

TPWODL

TP WESTERN ODISHA
DISTRIBUTION LIMITED

(A Joint Venture of Tata Power and Government of Odisha)



ARR, OPEN ACCESS FY 24-25

ALONGWITH TRUING UP APPLICATION FY 20-21 & FY 21-22 (revised) & FY 22-23
BEFORE HON'BLE COMMISSION
DT.05.02.2024



Lighting up Lives!

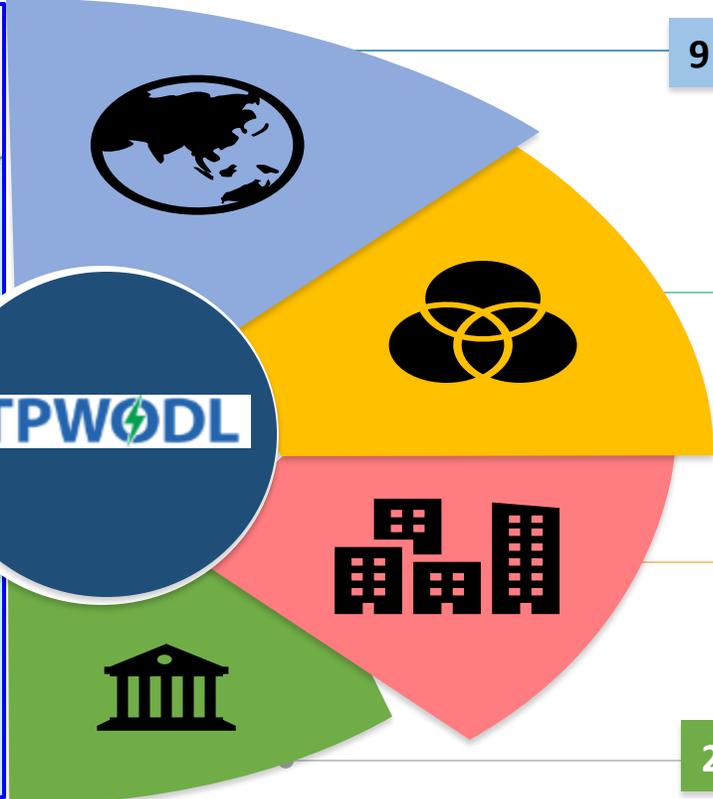
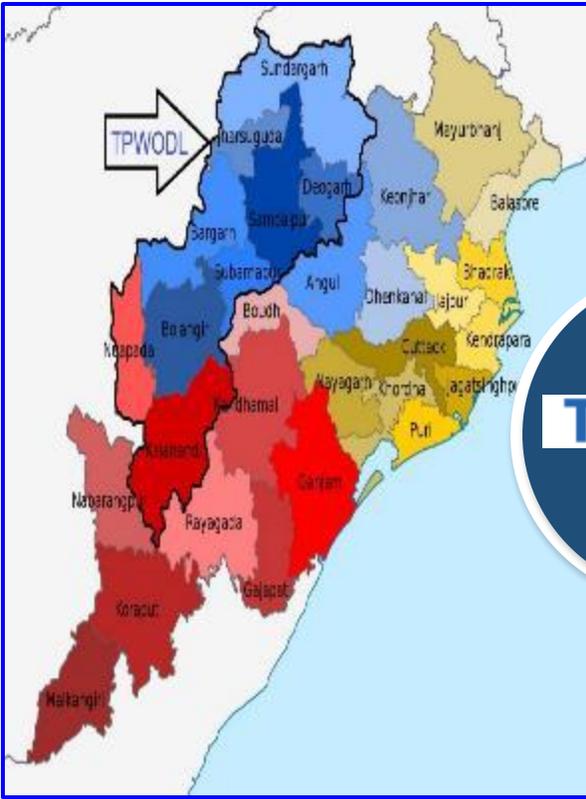
TPWODL at a glance



**88 Lakhs
Population Served**

**25.18 Lakhs
Total Consumer Base**

**48,373 sq. Kms
Distribution Area**



9 revenue districts of Odisha.

5 distribution Circles :
Rourkela
Sambalpur
Bargarh
Bolangir
Kalahandi

17 Division & 57 Sub - divisions

201 sections

- Sundargarh
- Jharsuguda
- Deogarh
- Sambalpur
- Bargarh
- Bolangir
- Sonepur
- Kalahandi
- Nuapada

**33/11 kV PSS
313 Nos.
4% ↑**

**No. of Power
Transformers: 689
5% ↑**

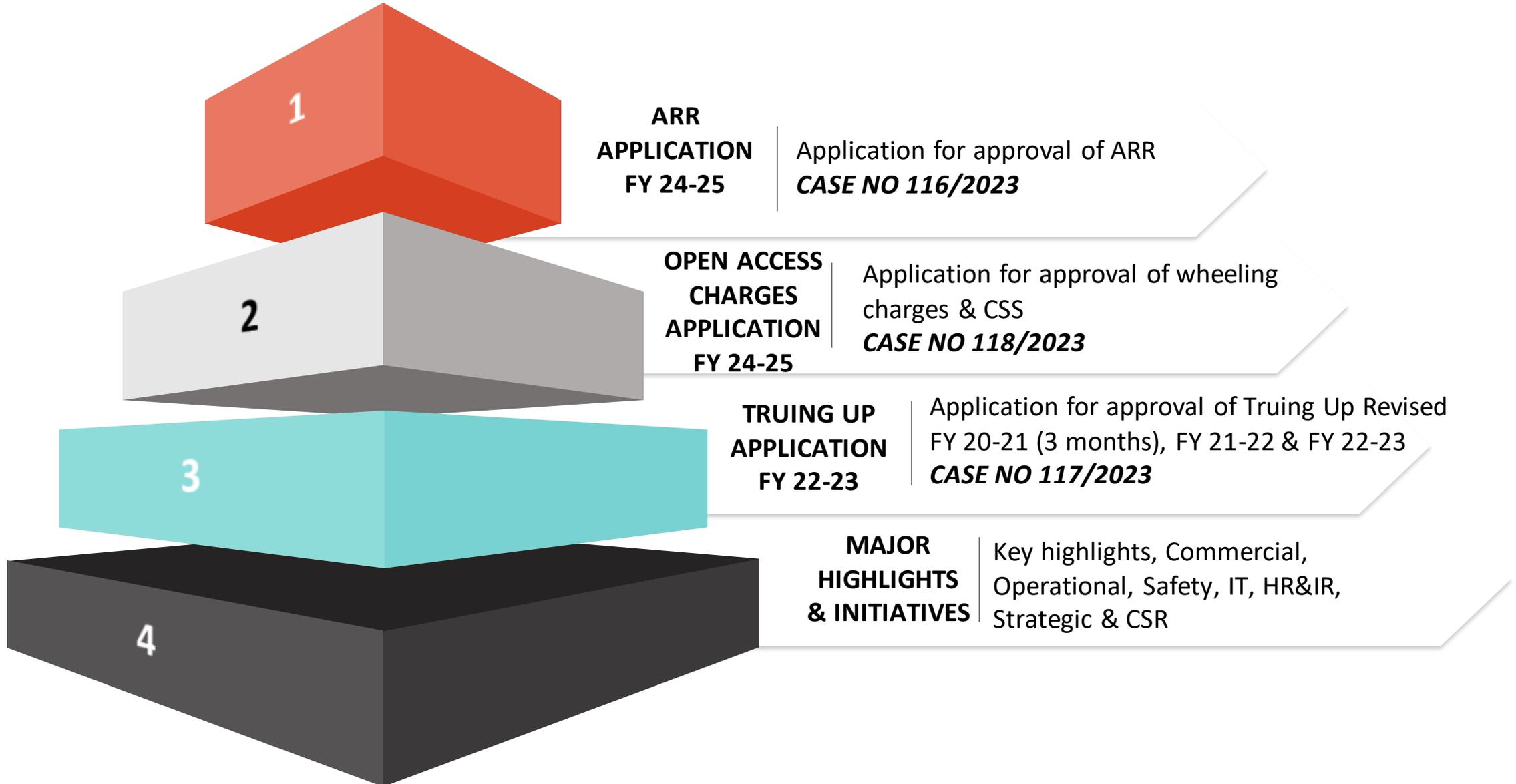
**No. of Distribution
Transformers: 76797
5% ↑**

**33KV Line:
5618 KM
9% ↑**

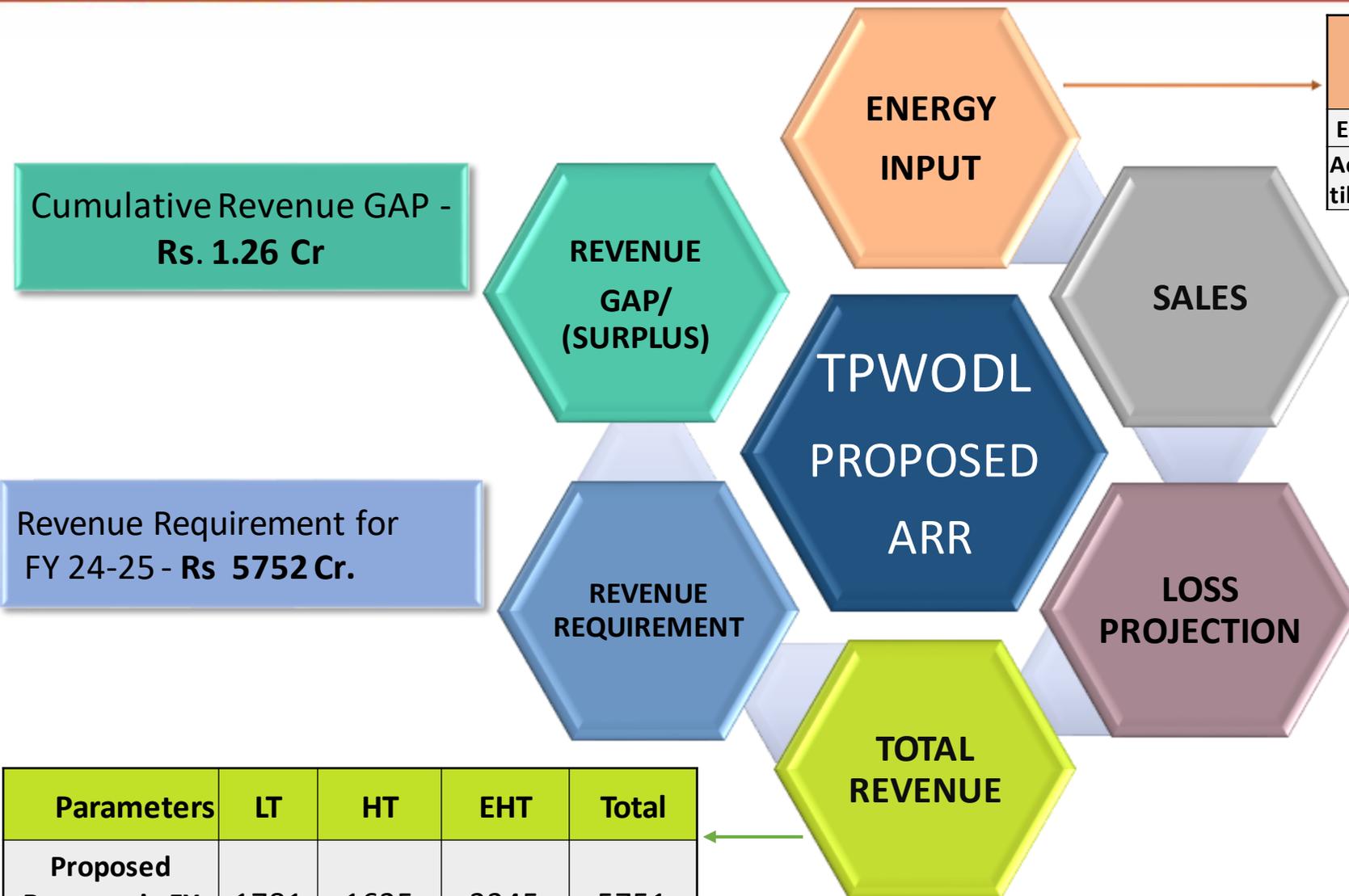
**11KV Line:
50,614 KM
2% ↑**

**LT Line:
65,714 KM
3% ↑**

AGENDA



ARR SYNOPSIS FY 24-25



Cumulative Revenue GAP -
Rs. 1.26 Cr

Revenue Requirement for
FY 24-25 - Rs 5752 Cr.

Parameters	LT	HT	EHT	Total
Proposed Revenue in FY 24-25 in Rs. Cr.	1781	1625	2345	5751

Parameters	FY-23 (Actual)	FY-24 (Rev. Est. - ARR) With TPA	FY-25 W/o TPA (Prop.)
Energy Input (MUs)	13002	13080	11524
Actual Energy Input till Dec-23 (MU)		9508 *	

Parameters	FY-23 (Actual)	FY-24 (Revised Estimated)	FY-25 W/O TPA (Proposed)
LT	2582	3341	3544
HT	2165	2444	2590
EHT	5863	4930	3480
Total (in Mus)	10610	10714	9614

Loss Parameters	2022-23 (Actual)	2023-24 (Est. in ARR)	2024-25 (Proposed)
Overall Distribution Loss(%)	18.40	18.08	16.57
Collection Efficiency(%)	100.14	99	99
AT& C Loss (%)	18.28	18.90	17.40
OERC Norms (AT&C)(%)	20.40	18.90	17.40
Actual AT&C(%) till Dec-23 (Prov.)		18.47	

* Achievement of approved 13286 MU may not be possible with current trend.



AGGREGATE REVENUE REQUIREMENT FY 24-25

Revenue GAP(+) / Surplus(-)



Revenue Gap with AT&C (18.90%)-Current Year FY 23-24

Parameters	Approved (Rs. Cr.)	Estimated (Rs. Cr.)
Power Purchase Cost excl. BSP surcharge	5528.46	5508.70
BSP surcharge	Not given	351.94
Total Power Purchase Cost	5528.46	5860.64
Distribution Cost incl. tax on ROE	1284.38	1381.61
Reasonable return on ROE after tax	57.59	107.41
Surplus carried over from past True ups	(-) 277.38	(-) 600
Sub Total	6593.05	6749.66
Revenue from sale of power at existing tariffs	6251.99	6282.69
Non-Tariff Income	400.33	460.21
Revenue GAP(+)/Surplus(-)	(-) 59.27	6.76

Surplus of past years shall be used to the extent of Rs. 600 Cr.

Revenue Gap with AT&C (17.41%)- Ensuing Year FY 24-25

Parameters	Proposed (Rs Cr)
Power Purchase Cost (without BSP Surcharge) (BSP @ Rs. 3.90/ u)	4770.69
Distribution Cost incl. tax on ROE	1603.44
Reasonable return on ROE after tax	135.43
Surplus carried over from past True ups	(-) 371.12
Sub Total	6138.45
Revenue from sale of power at existing tariffs	5751.16
Non-Tariff Income	386.01
Revenue GAP(+)/Surplus(-)	1.26

Surplus of past years shall be used to the extent of Rs. 371 Cr.

Proposed Revenue at Existing Tariffs for FY 24-25



LT CATEGORY

Category of Consumers	No of Consumers	Contract Demand	Sales	Net Revenue after incentive /surcharge & penalty
Units	Nos.	MVA	MU	Rs. Crores
Kutirjyoti (<=30KWH)	56309	20.742	20	5.41
DOMESTIC	1774138	1989.317	2340	1124.30
Total Domestic	1830447	2010.059	2360	1129.71
Total General Purpose (<100 KW)	104159	356.180	550	415.86
Irrigation Pumping and Agriculture	87615	277.843	360	58.11
Allied Agricultural Activities	852	6.883	11	1.85
Allied Agro-Industrial Activities	118	2.161	3	1.03
Public Lighting	4526	14.534	52	32.53
LT Industrial (S) Supply	3713	37.092	21	14.69
LT Industrial (M) Supply	1444	67.991	63	45.17
Specified Public Purpose	19590	45.781	64	42.00
Public Water Works<100KW	5022	37.064	60	39.38
Public Water Works >=100KW	19	1.938	0.1	0.40
General Purpose (>= 110 Kva)	2	0.32	0	0.06
LT TOTAL	2057507	2857.85	3544	1780.77

HT CATEGORY

Category of Consumers	No of Consumers	Contract Demand	Sales	Net Revenue after incentive /surcharge & penalty
Units	Nos.	MVA	MU	Rs. Crores
Bulk Supply- Domestic	31	9.99	23	11.35
Irrigation Pumping and Agriculture	45	139.523	85	37.46
Allied Agricultural Activities	8	1.779	6	0.87
Allied Agro-Industrial Activities	15	3.287	8	2.61
Specified Public Purpose	80	32.558	47	35.16
General Purpose (>70 KVA <=110 KVA)	0	0.00	0	0.00
General Purpose (>=110 KVA)	266	79.658	195	129.98
Public Water Works & Sewage Pumping	68	19.558	52	35.26
Large Industry	813	330.523	1297	856.06
Power Intensive Industry	13	95.550	690	376.19
Mini Steel Plant	5	37.350	230	136.43
Colony Consumption	0	0	7	3.49
HT TOTAL	1344	749.777	2590	1624.85

EHT CATEGORY

Category of Consumers	No of Consumers	Contract Demand	Sales	Net Revenue after incentive /surcharge & penalty
Units	Nos.	MVA	MU	Rs. Crores
General Purpose	2	0.221	0.46	0
Large Industry	12	145.000	645	395.43
Railway Traction	20	303.000	945	636.06
Heavy Industry	3	248.556	262	219.23
Power Intensive Industry *	7	526.667	1584	1071.65
Mini Steel Plant	1	5.00	8	5.56
Emergency Supply to CPP	1	5.00	1	0.80
Colony Consumption	0	0.00	35	16.81
Sale under TPA	0	200	0	0.00
EHT TOTAL	46	1433.44	3480	2345.54

Proposed SMD for FY 24-25 – 1850 MVA

Revenue GAP Analysis FY 24-25



Parameters	UoM	Approved FY 23-24	Estimated as per ARR FY 23-24	Projection Ensuing Year FY 24-25
Power Purchase Cost	MU	13286	13080	11524
Total power purchase cost (A)	Rs. Cr.	5528.46	5860.64*	4770.69
(*) Including BSP Surcharge		-		
Distribution Costs (B)				
a) Employees cost	Rs. Cr.	580.57	582.71	626.59
b) Repair and Maintenance cost	Rs. Cr.	281.99	281.99	336.86
c) Admin. & General Expenses	Rs. Cr.	158.12	191.09	245.87
d) Provision for bad and doubtful debts	Rs. Cr.	62.52	62.83	57.51
e) Depreciation	Rs. Cr.	72.93	91.58	125.98
f) Interest on loans and Working capital	Rs. Cr.	99.44	83.99	112.22
g) Interest on Security Deposits	Rs. Cr.	72.06	78.18	85.89
h) Return on equity Net of Tax	Rs. Cr.	57.59	107.41	135.43
i) Tax on ROE	Rs. Cr.		36.13	45.55
j) Carrying Cost on Reg. assets/liabilities	Rs. Cr.		-1.78	-0.59
k) Less expenses capitalized (Emp Costs)	Rs. Cr.	43.25	22.28	20.09
l) Less interest capitalized	Rs. Cr.		2.83	13.53
Total Distribution cost (B)	Rs. Cr.	1341.97	1489.02	1738.87
Regulatory Surplus (FY 21, 22 & 23)/Special appropriation (C)	Rs. Cr.	(-) 277.38	(-) 600	(-) 371.12
TOTAL COST (A +B + C)	Rs. Cr.	6593.05	6749.66	6138.45
Less Miscellaneous receipts	Rs. Cr.	400.33	460.21	386.02
Total Revenue Requirement	Rs. Cr.	6192.72	6289.45	5752.42
Revenue from tariffs (full year)	Rs. Cr.	6251.99	6282.69	5751.16
Revenue GAP(+)/ SURPLUS(-)	Rs. Cr.	(-) 59.27	6.76	1.26



Application for approval of ARR & RST for FY 24-25
CASE NO. 116 OF 2023
Tariff Rationalization Proposals FY 2024-25

Tariff Proposals – Continuation (1/2)



No	Proposal	Current	Proposed in ARR
1	Continuity of digital rebate of 4% for LT Domestic, LT GP single phase & Single-phase irrigation consumers	Presently Commission has approved 4% Digital rebate on payment by LT 1-ph Domestic & GP category w.e.f Apr'23.	Present market position is very dynamic and prone to digitalization. Door-to-door collection is becoming more costly and electrical customers require behavioral changes towards digital mode by provision of digital rebate. TPWODL proposes to continuity of digital rebate of 4%.
2	Discount to Domestic Rural Consumers	Presently there is 10 paise/ unit rebate on prompt payment to Domestic Rural consumers	TPWODL is proposing to continue the same 10 paise/ unit rebate in the ensuing year also.
3	Levy of CSS on RE power	Presently, Commission has introduced levy of CSS & wheeling charges on RE power if purchased from outside the state.	Proposal to continue the same practice for FY 2024-25, to promote more RE generation in the state of Odisha.
4	Special tariff to steel industry	Presently, Commission in the RST order dt. 23.03.2023 has extended continuation of special discount to steel industries connected in 33 kV level having load of 1MW and above.	In continuation to existing tariff mechanism for steel industries connected at 33 kV level (without CGP) it is also requested before Hon'ble Commission to extend a clarificatory direction regarding its applicability from the year (FY 22-23) when it was introduced while approving ARR.

