.

CAPEX PLAN

FY 2024-25 (RS. CRORE)

Particulars	<u>FY 2021-22</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>FY 2024-25</u>
(i) Telecom Wing	28.30	29.30	54.70	29.78
(ii) Existing Assets (O&M Wing)	55.87	169.12	197.19	251.44
(iii) Information Technology (IT Wing)	28.95	25.34	30.51	10.76
(iv) Civil Wing	18.57	57.99	78.19	124.19
(v) New Transmission Projects (Construction Wing)	1229.67	1560.88	646.00	1135.97
Total Capital Expenditure [(i)+(ii)+(iii)+(iv)+(v)]	1361.36	1842.63	1006.59	1552.14

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 2024-25 (RS CR)

	Book Value of FA as on 1-4-2022 including Upvalued and Grant/Deposit Assets	Book Value of FA as on 01-4-2022 Depreciated (90%)	Upvaluation effect	Book Value of FA as on 01-4-2022 (Grant, Beneficiary & Deposit Assets	Book value of own Assets as on 1-4-2022 (on which Dep. Calculated)	Addition during FY 2022-23 (Approved)	Book value of own Assets as on 01-04-2023	Book value of FA added in FY 23-24	Book value of FA added in FY 24-25
Approved by OERC	8,273.20					309.94			
	<i>Submission:</i>	1631.99	512.71	1711.45	4,417.05	(Approved: 824.17)	4726.99		
	8274.51								
Submission					4931.07	309.94*	5241.01	631.99	694.13

* FY 22-23: Book value of FA added : 751.03Cr – FA depreciated 90%: 232.97 Cr – Grant etc added : 198.59 Cr.-Adjustment 9.53 Cr.

- THE BOOK VALUE OF TRANSMISSION FIXED ASSETS OF OPTCL IS RS. 5241.01 CR. ON AS ON 01-04-2023. DEPRECIATION WAS CALCULATED FOR FY 24-25 ON ASSETS OF RS 5873 CR.
- ACTUAL ADDITION DURING FY 2022-23 IS RS 309.94 CR, AFTER CONSIDERING GRANT, DEPOSIT ASSET, ASSET DEPRECIATED UPTO 90% SHOULD BE CONSIDERED.
- OPTCL PROPOSED ASSET ADDITION OF RS 631.99 CR AND RS 694.13 CR FOR FY 23-24 AND FY 24-25 RESPECTIVELY. THIS SHOULD BE REVIEWED AFTER CONSIDERING CONTRIBUTION FROM GRANT, DEPOSIT ASSET ETC
- BOOK VALUE OF ASSET AS ON 1.4.2023 SHOULD BE CONSIDERED FOR DEPRECIATION AFTER REVIEW OF ASSET ADDITION DURING FY 22-23.
- 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 2024-25 (RS. CRORE)

RETURN ON EQUITY

- OPTCL PROPOSES **ROE OF RS. 273.09 CR.** FOR FY 2024-25 @15.5% ON 30% OF GFA RS.5873 CR. EQUITY CONSIDERED BY THE PETITIONER RS. 2206.10 CR- CONVERSION OF BOND: RS.647.00CR. + RS. 100 CR(TO BE RECEIVED IN JAN 2024)+RS. 113.92 CR. (DURING FY 2024-25).
- THE ACTUAL EQUITY RECEIVED, TILL DATE, SHOULD BE CONSIDERED. BASED ON THE PROJECT WISE CWIP, THE EQUITY TO BE CONSIDERED FOR ROE MAY BE FINALIZED.

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 2022-23, OPTCL HAS MADE PROVISION OF RS. 36.69 CR AS INCOME TAX IN FY 2024-25.
- ACTUAL INCOME TAX AMOUNT BOOKED IN THE AUDITED ACCOUNT SHOULD₁₅ BE CONSIDERED.

SUMMARY AND TREND OF ARR

FY 2024-25 (RS. CRORE)

	Approved FY 2022-23	Approved FY 2023-24	Proposed FY 2024-25	Increase % 23-24 vs 22-23	Increase % 24-25 vs 23-24
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	110.50	135.00	169.30	22.17	25.41
Expenses related to auxiliary energy consumption			0.00	0	0
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	-	-	0.00	-	-
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	0.00	148.40
Total	1135.1	1,196.63	1621.63	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	1380.69	7.72	54.06
Transmission Charges (P/U)	28.00	24.00	37.68	-14.29	57.00

DEFICIT OF REVENUE REQUIREMENT

FY 2024-25

Deficit of Revenue Requirement as per existing transmission tariff @ 24 p/u (Rs. Cr.)	
Total Aggregate Revenue Requirement	1380.69
Less: Revenue earned from Long Term Open Access Customer	879.94*
Deficit in revenue requirement for FY 2024-25	- 500.75

* Including Rs. 0.46 Cr. Earning from RE projects under RE policy -2022

Sl. No.	Customer	Commission's approval (MU) (FY <u>23-24</u>)	Energy demand (MU) as per DISCOMs estimation (FY <u>24-25</u>)	Amount (Rs. Cr.)
1	TPCODL	11256	11470	861.41
2	TPNODL	7508	8161	
3	TPWODL	13286	11704	
4	TPSODL	4920	4917	
5	RAILWAYS	--	-	
6	Total DISCOMs	36970	36252	
7	Less: Drawal in 33kV & 11kV network	300	360	18.07 ¹⁷
8	Energy transmitted for DISCOM	36670	35892	
9	Wheeling to industries from CGPs & Emergency/Backup Sale to CGPs/Industries	678	753	
	Total	37348	36645	879.48

MISC INCOME PROPOSED FOR FY 24-25 (RS CR)

	Particulars	Proposed for Financial Year 2023-24	Approved Financial Year 2023-24	Estimates for ensuing year 2024-25 with current rate
i)	Short term Open Access	337.00	271.00	165.00
ii)	Transmission Charges for Inter State Sale	9.45	9.45	7.75
iii)	Income from Investment of fixed & call deposits & bank balance	15.00	15.00	20.00
iv)	Other Misc. Receipt	5.00	5.00	48.19
	Total of (i to iv)	366.45	300.45	240.00

During FY 2022-23 other Misc. receipt was Rs. 201.20 Cr. However, the same has been projected to be reduced considerably. The same may be reviewed.

