

# TPCODL

## TP CENTRAL ODISHA DISTRIBUTION LIMITED



1. Aggregate Revenue Requirement and Determination of Wheeling & Retail Supply Tariff for FY 2023-24:- (Case no. 88 of 2022)
2. Determination of Open Access Charges for FY 2023-24 :- (Case no. 89 of 2022)
3. Truing up for FY 2021-22 (Case no-90 of 2022)
4. Truing up for FY 2020-21 (June 2020-Mar 2021) (Case no-91 of 2022)
5. Approval of Business Plan for FY 2023-24 ( Case no -11 of 2023)

28<sup>th</sup> February 2023

Lighting up Lives!

# Agenda



- 1 TPCODL at a Glance
- 2 Our Approach as a Utility
- 3 Overall Performance
- 4 ARR for FY 2023-24 and Resulting OA Charges
- 5 Tariff Rationalization & Other Proposals
- 6 True up of FY 2020-21 (10 Months) and FY 2021-22
- 7 Business Plan for FY 2023-24

# TPCODL at a Glance



30.32 Lakhs customers spread across 29,354sq.km

As on  
31.03.20  
22

33/11 kV PSS:359

STS Capacity: 4732  
MVA

Distribution  
Capacity: 5304  
MVA

33KV Line: 3916  
KM

11KV Line: 38621  
KM

LT Line: 49491 KM

As on  
31.01.20  
23

33/11 kV PSS:367

STS Capacity: 4847  
MVA

Distribution  
Capacity: 5441  
MVA

33KV Line: 4193  
KM

11KV Line: 39485  
KM

LT Line: 50948 KM

Addition

8 Nos

115 MVA

137 MVA

277 KM

864 KM

1457 KM

## Change in Consumer Profile

Category	No's of Consumers as on 31.03.2022	No's of Consumers as on 31.01.2023	Consumer Additions
EHT	35	36	1
HT	2083	2244	161
LT	2925338	3029991	104653
<b>Total</b>	<b>2927456</b>	<b>3032271</b>	<b>104815</b>

**104815 Consumers added in Apr 2022 - Jan 2023( including Regularization)**

**312 MVA of Load added in Apr 2022 to Jan 2023**

# Safety Initiatives 1/2

## Strengthening Employee Safety

### COMPETENCY ENHANCEMENT

- **BBS Training:** 3354 employees covered (Cumulative)
- **Skill Development Centre:** 4 established, another 1 being inaugurated in 1<sup>st</sup> week of March 2023.
- **Practice Yard:** 18 No's. ( 8530) employees trained)
- **Competency assessment** of all BA employees done.
- **Training Porta Cabins** 3 installed, 7 more being installed.

### TECHNOLOGY

- **FRP rod with Universal socket for Neon Tester & Discharge Rod**
- **SURAKSHA KAVACH:** Uploading of SOP compliance Photographs and JSA in Suraksha Kavach App
- **Man lifters are being procured**
- **A type FRP Ladder in PSS for Working at Height**
- **Web based portal for reporting unsafe act / conditions & incidents.**

### PROCESS

- **Safety Audits:** 568 Safety Audits completed.
- **CSM implementation:** Rs 150.9 Lakhs penalty imposed
- Use of Family photo inside helmet to inculcate behavior change
- **Photo of authorized employee on LOTO Tag:** Paradeep Division.
- **PPE & Safety Equipment** for all employees.
- **Lockout & Tag out** implemented at PSS.
- **IMS (ISO 9001,14001,45001)** implemented.

### SKILL DEVELOPMENT CENTRE



A type FRP ladder for PSS



Porta Cabins in Practice Yard

Helmet with Voltage Sensor

## Safety Initiatives 2/2

### Strengthening Public and Animal Safety

#### SAFETY AWARENESS

- **Safety Awareness in schools, Print & Social Media**
- **Nukkad Natak** through NGO
- **Playing of Safety jingles** through PA System on AMC vehicles
- **Suraksha Sachetan Rath** during Rath yatra, Bali Yatra, Gajalxmi Pooja etc.
- **Safety awareness pamphlets distribution**: 30 lakhs
- **Display of Safety Awareness posters** on AMC vehicles
- **Safety message painting on Substation Wall**

#### JOINT PATROLLING

- **Joint patrolling** with forest dept. to prevent Hooking and poaching of Animals

#### TECHNOLOGY

- **LT protection** at more than 600 locations to ensure public and animal safety
- **Interposing poles (>3.5k) and re-sagging (>33k spans) of conductors** to ensure minimum vertical clearance

#### OTHERS

- **Notice to Violators for Unauthorized construction.**
- **Village Safety Committee for Awareness & unsafe condition reporting.**
- **Fencing /Boundary Wall around open Distribution Substation.**

Nukkad Natak for Public Safety Awareness



44,619 unsafe locations made safe in FY 23,  
1.5 Lacs locations made safe on cumulative basis (FY 21 onwards)

Village Safety Committee Meeting



# Operational Performance Highlights



## KEY KPIS

Particulars	UOM	FY 21-22 (Till Dec)	FY 22-23((Till Dec)
SAIDI	Hrs.	132	114
SAIFI	Nos.	314	282
Grid Availability	%	97.9	98.2
DT Failure Rate	%	3.7	2.9

## HIGHLIGHTS

Dissolved Gas Analysis for Transformer monitoring



780 Nos

Ultrasonic Vibration management - Transformers, Switchgears & RMUs



266 Nos attended

Thermography for identifying hotspots in equipment



948 Nos attended

## OTHER INITIATIVES

- Network planning with Load Flow Analysis through **CYME**
- **SAP-Material Management** implementation
- Finalization of **Bhubaneswar City Reliability Plan**
- Low cost SCADA pilot at **Darpanarayan**
- **In-house workshop** for maintenance, inspection & repair of DTRs

- *Drone for network survey & maintenance- 11 kV Kujimahal*
- *Feeder Survey Going on. Length Covered 17 Km, Hotspot Observed- 14 nos.*

- **Beautification for Hockey World Cup in record 1 month** time -Restoration of network and infrastructure.
- Successfully removed dead poles and painted more than 1000 poles across major roads. Ensured 100% reliability throughout the Hockey World Cup.