Tariff Proposals – Continuation (2/2)



No	Proposal	Current	Proposed in ARR
5	Continuity of Special tariff for Existing industries having CGP if assured 80% LF of existing CD (<20 MW) – Bi-partite	Presently, as per RST Order dt. 23.03.2023 OERC has made certain departure and directed for prior permission from GRIDCO.	During the current year prior approval of GRIDCO on monthly basis is a hurdle & not gaining acceptability to the consumers. Hence, while approving the continuity of the scheme for FY 24-25, prior approval of GRIDCO may not be required till DISCOM are operating within their approved SMD.
6	Continuity of Special tariff for Existing industries having CGP with CD >20 MW with minimum offtake 80% of existing CD – Tri-Partite (TPA)	Presently, as per RST Order dt. 23.03.2023, industries having CGP with CD are allowed to avail intermittent surplus power from DISCOMs beyond 80% of load factor at a tariff of Rs. 5.00/ kVAh, by entering into a special tripartite agreement with GRIDCO (Bulk Supplier), DISCOMs.	Proposal to continue the scheme in the ensuing year also with bucket filling method. In addition, an industry availing this benefit shall not be permitted to avail benefit of another scheme.
7	Continuation of Green Tariff Premium (GTP) mechanism with reduced rate of 25 p/u.	Presently, Commission has launched premium rate for RE power. Consumer has to pay additional 25 paise per unit as premium over and above the normal rate of energy charges.	With reduction in price of RE power in the market RE certification charges also reduced. Proposal to continue GTP @ 25 paise/ unit for the ensuing year, which will be win-win for all the stake holders. Some of the objectors requested for reduction, Hon'ble Commission may take a suitable decision in this regard.

Tariff Proposals – New (1/3)



No	Proposal	Current	Proposed in ARR
1	Additional. Rebate of Rs. 10/ month if opting for E-Bill	Presently, there is no such rebate to consumers.	<p>At present substantial amount is spent on MBC activities. Demand for Smart meters has been increased and consumers with smart meters can be served with E-bill without any additional cost.</p> <p>Proposal of Rs.10/ p.m. additional rebate over and above all other rebates where a consumer desires/opt for E-bill instead of physical bill.</p> <p>If provision of E-mail ID will be mandated the consumer can also get many information/communication from the licensee.</p>
2	Processing fee for each services as per Regulation	<p>Presently, the Licensees are directed to serve the consumer for their different requirement apart from Billing and collection activities.</p> <p>As per existing Regulation, for new connection the processing fee has been defined as Rs.50/-per application.</p>	<p>Licensee is spending considerable amount for services such as Change of name, Category Change, name correction, address correction /Change etc.</p> <p>DISCOM proposes charges for each services extended:</p> <ul style="list-style-type: none"> a) Change of Category – Rs. 100/- b) New Connection / Load Change – Rs. 100/- c) Change/correction of Name or address, Ownership change/modification – Rs. 100/-.
3	Uniform Tariff for a specific category of Consumer as per load instead of Voltage of Supply	Presently few consumers are covered under LT & HT for Tariff purposes considering their Voltage of Supply, which creates many confusions and disparity.	<p>To avoid confusion the DISCOM proposes that basis upon the consumers contract demand/connected load and metering type (LT or HT) tariff may be fixed.</p> <p>Benefits:</p> <ul style="list-style-type: none"> •Consumers with load>70 kVA with metering at HT shall be billed under HT Tariff and transformer loss shall be added while billing when metering is at LT side. •LT consumers (Load <70 KVA) to be billed as per slab rate and transformer Loss will not be levied. •Uniformity in tariff category and Metering side.

Tariff Proposals – New (2/3)



No	Proposal	Current	Proposed in ARR
4	Charges for Temporary Supply	Currently allowed with payment of 10% higher on energy charges.	DISCOM proposes for construction purposes, GP tariff may be made applicable for all types of construction irrespective of future tariff category upon completion of construction activity. (Upon completion they may be covered on appropriate category)
5	Creation of Category for Mega lift points under EHT and applicability of Demand Charges	Presently, there is no such tariff category under EHT for Mega lift category, TPWODL is billing them with HT irrigation category where demand charges & energy charges are very nominal.	TPWODL proposes for creation of separate category under EHT with demand charges of Rs.250 per kVA and energy charges under graded slab method.
6	Special tariff for industries those who have closed their units if reopen/starts	Presently there is no special tariff who have closed their industry.	TPWODL is proposing special tariff for closed industries who want to reopen again. Incentive may be given @ 20% on entire units consumed if achieves 60% L.F. in a month. Closed Industry may be permitted at 11kV or 33kV level with minimum CD of 500 kW. Industries opting this benefit shall not be eligible for open access. The scheme will be for FY 2024-25 only.
7	Special tariff for existing industries who have no CGP for drawl of additional power beyond CD of 10 MVA	Presently there is no special tariff.	TPWODL is proposing special rate if consumer ensuring 85% LF. Load reduction shall not be allowed during the financial year. Industry availing this benefit shall not be permitted to avail benefit of another scheme and open access shall not be permitted.

Tariff Proposals – New (3/3)



No	Proposal	Current	Proposed in ARR
8	Special tariff for Industries for temporary business requirement	As per existing regulation temporary supply is permitted to meet temporary needs i.e. fairs, festivals, religious functions or seasonal business or for temp. construction. Energy Charges shall be 10% higher as compared to the regular connection. However, no such provision is there for Industries.	Under TPWODL area there are around 24 industries having their own CGP . They may require power during annual maintenance of their units from DISCOM . TPWODL proposes to approve/permit such temporary additional load beyond CD for short period of maximum 3 months. Industry has to bear 10% higher charges on both normal Demand and energy component . Such additional consumption will contribute towards revenue enhancement and will help to protect risk of tariff enhancement.
9	Minimum offtake for the industries having CGP	Presently the BST of all the DISCOMs is with composite of Energy and Demand charges. Considering the approved SMD composite BST is determined by OERC. Major impact is due to the CGP industries who are keeping their CD, but not using the DISCOM energy. GRIDCO facing difficulty in arranging power as they are drawing without prior intimation or scheduling.	Proposal of minimum off take (25%) of the requirement commensurate with their CD or Demand charges has to be on installed capacity instead of CD.
10	Revision of Reconnection Charges with penalty clause	Presently, reconnection charges w.e.f. 01.04.2023 is continuing since last 11 years even though BST and RST of DISCOMs have increased no. of times. <u>Continuing Reconnection charges –</u> LT single phase Domestic – Rs. 150/- LT single phase Others – Rs. 400/- LT 3 phase – Rs. 600/- All HT & EHT – Rs. 3000/-	TPWODL proposes in the event of consumer found reconnected without paying, formal reconnection charges shall be imposed with 10 times of the reconnection charges . <u>Proposed Reconnection charges –</u> LT single phase Domestic – Rs. 300/- LT single phase Others – Rs. 800/- LT 3 phase – Rs. 1200/- All HT & EHT – Rs. 6000/-

Tariff Proposals – Other (1/3)



No	Proposal	Current	Proposed in ARR
1	Billing with Defective Meter	<p>Presently, provisional billing is allowed for a maximum period of three months in case of defective meter.</p> <p>In case of meter not accessible, two billing cycle is permitted for provisional billing.</p>	<p>TPWODL proposes for a practice direction may kindly be given in the RST order FY 24-25 for revision of the provisional bill in case of defective meter, considering the past corresponding period's actual consumption.</p> <p>Basing upon actual consumption during the succeeding six-month period, necessary sundry debit shall be made if the actual consumption in succeeding month is less than or more than the past corresponding period's actual consumption.</p> <p>Further, Bill revision of past period till 15th July-23(as per OTS Order) was permitted which may kindly be extended for benefit of all stakeholder.</p>
2	Combined Application form replacing Form-I & Form-II	<p>Presently, a Domestic & GP consumer is opting Form-I for New Service Connection / Load enhancement/ Load reduction/ Reconnection /Change of Name/ Shifting/ Temporary Supply/ Conversion of Service/ Change of consumer category and Form-II is applicable to other category of consumers for New Connection/Load Reduction/Load Enhancement/ Change of Name.</p>	<p>Consumers are confused about the application form which one they must choose (Form-I or Form-II) due to which the Licensee is unable to capture the detailed information about the consumer.</p> <p>Proposal to introduce a single application form which is beneficial for both consumers and Licensee.</p> <p>Hon'ble OERC may direct/allow through practice direction to adopt a common Application Form till Regulation is amended.</p>
3	Creation of Energy Police station	<p>Before take over, there were 10 no of EPS across 9 revenue districts of TPWODL.</p>	<p>TPWODL proposes to accord approval of necessary additional A&G cost and may direct Govt of Odisha for creation of EPS across all the divisions of TPWODL.</p> <p>TPWODL has plans for setting up of at least 2 EPS, in two circles (Bargarh & Bolangir). It is a belief of TPWODL that establishment of EPS will contribute towards 5T vision of the State.</p>

Tariff Proposals – Other (2/3)



No	Proposal	Current	Proposed in ARR
4	Consideration of Load Factor in case of Theft of energy	As per present regulation, separate assessment method is available for unauthorized use. Considering field condition, assessment for unauthorized use is not possible adhering extant regulation.	Proposal that if a consumer found using electricity unauthorizedly, in such case the assessment must be made with LF basis. In case of Domestic - 30% LF, GP - 60% LF & in case of continuous process industries, assessment may be done with 100% LF.
5	Meter Cost to be included in CAPEX instead of Meter Rent	Presently, not included in CAPEX.	Consumers are reluctant to allow meter replacement. Recovery of meter rent through installation of smart meters is becoming more challenging now-a-days. Hence, the entire new connection as well as replacement of defective meter may be permitted through Smart meter only. Further, replacement of old meter with smart meters as per Reg. 113(v) of Supply Code, 2019 with adjustment of balance cost of old meters irrespective of ageing. Therefore, the DISCOM is of the opinion in case of replacement of old meters with smart meters there shall not be any adjustment if the meter cost of old meter if fully recovered.
6	Levy of DPS on electricity bills	Presently, OERC had discontinued the practice of levy of DPS on the Electricity Bills in the RST Order for FY 2023-24	Due to discontinuation of Levy of DPS, willful delay in payment is observed in consumers. Hence, TPWODL proposes the following: <ul style="list-style-type: none"> DPS would be applicable only on the undisputed portion. Increase the Due Date of consumers to 30 days from 7 days where bill delivery is delayed. Proposal to consider re-introducing the DPS for LT Domestic, LT General Purpose and HT Bulk Supply Domestic Consumers.

Tariff Proposals – Other (3/3)



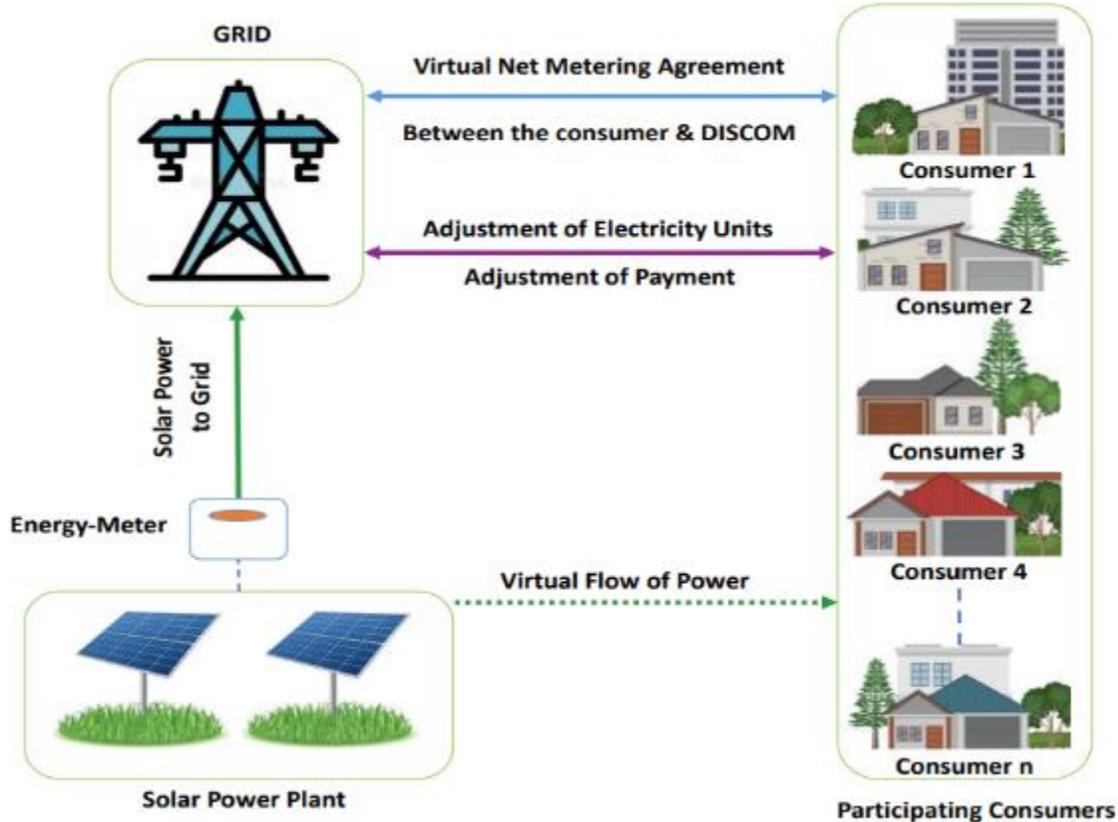
No	Proposal	Current	Proposed in ARR
7	Pro rata billing	Presently, OERC vide letter dated 06.06.2022 denied pro-rata billing in all cases other than in cases of commencement or termination of supply. DISCOMS are directed to follow Regulation 109 (on billing cycle period) with provision of +/- 3 days.	Proposal to permit pro-rata adjustment of Slabs limits based on actual days of billing vis-à-vis the standard norm of 30 days (365 Days/ 12) to ensure that the Consumers get the full slab benefit.

Other Submissions before OERC

No	Issues	TPWODL Submission
1	Issue regarding CD enhancement of Vedanta Limited & Non-Drawal of RSP affecting EHT Sales	<ul style="list-style-type: none"> Due to non-approval of additional load, TPWODL lost Rs. 30 Cr. till now as assured fixed cost from the high value consumers even though we are operating well within the approved SMD. Further, there is uncertainty of RSP drawal due to increased self-generation. The load of RSP around 170 MVA is almost idle.
2	Sharing of Green Tariff Premium with GRIDCO in the ratio of 80:20	<ul style="list-style-type: none"> Tariff Order for FY 23-24 mandates an addnl. 25 p/kWh for consumers opting for 100% green energy and seeking a green consumer certificate. TPWODL is actively encouraging industries to utilize DISCOM power. GRIDCO purchases power, including RE power, to meet the state's needs. Any surplus RE Power can be sold via open access. If GRIDCO can't procure power for DISCOMs, DISCOMs can source it independently as per the vesting order. The suggestion of GRIDCO for sharing of GTP in ratio of 80:20 is not a fair proposal.



Rooftop Solar through VNM Model as per MNRE Guidelines Target: 5 MW in FY 25



Financial Outlay

- MNRE Sanction:** CFA for 20 MW at Rs. 18,000 per kWp, totaling around Rs. 30 Cr.
- Proposed Funding Components for rural households:**
 - State Funding:** For 20 MW at Rs. 20,000 per kWp totaling around Rs.40 Cr.
 - By DISCOMs:** For 20 MW at Rs. 17,000 per kWp totaling around Rs. 34 Cr.

Proposed Budgetary Provision DISCOM wise

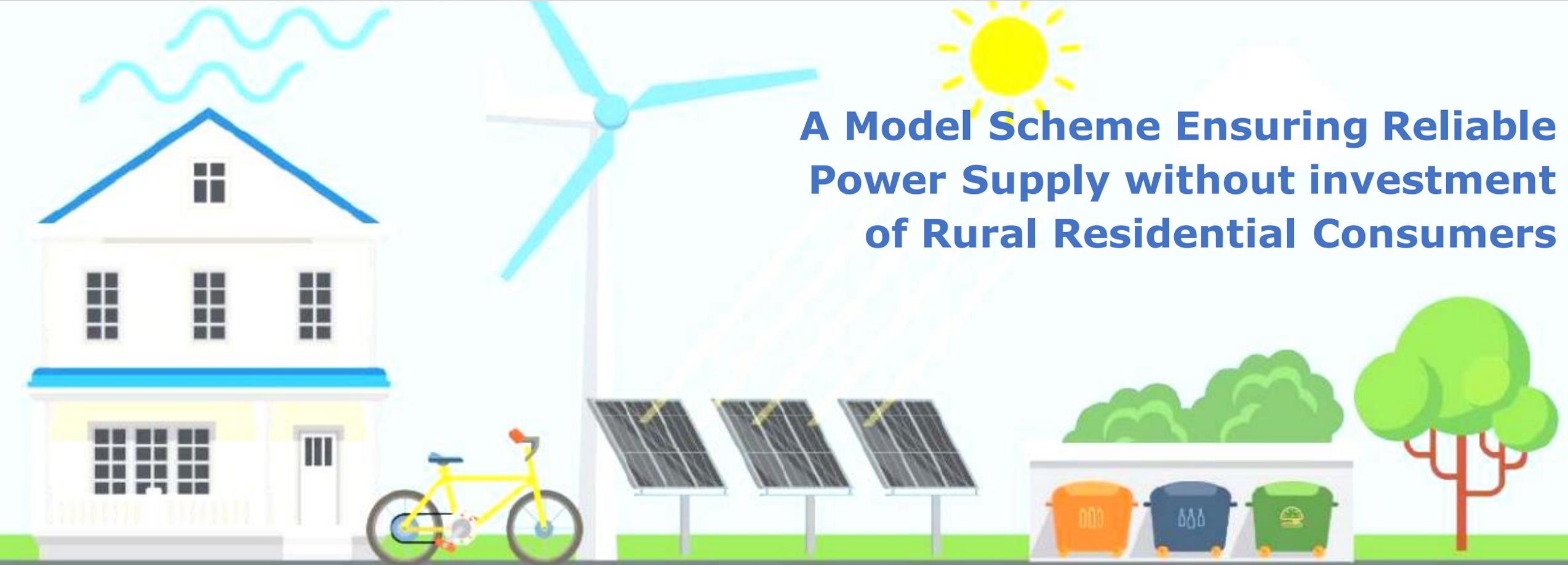
DISCOM	Proposed Capacity	Budgetary Provision		Total
	FY- 24-25	By State Govt (Rs.20000/kw)	By DISCOMs (Rs.17000/kw)	
	MW	Rs. Cr.	Rs. Cr.	
TPWODL	5	10	8.5	18.50
TPCODL	5	10	8.5	18.50
TPNODL	5	10	8.5	18.50
TPSODL	5	10	8.5	18.50
Total	20	40	34	74

- Hon'ble Commission is requested to allow Rs. 8.5 Cr. to the DISCOM under DSM for FY-25 to execute the program.
- State Govt. may kindly be directed for extending SFA Rs. 10 Cr. to TPWODL for FY-25.