OPEN ACCESS CHARGES

FY 2024-25

ABSTRACT OF OA CHARGES PROPOSED BY OPTCL FOR FY 2024-25	
DETAILS	In Rs. Per Unit approach
Net Aggregate Revenue Requirement (Rs. Cr.)	1380.69
Proposed Energy to be transmitted in OPTCL Network (MU) excluding MCL & ABReL SPV	36645
Power Flow (Equivalent of 36645 MU) in MWs	4183.22
Proposed Transmission Tariff (Rs./MW-Day)	9042
Proposed Transmission Charges (Paise/unit)	37.68
Open Access Charges (Approved 23-24)	Rs.5760.00/MW/day (Rs. 240/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.
- OPTCL IS DIRECTED TO CARRY OUT ENERGY AUDIT OF THE TRANSMISSION SYSTEM TO IDENTIFY AREAS WHERE LOSS IS MORE AND TO ASSESS THE LOSSES IN VARIOUS TRANSMISSION ELEMENTS (POWER TRANSFORMERS, TRANSMISSION LINES, PARTICULARLY OVER LOADED LINES, ETC.) AT DIFFERENT VOLTAGE LEVELS, (400 KV, 220 KV, 132 KV) AND PLAN ACCORDINGLY TO UNDERTAKE VARIOUS REMEDIAL MEASURES TO REDUCE TRANSMISSION LOSS .
- THE COMMISSION DESIRES THAT NO TRANSMISSION SYSTEM STRENGTHENING AND EXPANSION PROPOSALS SHOULD BE EXECUTED WITHOUT THE PRIOR APPROVAL OF THE COMMISSION. OPTCL SHOULD SUBMIT THE **COMPREHENSIVE SYSTEM STUDY ALONG WITH REQUIREMENTS** AS SPECIFIED IN THE LICENCE CONDITIONS OF OPTCL AND TARIFF REGULATIONS.
- THE COMMISSION DIRECTS OPTCL TO TAKE UP THE MATTER WITH GOVERNMENT OF ODISHA **TO FUND THE ECONOMICALLY UNVIABLE PROJECTS** REQUIRED FOR SOCIO ECONOMIC DEVELOPMENT ACTIVITIES AND FOR THE LARGER INTEREST OF THE STATE THROUGH GRANTS. THE COMMISSION, DIRECTED OPTCL TO HAVE A **PROJECT MONITORING CELL**, TO MONITOR THE PROGRESS OF PROJECTS, IDENTIFY THE BOTTLENECKS/CONSTRAINTS AND RESOLVE THE ISSUES FOR TIMELY EXECUTION OF THE PROJECTS.
- OPTCL IN ASSOCIATION WITH SLDC SHALL SUBMIT A REPORT ON TRANSMISSION LOSS AT DIFFERENT VOLTAGE LEVELS OF OPTCL'S TRANSMISSION NETWORK.. A REPORT ON THE TRANSMISSION LOSS AT DIFFERENT VOLTAGE LEVELS FOR THE FY 2022-23 SHOULD BE FURNISHED LATEST BY 30.06.2023. FURTHER, A REPORT ON THE MONTH WISE TRANSMISSION LOSS IN INTRA-STATE TRANSMISSION SYSTEM AT DIFFERENT VOLTAGE LEVELS (I.E. 132 KV, 220 KV AND 400 KV LEVELS) FOR THE 1ST QUARTER OF FY 2023-24 SHOULD REACH THE COMMISSION BY 31.08.2023.

SUMMARY AND COMMENTS

CONSUMER COUNSEL

- OPTCL HAS PROPOSED TO CONSIDER:
 - AGGREGATE REVENUE REQUIREMENT OF **RS. 1380.69 CR.**
 - RECOVERY OF TRANSMISSION CHARGE @ **RS. 9042/MW-DAY I.E. 37.68 PAISE/UNIT.**
 - TRANSMISSION LOSS FOR WHEELING AS **3.05%** ON ENERGY DRAWL
 - TRUING UP EXERCISE FOR THE FY 2022-23 AND CONSIDER THE DEFICIT AMOUNT OF **RS.41.67CR.**
 - CONSIDER RS. 106.14 CR. WHICH WERE NOT CONSIDERED APPROPRIATELY IN THE TRUING UP ORDERS FOR FY 2018-19. THE CUMULATIVE DEFICIT OF **RS.56.39 CR.** (91.42-41.67-106.14)

HON'BLE COMMISSION MAY CONSIDER THE SUBMISSION OF CONSUMER COUNSEL AND FINALIZE THE TRANSMISSION TARIFF AT APPROPRIATE LEVEL.

The background features a light gray gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text 'THANK YOU !' is centered in the middle of the image.

THANK YOU !