DSS/DT Maintenance



11 kV Feeder work



Power Transformer Overhauling

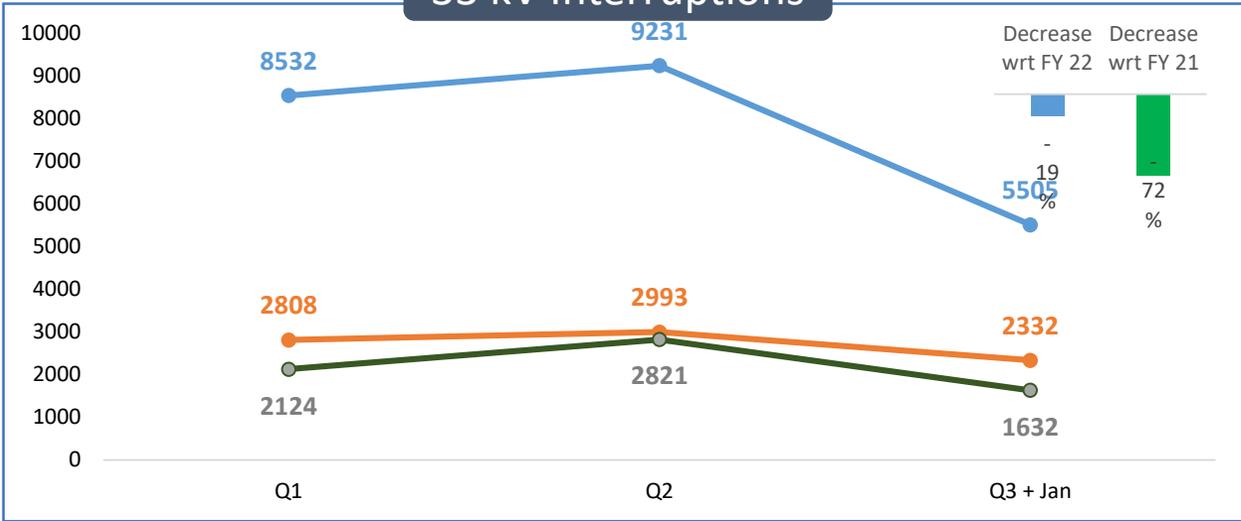


Grid Audit

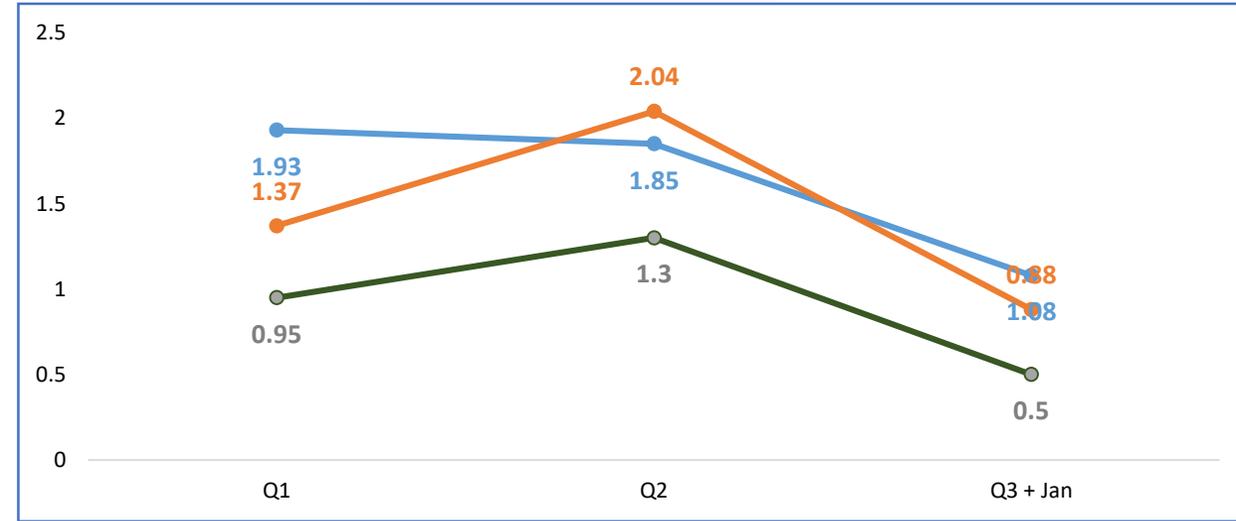
# Operational Parameters Trend



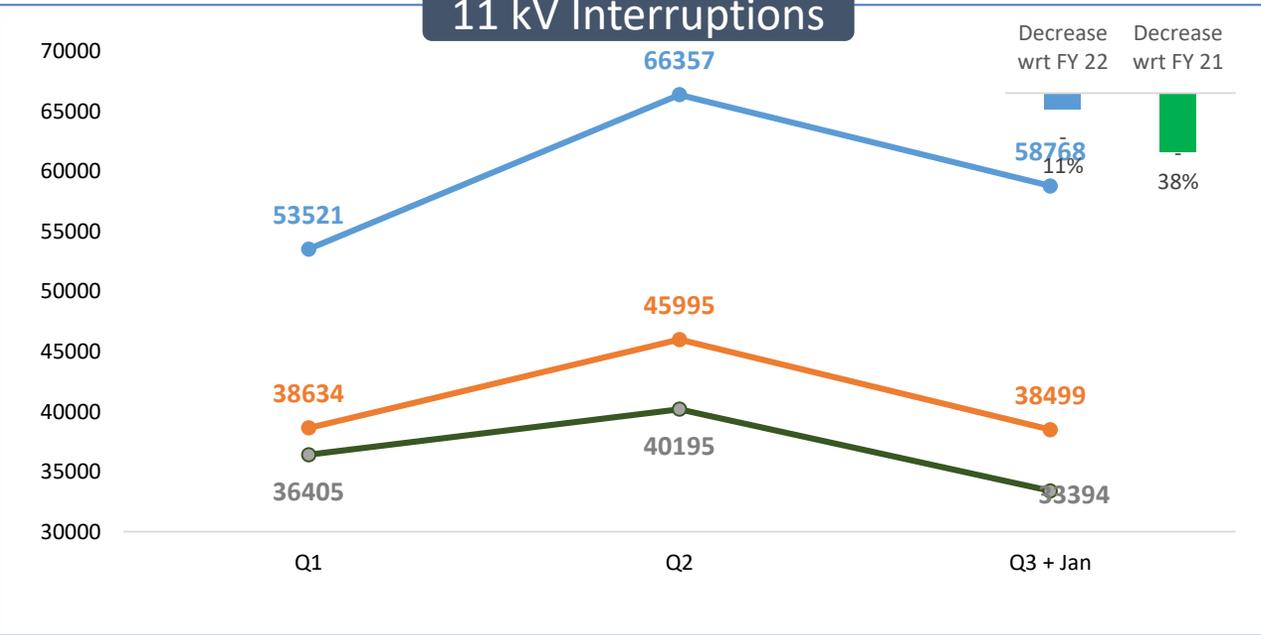
## 33 kV Interruptions



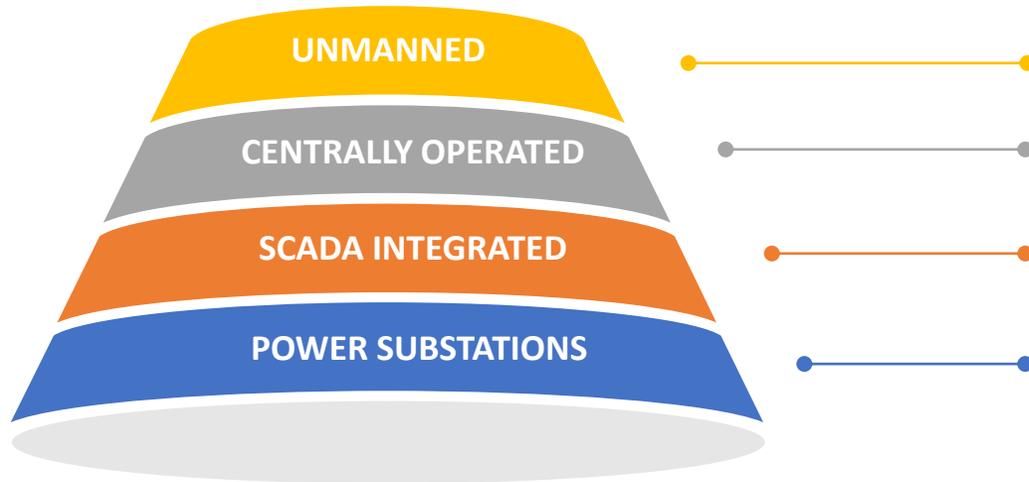
## DT Failure Rate (%)



## 11 kV Interruptions



# Sub-Station Automation System Status and Plan



82 Unmanned Substations

115 Substations operated through Central PSCC

183 Substations integrated with SCADA System

381 33/11 KV Power Substations

## Centralized Power System Control Centre benefits:

- Ensures efficient & coordinated operations
- Faster restoration during shutdown /breakdown
- Ensure optimal loading, network utilization
- Contingency analysis with real time network parameters
- Establish uniform safety procedures
- Optimal Outage Management
- Central Repository for Network Parameters