Model Scheme to Solarise Rural Households through Community Solarization mechanism under RTS-II

A Model Scheme Ensuring Reliable Power Supply without investment of Rural Residential Consumers



Existing Scenario of Rooftop Solar & Challenges



- ❖ GOI, on 30th February 2019 approved Phase II of 'Grid Connected Rooftop and Small Power Plants Program.
- ❖ Distribution Companies of Odisha has received the allocation order of 20 MW (05 MW each) from Ministry of New and Renewable Energy (MNRE), Govt. of India vide No. 318/63/2019-GCRT dated 19.01.2022
- ❖ **Subsidy:** Recent Amendment in CFA Admissibility for Residential Rooftop Solar Projects

CFA to Residential Individual House Holds

Project Capacity	Applicable CFA
1-3 kW	Rs. 18,000/kW
Above 3-10 kW	Rs. 9,000/kW

CFA to Resident Welfare Association /Group Housing Society (RWA/GHS)

Project Capacity	Applicable CFA
For Common facility up to 500kW @10kW per house	Rs. 9,000/kW

- ✓ **Existing scheme :**
 - A. Implementing Agency: Respective DISCOMs
 - B. Domestic Electricity Consumer can avail Subsidy under RTS Phase II
- ✓ **Challenges in the Existing scheme :**
 - A. **Rural homes are less interested** in Rooftop Solar
Financial constraints, **low & subsidized** electricity tariffs.
 - B. Awareness

RTS Progress till date in Odisha under Subsidy Scheme

Sr No	Discom	No of Installations	Capacity (MW)
1	TPCODL	70	0.276
2	TPNODL	35	0.104
3	TPSODL	38	0.136
4	TPWODL	18	0.086
5	Total	161	0.602

State's Regulations/ Guidelines:

1. OERC Net Metering Regulation Dated :19.08.2016
2. OERC Net Metering Regulation amended : 05.05.2022 (VNM & GNM).
3. OERC Order dated 23.02.2023 regarding SoP of Solar Net Metering, Gross Metering, VNM & GNM.
4. Odisha RE Policy- 2022

MNRE allowed Subsidy to Rural Households under VNM mechanism as per RTS scheme

DISCOM's Difficulties & Scope in Rural Segment



Present Position of the DISCOMs in Rural Segment:

- ✓ High Distribution Loss
- ✓ Difficulties in MBC activity
- ✓ Effective Power Purchase cost is higher due to T&D Loss.
- ✓ Lower **collection efficiency** in Rural Area
- ✓ Loss of margin due to **gap between Power Purchase and Realization**

DISCOM Loss in Rural LT Segment

Particulars	TPWODL	TPCODL	TPNODL	TPSODL
Each 100 unit of Sale in Rural Segment	100	100	100	100
Distribution Loss (approved as per ARR FY-23-24)*	35%	24%	24%	26%
For each 100 unit of Sale requirement of Power	135	124	124	126
Power Purchase Cost per unit (Rs./kWh)	4.14	3.29	3.59	2.34
Ultimate Power Purchase Cost (Rs.) to serve	558	410	447	295
Avg. billing in Rs. with existing tariff	390	390	390	390
Loss due to gap between Power Purchase and Billing (A)	168	20	57	-95
Collection Efficiency of Rural Area (Assumed)	70%	75%	75%	80%
Annual Loss in Rs. due to CE (B)	117.00	97.50	97.50	78.00
Total loss (A+B)	284.69	117.02	154.34	-17.17
Loss percentage upon ultimate Power Purchase Cost	51.05%	28.58%	34.54%	-5.82%

*Actual loss is higher

RTS adoption in Rural Segment is a Challenge:

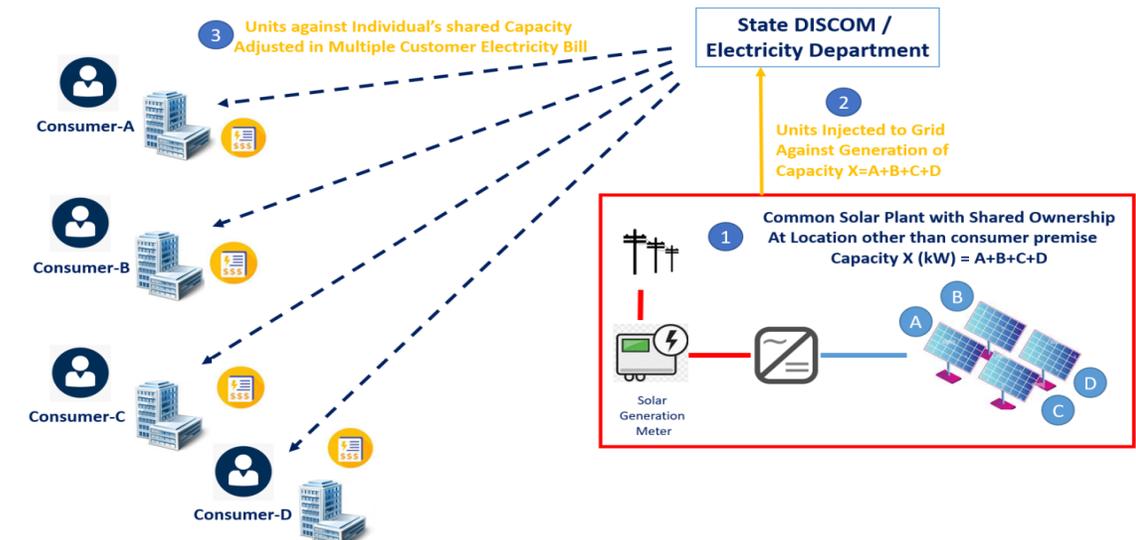
- ❖ Financial constraints
- ❖ **Low & subsidized** electricity tariffs
- ❖ Installation & O&M Support thereof in Rural area
- ❖ Awareness

Why a Scheme is required for Rural Electricity Consumer:

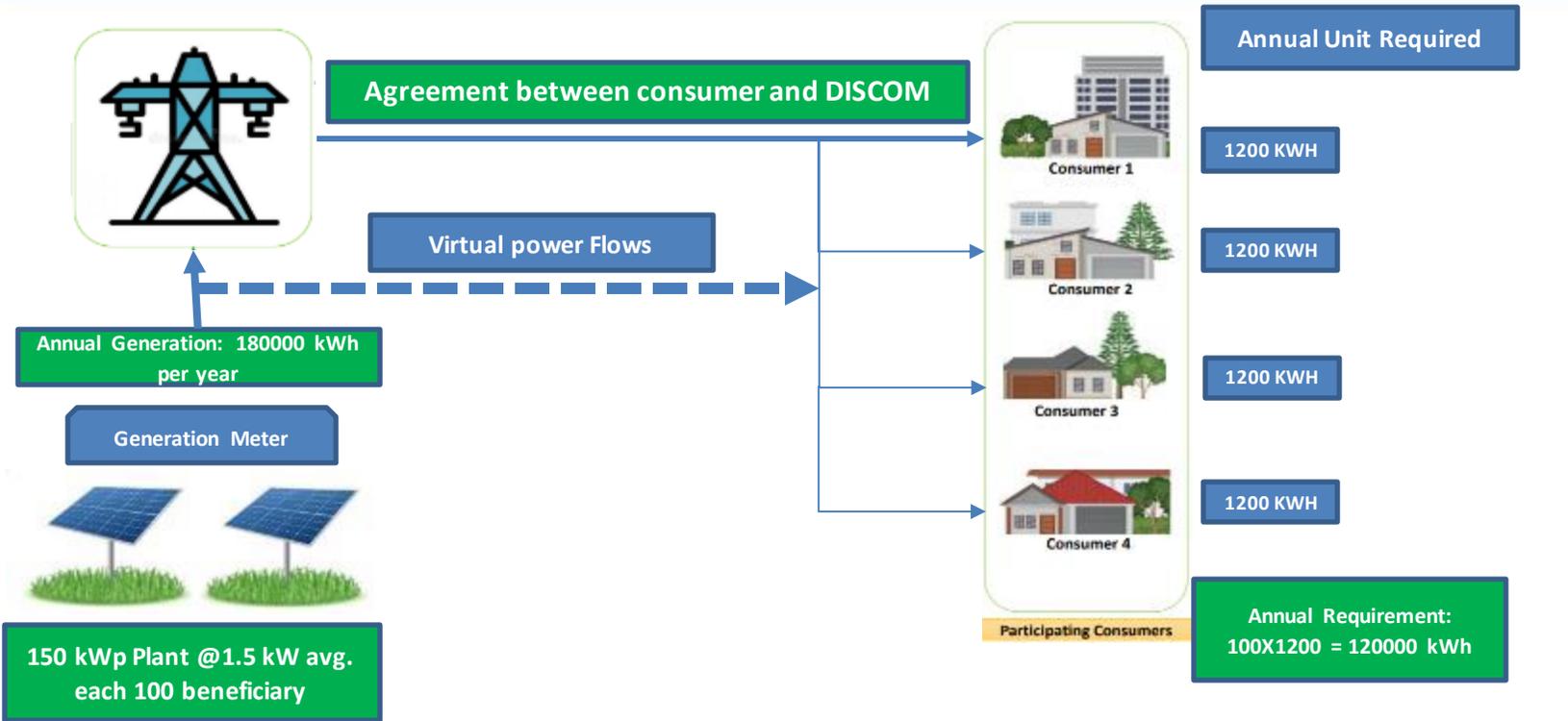
- ✓ Extending the Benefit of RTS in the Rural Area
- ✓ Reliable Power Supply to RHH

Embedded features in the proposed scheme:

- ✓ No investment required by Rural HH
- ✓ Free electricity up to the share of Subsidy
- ✓ DISCOM responsible for Installation & O&M thereof
- ✓ Saving in Power Purchase by DISCOM
- ✓ No Loss/Minimum Loss due to Generation at Consumer End.



Proposed Model Project & Energy Accounting Mechanism



Participating Rural HH	100Nos
Avg. Load per HH	1.5 KW
Proposed Plant Capacity	150 KW
Cost per kWp	Rs. 55,000
CFA	Rs. 18,000
SFA (Proposed)	Rs. 20,000
DISCOM towards PC	Rs. 17,000
Addl. Cost for OPEX (Lum sum) *	

Project Capacity	kW	150
Total Annual Generation	Unit	180000
Estimated Project Cost	Rs. Lakh	82.50
MNRE Subsidy	Rs. Lakh	27.00
Proposed State Subsidy	Rs. Lakh	30.00
Proposed DISCOM Share: 1- towards Project Cost	Rs. Lakh	25.50
* DISCOM Share: 2 - towards OPEX (AMC, RENT, W&W & interest)	TPWODL	Rs. 11.38 Lakh
	TPCODL	Rs. 12.65 Lakh
	TPNODL	Rs. 12.65 Lakh
	TPSODL	Rs. 16.48 Lakh

- Opex Consist of:**
1. Interest on W.C.
 2. Lease Rent
 3. Watch & Ward (till 5th Year)
 4. AMC 6th Year onwards incl. W&W

Allocation of Generated Energy



Project Capacity & Project Financing							DISCOM add. Investment towards OPEX				Total Generation (kWh) 4unit/day/kWp for 300 days	Consumer Energy Share			
							TPWODL	TPCODL	TPNODL	TPSODL		TPWODL	TPCODL	TPNODL	TPSODL
Consumer	CD in kW	Proposed SFA (Rs.)	MNRE CFA (Rs.)	Total Aid (Rs.)	Project Cost (Rs.) @Rs. 55 per Wp	DISCOM Share towards Project Cost in Rs.	DISCOM Share towards OPEX (AMC, RENT, W&W & interest) (Rs.)	DISCOM Share towards OPEX (AMC, RENT, W&W & interest) (Rs.)	DISCOM Share towards OPEX (AMC, RENT, W&W & interest) (Rs.)	DISCOM Share towards OPEX (AMC, RENT, W&W & interest) (Rs.)	Individual Annual Share (kWh)	Individual Annual Share (kWh)	Individual Annual Share (kWh)	Individual Annual Share (kWh)	
1	1	20000	18000	38000	55000	17000	Interest Accrued up to repayment @10%	180000	729	719	719	691			
2	1.5	30000	27000	57000	82500	25500						1093	1078	1078	1037
3	2	40000	36000	76000	110000	34000						1457	1438	1438	1382
4	1.5	30000	27000	57000	82500	25500						1093	1078	1078	1037
5	3	60000	54000	114000	165000	51000						2186	2157	2157	2073
6	2	40000	36000	76000	110000	34000						1457	1438	1438	1382
7	2.5	50000	45000	95000	137500	42500						1822	1797	1797	1728
8	1.5	30000	27000	57000	82500	25500						1093	1078	1078	1037
9	1	20000	18000	38000	55000	17000						729	719	719	691
10	3	60000	54000	114000	165000	51000						2186	2157	2157	2073
11-100*	131	2620000	2358000	4978000	7205000	2227000	95450	94171	94171	90532					
	150	3000000	2700000	5700000	8250000	2550000	109294	107830	107830	103663					
*Assumed load of Balance 90 Consumer							Total Project Cost	9387500	9515000	9515000	9897500				

DISCOM Investment 1: towards Project Cost

DISCOM Investment 2: towards OPEX (AMC, RENT, W&W & interest)

DISCOM	TPWODL	TPCODL	TPNODL	TPSODL
Consumer Share (%)	60.72%	59.91%	59.91%	57.59%
DISCOM Share (%)	39.28%	40.09%	40.09%	42.41%
DISCOM Share (kWh)	70706	72170	72170	76337

DISCOMs saving in Power Purchase & Payback Calculation



DISCOM	UoM	TPWODL	TPCODL	TPNODL	TPSODL
Total Annual Generation from Proposed SPV Plant 150kWP	unit	180000	180000	180000	180000
Annual Energy Share of DISCOM (residual energy)	unit	70706	72170	72170	76337
Saving in Power Purchase Cost from residual energy (in Lakhs) (A)	Lakhs	2.93	2.38	2.59	1.79
Saving due to sale of DISCOM share of energy @ LT average Rs.4.98/unit (in Lakhs) (B)	Lakhs	3.52	3.59	3.59	3.80
Avoidable Energy Purchase (Present Power purchase) (unit)	Unit	147174	135980	135977	137614
Cost of that Energy in Lakhs (C)	Lakhs	6.10	4.48	4.88	3.22
Total Annual Impact D=(A+B+C)	Lakhs	12.54	10.45	11.07	8.81
Less:-Existing level of Billing & Collection which will be stopped to the extent of free energy to Consumers (E)	Lakhs	2.98	3.15	3.15	3.23
Net Annual Savings F=D-E	Lakhs	9.56	7.29	7.92	5.58
Share of DISCOM's Investment	Lakhs	₹ 25.50	₹ 25.50	₹ 25.50	₹ 25.50
Opex Cost to be considered in Payback Ccalculation					
Interest Accrued up to repayment @10% on reducing balance	Lakhs	₹ 6.38	₹ 7.65	₹ 7.65	₹ 11.48
Cost of Lease Rent & watch & ward up to 5th Year @1Lakh/Year after 5th year will be covered through AMC	Lakhs	₹ 5.00	₹ 5.00	₹ 5.00	₹ 5.00
Total cost G	Lakhs	₹ 36.88	₹ 38.15	₹ 38.15	₹ 41.98
Payback period	Years	3.86	5.23	4.82	7.53
After repayment of Principal Watch & Ward, Lease rent & AMC shall be taken care out of Annual Saving as indicated as Annual impact					

Challenges

Mitigation plan

- Availability of Land/roof top
- Selection of beneficiary
- Protection of solar plant

- Option of Govt land shall be exercise first. In absence of same govt land, private/beneficiary/beneficiaries land on lease rent basis.
- Beneficiary selection will be with approval of District administration
- Cost of R&M including watch & ward to be met by reducing beneficiary share of power.
- Night Surveillance with CCTV integration with DISCOM Call Center

Reason for DISCOM Investment & Way forward



Reason for DISCOM investment	DISCOM investment will help in reducing in T&D Loss at LT Level. Share of Generation to the extent of investment will be allotted to DISCOM. Hence saving in Power Purchase
Proposal for SFA @ 20000/- per kW per Households	Recently GoO on 4 th Jan 2024 allowed Rs. 20,000/- per kW to residential H/H in Bhubaneswar only. Request to extend the same for Rural segment for providing free Electricity to the Rural Households.
Proposal to Regulator for Approval	Repayment of Loan, interest amount, Cost of Watch & Ward, AMC after 6 th Year will be paid out of avoidable power purchase cost & Share/ Adjustment of Generated Energy as per Investment.
Proposed Land	Govt. / Private land may be used for the purpose of setting up SPV Plant. However, Lease Agreement for a period of 25 years to be made between DISCOM Land-owner, the Lease Rent Amount will be paid as per the terms.

Scheme Benefits



Benefits to Rural Consumer:-

- a) No need to invest a single rupee
- b) Free electricity almost more than 100 units per month (Subject to Solar plant size and no of beneficiary)
- c) Benefit to Landowner/owners out of lease rent
- d) Reliable power supply

Benefit to Govt:

- a) No direct subsidy is required
- b) Beneficiaries will get free electricity up to 100 units if Govt desires to extend SFA in line with CFA (MNRE)
- c) Contribution towards carbon neutrality

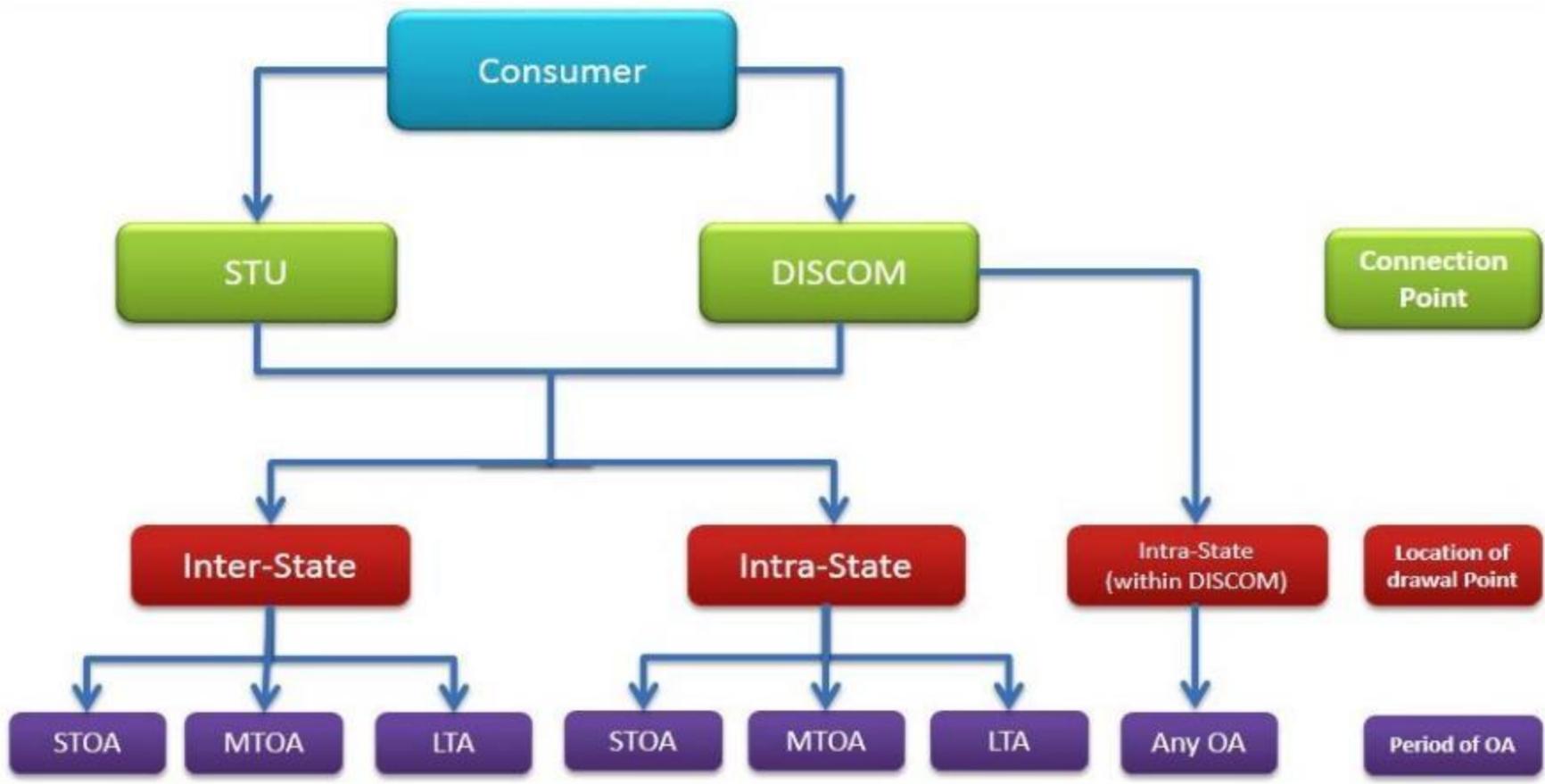
Other High end Consumer:-

Cross Subsidy quantum will be reduced & hence cost reflective tariff

Benefit to other

GRIDCO :

- a) Burden on power sourcing will be reduced.
- b) Contribute towards RPO



Determination of Wheeling Charges

* HT Loss considered @ 8% only.

	EHT	HT	LT	TOTAL
Input received in the system(MU)	11524	8044	4810	
Proposed Input (MU) for 24-25	3480	3234	4810	11524
Proposed Sale (MU) for 24-25	3480	2590	3544	9614
Loss (MU)	0	644	1266	1910

Wheeling cost per kWh is **152 paise**

The calculation for the same is:

Total wheeling cost for FY 24–25(in Cr)
Input received in the system from HT(in MUs)

$$\left[\frac{1221.82}{8044} \times 1000 \right]$$

SI No.	Cost/Income Component	ARR for FY 24-25 (Cr)	Assumption Ratio for consideration in Wheeling Business	Assumption Ratio for consideration in Retail Supply Business	Wheeling Cost for FY 24-25 (Cr)	Retail Supply Cost for FY 24-25 (Cr)
1	Cost of Power	4492.23	0%	100%	231.67	4260.56
2	Transmission Charges	276.41	0%	100%	18.02	258.39
3	SLDC Charges	2.06	0%	100%	2.06	0.00
	Total power purchase cost *	4770.69			251.74	4518.95
	O&M					
4	Employee Cost	606.50	60%	40%	363.90	242.60
5	Repair & Maintenance Cost	336.86	90%	10%	303.18	33.69
6	Administrative & General Expenses	245.87	50%	50%	122.93	122.93
7	Bad & Doubtful Debt including Rebate	57.51	0%	100%	0.00	57.51
8	Depreciation	125.98	90%	10%	113.39	12.60
	Interest on Loans					
9	for Capital loan	31.56	90%	10%	28.41	3.16
10	for Working capital	67.12	10%	90%	6.71	60.41
11	Interest on Security Deposits	85.89	0%	100%	0.00	85.89
12	Return on Equity	135.43	90%	10%	121.89	13.54
13	Tax on ROE	45.55	90%	10%	41.00	4.56
14	Carrying cost on Regulatory Assets/Liabilities	0.59	10%	90%	0.06	0.53
	Special Appropriation					
15	Amortization of Regulatory Assets	0.00	25%	75%	0.00	0.00
16	True Up of Current year	-371.12	25%	75%	-92.78	-278.34
17	Other, if any-Contingency Reserve	0.00	100%	0%	0.00	0.00
	Grand Total	6138.45			1260.42	4878.02
	Miscellaneous Receipt					
18	Non-Tariff Income	386.02	10%	90%	38.60	347.42
	Net Costs	5752.42			1221.82	4530.60

Determination of CSS



Determination of Surcharge for EHT category of Consumers

Total EHT Sales proposed for FY 2024-25 in MU	Proposed ARR for EHT Category (Rs in Crore)	Average Tariff (P/KWH) (T)*	Cost of Power Purchase (P/KWH) (C)	Wheeling Charge (P/KWH) (D)	System Loss(%) (L)	Regulatory Asset (P/KWH)	Surcharge (P/KWH)(T – (C/(1-L/100) + D + R))
3480.00	2345.54	652.15	414.00	0	0	0	238

Determination of Surcharge for HT category of Consumers

Total HT Sales proposed for FY 2024-25 in MU	Proposed ARR for HT Category (Rs in Crore)	Average Tariff (P/KWH) (T)*	Cost of Power Purchase (P/KWH) (C)	Wheeling Charge (P/KWH) (D)	System Loss(%) (L)	Regulatory Asset (P/KWH)	Surcharge (P/KWH)(T – (C/(1-L/100) + D + R))
2590.00	1624.85	627.36	414	152	8	0	25

*Average Tariff has been calculated based on kVAh quantum as kVAh billing has been started from 04.04.21



**Application for approval of Truing Up for FY 20-21 (revised), FY 21-22
(revised) & FY 22-23
CASE NO. 117 OF 2023**

Statement of Revised Truing Up Calculation FY 20-21



Expenditure (Rs. Cr.)	Approved in ARR FY 20-21	Audited (3 Months)	Allowed in Prov. True-Up	TPWODL Revised Submission FY 20-21
Cost of Power Purchase	2633.22	689.80	660.68	665.15
Employee Cost	361.02	101.70	101.70	116.38
Repair & Maintenance	92.24	5.75	5.75	5.75
Administrative and General Expenses	52.80	36.76	13.20	22.07
Provision for Bad & Doubtful Debts	22.95	8.53	5.74	8.53
Depreciation	61.40	16.40	15.35	16.40
Interest on Working Capital	0.00	2.95	2.95	2.95
Interest Chargeable to Revenue (Including SD)	38.62	8.00	8.00	8.00
Interest on Long term loans	14.58	0.00	0.00	0.00
(A) Total Expenses	3276.83	869.89	813.36	845.23
(B) Total Special Appropriation	0.00	0.00	0.00	0.00
(C) Return on Equity	7.78	0.00	12.00	12.00
TOTAL (A+B+C)	3284.61	869.89	825.36	857.23
Less: Misc. Receipt/ CSS	191.39	91.50	91.50	91.50
Total Revenue Requirement	3093.22	778.39	733.86	765.72
Revenue from Sale of Power	3128.91	847.62	847.62	847.62
GAP(-)/ Surplus (+)	35.69	69.23	113.76	81.90

Parameters	Allowed in Prov. True Up	TPWODL Revised Submission FY 20-21
Approved AT&C Loss (%)	19.60	20.40
Normative Collection Efficiency (%)	99	99
Calculated Dist Loss(%)	18.79	19.60
Actual Sales (MU)	1561.53	1561.53
Actual Power Purchase(MU)	2013.06	2013.06
Normative Power Purchase(MU)	1922.78	1942.10
Additional Power Purchase (MU)	90.28	70.96
Approved BSP incl. Tx. (P/ kWh)	322.60	34.60
Amount eligible for loss or gain (Rs. Cr.)	29.12	24.66

- ❖ **Change in Power Purchase Cost** on a/c of loss/gain (*erroneous consideration of T&D loss of 19.6% instead of AT&C Loss of 20.4%. Approved BSP considered incl. Tx. Charges*).
- ❖ **Emp. Cost includes** outsourced & contractual cost (booked under A&G as per a/c – **Rs. 14.68 Cr.**)
- ❖ **A&G expenses may be** considered taking into account the ground realities and initial setup cost incurred due to takeover process.
- ❖ **Prov. of Bad debts** considered as per 1% on actual revenue billed as approved.
- ❖ **Depreciation** considered as per audited accounts (*even pro-rating actual incurred by WESCO till Dec-20 – Rs. 48.32 Cr Q4 portion would be Rs. 16.11 Cr*).

Hon'ble OERC is requested not to consider WESCO period's approval for Truing up of 3 months (FY 20-21) - TPWODL's period..

Statement of Revised Truing Up Calculation FY 21-22 (with unbilled revenue)



Expenditure (Rs. Cr.)	Approved in ARR & ABP FY 21-22	FY 2021-22 (Audited)	Allowed in Prov. True-Up	TPWODL Revised Submission FY 21-22
Cost of Power Purchase	3140.48	3338.17	3310.91	3340.43
Employee Cost	409.49	456.35	412.35	473.45
Repair & Maintenance	160.00	137.06	137.05	137.06
Administrative and General Expenses	103.17	146.23	103.17	113.27
Provision for Bad & Doubtful Debts	27.42	45.03	45.03	45.03
Depreciation	36.34	81.12	24.45	24.45
Interest on Working capital	34.37	9.98	9.98	9.98
Interest on Consumer SD	0.00	32.95	32.95	32.95
Sub-Total	3911.27	4246.89	4075.90	4176.61
Less: Emp. Cost capitalized	0.00	5.64	5.64	5.64
(A) Total Expenses	3911.27	4241.25	4081.54	4170.97
Return on Equity	48.00	63.74	52.79	52.79
Income Tax	0.00	21.45	0.00	21.79
(B) Sub-Total	48.00	85.19	52.79	74.58
Total (A+B)	3959.27	4326.44	4134.33	4245.55
Less: Misc. Receipt/ CSS	237.45	234.36	142.67	142.67
Total Revenue Requirement	3721.82	4092.08	3991.66	4102.88
Revenue from Sale of Power	3705.75	4691.86	4691.86	4691.86
GAP(-)/ Surplus (+)	-16.07	599.78	700.20	588.98

❖ **Change in Power Purchase Cost** on a/c of loss/gain (Sales considered incl. unbilled quantum and Approved BSP considered incl. Tx. Charges).

❖ **Emp. Cost includes** outsourced & contractual cost (booked under A&G **Rs. 32.96 Cr** as per a/c) and cost of permitted recruitment (**Rs. 28.14 Cr.**)

❖ **A&G and R&M expenses** to be considered in toto (**Rs. 250.32 Cr.**) considering ground realities which is well within limits of total approved R&M and A&G cost (**Rs. 263.17 Cr.**)

❖ **Due to oversight/clerical error Emp. Cost capitalized** has been added instead of deduction.

❖ **Income Tax** considered on grossed up RoE (actual tax paid is **Rs. 33.13 Cr.**)

Statement of Revised Truing Up Calculation FY 21-22 (without unbilled revenue)



Expenditure (Rs. Cr.)	Approved in ARR & ABP FY 21-22	FY 2021-22 (Audited)	Allowed in Prov. True-Up	TPWODL Revised Submission FY 21-22
Cost of Power Purchase	3140.48	3338.17	3310.91	3308.65
Employee Cost	409.49	456.35	412.35	473.45
Repair & Maintenance	160.00	137.06	137.05	137.05
Administrative and General Expenses	103.17	146.23	103.17	113.27
Provision for Bad & Doubtful Debts	27.42	45.03	45.03	45.03
Depreciation	36.34	81.12	24.45	24.45
Interest on Working capital	34.37	9.98	9.98	9.98
Interest on Consumer SD	0.00	32.95	32.95	32.95
Sub-Total	3911.27	4246.89	4075.90	4144.83
Less: Emp. Cost capitalized	0.00	5.64	5.64	5.64
(A) Total Expenses	3911.27	4241.25	4081.54	4139.19
Return on Equity	48.00	63.74	52.79	52.79
Income Tax	0.00	21.45	0.00	21.79
(B) Sub-Total	48.00	85.19	52.79	74.58
Total (A+B)	3959.27	4326.44	4134.33	4213.77
Less: Misc. Receipt/ CSS	237.45	234.36	142.67	142.67
Total Revenue Requirement	3721.82	4092.08	3991.66	4071.10
Revenue from Sale of Power	3705.75	4691.86	4691.86	4609.32
GAP(-)/ Surplus (+)	-16.07	599.78	700.20	538.22

❖ **Change in Power Purchase Cost** on a/c of loss/gain (Sales considered excl. unbilled quantum – **69.301 MU** and Approved BSP considered incl. Tx. Charges).

❖ **Emp. Cost includes** outsourced & contractual cost (booked under A&G – **Rs. 32.96 Cr.** as per a/c) and cost of permitted recruitment (**Rs. 28.14 Cr.**)

❖ **A&G and R&M expenses** to be considered in toto (**Rs. 250.32 Cr.**) considering ground realities which is well within limits of total approved R&M and A&G cost (**Rs. 263.17 Cr.**).

❖ **Due to oversight/clerical error Emp. Cost capitalized** has been added instead of deduction.

❖ **Income Tax** considered on grossed up RoE (actual tax paid is **Rs. 33.13 Cr.**)

❖ Unbilled Revenue – **Rs. 82.54 Cr.** not considered in **Revenue from Sale of Power.**

Statement of Truing Up Application FY 22-23



Expenditure (Rs. Cr.)	Approved in ARR & ABP FY 22-23	(Audited) FY 22-23	TPWODL Submission FY 22-23
Cost of Power Purchase (A)	3610.07	5094.79	5169.93
Employee Cost	474.83	467.40	474.40
Repair & Maintenance	156.03	237.56	237.56
Administrative and General Expenses	110.39	153.46	146.45
Provision for Bad & Doubtful Debts	27.87	129.41	61.81
Depreciation	46.52	44.27	44.27
Interest on Working capital & Finance Cost	7.00	21.15	67.55
Interest on Consumer SD	37.50	63.94	63.94
Total O&M and Other Cost	860.14	1117.19	1095.98
Less: Emp. Cost capitalized	21.18	15.23	15.23
Less: Interest Capitalized	0.00	3.64	3.64
Add: Return on Equity	48.00	67.21	67.21
Add: Income Tax	0.00	31.94	22.61
Total Distribution Cost	886.96	1197.47	1166.93
Less : Misc. Receipt	267.69	233.99	218.33
Less: CSS/ Open Access Charges	0.00	540.07	540.07
Net Distribution Cost (B)	619.27	423.40	408.52
Less: Prov. Surplus considered	150.00	-	-
Total Revenue Requirement (A+B)	4079.34	5518.20	5578.45
Total Revenue (Full year) on accrual basis	4119.48	6180.86	6180.86
GAP(-)/ Surplus (+)	40.14	662.66	602.41

- ❖ **Change in Power Purchase Cost** on a/c of loss/gain (*Approved BSP considered incl. Tx. Charges*).
- ❖ **Emp. Cost includes** Rs. 7.00 Cr. which was erroneously booked under A&G as per audited accounts towards CLA of employees.
- ❖ **A&G and R&M expenses** to be considered as per **actual audited expenses in line with the approval of FY 23-24 (which is the base year)**.
- ❖ **Interest on Working Capital & Finance cost** claimed as per normative basis.
- ❖ **Income Tax** considered on grossed up RoE (**actual tax paid is Rs. 66.28 Cr.**)
- ❖ **Meter rent on IPDS & Saubhagya** scheme offered as NTI.



KEY ACHIEVEMENTS & HIGHLIGHTS

Capital Work Status – OERC Approval



SL. No	OERC Approved Category	CAPEX Approved Upto FY24	CAPEX Approved for FY24	Cumulative Capitalization Till FY23	YTD FY24		Capitalisation Expected in Q4 FY24	Capitalisation Plan in FY24	Actual Capitalization Expected in FY24	Cumulative Capitalization Expected till FY24
					Plan	Actual				
					(A)	(B)				
1	Statutory & Safety	185	34	95	37	35	33	69	68	162
2	Loss Reduction	148	59	56	34	13	55	89	68	123
3	Reliability	237	69	73	65	28	99	164	127	200
4	Network Optimisation & Load Growth	253	68	114	75	23	98	173	121	235
5	Technology and Civil Infrastructure	370	151	189	95	50	124	218	173	362
Total		1193	382	526	305	148	409	714	557	1083

Capex commitment as Vesting Order is ₹ 1139 Cr till FY24

Improvement through CAPEX – Loss Reduction



Initiatives

Energy Audit & Meter related activity

Upgradation of HT & LT Network.

Installation LT DB, Metering Unit, Meters, and Modems, DTR Smart Metering, Installation of CT, PT, Meters & Modems.

Outcomes

- Approx. 5 Lakhs+ faulty meters replaced till date.
- Approx. 46000-3phase meters & approx. 70000-1 Phase meters replaced with smart meters.
- 193 Nos. BST Points (Grid End), 47 Nos. EHT Consumers, 191 Nos. 33 KV Feeders, 1087 Nos. 11 KV feeders are metered.
- 750 CKMs+ of LT bare to LT ABC replacement done.
- Conductor Upgraded: 700Km+(11 kV) & 350 km+(33 kV)
- DTR capacity augmentation & Load Balancing: 937 Nos. Overloaded DTR augmented (37.7 MVA added) & 4643 Nos. DTR load balancing
- 2379 Nos. of ACB/MCCB/Hanging Type feeder pillars installed. 394 Nos. of CT/PT/Relays replaced. Smart meters installation at 2303 Nos. DTs secondary done.



Initiatives

Augmentation of undersized 33 KV, 11 KV , LT Sections, PTR. DTRs

Network with N-1 redundancy (33 KV/ 11 KV/High Revenue PSS (Industrial pockets, Town areas), Model DSS

Installation of RMUs, Auto Recloser, Sectionalizers, FPIs, isolators, AB Switch etc.

Refurbishment of Network Components in PSS & DSS.

Outcomes

- 79 CKMs of 33 KV Line, 414 CKMs of 11 KV line, 513 CKMs of LT bare to ABC conversion done. 24 Nos. of PTRs augmented/ replaced. 937 Nos. DTR augmentation/Swapping done.
- Improvement in N-1 redundancy at 33 KV level(N-1 Compliant high revenue feeders improved from 35 Nos. to 57 Nos. against total of 57 Nos. high revenue feeders). Similarly, improvement in N-1 redundancy at 11 KV level (N-1 compliant high revenue feeders improved from 108 Nos. to 130 Nos. against total of 130 Nos. high revenue feeders), 45 Nos. of Model DSS created.
- 66 Nos. of Auto Recloser / Sectionalizers, 4218 Nos. AB Switches installed.
- Total 46 Nos. of PSS refurbishment done. 251 Nos. VCB replacement done. New Power Transformer: 31 Nos. (255.5 MVA) added in last year to ensure 100% PTR loading <80%
- Earthing at 88 Nos. PSS done. 25 Nos. station transformers replaced. 2379 Nos. ACB/MCCB installed. 164 Nos. CRP panel & 15 Nos. RTU panels replaced.



Improvement through CAPEX – Load Growth

TPWDL

Initiatives

Mitigation of Overloaded network

Addition of PTRs, DTRs, New 33 KV, 11 KV & LT Feeders & Link Lines

New PSS (33/11 KV)

Outcomes

- Reduction in overloaded feeders (33 KV- 10 Nos. in FY 22 to 2 Nos. in FY 24, 11 KV feeders- 58 Nos. FY 22 to 14 Nos. in FY 24) after considerable increase in load.
- 2 nos. of new PTRs installed. 314 CKMs of New 33 KV Line erection done. 391 CKMs of New 11 KV line erection done.
- 29 Nos. of new PSS charged. (5 Nos. new PSS in CAPEX under execution). Rourkela Hockey stadium PSS charged in record 4.5 Months.



Initiatives

Deployment of SCADA across TPWODL electrical Network

Implementation of GIS across TPWODL

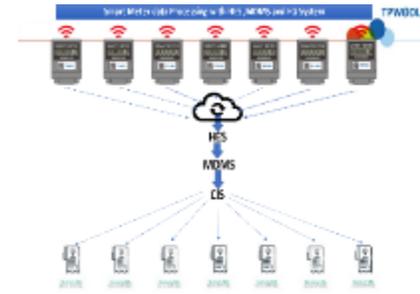
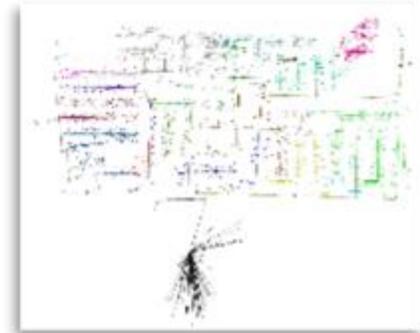
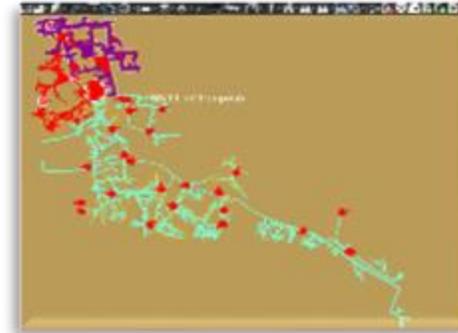
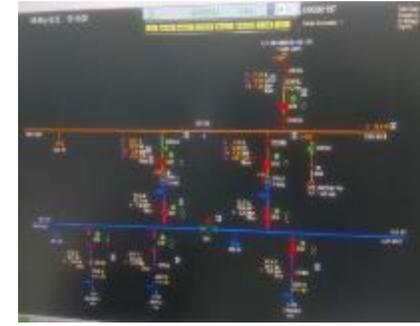
Deployment of SMART meter and Backend infra

Outcomes

- Centralized monitoring and Control of 125 PSS and reduction in ENS (Energy Not Served).
- Life span of Equipment Improvement through monitoring of real time operational parameter.
- Reliability Improved as early power supply restoration (SAIDI improved from 424 Hrs. in FY 22 to 329 Hrs. FY 23- 22% Improvement).

- Mapping of all the assets of TPWODL.
- Used for Network Planning.
- Used for Energy Audit.
- Used for Outages management.
- Used for new connection released.

- Improvement in Billing accuracy
- Monitoring of real time energy consumption.
- Remote Connection and Disconnection
- Prepaid Facility of energy bill.



Initiatives

Upgradation of Civil infrastructure of office buildings

Improvement of Store infrastructures

Infrastructure for fuse call center, New/ Renovation of washroom to provide personal health & Hygiene

Outcomes

- Renovated /Constructed 96 Nos. of Circle/Division/ Subdivision/Section/Commercial buildings those were in dilapidates conditions.
- Renovated 3nos Meter Reading and Testing Lab with NABL standard.

- Upgradation of Central Store.
- Oil shed, Go downs, E-waste room and scrap store.
- Strengthening of Store Boundary and retaining wall.

- Renovated and constructed total 327nos washroom for personal health and hygiene.
- Renovated/ Constructed 13 nos. customer care centers.



Initiatives

Working at height risk reduction (Use of Telescopic Tree Cutter, Man Lifter.)

Deployment of PPEs (Arc Flash kit, Neon Tester, Discharge Road)

Erection of Boundary Walls in PSS, Fencing in DSS, Mid Poles to avoid sag in lines.

Public safety awareness campaign

Outcomes

- Enable to reach height without using a ladder.
- Tree trimming at different level of height.
- Human Risk Reduction.
- Arc suit provide the protection against the severe burn Injury due to Arc flash.
- Voltage presence identification.
- Human protection.
- Protection of human beings and animals through avoiding unauthorized access. (4500 Rmtr. of 33/11KV PSS boundary walls strengthened, Civil work inside PSS in 27 nos 33/11KV PSS done, 1360 Nos. DTR fencing done, 372 Nos. Mid-Pole at 33 KV & 5230 Nos. Mid-Poles at 11 KV added).
- Maintaining statutory clearances.
- Awareness video message displayed through Digital Van.
- Awareness through PA system on maintenance vehicle is more acceptable method of passing information to many people in public.
- Effective approach for local language.



Key Achievements & Highlights



Total **295 MVA** Load added & New consumers **added - 73087 Nos.** in FY 24.



Increased in Actual Billing from **75.4% to 84.8%** & OCR Billing improved from **14% to 83%**



36 Sections achieved 100 % actual billing, with **64** Sections reaching the milestone of **>95% actual billing.**



Total **103 MW** load booked & recovered **Rs.21 Cr** from Enforcement assessment through conducting >850 settlement camps.



Received **NABL Accreditation for All Meter Testing Labs**, Elevating Standards of Precision and Excellence.



Reduction of Tripping- **43 % in HRF & 19 % in overall**



Conversion of **294 Nos of FCC to “Bidyut Seva Kendra”**



SAP based **Preventive Maintenance Compliance -90%**



Usage of **FCC App Compliance - 92 %** for No current complaint monitoring.



100 % Sales of allocated RE power 704 MUs to (Vedanta, AAI, Birsa Munda Hockey Stadium, IOCL, SBI ATMs etc.) thus generating **additional revenue of 17.60 Cr**



The **SIGITEK Automatic Supplier Invoice Management System** has been launched to ensure audit compliance, checks and controls and timely bill processing and payment.