# GIS Implementation



33/11kV Network including GSS Boundary, All PSS and its Connected Network



100 % Complete

11 kV (line UG and OH) network



27060 Km N/w & 71057 Nos of DT Captured



100 % Complete by Mar'23

LT Line (UG and OH) network



31131 Km Km N/w Captured



Another 15000 Km by Mar'23

Consumer Indexing



18 lakhs captures



Another 4 lakhs by Mar'23

ESRI enterprise GIS Solution

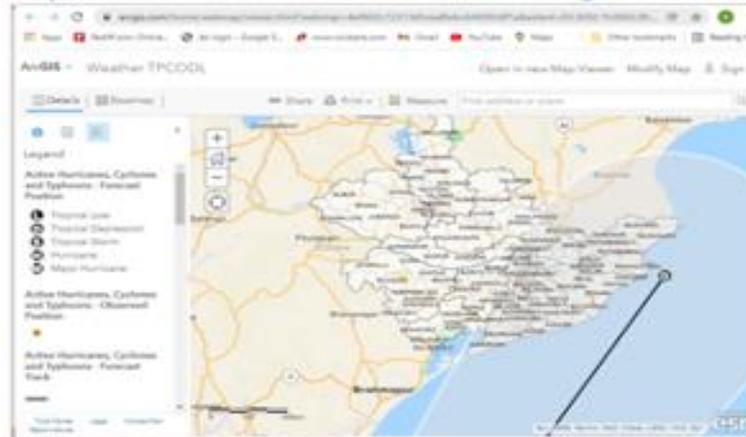


All integration to be active and made synch able by Mar'23

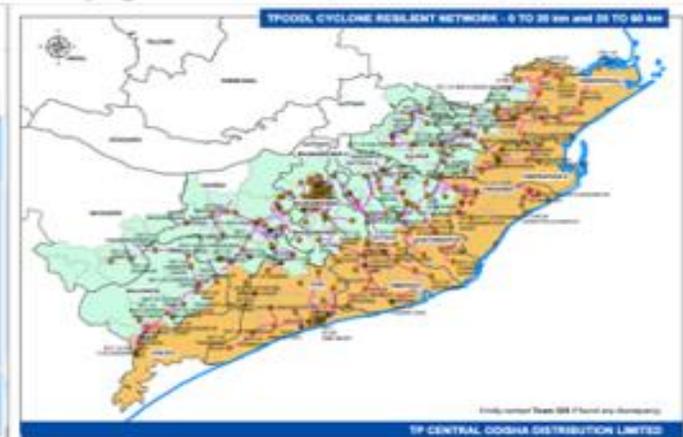
## Benefits realized so far:

- **Network Planning** (all 33/11 kV S/S SLD in GIS is now a single input for SCADA/ PSC, STS and synched with Cyme Application).
- **For creating functional location in SAP for Asset Management.**
- **During cyclone for mapping and planning of affected sections**
- **Calculating Energy Audit for Cuttack and BBSR I Circle.**

Cyclone affected Sections – Disaster Management



Identifying Infrastructure within 0-20KM & 21-60KM





## IT

- Consumer Centric Initiatives - Interactive Billing, Development and rollout of **FCC App**, Desk wise PA pendency **auto email escalation**, Pre-paid meter incorporated
- **Online Vendor Registration Portal** started for reduction of the procurement cycle.
- **BAPASS (Business Associate Permit and Site Safety)** Application was released to ensure that only authorized persons are working at site
- **FCC App** successfully rolled out in across 597 FCC spread across 16 divisions
- **MMG 2.0 App Rolled out**, which reduced protocol data upload time from 2 days to 15 Minutes & Saving of Approx ₹ 1.7 Cr OPEX
- **Sarathi 2.0 for Energy Audit** successfully deployed
- **Optical Character Read (OCR) App** developed and rolled out for carrying out meter reading through scanning of the meter using a mobile phone, to help reduce reading errors and suppressed / incorrect readings.

## New Technology

- **Wearable Real-wear Headgear.**
- **Remote mentoring using WebEx, Document Navigation.**
- **Automatic triggering of Video feed** during real-time operation of equipment at substation.
- **Fault analysis and IED management** from the Centralized System at MCC & BCC.



Real Time monitoring-Thermal View of EMC Park Substation Equipment

# Key Initiatives for improvement in Customer experience... 1/5



## Bidyut Seva Kendra (BSKs)

- To make a stronger connect with the Rural customers, Fuse Call Centres are being converted to BSKs
- 227 Nos of BSKs have been established till date. It is targeted to reach out to all Divisions by Q1 FY 24
- Services provided through BSKs:
  - Attending Fuse call complaints
  - Technical Feasibility & Dues Verification of New Connection
  - Bill payments through digital means – QR Code, TPCODL Mitra, Online
  - Registration of new connection request along with documentation
  - Senior Citizen facilitation through Whatsapp video call

## Bill Printing in Odia

- By default for NSBM since Nov'22 –On Websites, Mobile App, Online Link. On Demand English Bill also available.
- In Spot bill since Oct'22 –Option has to be given by Consumer

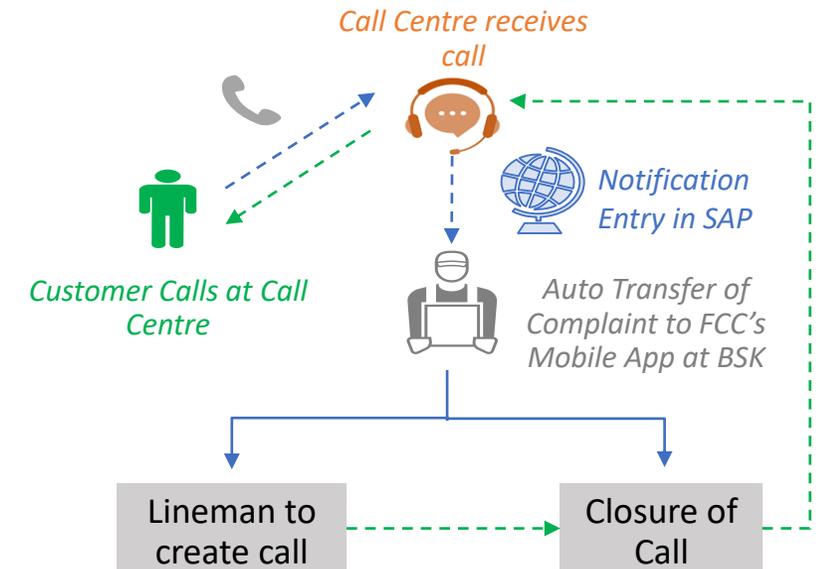
## Proactive Communication

- **Covered 5000 +** Student through awareness Session in School / Energy Club

### Bidyut Seva Kendra inaugurated by Sarpanch in Nayagah



### Process flow chart of complaint management @ BSK



### Awareness Camps at School on Energy Conservation and Online Payment



# Key Initiatives for improvement in Customer experience... 2/5

## 'Gaon Chala'

- 654 Camps Organized across all divisions & more than 20 K Customers Touched
- 2737 Consumers converted to Digital Platform
- 3691 New Service Connection Processed

## RWA Meet

- 57 meeting with Resident Welfare Associations in Urban Division

## WhatsApp Billing

- WhatsApp Billing introduced

## Consumer Meet

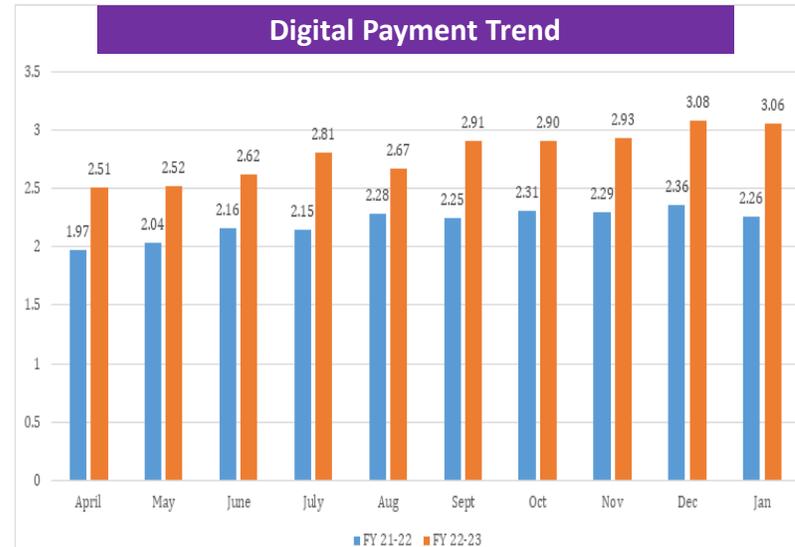
- 2<sup>nd</sup> Consumer meet organized on 20<sup>th</sup> Jan 2023

## Customer Care Centre

- 4 Cust. Care centres added in FY-23 .
- Total Operationalized CCC till date: 17 (in 17 Division out of 20) including one Mobile CCC in Marshaghai.