Rewards & Recognition FY 23-24



31st CCQC 23 Rourkela Chapter-9 Gold & 02 Silver Award



CEO with HR Orientation by "Asia Pacific HRM Congress



Global Top 10 CSR Impact Award-by HR-SUCCESS Talk



Excellent Performer" for the year 2023 in the Compliance 10/10 Award



48th ICQCC23 Beijing China – 3 Gold Award



5th CCQC 23 Bhubaneshwar Chapter- 8 Gold & 02 Silver Award



46th CII National KAIZEN –Silver Award



COMMERCIAL HIGHLIGHTS

Customer Service Initiatives (1/2)



Call Centre & CCC Operations:

- ADMS Integration with CRM (Pilot started from RED)
- Introduced Sochna portal for Live Outage Information
- FCC App enhancement (100% complaint Closure)
- VR OBD for Digital Communication
- Inhouse Emailing Broadcasting
- Push SMS during live call,
- E-Billing through WhatsApp & Email
- ETR SMS communication for NPS complaints
- Consumer service Camp Jan Jagran Journey
- Miss Call Pay Service
- eDARPAN-transactional feedback
- Rate the customer behavior

Improving Rural Service Delivery :

- Digital Literacy Campaigns
- GP meetings
- Digital Services Sticker

Social Media:

- Introduced Direct Message link on Twitter
- You Say-We Listen campaign-on Twitter
- Awareness/Educational campaigns on Social Media
- MO Sarkar Visitor Management System all CCC

Training & Development:

- Inhouse Video Based Training Module for training
- IJP for Call Centre & CCC exe. (Upgradation)
- Train the trainer program
- Soft Skills training by external experts.
- Live Call Barging & Monitoring
- Arrear amount display in FCC
- Escalation and SMS notification history

Add. Chief Sec. listening Live Call @ Call Centre



Development of Escalation & SMS Notification History

Notification Receiver	Mobile No	Notification Type	Notification Delivered Date	Notification Sent Y/N
Consumer	7578358780	Registration	05-Jul-2023 15:32:43	Yes
TO	5977556791	Registration	05-Jul-2023 15:32:51	Yes
Insman	8744815040	Dispatch	05-Jul-2023 15:31:28	Yes
ESC	7008913547	First Escalation	06-Jul-2023 01:32:43	Yes
SDO	943755880	Second Escalation	06-Jul-2023 11:30:25	Yes
EE	943755887	Pending Beyond	06-Jul-2023 11:32:25	Yes
Consumer	7578358780	Resolved	07-Jul-2023 11:46:12	Yes

Visit of CEO-TPDDL

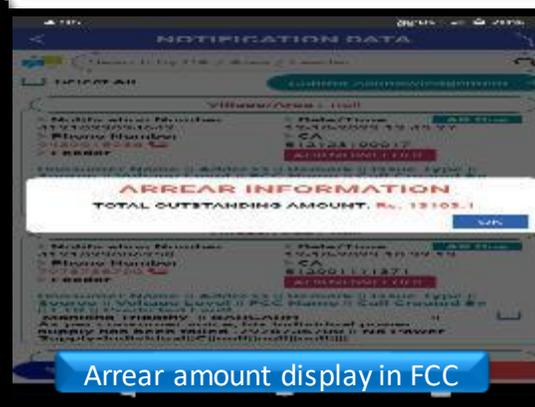
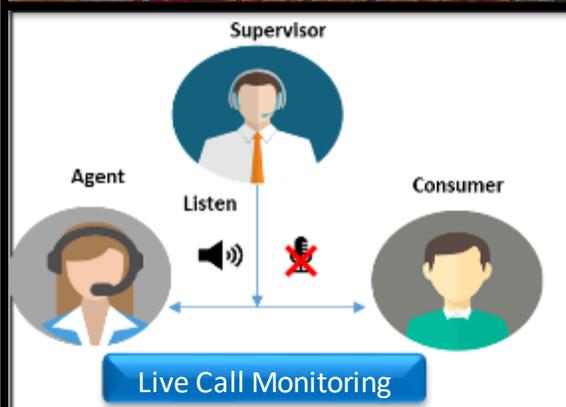


Jan Jagran Journey @CCC



Update of Contact Details through Complaint Registration

GP Meets



Arrear amount display in FCC



Customer Service Initiatives (2/2)



Consumer Communication:

- Green Bill Opt-In Drive
- Digital Payment Awareness
- Miss Call Pay Service
- Dangers about hooking
- Energy Conversation
- Electrical safety
- Consumer Touchpoints



CCO Visiting of CCC



Senior Citizen Desk @CCC



Digital Service Sticking

TPWODL || Electrical Fire Safety

Shreya Paul
To: 9000pradeep@gmail.com

Electrical Fire Safety

Electrical fires are a leading cause of property damage and injury. To prevent them, it's important to take the following safety measures:

- 1. Use proper wiring and electrical components.
- 2. Avoid overloading circuits.
- 3. Test smoke detectors regularly.
- 4. Hire a licensed electrician for any electrical work.
- 5. Keep flammable materials away from electrical outlets.
- 6. Turn off power when leaving a room.
- 7. Never use extension cords as a permanent solution.
- 8. Avoid using electrical equipment in the bathroom.
- 9. Do not use electrical equipment near water.
- 10. Replace old electrical wiring and outlets.

For more information, please contact us at the following numbers:

- Customer Care: 1800-123-4567
- WhatsApp: 9876543210
- Phone: 0123456789
- 24x7 Toll-Free: 1800-123-4567
- Website: www.tpwl.com

Electrical Fire Safety

Customer Service

Promote

Why E-Bill?
We at #TPWODL are committed to serve Environment & sustainable practices. E-Bill is once such initiative where we prioritize reducing paper bills towards a sustainable future. Lets reduce using paper and contribute our part to environmental conservation.

To join this green initiative & opt for E-Bill

#SustainableAttainable #GoPaperlessGoGreen

TPWODL
TP WESTERN ODISHA DISTRIBUTION LIMITED
A Tata Power and Odisha Government Joint Venture

PAY ELECTRICITY BILL ONLINE & GET YOUR MONTHLY BILLS ON WHATSAPP, SMS & EMAIL

SCAN THIS QR CODE AND OPT FOR E-BILL AT YOUR FINGERTIPS!

Go Green. No Green.

Green Bill Drive

ଡିଜିଟାଲ ପୁରବର୍ତ୍ତନ ମାଧ୍ୟମରେ ଆପଣଙ୍କର ବିଦ୍ୟୁତ୍ ବିଲ୍ ଯେଉଁ କରନ୍ତୁ

TPWODL
TP WESTERN ODISHA DISTRIBUTION LIMITED

4% ପର୍ଯ୍ୟନ୍ତ ବିହାର୍ତ୍ତ ଘାଆକୁ

Digital Payment drive

F Care TPWODL | gerohit2002@gmail.com

TPWODL VIGILANCE WEEK.

TPWODL
TP WESTERN ODISHA DISTRIBUTION LIMITED

DO NOT ENCOURAGE BIRDS IN ANY FORM

SAY NO TO CORRUPTION AND COMMIT TO THE NATION!

VIGILANCE AWARENESS WEEK

TPWODL
WESTERN ODISHA DISTRIBUTION LIMITED

Interactive WhatsApp Service

Share your valuable response regarding TPWODL Service

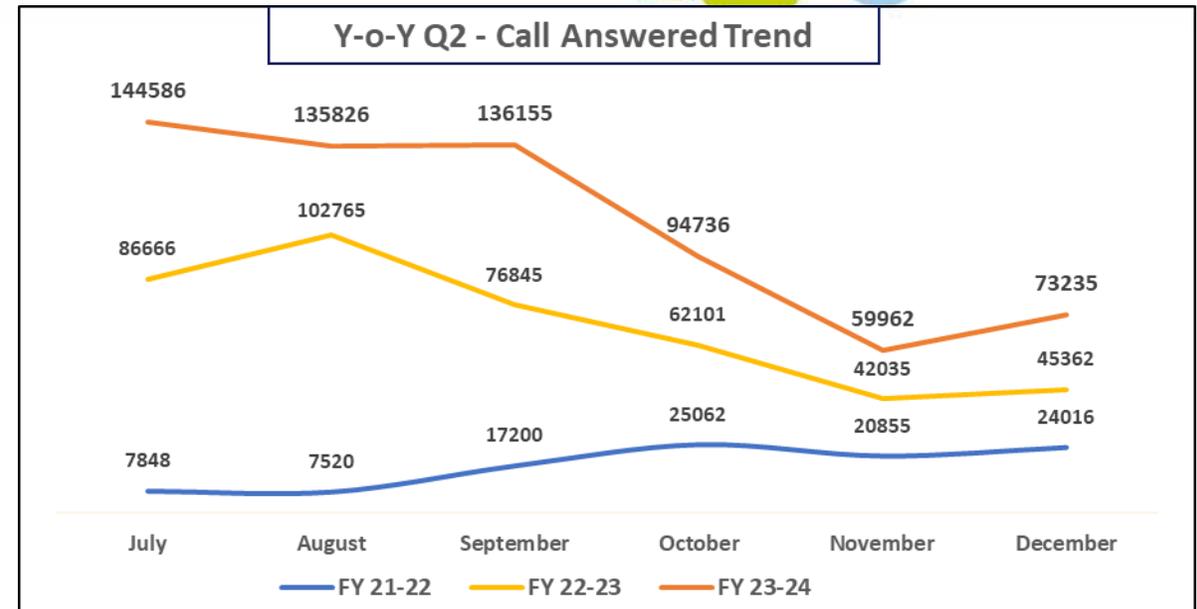
Call Centre No: 18001234567
Mail: customer@tpwl.com

WhatsApp No Promotion @CCC

Customer Grievance Redressal Matrix



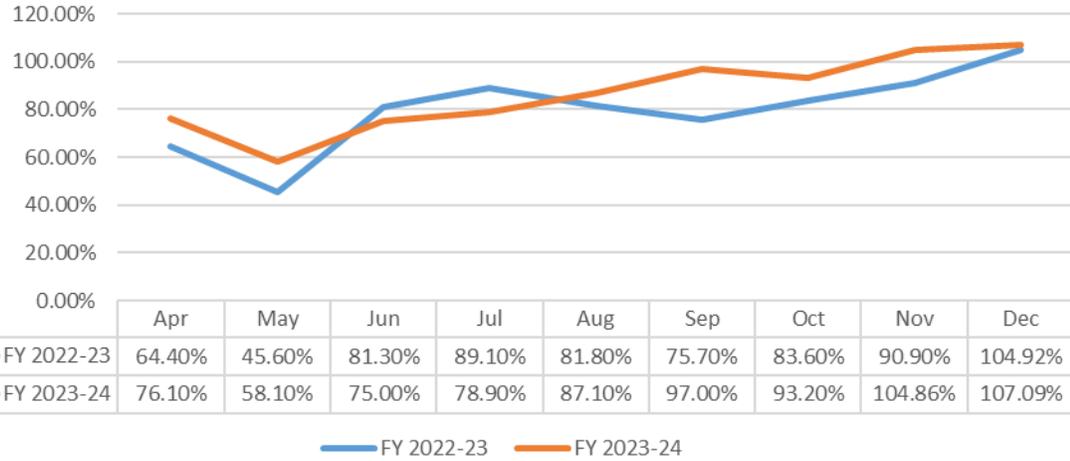
Particulars	ABP	Q1	Q2	Month	Month	Month	Q3	Q4
(Overall Customer Service)	FY24	FY24	FY24	Oct'23	Nov'23	Dec'23	FY24	FY24
	Target	Actual	Actual	Actual	Actual	Actual	Target	Target
AHT (Sec)	180	188	185	158	173	157	180	170
AWT (Sec)	25	25	25	33	20	25	24	23
Call Answered (%)	97	92	92	98	97	97	97	97
Call Quality (%)	97	95	97	96	96	97	97	97



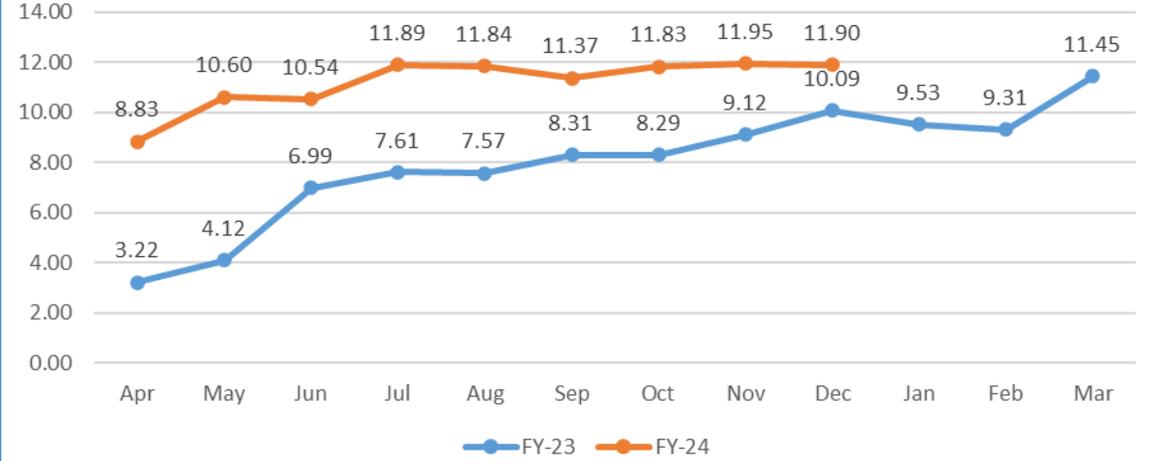
Particulars (Digital Literacy)	Q1-FY24 Actual	Q2 FY24 Actual	Q3 Oct'23 Actual	Q3 Nov'23 Actual	Q3 Dec'23 Actual	Q3 FY24 Target	Q4 FY24 Target	ABP FY24 target
My Tata Power Consumer App – Consolidated(Count)	145132	183433	216000	222497	226607	375000	500000	500000
Email Registration(Count)	81216	89743	91045	98250	103051	95000	100000	100000
WhatsApp Registration(Count)	458693	525470	542271	555621	665351	575000	650000	650000
KYC Completed/Plan(Count)	503000	592771	607052	616022	653683	625000	650000	650000
Digital Service Stickers - Consolidated (Count)	35905	41005	76256	98810	104775	75000	100000	100000
GP Meets - Consolidated(Count)	61	89	110	122	132	120	150	150

LT Collection Trend (1/2)

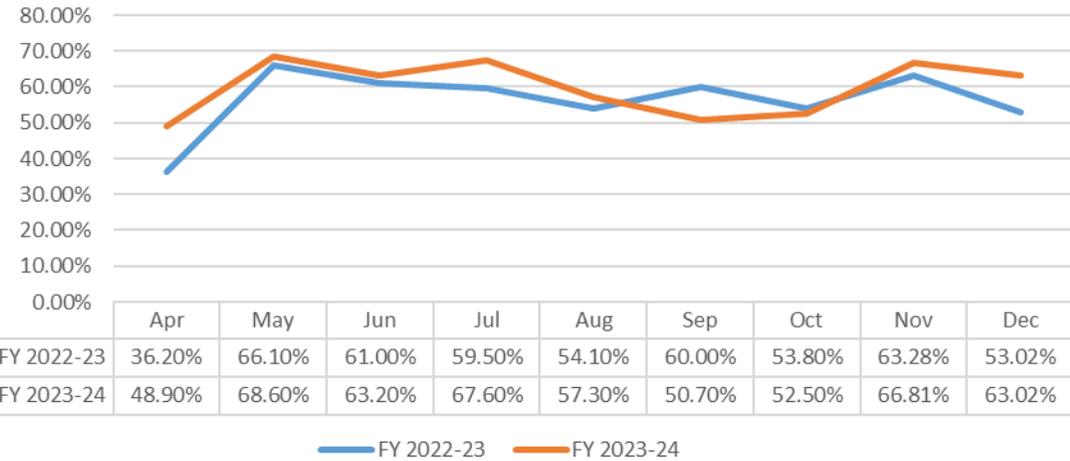
LT Collection Efficiency



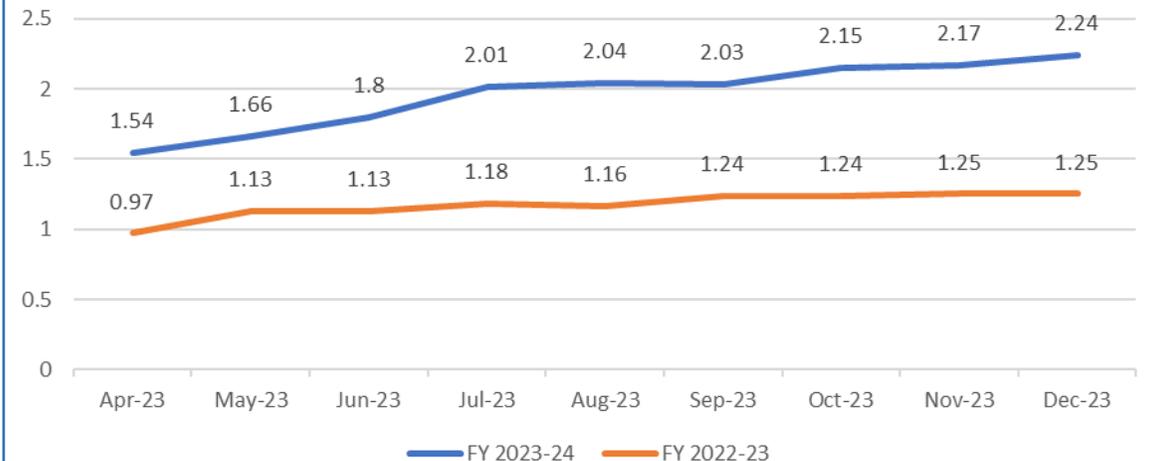
MR Count (in Lacs)



LT Billing Efficiency

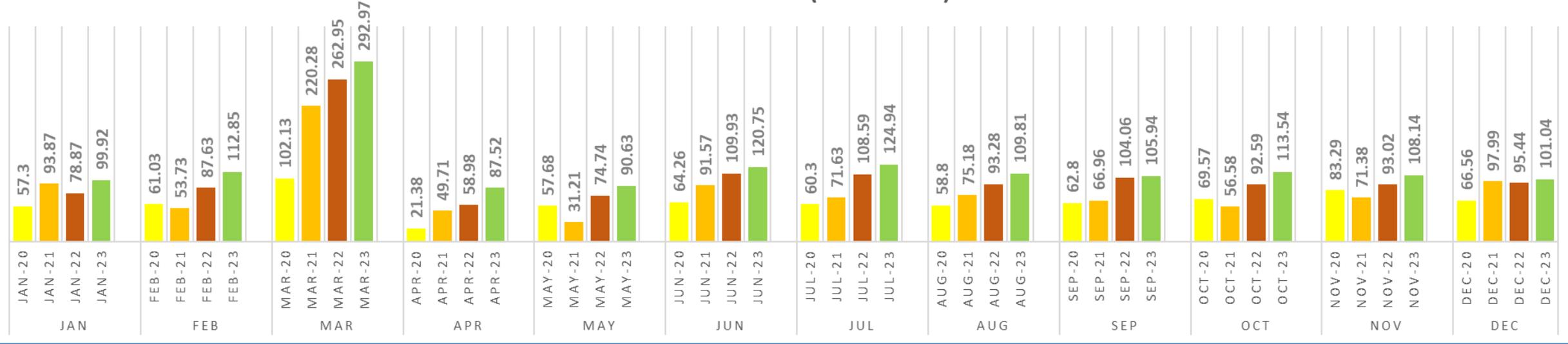


Digital Payment Count

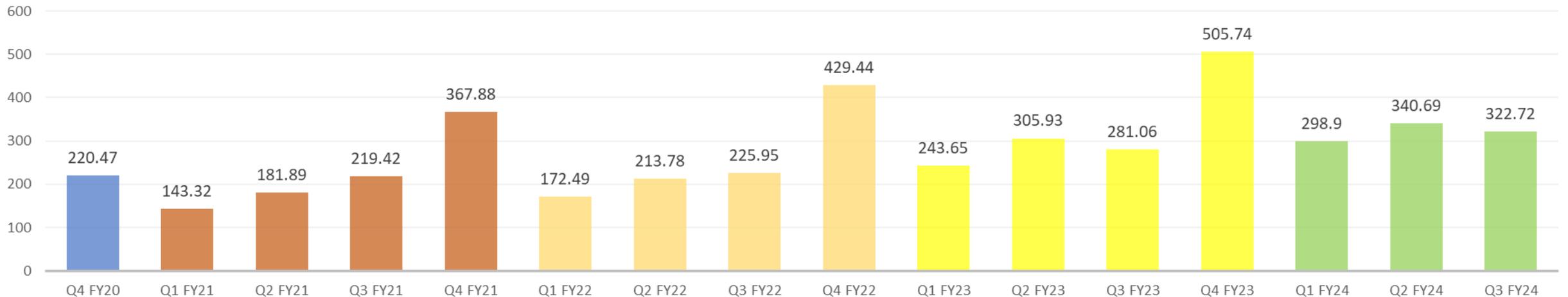


LT Collection Trend (2/2)

LT COLLECTION (IN RS. CR)

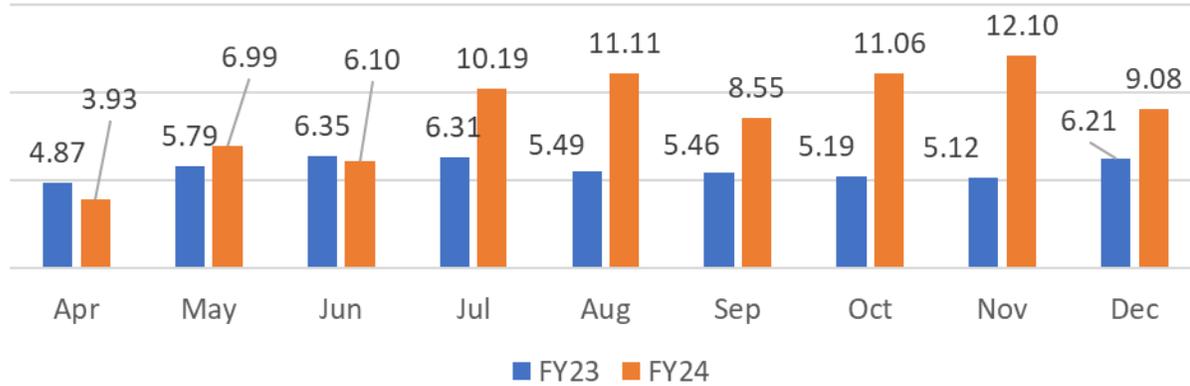


Quarter-Wise LT Collection (In Cr.)

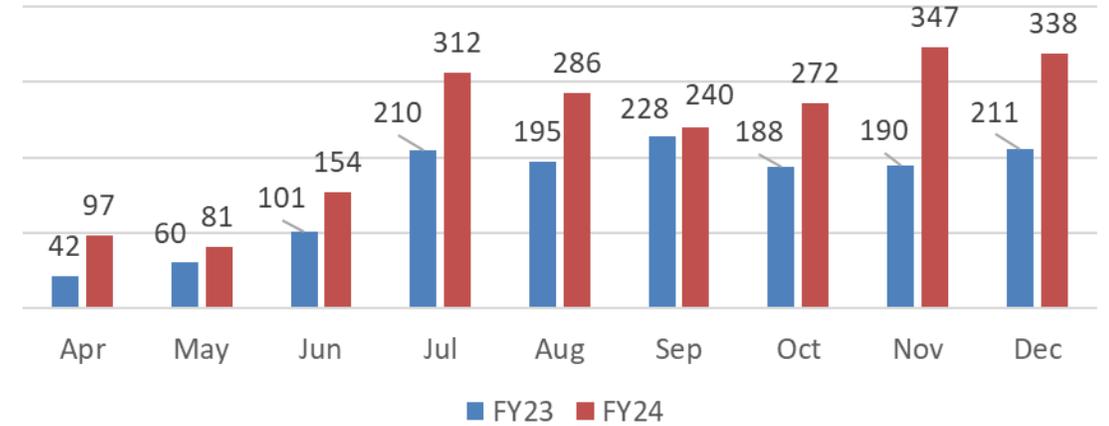


Enforcement Highlights

Month Wise DT/DAE Load Booking Comparison (YTD FY23 VS FY24) (MW)



Month Wise Theft Collection comparison (Lacs)-(YTD FY23 vs FY24)



Cases booked in FY -22 and Resolved in FY – 24
Cases Resolved: 186
Amount Realized : Rs. 0.46 Lacs

Cases booked in FY- 23 and Resolved in FY- 24
Cases Resolved : 2115
Amount Realized : Rs. 3.24 Cr

For FY-24 Booked Cases
Cases Resolved : 9878
Amount Realized : Rs. 17.56 Cr

Total Case booked in Dec'23 = 3588 (10.39 MW)
U/S 135 – 3440 (9.13 MW)

Total FA since Apr'21– Dec-23 – Rs. 102.30 Cr.
Amount Realized– Rs. 39.38 Cr
Balance – Rs. 62.92 Cr

Theft Type	YTD		% Increase
	FY23	FY24	
DT/DAE (MW)	50.79	79.12	56%

Theft Amount Collected (Rs. Cr)	YTD		% Increase
	FY23	FY24	
	14.26	21.26	49%



Early Morning Raid in Rourkela Division

Category wise Load Booking



Category	Dec'22- YTM			Dec'23 - YTM		
	Count	Theft Load (kW)	Average Load per Case	Count	Theft Load (kW)	Average Load per Case
Domestic	18335	43292	2.36	25547	64190	2.51
General Purpose	1586	4534	2.86	1693	5253	3.10
Irrigation Pumping & Agriculture	415	1228	2.96	1648	4760	2.89
Specified Public Purpose	325	755	2.32	368	952	2.59
Temporary Supply	77	240	3.11	618	2203	3.56
Allied Agriculture Activities	52	191	3.67	85	346	4.07
Public Water Works	36	180	5.01	75	216	2.88
Industrial	22	374	16.98	38	1200	31.57
Total	20848	50794	2.44	30072	79119	2.63

Meter Replacement Status



Meter Replacement (Faulty/Burnt) status -1Ph

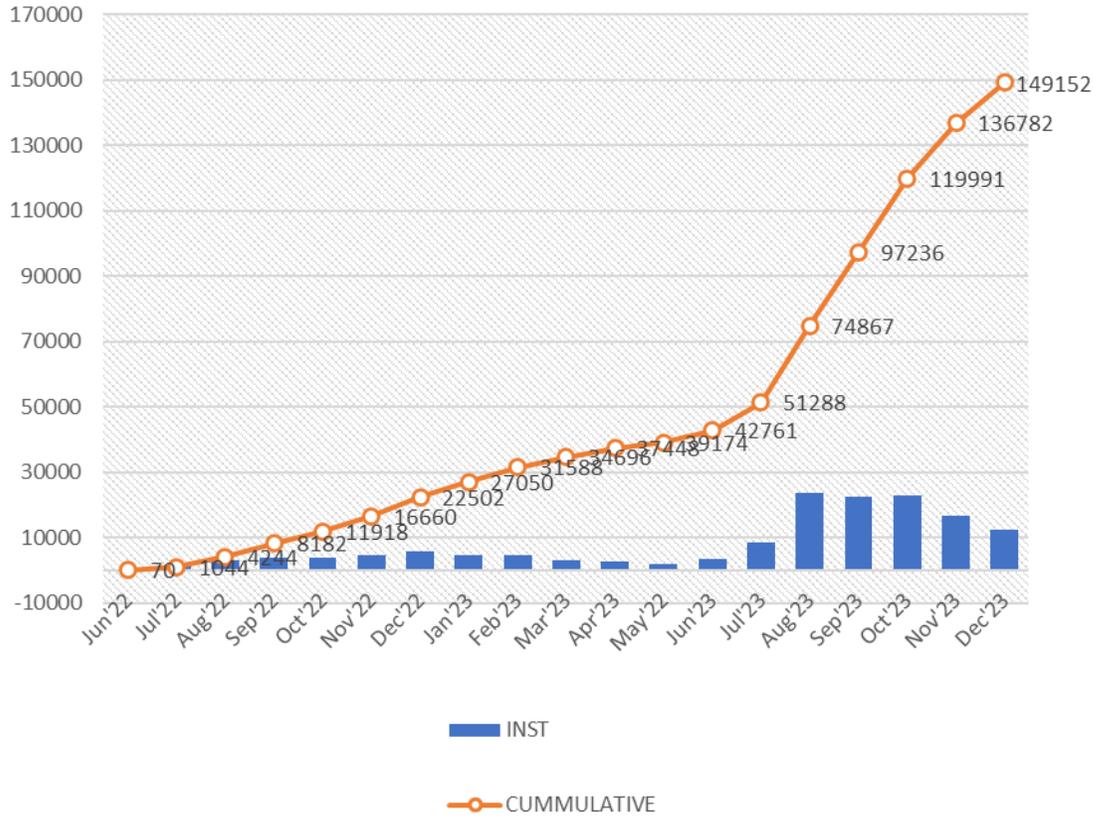
Year /Month	FY-24	FY-24	Dec-23	Dec-23	Jan-24
	Target	Actual (till Dec'23)	Target	Actual	Target
FY23-24	222674	162941	41116	33449	50000

Metering Status for LI consumers

Circle	Total LI Consumers (Nos)	Ok Meter as per Last billing Data (Nos)	DISCONNECTED/ PD/BILL STOP/BILL BLOCK	Meter to be Replaced			Progress- Dec-23				Balance to be resolved. (Nos)
				Defective Meter	Without Meter	Total	Meter replaced	Found Disconnected	Not traceable / Ghost	Total Resolved cases	
Sambalpur	9390	3451	1517	2078	2344	4422	232	61	0	293	4129
Rourkela	7378	3187	2222	1829	140	1969	144	0	0	144	1825
Bargarh	32501	13396	4148	8904	6053	14957	819	10	0	829	14128
Balangir	21725	7514	4045	4402	5764	10166	1109	449	0	1558	8608
kalahandi	12849	5918	3430	2662	839	3501	572	10	4	586	2915
TOTAL	83843	33466	15362	19875	15140	35015	2876	530	4	3410	31605

Smart Meter Installation Status

SMART METER INSTALLATION



Particular	Smart Meter Installed in FY - 23	Smart Meter Target for FY - 24	Dec-23		Installed Till Dec-23	Cumulative Installation	Target for Q4
			Plan	Actual			
Govt Connection 1 Ph : 12515 + 3 Ph : 6000	6124	11838	1000	696	8601	14725	3237
3 phase meters (Excl Govt)	28572	40000	5000	4951	22824	51396	17176
1 phase Connection (Excl govt)	0	162862	10000	6723	83031	83031	79831
DT meters	0	10773	1000	734	3783	3783	6990
Total	34696	225473	17000	13104	118239	152935	100244

Action Plan

- All Govt Connections Meters to be replaced by Smart Meters till March'24
- Feeder-wise planning is being done for installing smart meters on LI Connections

Consumer Category	1 Phase	3 Phase	Total
Govt Consumer	7748	6977	14725
Non Govt Consumer	83031	51396	134427
Total	90779	58373	149152

Consideration of Smart Meter cost under CAPEX instead of Meter Rent

1 Ph Meter

Sl.No.	Particulars	Quantity planned FY25	Unit Rate (including tax)	Capex Required
1	All Govt connection	10000	Supply: 3704 Services: 750	169.25
	All Urban Area New Connection	30000		
	All Rural Area New connections with 3kW & above	15000		
	Existing connections with meter ageing > 5 years & consumption greater > 200 units	175000		
	All Faulty Meters & Enforcement Cases	150000		
	Total Quantity	380000		

3 Ph Meter

Sl.No.	Particulars	Quantity planned FY25	Unit Rate (including tax)	Capex Required
2	3 Phase consumer W/C Smart Meter with Box	15000	Supply: 6599 Services: 1351	13.52
	LTCT Smart Meter	1500	Supply: 8502 Services: 2124	
	HTTV Smart Meter (Both 11 KV & 33 KV)	0		
	Total Quantity	16500		

Seal & Accessories

Sl.No.	Particulars	Quantity planned FY25	Unit Rate (including tax)	Capex Required
3	Total Seals & other Accessories	2775500	202	56.07

**Total Capex Required
(1+2+3)= ₹ 238.84 Cr.**

Effect on ARR	₹ crore
Meter Capex Cost	238.84
Equity	71.65
Return on Equity (%)	16%
RoE (₹ crore) - Average	11.46
Debt	167.19
Interest rate (%)	9%
Interest cost (₹ crore) - Average	15.05
Depreciation	
Rate (%)	4.67%
Depreciation (₹ crore)	5.02
Total cost per year	31.53
LT Units (MUs) in FY25	3544
Impact on LT Tariff (Rs./Unit)	0.09
Total Units (MU) in FY-25	9614
Impact on Overall Tariff (Rs./Unit)	0.03

Prayer: Hon'ble Commission is requested to approve additional capex of 238.84 Cr.



OPERATIONAL HIGHLIGHTS

Initiatives for Reliability Improvement



Before



After

PSS Modernization and SCADA Compatible CR , RTU Panel installation work along with battery charger completed at Bhukta PSS.



Inside PSS Control Room



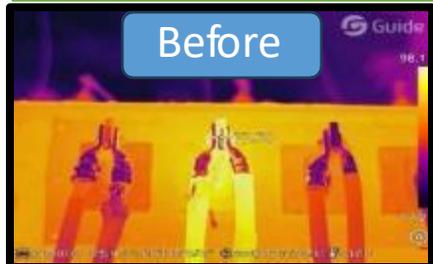
PM WIP AT PSS



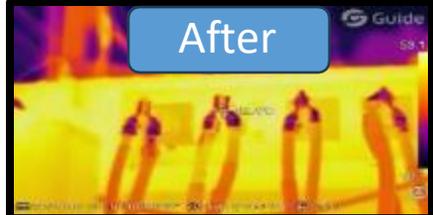
Inhouse DGA, Oil Filtration, PTR repairing Started



Implementation of MOC-2 (Cheruapada-Badabazar) & MOC-3(Ainthapali-Kainsir)

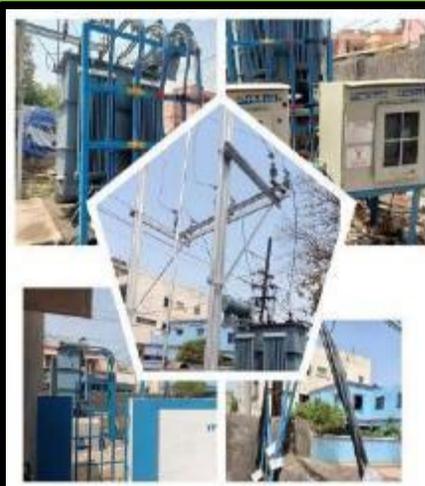


Before



After

Hot Spot Detection by Thermoscanning & Rectification



MODEL DSS WIP



New AB switch installation work



DT Augmentation/Swapping WIP



Bare conductor to AB cable replacement work

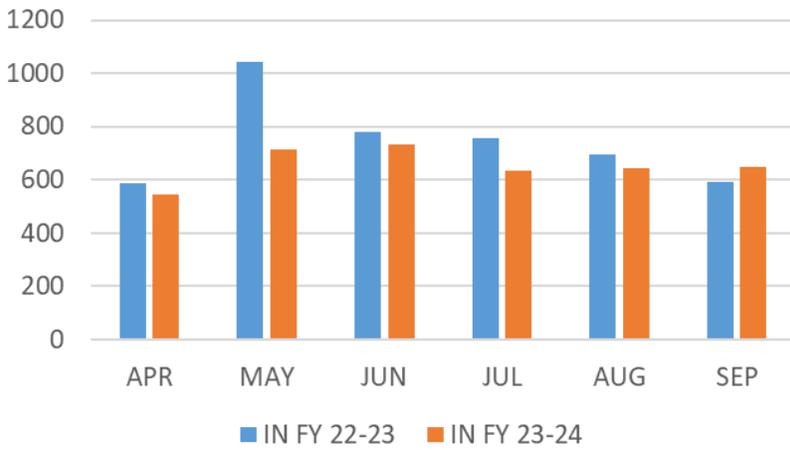


Feeder Pillar installation

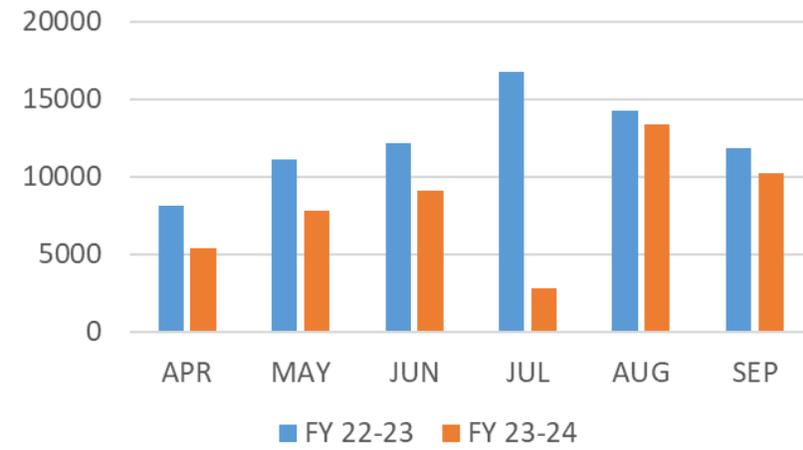
Operation Performance FY-23 V/s FY-24 - (1/2)



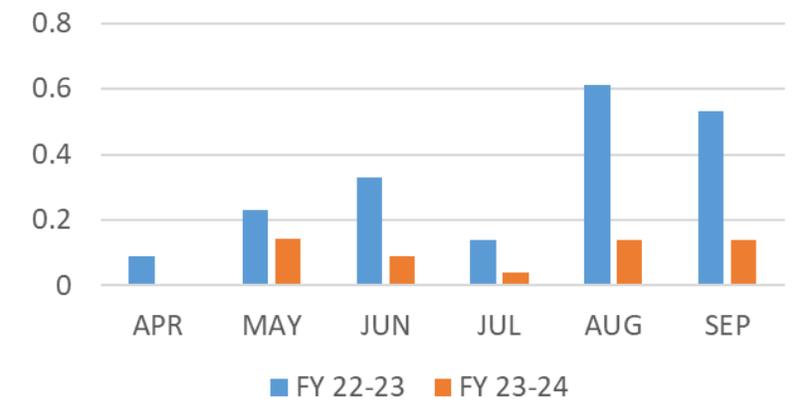
33 KV TRIPPING



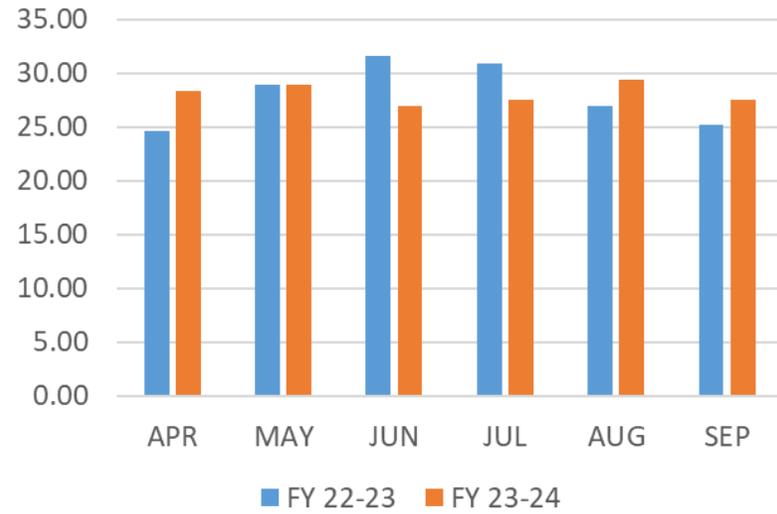
11 KV TRIPPING



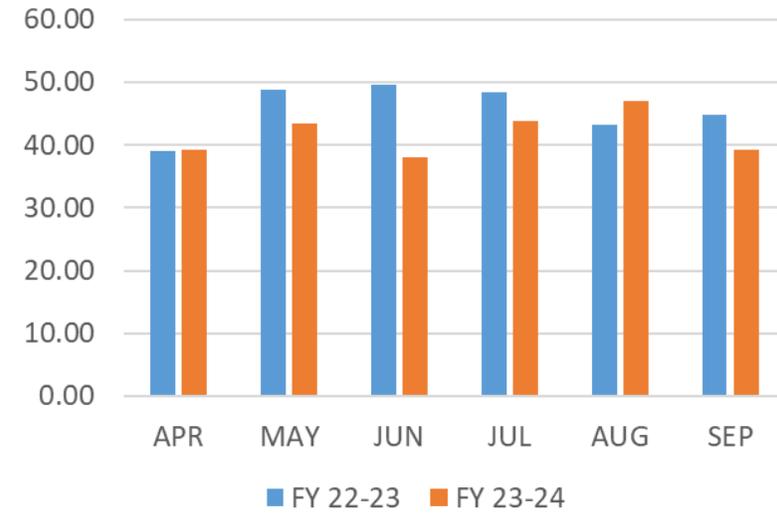
PTR FAILURE



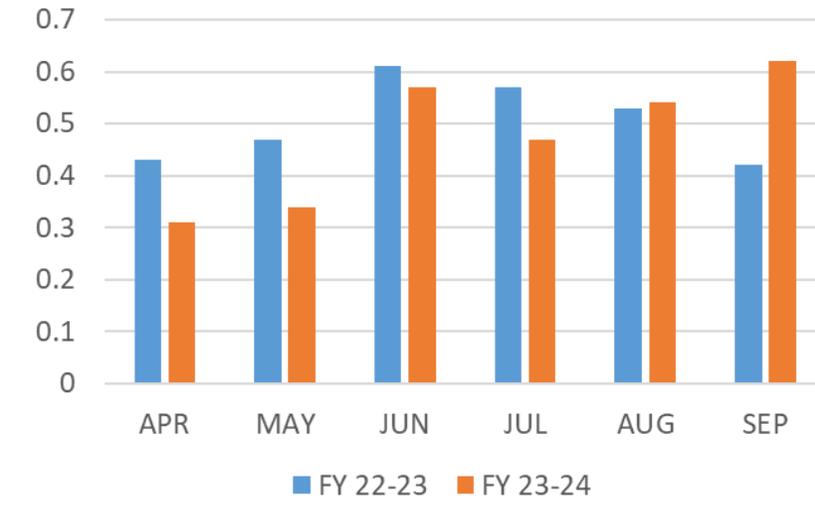
SAIDI



SAIFI



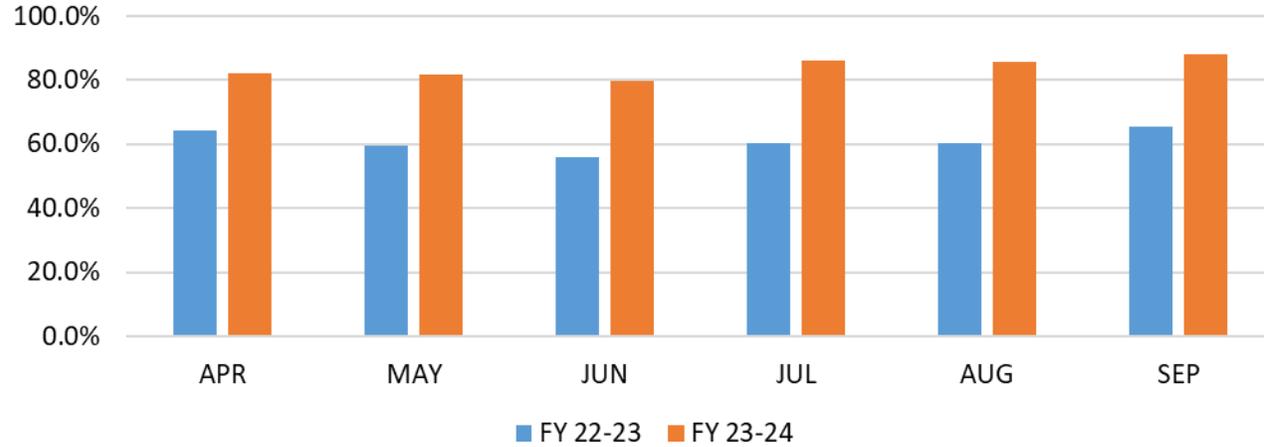
DTR FAILURE (%)