## Digital Payment Promotion

- Collaboration with Bharat Money Store (approx. 8600+) and CSC (6500+)
- Launch of Dynamic QR code based payment system.
- Video prepared on Online & Rebate benefits for awareness through Whatsapp
- Putting Banners of QR code for Digital Payment



3.06 lakhs Digital Payers in Jan 2023

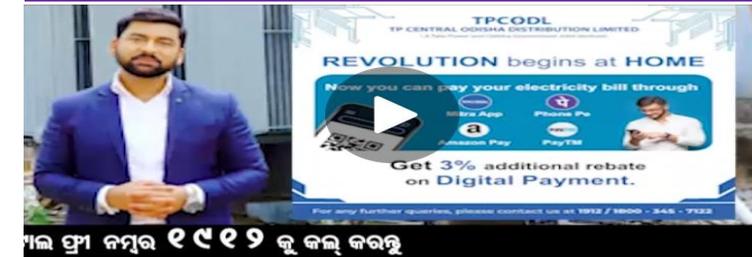
## Gaon Chalo Camp



## RWA Meets



## Banners & Dynamic QR code for Digital Payment



## 2nd Consumer Meet



# Key Initiatives for improvement in Customer experience... 3/5

## Freedom from Hassle in New Connection

Release of new connection on 15<sup>th</sup> August through 4 easy steps of Registration, Uploading documents, payment and verification & meter installation under the Ease of getting electricity

1. No Application processed manually
2. Request of customer at section/sub-division/ division/ customer care are registered immediately

## Complaint registration methodologies

Offline / Physical Mode –

- Customer Care Associate ( CCA) at Section Office
- Customer Care Centres at Division Levels where Customer Relations Executive (CREs) and CCA are deployed.

Website Call Centre Cust. Care email -

Customer Touch Points    Grievance Escalation Matrix    Share Your Feedback with us

<p><b>To Register a Complaint</b> Click here</p>	<p><b>Call us on the</b> TPCODL Toll Free Number 1912 / 1800 345 7122</p>	<p><b>Write to us at the</b> TPCODL Customer Care E-mail Id: <a href="mailto:customercare@tpcentralodisha.com">customercare@tpcentralodisha.com</a></p>	<p><b>To visit the</b> TPCODL Customer Care Centre Click here</p>
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Escalation matrix if Complaint not resolved

<p><b>Level 1</b></p> <p>Customer Relationship Executives Contact Details and Key Consumer Group (Load above 100KVA) Contact Details</p> <p>Contact Details</p>	<p><b>Level 2</b></p> <p>Divisional Manager Contact Details</p> <p>Contact Details</p>	<p><b>Level 3</b></p> <p>Circle Head Contact Details</p> <p>Contact Details</p>	<p><b>Level 4</b></p> <p>Please email us at <a href="mailto:Grievance@tpcentralodisha.com">Grievance@tpcentralodisha.com</a></p>
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Official contact number and E-mail id of the team is available on the website also

**Freedom from Hassle in New Connection**

75 Azadi Ka Amrit Mahotsav

ବାୟୁଜ୍ଵାଳା ଅନୁଚ୍ଚୟୋଗ, ଦିଏ ଅଗରେ  
**ନୂଆ ବିଦ୍ୟୁତ୍ ସଂଯୋଗ**  
SWADHINATA RA AMRUTAJOGA, TIPA AGARE  
**NUA BIDYUT SANJOGA**  
ଏହି ସେବା ୧୫ ଅଗଷ୍ଟ, ୨୦୨୨ ଠାରୁ ଆରମ୍ଭ

ବିଦ୍ୟୁତ୍ ସଂଯୋଗ ଏବେ ଅତି ସରଳ

କିଛିଟୁ ପଞ୍ଜୀକରଣ ମାତ୍ରମା

Whatsapp/ SMS/ Missed Call ହାତ୍ସପ/ ମିସଡକଲ/ ଏମ ଏମ ଏମ 8093009990  
Customer Care/ ଗ୍ରାହକ ସେବା 1912/1800-345-7122  
E-mail/ ଇ-ମେଲ୍ [newconnection@tpcentralodisha.com](mailto:newconnection@tpcentralodisha.com)  
Website/ ୱେବସାଇଟ୍ <https://mobidyut.com/NewConnection/ConnectionType>

ଅଧିକ ବିବରଣୀ ପାଇଁ [www.tpcentralodisha.com](http://www.tpcentralodisha.com) ରେ ଲଭନ୍ତୁ କରନ୍ତୁ

**TPCODL**  
TP CENTRAL ODISHA DISTRIBUTION LIMITED  
(A Tata Power and Odisha Government Joint Venture)

**1912 – Complaint/ query call**

For any complaint/query call

**1912**

For New Connection

- 1 Customer Care/ ଗ୍ରାହକ ସେବା 1912/1800-345-7122
- 2 Whatsapp/ SMS/ Missed Call ହାତ୍ସପ/ ମିସଡକଲ/ ଏମ ଏମ ଏମ 8093009990
- 3 E-mail/ ଇ-ମେଲ୍ [newconnection@tpcentralodisha.com](mailto:newconnection@tpcentralodisha.com)
- 4 Website/ ୱେବସାଇଟ୍ <https://mobidyut.com/NewConnection/ConnectionType>

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# Key Initiatives for improvement in Customer experience... 4/5



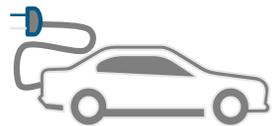
## Rooftop Solar



- **524 installation (total capacity 3.28 MW)** commissioned till date
- **5 MW** Installation Target received under MNRE subsidy scheme.
- **17 Solar Developers empanelled** through tendering process and **9** in Simplification process of MNRE.
- In the Stage Registration Portal developed by TPCODL -**846 Applications received with cumulative capacity of 2.45 MW.**
- In MNRE portal , **87 application received** with cumulative capacity of **229 kW** under the Simplification procedure
- 162 kW Solar installation under progress and 25 kW has been installed.
- Customer turnaround not encouraging due to high per kW cost even after subsidy.



Solar panel installed on roof of a customer



## EV Public Charging



- **11 connections** with a load of **333 kW** provided
- EV Charging Station for E-Rikshaw and E-Bus : Charged in Pokhariput (733 KVA) & Patia (744 KVA), Ghatikia, Near SUM Hospital (30 KW)



EV Charging for E-Bus

# Key Initiatives for improvement in Customer experience... 5/5



**PM-KUSUM  
(Component- C)**



<b>State Nodal Agency</b>	<b>Dept. of Agriculture</b>
<b>State Implementing Agency</b>	TPCODL
<b>Target for FY 22-23</b>	500 Nos of Pump
<b>Benchmark price for subsidy dispensation</b>	Rs 47,100 per kW
<b>Approved market price of power plant</b>	Rs 55,000 per kW
<b>Loan Tenor</b>	12 years (Max)
<b>Rate of Interest</b>	9% (Max)
<b>Max capacity of pumps to be covered under the programme</b>	
<b>For individual farmers</b>	7.5HP
<b>For groups, Pani Panchayats, FPOs, Community Irrigation systems</b>	Any HP @ 5HP per member

**Activities completed :**

- Tariff Order & order for socialization of bank interest of farmer and standard parameters for programme implementation obtained.
- Programme Implementation guidelines issued by Dept. of Agriculture.
- Empanelment of Vendors on verge of completion.
- Feeder wise farmer identification in process.