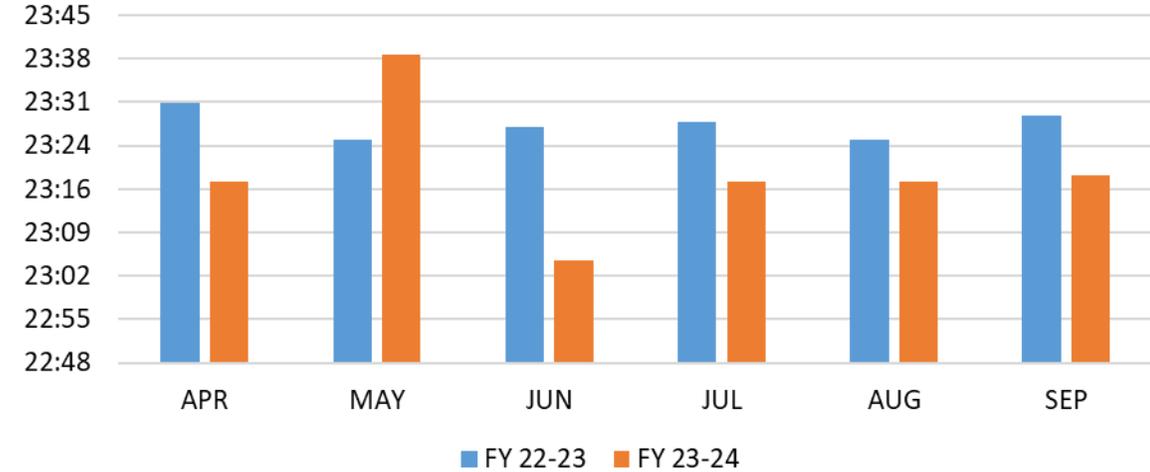
Operation Performance FY-23 V/s FY-24 - (2/2)



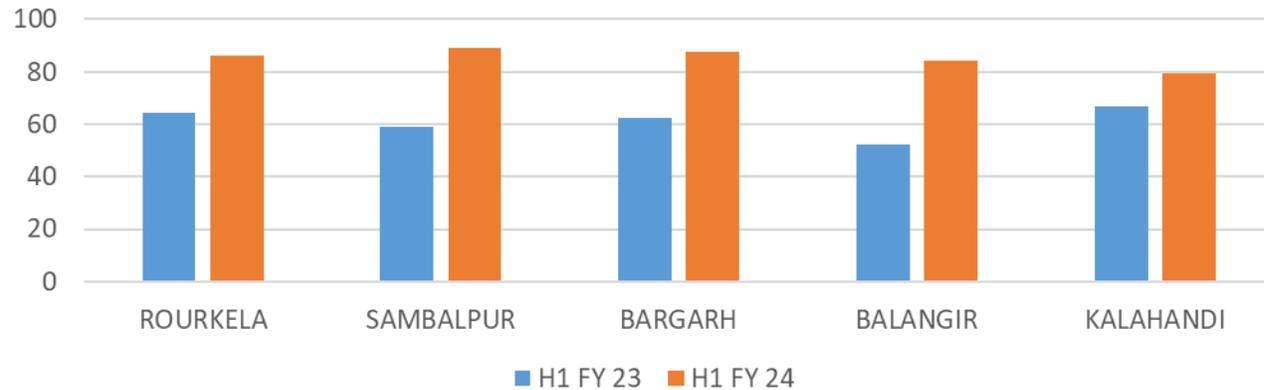
CLOSURE OF NCC WITH IN SLA



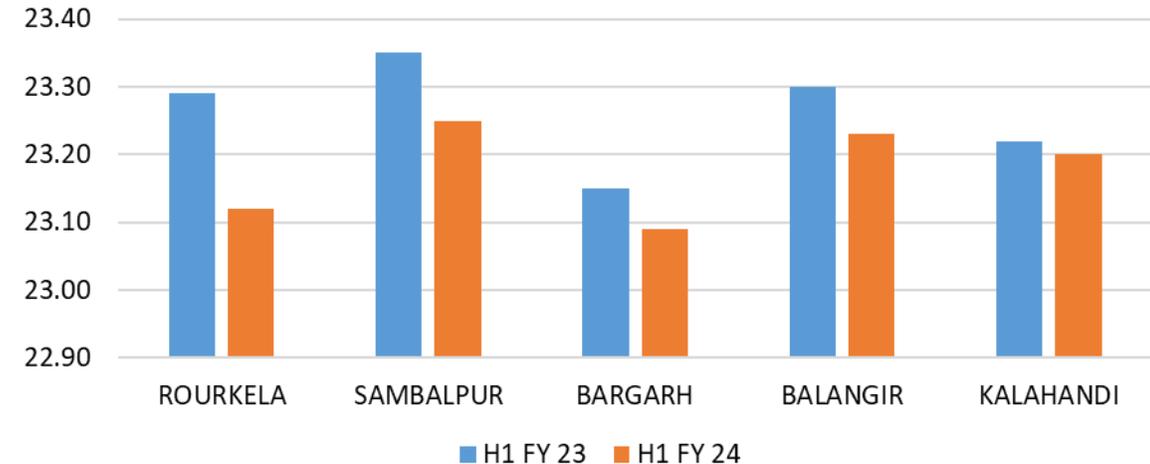
Trend of Power Availability hours



CLOSURE OF NCC WITH IN SLA- Circle wise



Trend of Power Availability hours



Reliability Improvement Initiatives - (1/6)

33 kV Preventive & Predictive Maintenance



Major Maintenance Activities	Q-1 Achieved	Q-2 Achieved	Q-3 Plan	Q-4 Plan
33kV Feeder PM in Ckt KM	1458	1865	1900	1200
Strengthening of tilted pole	88	168	130	100
Installation of Intermediate Pole	48	35	72	30
Re-sagging of conductor (Span)	192	122	260	200
Insulator Replacement	1741	1516	2340	1800
LA replacement/ taking into service	77	114	150	90
Isolator /AB Switch replacement / Repairing	285	343	360	280
Jumper replacement	1062	968	1300	1000

Reliability Improvement Initiatives - (2/6)

11 kV Preventive & Predictive Maintenance

DT MAINTENANCE

Q-1 Achieved

Q-2 Achieved

Q-3 Plan

Q-4 Plan

DT PM (> 100 KVA)

628

389

994

957

Overloaded DT replacement (Aug/swapping)

357

344

1087

1276

AB switch installed/Repaired

962

859

954

1023

Installation of new earthing

279

379

456

480

Load balancing of DTs

1149

767

1378

1523

LA Replaced

874

563

823

865

Model DSS

5

15

25

15

Double Jumpering

854

612

539

356

Reliability Improvement Initiatives - (3/6)

PSS Preventive & Predictive Maintenance



Major Maintenance Activities

	Q-2 Target	Q-2 Achieved	Q-3 Plan	Q-4 Plan
Transformer maintenance	85	108	106	77
Breaker maintenance	200	446	350	200
DGA	400	340	100	150
DC System Maintenance	310	50	310	310
Relay Upgradation	100	37	80	70
Commissioning Of New VCB In place of OLD VCB	32	44	30	30

Reliability Improvement Initiatives - (4/6)

Effective Technology Adoption in 33 kV Network



Major Upgradation Activities

	Q-1 Achieved	Q-2 Achieved	Q-3 Plan	Q-4 Plan
New Isolator installation	57	20	70	10
New AB switches installation	36	19	20	10
New Tower erection in 33kV Network	0	0	0	40
N-1 source for High Revenue PSS & Feeder	12	10	2	18
No of new Earthing in Feeder/PSS	50	110	100	50
Auto Recloser Installation	0	0	0	7
Sectionalizer commissioning	0	0	0	21
33kV RMU Installation	0	0	2	4
33kV FPI installation & Commissioning	0	0	60	99

Reliability Improvement Initiatives - (5/6)

Effective Technology Adoption in PSS Modernization Work

Major Activities

	Q-1 Target	Q-2 Achieved	Q-3 Plan	Q-4 Plan
PSS Modernization Work (Nos)	2	4	8	12
33 KV VCB Commissioned (Nos)	12	10	10	10
11 KV VCB Commissioned (Nos)	05	17	20	20
St. Tr(33/0.433 KV) Commissioned(Nos)	5	4	6	5
Battery Chargers commissioned (NOs)	18	20	16	21
PTRs Commissioned (Nos)	0	0	2	5
CR & RTU Panels Installation & Commissioned (Nos)	21	26	37	37

Reliability Improvement Initiatives - (6/6)

Effective Technology Adoption in 11 kV Network



Action Item	Q-1 Achieved	Q-2 Achieved	Q-3 Plan	Q-4 Plan
Thermovision camera	150	310	180	215
FCC App usage Compliance	80%	100%	100%	100%
Installation of RMU	0	0	15	15
Installation of Auto-Reclosure	17	0	10	11
Installation of Sectionaliser	49	0	27	30
Installation of FPI	NIL	0	60	65
Installation of ACB & MCCB	135	340	240	280
Installation of Hanging Type Feeder Pillar	38	21	74	106



SAFETY HIGHLIGHTS

Focus Areas & Action Plan – Safe Operations



Business Partner Safety Management

- Training based on competency assessment
- Mandatory CFSA for all orders as a prerequisite for SES clearance
- Implementation of Consequence Management
- Co-creation of HIRA JSA by involvement of BP
- Felt Leadership to ensure effective implementation of CSCC
- Safety Score-card for Business Associates
- Ensuring quality of PPEs used by BP staff

People and Performance

- Competency assessment of employees
- Fixing of accountability – SE/EE/SDO/ESO
- Focused approach towards root cause
- Implementation of Consequence Management System



Leadership and Governance

- Demonstrating Visible Leadership
- Effective implementation of governance structure
- Site Leadership – R&R, Spot awards

Operations and Risk

- Effective implementation of critical safety procedures
- Proactive identification and evaluation of Hazards
- In-depth analysis of Incident and observation
- Timely reporting of Near Miss and recording learnings
- Implementation of Safety Management System

Strategic Initiatives for improved Safety Culture

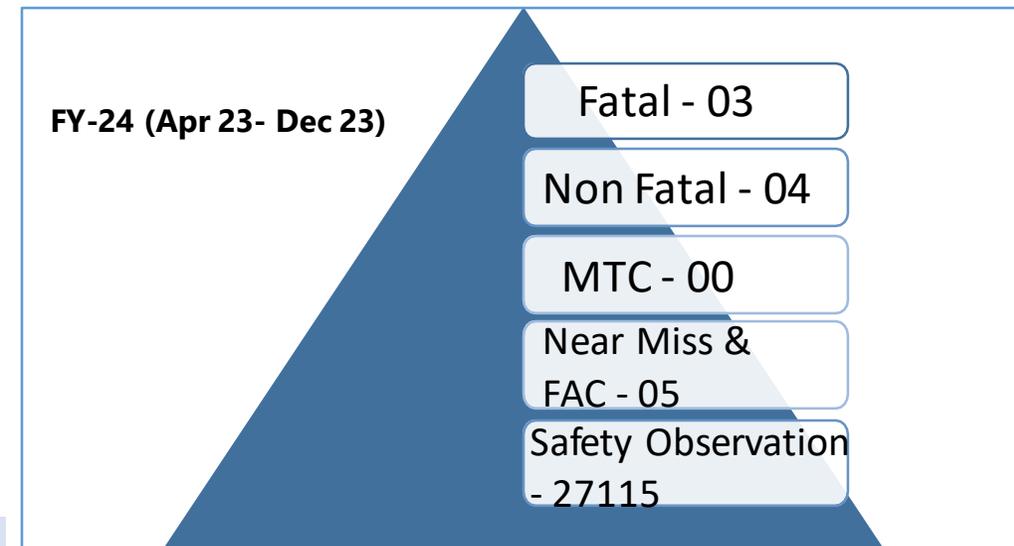
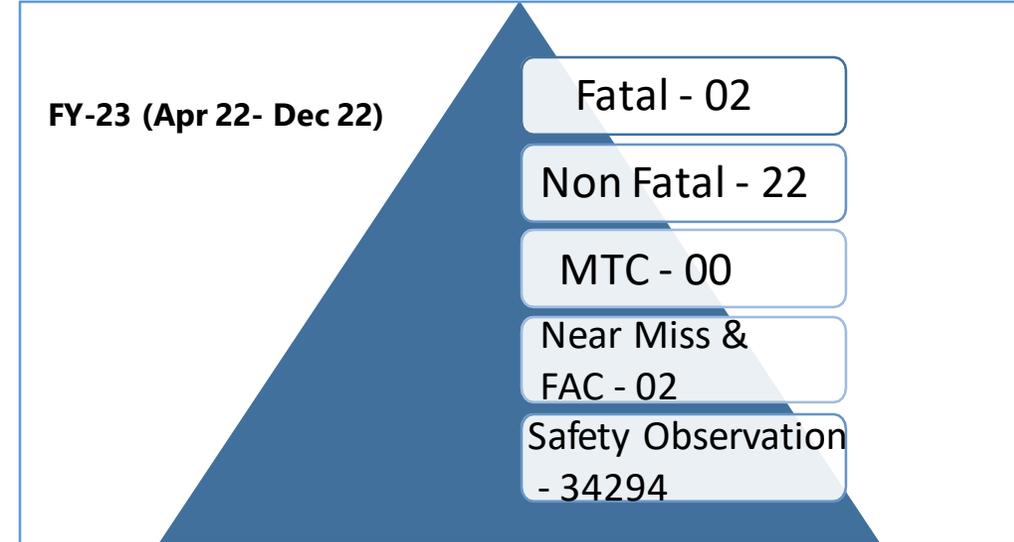


- **Implementation of Lock Out – Tag Out (LOTO)**
 - Reduction in Operational Risk
 - Process Strengthening
- **“Jeevan ki Aur” – Connecting with Family**
 - Cultural change towards safety
 - Emotional connect – valuing human life

Safety Trainings



On site training	No of participants	Total Training manhours
Working at Height (LM)		
Safety Zone(LM/Helper)		
Fire Safety (ALL)	170937	256406
Theme base Training(ALL)		
JSA (Field Staff)		
L1 BA Employee	3919	31352
BBS-BA employee	1886	15088
BBS-Middle management	35	280
Felt leadership	105	840
Suruksha Sambad	325	2600
Safety Induction	362	1448
Risk Assessment	165	660
First Aid	78	1872
5S	40	320
Leading Safety	51	408
Making safe choice	24	192
Defensive Driving	57	456
TPSDI Train the trainer	38	608
Safety workshop for safety professional	22	352
Training for ITI student	139	1112
Total	178183	313994



Safety Initiatives



- ❖ Human Risk Reduction by using Technology (Pilot Project – 02)
- ❖ L1 Training for 33kV PSS operation Staff. (Business Associates – 2300 Manpower)
- ❖ Felt leadership training for Middle management. (ESO&SDO – 259)



Deployment of Telescopic Anchor System



Working at Height risk reduction by using Telescopic Tree Cutter



- ❖ Development of infrastructure and provisions for mandatory safety equipment.
- ❖ Development of Practice Yard for meter installation practices training.
- ❖ Inclusion of Equipments (RMUs, Sectionalizers, PTs, etc.) at HOTT in Circles.



Felt Leadership Training for Senior Leadership Batch



L-1 training at KWED for 33 kV BA employees (Day – 08)



- ❖ Safety Best Practices Implementations.
- ❖ Implementation of LOTO system for 33Kv System and 11KV System in PSS.
- ❖ Step Change, Horizontal Deployment & New Initiatives.



Fire Mock Drill & Fire Extinguisher Demo Training



Handsfree Communication System

Public Safety Awareness Initiatives



Dedicated WhatsApp Contact Number for reporting of unsafe action by public



Rewarded to Public for unsafe act reporting



Crush Helmet Rewarded to Public for encouraging safety



Awareness campaign at school



Public safety awareness Street play program



Awareness campaign to students



IT HIGHLIGHTS

Operation

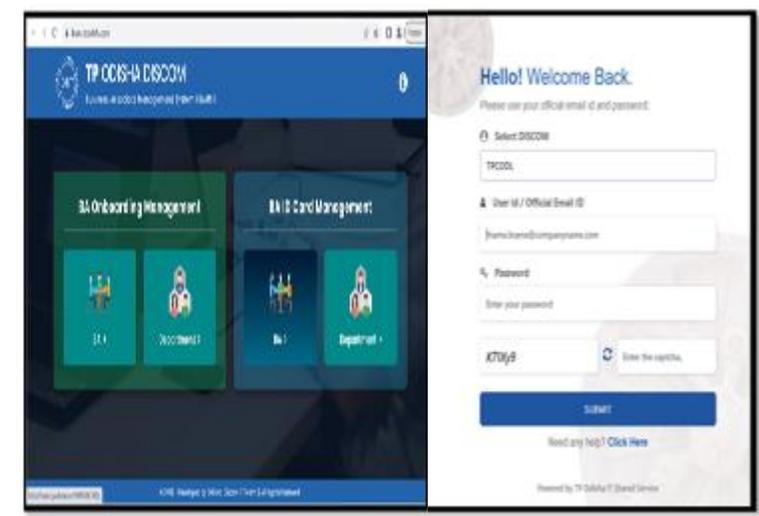
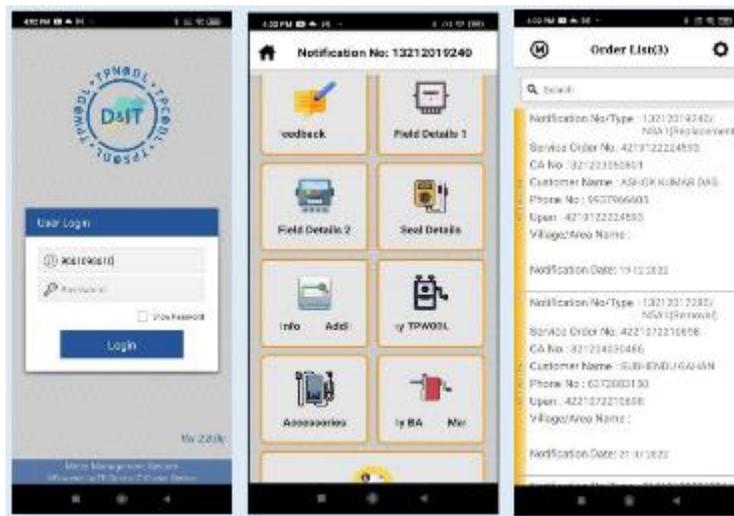
- FCC App
- A1 Notifications
- Suraksha Kawach
- Suraksha Prahari
- SAP FIORI on Mobile (Material Reservation & Notification processing)

Commercial

- OCR Enabled SBM Billing
- MMG Mobile App
- DO (Disconnection Order) App
- My TATA Power App
- Consumer feedback platform
- Integrated Mo-Bidyut Platform

Support Function

- BAMS (Business Associate Management System)
- Achiever Portal
- Aagman Portal
- Connect2Resolve Portal
- PTL (Permit to Leave) Portal



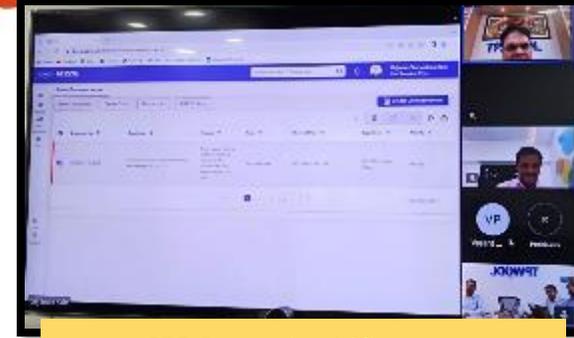
Digital Workspace Suit (DWS)



DAK management process launched on 1st August 2023

Document scanning in progress at Rourkela Circle, RSED & RED Rourkela Divisions
Till date more than 11 lacs pages have been scanned from 14315 files

Usage statistics
Correspondences In warded – 2508, Files created – 327. Major usage is at corporate office with 1500+ correspondence created followed by SED and BED



CEO Processing 1st live case



Members joined virtually for Go-Live



At Rourkela Circle

Extensive **user training** covering 280 offices and 1000+ employees

67 employees selected from various departments as Master Trainers cum DWS Champions

18+ processes to be mapped under DWS project. Final UAT of Generic approval process is completed and will be live in January 2024..

Supporting Go Green
Our efforts is saving approx. 10 Lacs pages each month that reflects potential conservation of around 120 trees per month.



HR & IR HIGHLIGHTS

Employee Engagement : Ullas 2023



Employee Engagement : Grand Annual Athletics Meet 2023

TPWODL



Campus Recruitment & Learning & Development Initiatives

TPWODL



CAMPUS RECRUITMENT of GETs and DETs : To create several Job Opportunities within State Domicile



2 days Certification program on "Strategic Communication"



1 day Training program on "Regulatory & Grid Code"



2 days Safety Improvement program focusing on "FELT Leadership & Suraksha Sambad"



NDRF – FAMEX & Community Awareness program on Disaster Management.

Industrial Relation (IR) Initiatives



01

Project Udaan : for the upgradation of technical, safety and behavioral knowledge of the outsource contract employees.

02

Regularization of Outsourced Manpower : regularization of technically qualified & experienced outsourced employees through a designed process for the post of Operation Trainee. A total of 128 candidates have been selected & joined TPWODL in this process.

03

Reward & Recognition : R&R sessions are organized on regular basis by the TPWODL management for their BA employees. In FY-24, 352 BA employees were awarded R&R.

04

Vendors Meet : Organized BAs & Management Meet on periodical basis to give awareness regarding applicable rules & acts for development of BAs & Statutory Compliances for TPWODL.

05

Statutory Compliances for BA Employees : a) Payment of minimum wages b) Timely disbursement of monthly salary c) Monthly contribution of EPF & ESIC d) BA Employees accidental policy e) Payment of bonus & Leave encashment.