**Demand Side Management**



- MoU has been signed with EESL where TPCODL customers can avail super efficient A.C and BLDC fans through online registration.
- **TPCODI's direct collaboration with Voltas**, offering TPCODL customers a wide range of 5 star A.C models
- **32 Energy** efficient 5 star inverter A.Cs and **90 BLDC** energy efficient ceiling fans have been distributed under the DSM program.



# Replacement of Meters – Loss Reduction Measures

SI No	Activity	FY 23 Till 25 <sup>th</sup> Feb-23	Till date 25 <sup>th</sup> Feb-23	Project.FY 23 Till March-23
1	1Ph Def/NM Replaced	133804	562157	150000
2	Mechanical Meter Replaced	95028	278701	103028
3	Govt. Smart Meter installed	10706	10706	21000
4	Private Smart Meter installed	19835	19835	40000
<b>Total</b>		<b>259373</b>	<b>871399</b>	<b>304028</b>

## Benefits to the Consumer

- Smart metering provides rapid access to **customer transaction and payment records.**
- Provides **easy pre-payment facility & Pay as per your use.** No need to stand in queue
- **No surprising bill** as day to day bill will be available and thus effective load management by using appliances at off peak hours which will also result in lesser bill to consumer.
- **Mobile App** is programmed to display various facilities including **amount of credit left, last recharge details** etc
- **No bill dispute**
- Allow consumer to budget expenses.
- Help consumer contribute towards **energy conservation.**

Smart Meter Pictures

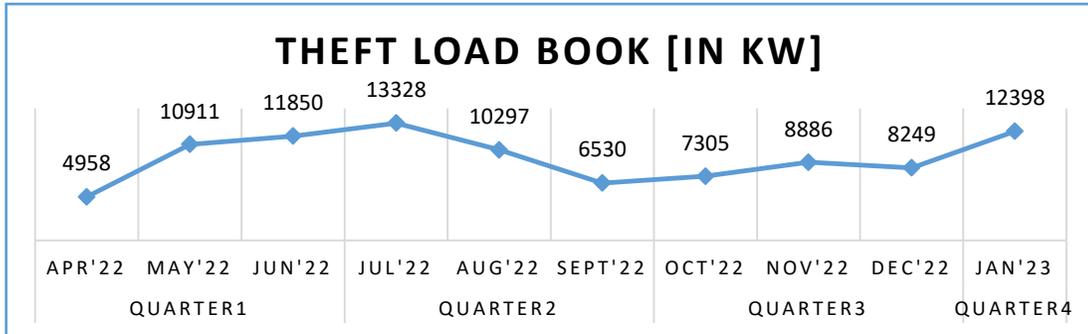


▪ Daily output has increased to > 500 installations for Smart Meters .

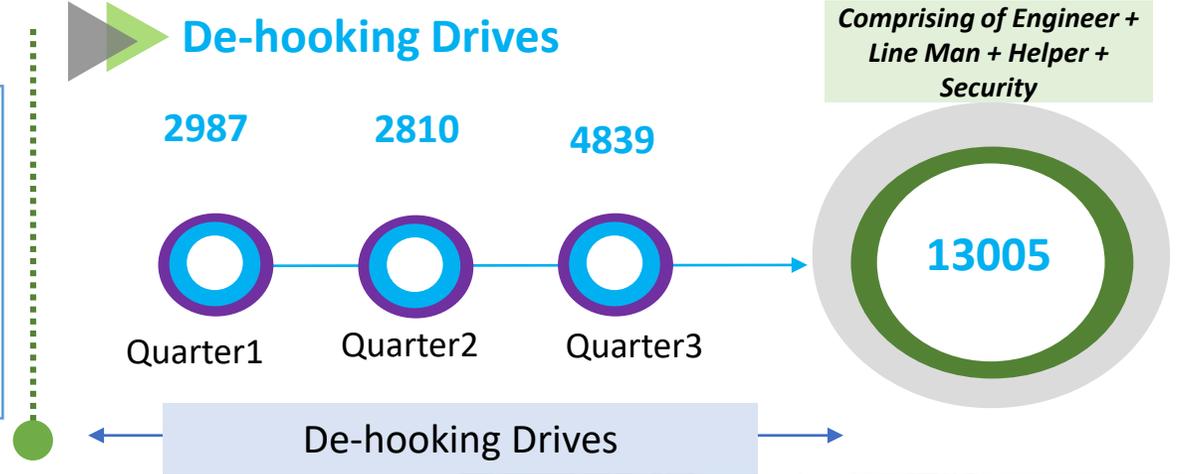
# Enforcement Activities

## Load Booking

Total Theft Load Booked till Jan'23 of FY-23 is **95 MW** (Last Yea same period-**65 MW**)



## De-hooking Drives



**51 Teams deployed**

Comprising of Engineer + Line Man + Helper + Security

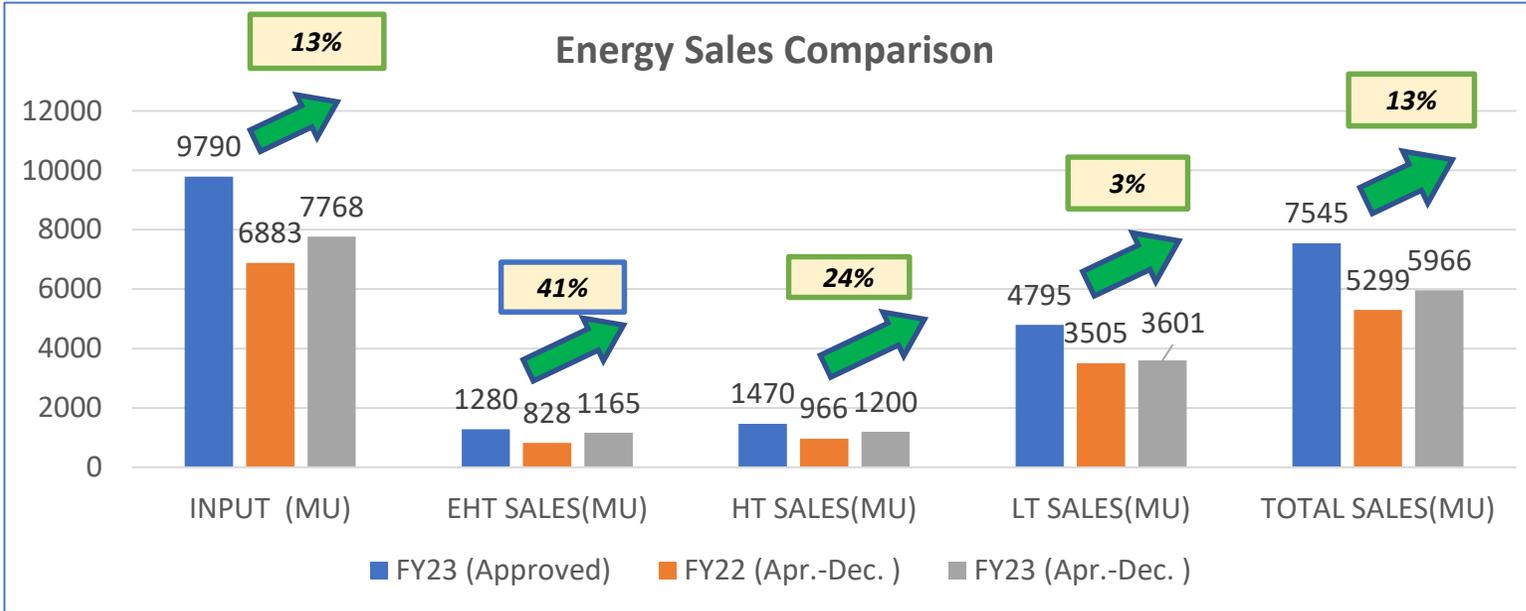


Glimpse of De-hooking drives at various operational areas of TPCODL



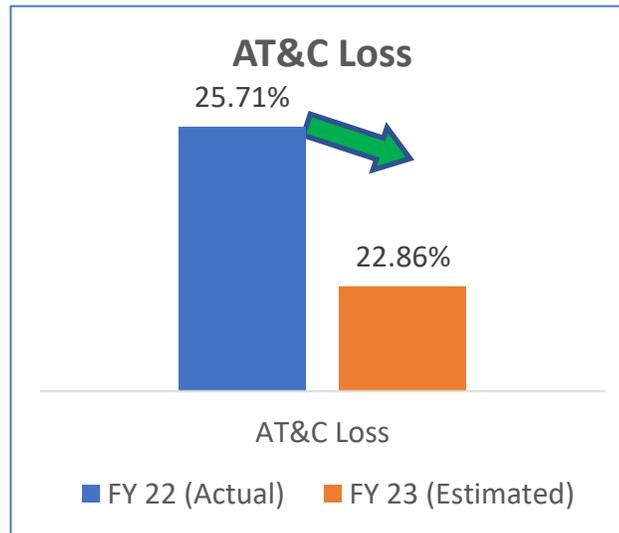
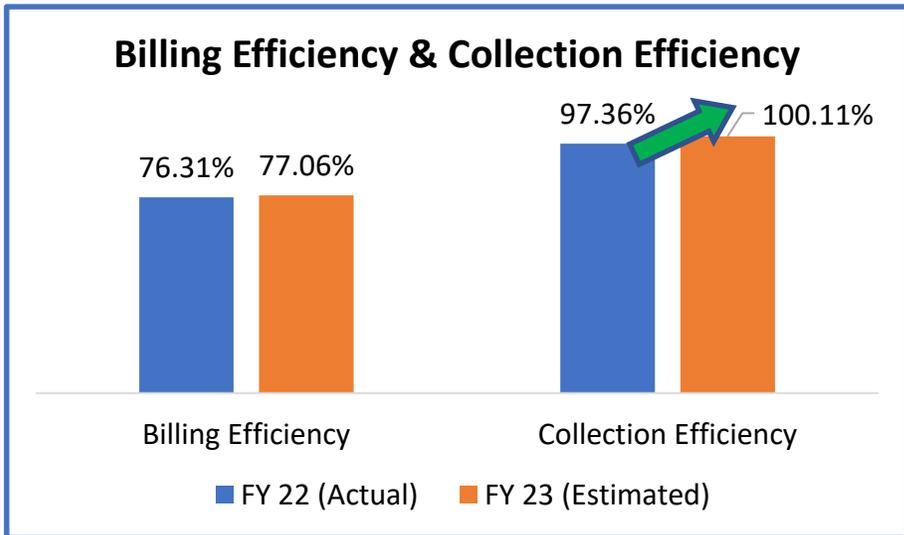
### 3. Overall Performance

# Overall Performance (Apr-Dec FY23 Vs FY22)



### Growth Rate in Sales

PARAMETERS	FY22 (Apr.-Dec.)	FY23 (Apr.-Dec.)	% increase
INPUT (MU)	6883	7768	13%
EHT SALES(MU)	828	1165	41%
HT SALES(MU)	966	1200	24%
LT SALES(MU)	3505	3601	3%
TOTAL SALES(MU)	5299	5966	13%



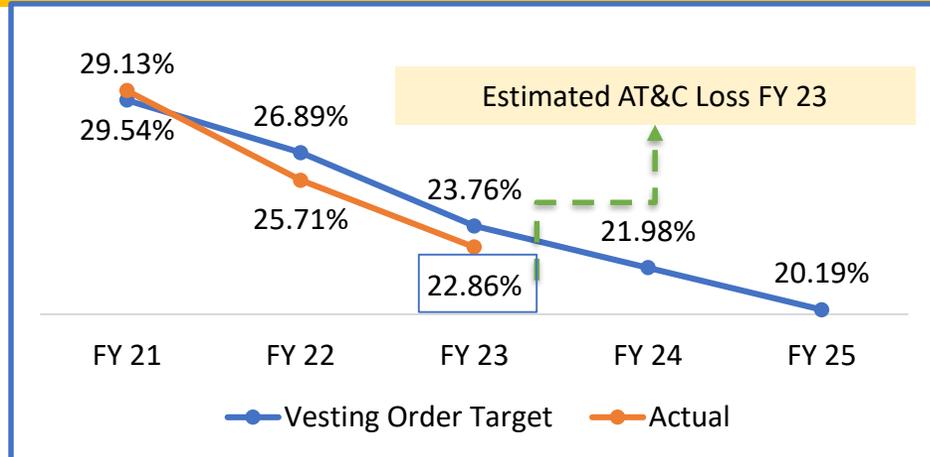
**AT&C Loss for FY 2022-23 estimated to be less than the Vesting Order target of 23.76%**

- Impact of various data sanitization activities (like bill revision, Defective Meter Replacement, Reversal etc) has caused reduction in BE.

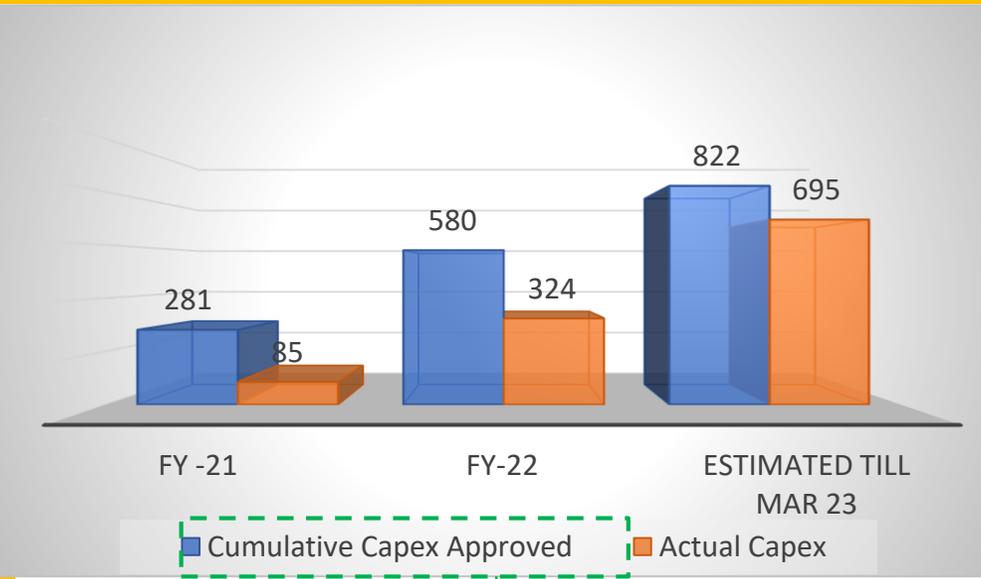


# Overall Performance-Target Vs Actual

## AT&C Loss – Vesting Order target vs Estimated till Mar 23



## Cumulative Capex (Rs. Cr) – Approved vs Estimated till Mar 23



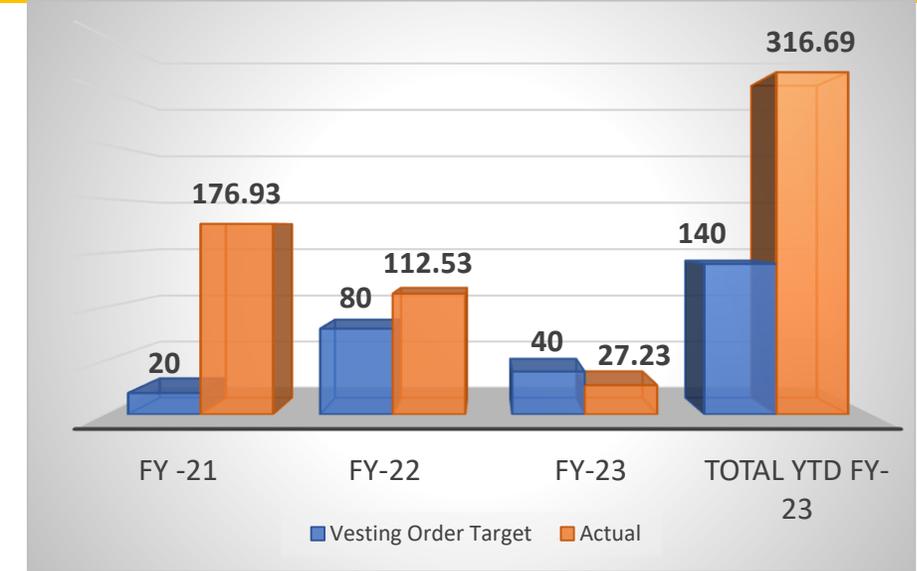
- FY-21 Approval - Sep'20
- FY-22 Approval - Sep'21
- FY-23 Approval - July '22
- FY-23 Additional Approval - Dec'22

Apart from the Capex Jobs and Government schemes, TPCODL is also engaged in the direct execution of various other Govt. signature Projects worth ₹ 132 Cr.