STRATEGIC INITIATIVE HIGHLIGHTS

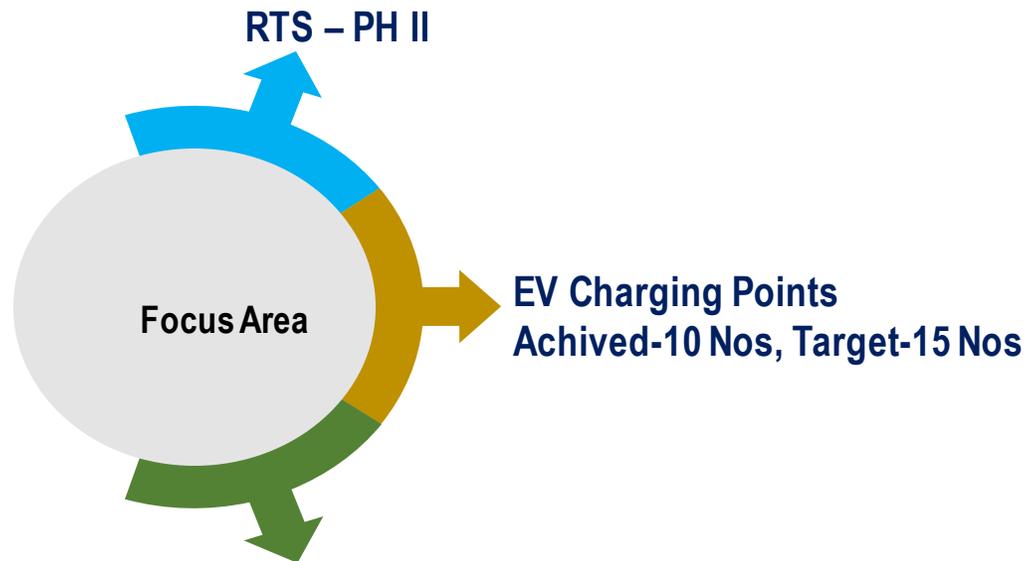
Green Energy Initiatives – Go Green

ROOF TOP SOLAR (RTS) ACHIEVEMENTS

FY	No. of Projects	Capacity(KW)
2020-21	11	166.23
2021-22	20	645.67
2022-23	107	1473.71
2023-24 H1	82	1202.26

ROOF TOP SOLAR (RTS) TARGET

RTS FY Wise TARGET (In MW)	
FY	Capacity(MW)
2023-24 (H2)	3.00
2024-25	6.00
2025-26	10.00
2026-27	12.00



- PM KUSUM – A 500 KW to 2MW solar plant
- PMKSUM C- Individual Pump Solarisation
- PM KUSUM – Scheme C (Feeder Solarization)



The targets are set up to FY 26 based on MNRE direction. If the scheme is extended, further targets can be set.

	IPS (no of Pumps)	capacity in MW	Feeder Solarisation(no of Pumps)	capacity in MW
FY23	1000	4.5	1500	6.75
FY24	19000	85.5	3500	15.75
FY25	17400	78.3	4600	20.7
FY26	18000	81	4000	18
	54400	244.8	13600	61.2

Green Power Sold-702.9 MU
(Till Oct-23 FY 24)

5S Status & Target



Q3 FY 24 (T)

51 Nos PSS

Q4 FY 24 (T)

100 Nos PSS

FY 25 (T)

100 %

Training On 5S Conducted To AMC BA Team At Goshala

Activities Under 5S AT Different PSS Completed





CSR HIGHLIGHTS

CSR – Continued Focus on 4Es with focus on scaling up Flagship Initiatives



Continued Focus on 4Es



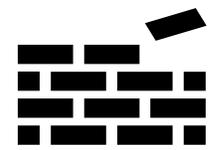
Education



Employability & Employment



Entrepreneurship



Essential Enablers

Vision to Impact 5 Lakh People Cumulatively by FY27

Standardize, Institutionalize and Scale Flagships

Pay Attention

Creating nation wide physical 'Autism Support Network' & champions in association with Govt. facilities & early intervention centers

Anokha Dhaaga

Scaling upskilling & livelihoods ecosystem for SHGs (agri & non-agri) – capacity-building, forward & backward linkages with circular economy/sustainable sourcing

Adhikaar 2.0

Enabling community right to digital, financial literacy; furthering access to Govt. welfare & social security services through Digital Kendras

Club Enerji

Scale up conservation-education to reach maximum schools across TPWODL's operational areas (9 districts) – to reach over 1 Lakh students by FY27 (Ensuring uniformity with Tata Power's Club Enerji initiatives)

Driving flagships

Anokha Dhaaga working with Women, SHGs, FPOs

No of members ('000s)

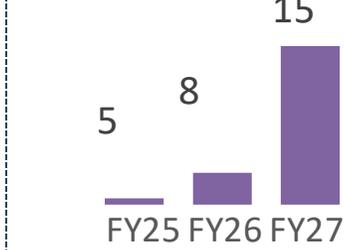


Turnover (₹ lakh)

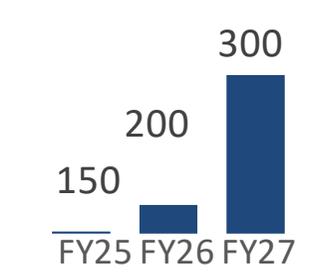


Scaling up through Change Agents

Tie-ups with Local Public Institutions



Creating Community Volunteers



Major focus will be for collaborative initiatives with the District Administration in the 3 Aspirational Districts

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Thank You!

Proposed Power Purchase Cost FY 24-25

ALL FIGURES IN CR

■ FY 2022-23 (Actual) ■ FY 2023-24 (Estimated) ■ FY 2024-25 (Proposed)



- For FY 2023-24, the additional BSP surcharge is estimated as **Rs. 352 Cr.**
- For the year FY 2024-25, energy input of **11524 MU** has been estimated based on the estimated sale of **9614 MU** and Distribution loss of **16.57%**.
- During the ensuing year FY 2024-25 power purchase cost has been estimated **without BSP Surcharge & without TPA** at **Rs 4770.69 Crores** with BSP **@390 paise p.u.**, Transmission charges **@24 paise p.u** and SLDC charges **@Rs 17.138 Lakhs per month.**



Proposed Employee Expenses FY 24-25



Sl No	Particulars	Erstwhile Total (Rs. Cr.)	CTC Total (Rs. Cr.)	Total FY 24-25 (Rs Cr)
1	Basic Pay	125.44	57.97	183.41
2	Grade Pay			
3	Dearness Allowance	66.48	0.00	66.48
4	Reimbursement of House Rent	22.58	12.30	34.88
5	Other Allowance	5.46	31.71	37.17
6	Arrear of 7th Pay Commission including pension			
7	Subtotal (1 to 6)	219.97	101.97	321.94
8	Contractual Obligation	21.15	0.00	21.15
9	Outsource Obligation for Grid and S/S manning (maintenance, watch & ward)	22.55	0.00	22.55
10	Other staff Cost (LTA, Medical exp., Incentive, Misc)	43.38	41.47	84.85
11	Total additional Employee cost(8 to 10)	87.09	41.47	128.56
12	Staff Welfare Expenses	13.83	4.68	18.51
13	Terminal Benefits(Pension)	136.98	0.00	136.98
14	Terminal Benefits(Gratuity, Rehabilitation & Unutilised leave)	18.14	2.46	20.60
15	Total cost of Terminal Benefits, Gratuity, welfare Exp.)	168.95	7.14	176.09
16	Total (7+11+15)	476.00	150.59	626.59
17	Less:-Employee cost Capitalised	15.26	4.83	20.09
18	Net Employee Cost	460.74	145.76	606.50

Rev. Est. for
FY 23-24

Actual Employee Expenses till Nov'23 Rs. **353.89 Cr.** (CTC: Rs. **75.91 Cr**, Erstwhile: Rs. **277.98 Cr** Terminal Due :Rs **113.59Cr**)
Est Total : Rs. 582.71 Cr
OERC Approved: Rs. 580.57 Cr

Particulars	FY 24-25		
	CTC	Erstwhile	Total
Opening strength	1518	1887	3405
Employees added	330	0	330
Employees retd./expired/resigned	0	55	55
Total Manpower	1848	1832	3680
Average Strength	1683	1860	3543
Approved No. of Employees per 1k consumers			1.4
Consumer Strength (incl. TD & PD)			2518141

ASSUMPTION –

- Emp. Exp.- Erstwhile employees considered @ 3% hike & CTC around 9% over FY 23-24 as per industry norms.





Proposed A&G Expenses FY 24-25



ALL FIGURES IN CR



	Administrative and General Expenses	Additional Expenses	Total
■ FY 2022-23(Actual)	146.45	0	146.45
■ FY 2023-24(Estimated)	191.09	0	191.09
■ FY 2024-25(Proposed)	204.46	41.40	245.86

A&G Expenses for FY 23-24

- Proposed **Rs. 191.09 Cr**
- Actual A&G Expenses (Up to Nov'23) **Rs. 131.42 Cr**
- Approved **Rs. 158.12 Cr**

Proposed A&G Expenses for FY 24-25

- With escalation of **7%** on estimated A&G of FY 23-24, accordingly A&G for FY 24-25 projected as **Rs. 204.46 Cr**.
- Further **Rs. 41.40 Cr**. Addnl. Expenses due to different revenue improvement initiatives.
- Hence, total A&G proposed for FY 24-25 is **Rs. 245.87 Cr** may kindly be approved.

Major Initiatives planned in FY 24-25

- Call Centre – **Rs. 3.84 Cr**
- GIS, SCADA, Communication, OT, Data Charges – **Rs. 14.19 Cr.**
- IT Automation – **Rs. 5.65 Cr.**
- Meter replacement (recurring cost) – **Rs. 3.22 Cr.**
- Loss Reduction – **Rs. 4.34 Cr.**
- Energy Police Station – **Rs. 5.06 Cr.**
- Energy Audit – **Rs. 0.05 Cr.**
- Enforcement Activities – **Rs. 5.50 Cr**

Total Additional A&G Cost – Rs. 41.40 Cr.



Proposed R&M Expenses FY 24-25



Sl. No	Particulars	Current Year (23-24) (Rs. Cr.)	Ensuing Year (24-25) (Rs. Cr.)
1	Civil repairs & maintenance	0.24	0.30
2	Distribution line repairs & maintenance (Material)	7.01	7.79
3	33 KV Network asset AMC	26.12	43.77
4	11 KV & below Network assets AMC	106.33	133.40
5	Consumer Service Maintenance	14.14	14.85
6	Substation operations & maintenance	42.95	51.21
	Street Light maintenance	0.27	0.29
7	Transformer maintenance	16.99	15.26
8	Other repairs & maintenance	7.00	7.65
9	Special R&M (33 kV & 11 kV river crossing & forest area Tower maintenance)	60.94	62.35
TOTAL		281.99	336.86

Proposed FY 24-25		
Particulars	Own Assets	Govt. (Funded/Grant) Assets
Total GFA as on 01.04.2024 (Rs. Cr.)	3906.89	4359.15
Normative Rate	4.20%	3%
R&M on GFA (Rs. Cr.)	164.09	130.77
Total R&M (Rs. Cr.)	294.86	

Asset Details

Particulars	Mar-23	Mar-24
Assets out of Consumer Contribution	1147.90	1265.20
Grant Assets	479.86	636.61
Own Inherited Assets	868.08	868.08
Own CAPEX Assets	500.00	1137.00
Total GFA (Own Assets)	2995.85	3906.89

Name of Scheme	Mar-23 (Rs. Cr.)	Mar-24 (Rs. Cr.)
ODSSP (I, II & III)	899.45	1143.53
ODSSP (IV)	29.87	491.12
DDUGJY New	293.39	293.39
IPDS	223.11	223.11
DDUGJY (PGCIL)	685.37	685.37
DDUGJY (NTPC)	1442.63	1442.63
RLTAP	80.00	80.00
Total	3653.82	4359.15

Addnl. R&M Expenses of Rs. 42 Cr. to be claimed for FY 24-25



Proposed Prov. for Doubtful Debts & Depreciation for FY 24-25

Provision for bad and doubtful debts

As per Regulation Bad and Doubtful debt during the control period is permitted on normative basis **@ 1% of the total annual revenue billed**. The licensee has proposed the same as provisions for bad and doubtful debts amounting to **Rs 57.51 Cr.**

Description (Rs. Cr)	FY 2022-23 (Actual)	FY 2023-24 (Estimated)	FY 2024-25 (Proposed)
Provision for bad and doubtful debts	129.41	62.83	57.51

Description (Rs. Cr)	FY 2022-23 (Actual)	FY 2023-24 (Estimated)	FY 2024-25 (Proposed)
Provision for depreciation	44.27	91.58	125.98

Provision for Depreciation

Depreciation has been provided on the assets to be capitalized during the ensuing year excluding dep on consumer contribution assets. **Depreciation on old assets @ pre-92 rate & on TPWODL assets as per new regulation.**

Items	Pre-92	As per New Regulation
Land	0%	0%
Buildings	1.80%	3.34%
Network assets	3.80%	4.67%
Overhead lines	3.80%	4.67%
F&F	4.55%	6.33%
Vehicles	12.86%	9.50%
O/E	9.00%	6.33%
O&E-Computer	9.00%	15.00%
Software		30.00%



Proposed Interest Expenses FY 24-25



Description (Rs. Cr.)	FY 23-24 (Estimated)	FY 24-25 (Proposed)
Interest on Loan for Capex	23.42	45.10
Interest on Loan for Working Capital	60.57	67.12
Interest on Security Deposit	78.18	85.89
Total Interest for ARR	162.17	198.11



Proposed Rate of Interest @ 11.6% p.a. (SBI Base Rate + 1.5%)

- Capex Loan till Nov-23 (HDFC & Canara Bank) - Rs. 275 Cr.
- Capex Loan esmt. (Dec-23 to Mar-24) – Rs. 81.66 Cr.
- Proposed Addnl. CAPEX Loan during FY 24-25 - Rs. 350 Cr. with Interest @11.60%.
- Proposed interest on Capex Loan FY 24-25 - Rs 45.10 Cr.

Particulars (Rs. Cr.)	FY 2024-25
O&M Expenses (Emp & A&G)	852.36
O&M Expenses for 1 month (a)	71.03
Power purchase Cost	4,770.69
Power Purchase for 1 month (b)	397.56
R&M Expenses	336.86
Maintenance spares @ 20% of R&M for 1 month (c)	5.61
Total Working Capital (a+b+c)	474.20
Rate of Interest for Working Capital	13.10%
Interest on Working Capital	62.12
Other borrowing interest	5.00
Total Interest on Working Capital & Other Borrowing	67.12



Proposed Rate of Interest 13.1% p.a. (SBI Base Rate + 300 basis points)

- Proposed WC is Rs 474.20 Cr (O&M- and Power purchase cost 1 month, R&M 20% of monthly Average).



Interest on security deposit @6.75% on balance of FY-24 and addition during the ensuing year

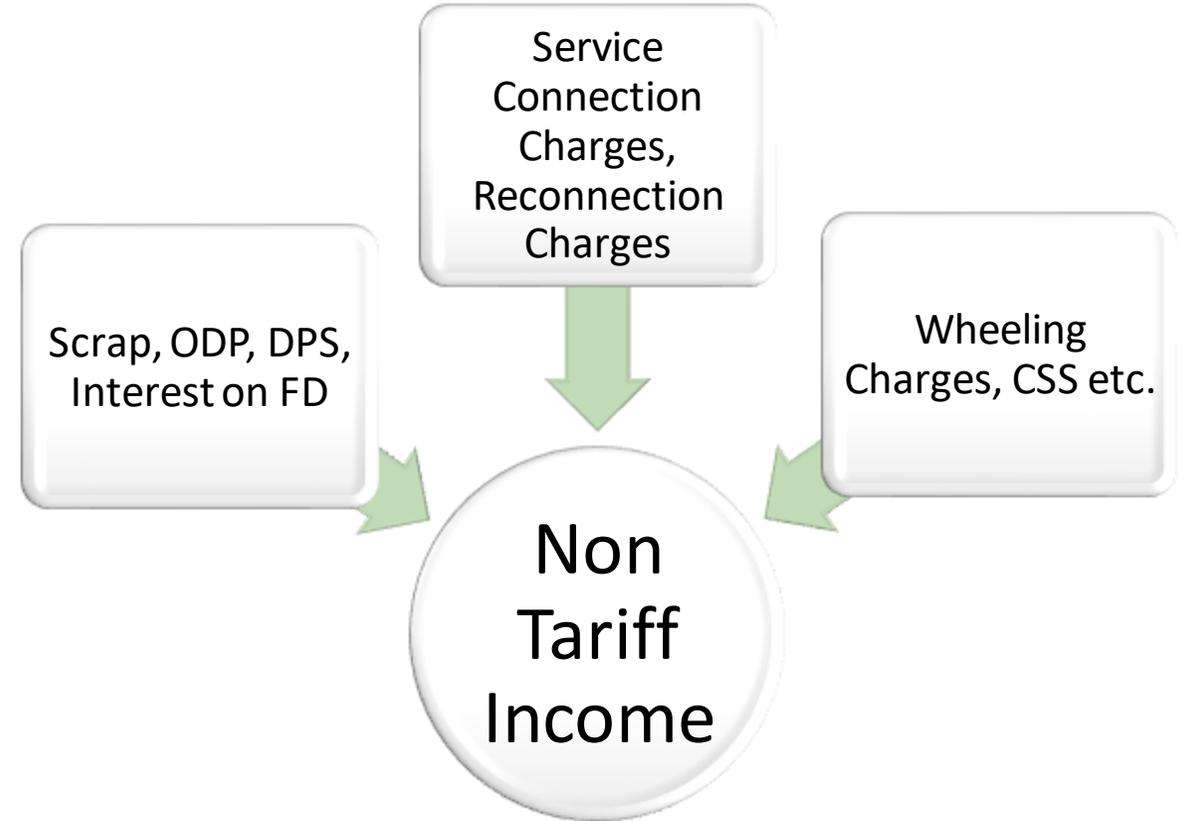
- Opening Balance as on Mar-24 is estimated as Rs.1240 Cr
Proposed SD as on March-25 is Rs 1305 Cr.



Proposed Non-Tariff Income FY 24-25



Particulars	UoM	FY 24-25 (Proposed)
Rebate on Power Purchase	Rs. Cr	66.52
Supervision Charges	Rs. Cr	20.00
Interest on FD	Rs. Cr	80.00
Open Access Charges (CSS & Wheeling)	Rs. Cr	180.00
Misc. Receipt	Rs. Cr	10.00
ODP	Rs. Cr	10.00
DPS	Rs. Cr	9.50
Other incl. Scrap	Rs. Cr	10.00
Total	Rs. Cr	386.02



- The Utility has proposed Rs 386.02 Cr as Non Tariff Income for the ensuing year FY 2024-25.



Increase in Bulk Supply Price



Bulk Supply Price (BSP) - GRIDCO

Rate of supply of procured electricity by Aggregator company to DISCOMs for distribution

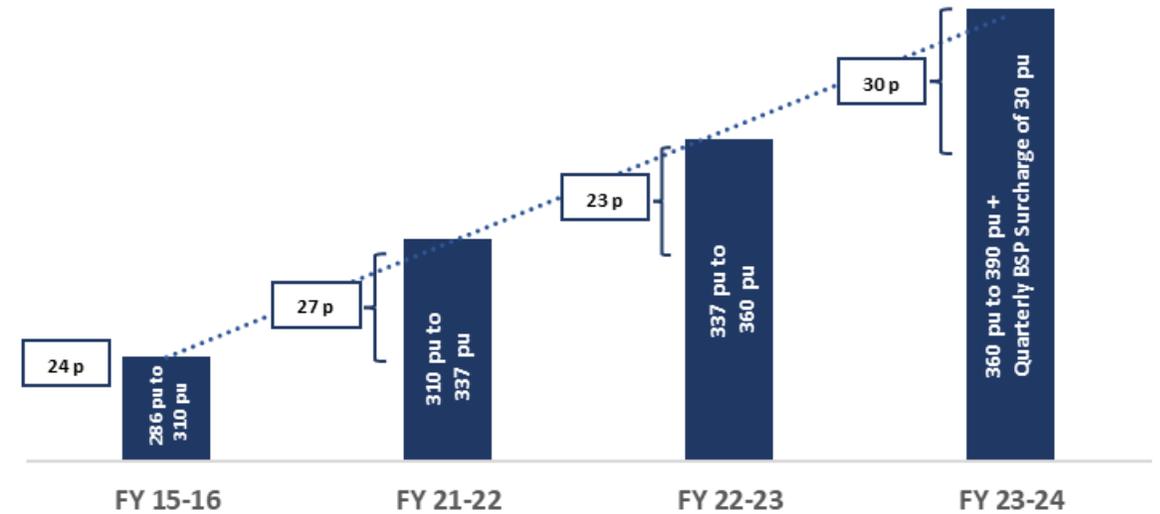
Financial Year	Increase	Remarks
FY 15-16	24 paise	286 p/u to 310 p/u
FY 21-22	27 paise	Increased to 337 p/u
FY 22-23	23 paise	337 p/u to 360 p/u
FY 23-24	30 paise	360 p/u to 390 p/u +BSP surcharge of 30 p/u to be paid quarterly

Retail Supply Tariff (RST) - DISCOMS

Rate of provision of electricity to retail consumers by DISCOMs

Financial Year	Increase
FY 15-16	20 paise
FY 17-18	10 paise
FY 21-22	50 paise

Increase in BSP



- 1) Bulk supply Price** has been revised by the Hon'ble OERC by **almost 40% over the last 10 years** as compared to the Retail Supply Tariffs.
- Further increase in BSP will create a Revenue Gap for the DISCOMs and will affect the financial health of the DISCOMs thereby affecting the consumers of the state.