Some of the prestigious Govt. Projects are:

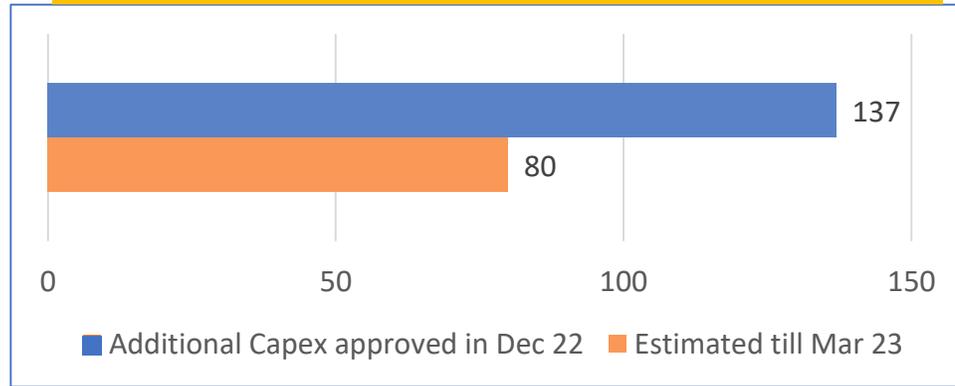
1. Redevelopment of SCB Medical College and Netaji Subash Bose Bus terminal,
2. Sri Mandir Parikrama Project network shifting and 5 Major Road UG cabling works near Temple,
3. Baliyatra Electrification work,
4. Kalinga network Infrastructure strengthening in view of World Cup,
5. Make in ODISHA conclave,
6. Network strengthening in Elephant Corridor etc

## Past Arrear Recovery (Rs. Cr) –Vesting Order target vs Actual



Actual Capex is Hard cost only excluding IDC, Emp Cost & GRIDCO Contribution

## Supplementary Capex (Rs. Cr) Estimated till Mar 23



# Govt. Funded Projects



Sl. No.	Project Name	Sanctioned / Received Amount	Expenditure Amount	Work In Progress	% Completion	Remarks
1	ODSSP*	1085	948	150	96%	Implemented by OPTCL
2	School & AWC	33	17	16	74%	Work in Progress. Completion targeted by 15-Apr-23
3	Elephant Corridor & Movement Area	169	125	18	87%	Work in Progress. Completed targeted by 31-Mar-23
4	Electrification of 49677 nos HHs under BGJY (On -Grid)	69.9		69.9	3.3%	Target Dates: <ul style="list-style-type: none"> <li>Households with Service Only: 31-Mar-23</li> <li>Households with LT Infra Augmentation: Jun-23</li> <li>Households with HT &amp; DT Augmentation: Jun-23</li> <li>Households with Off-Grid Solar: 30-Apr-23</li> </ul>
5	Electrification of 329 nos HHs under BGJY (Off -Grid)	1.6		0.80	10%	

\*Out of 134 PSS, we have commissioned 129 PSS under ODSSP scheme

## 1. ODSSP Phase IV

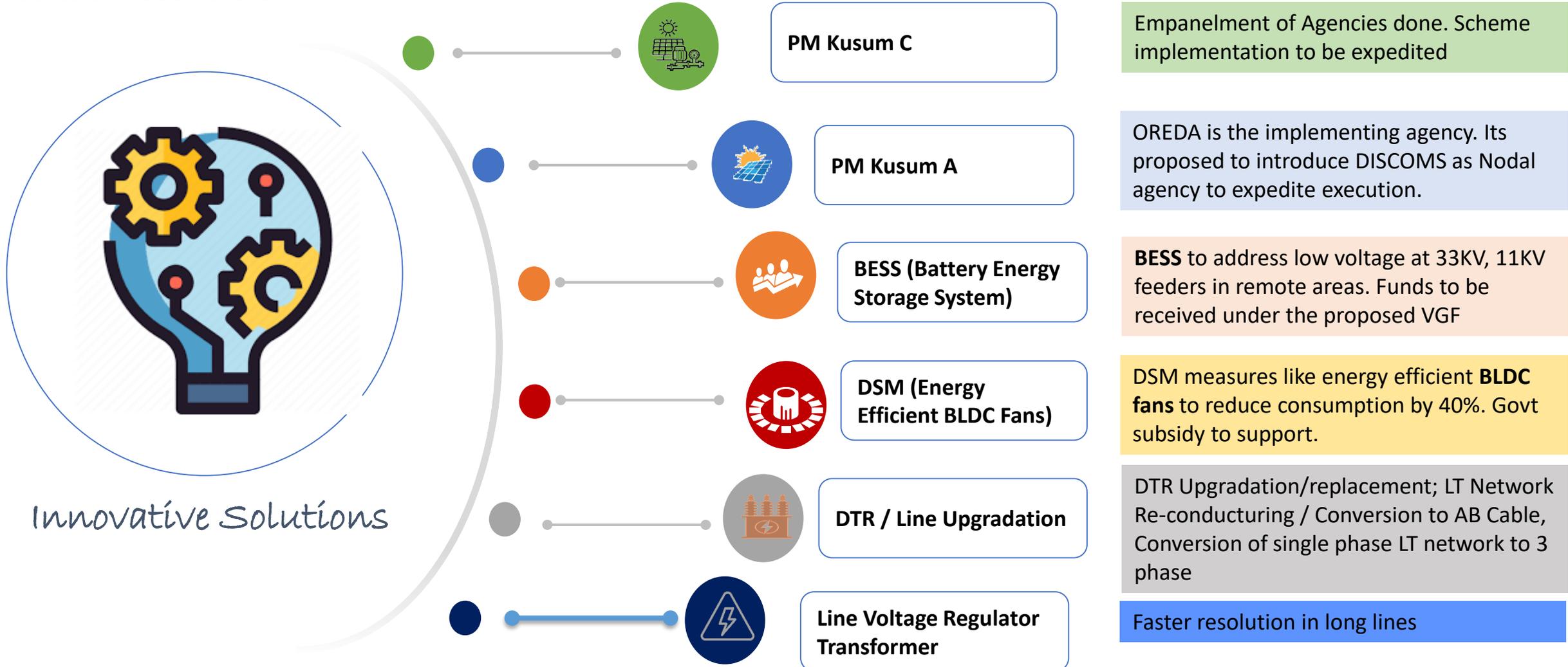
- Low voltage mitigation in rural areas.
- Launched in Dec-21.
- Budgetary outlay ~Rs 300.85 5crore.
- Scope covers 16nos. 33/11 kV sub-station (~220Km 33KV & 192km 11Kv associated line) & 18nos. independent 33 kV line (~190km)

Low Voltage Pockets	Resolved till date	March'23	June'23	Capex Status	
(nos.)	%	%	%	Scope	Status
462	21%	31%	51%	PSS – 2 Nos Lines – 287 CKM	PSS – LOI issued Lines – 42% by Mar'23

# Innovative Solutions for Localised LT low voltage issues



Strengthening of 33KV, 11KV and LT network are being done to address low voltage issues. However, some out of Box low cost solutions are required to address the low voltage issues in **remote areas**. Apart from Network strengthening, following initiatives are being initiated at DISCOMs level:



# Cyclone Resilient Network Design



## Comparison H Pole and RLP Pole

Particulars	H-Pole	RLP
Weight	545 kg	450 kg
Span	Max 45 mtr	Max 90 mtr
Wind Speed	265 Km/ Hr	300 Km/ Hr
<b>Cost for construction of 1 km 33 kV Line</b>	<b>₹ 28 Lacs</b>	<b>₹ 18 Lacs</b>
Transverse Stiffness	Good	Apart from Transverse Stiffness, Pole can withstand broken wire scenario

## Composite Insulated Cross-arm (CICA)



**Cross arm and insulator combined into one piece**

### Benefits of Composite Insulated Cross-arm (CICA)

- Higher Phase - Earth clearance shall eliminate bird faults
- Higher creepage shall reduce insulator failure

**Rebar Lacing Pole (RLP)**



**Pilot Project for Installation of 1 KM 11KV line is under construction at Konark Coast**

# Status on CSR Initiatives



## WSHGs ( Inst. Building)

- 515 WSHGs engaged in livelihood opportunities comprising of 895+ women in 9 divisions
- 2<sup>nd</sup> Layer of Institution Building Piloting through deployment of 29 Nos **SHAKTI SAHAYIKA** (acting as supervisors) in 3 Divisions

## Mobile Health Dispensary

- 2 Nos of MHD operational in Dhenkanal and Cuttack Circle served across 75 GPs in Q-3;
- Total Beneficiaries Served through MHD – 42,050 with free medical consultancy, medicine distribution and awareness on health & Hygiene

## Club Enerji

- 62 Schools, 4500+ Students imparted sessions on Energy Conservation and Natural Resource Management under Club Enerji Program
- 02 Mega Urja Mela Conducted in Bhubaneswar and Angul respectively for the school students , wherein competitions viz. Science Exhibition, Painting and Slogan Writing conducted for Students on Energy Conservation



URJA MELA



Certificate Distribution (WLC)



ARPAN Portal Launch



Certificate Distribution (VTC)

## Vocational Training Program

- 200 trainees Passed Out with NSDC Certification from VT Center on Stitching – Tailoring and Computer trades
- 3<sup>rd</sup> Batch of 100 Beneficiaries Ongoing on Stitching – Tailoring and Computer trades .

## Women Literacy Centre

- Presently 15 WLCs are functional in Bhubaneswar and Cuttack, wherein 300 women are getting the benefits of functional literacy classes.
- Certificate given to the trainees in association with TCS who has successfully completed the six month module on functional literacy

## Elephant Conservation

- Baseline Findings of Assessment presented before Hon'ble Minister and Executives of Forest Department (Additional Chief Secretary , PCCF- wildlife, M&N & Divisional Forest Officer – GoO)

## Volunteering Activities

- ARPAN Portal Launched to scale up Volunteering Activities
- 1 Blood Donation camp organized in Q3. 3 Blood Organized Cumulatively till date in association with Indian Red Cross Society

## Other Initiatives

- 2 Eye Check Up Camps organized for Beneficiaries
- 20000+ beneficiaries covered through 654 camps under Digital Literacy Program through Gaon Chalo Abhiyan
- Event celebrated - International Girl Child Day, Global Handwashing Day, Cleanliness Drive, CSR Stall, Impact study is being conducted

# Awards & Accolades



IMS Certification (ISO:9001:2015, ISO 14001:2015 and ISO 45001:2018) for Quality, Environment & Occupational Health and Safety by DNV Business Assurance India, Certification Body



In 'National Convention of Quality Concept'-NCQC 2021, TPCODL was conferred with 'Par Excellence' award and 'Excellence' award in NCQC-2021. **Won 4 Gold Awards in ICQCC-International convention at Jakarta.**

TPCODL participated in CCQC (Bhubaneswar) and won 10 awards. TPCODL 9 QCC teams won 'Gold' Category award and 1 QCC team won 'Silver' Category award.



TPCODL was adjudged as "National Winner 2022 with Par Excellence" Award in 34th CII National Quality Circle Competition' organized by Confederation of Indian Industry (CII).

TPCODL was winner of 5 awards at CII Inter-Industry Kaizen Competition" 2022. The competition was held on themes such as MSME, Cost reduction, Process & Quality Improvement, Safety, etc.



TPCODL won Gold category award in ISGF Innovation Awards 2022 under category of Best Survival Effort, Business Continuity and Innovation to deal with Crisis Periods.

TPCODL was winner of 5 Awards in "CII Inter-Industry Supervisory Skill Competition 2022". The competition was organized on themes such as Operation Excellence, 6-Sigma Health & Safety, Kaizen- Karakuri Kaizen to Poka-yoke, etc.



TPCODL was adjudged as winner of "CII Eastern Region Annual Productivity competition 2022" organized by Confederation of Indian Industry (CII).

# Recognition



All four teams of TPCODL got Gold category Awards at 'International Convention on QC Circles' 2022 organised by Indonesia Quality Management Association, Jakarta.



Group Photos - Winning Team of TPCODL

Appreciation for providing Safe & Reliable Power during Rath Yatra



Felicitation for Contribution towards smooth Organization of Hockey World Cup



Appreciation by Governor of Odisha for Infrastructure development for Bali Yatra in record time



## 4.ARR for FY 2023-24

# Gist of the ARR and Approach



## Basis

- OERC Tariff Regulations, 2022
- Vesting Order dated 26.05.2020.
- Carved Out Balance Sheet Order dated 30.09.2021.
- Capex Orders for FY-21, FY-22 and FY-23.
- True up petition filed for FY -21 (10 months) & FY-22.
- Approval for Recruitment of Manpower



Capex Proposed for FY 2023-24

Opex estimated for FY 2022-23 & for FY 2023-24

Gap Computed for FY 2022-23 & FY 2023-24

# Sales Projection & Purchase Requirement for FY2022-23 and FY 2023-24



## Sales & Power Purchase



Particular	UoM	FY-22 Actuals	FY-23 Estimated	FY-24 Projected	FY23 Over FY- 22	FY24 Over FY- 23
EHT Sales	MU	1149	1589	1858	38%	17%
HT Sales	MU	1462	1784	1908	22%	7%
LT Sales	MU	4117	4415	4902	7%	11%
<b>Total Sales</b>	<b>MU</b>	<b>6728</b>	<b>7788</b>	<b>8668</b>	<b>16%</b>	<b>11%</b>
Power Purchase	MU	8817	10112	10999	15%	9%
Billing Efficiency	%	76.31%	77.01%	78.81%		
Collection Efficiency	%	97.36%	99%	99%		
AT & C Loss	%	25.71%	23.76%	21.98%		

## Sales Mix



Category	FY-22 Actuals	FY-23 Estimated	FY-24 Projected
EHT	17%	20%	21%
HT	22%	23%	22%
LT	61%	57%	57%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### Sales Estimation basis:

- Increase in higher EHT & HT Sales in H-1 of FY-23 due to impact of COVID getting minimal.
- Upcoming Industrial Load & certain estimate of some industrial load moving to EHT from HT in FY-24.

# Revenue Estimate at existing Tariff



## Estimated Revenue at existing Tariff

Sr No	Particulars		FY 2022-23 (Estimated)				FY 2023-24 (Projected)			
			LT	HT	EHT	Total	LT	HT	EHT	Total
1	Sales	Mus	4415.0	1784.0	1589.0	7788.0	4902.2	1908.0	1858.0	8668.2
2	Revenue from Demand Charge	Rs Cr	1.3	182.6	118.9	302.8	1.4	205.3	161.9	368.6
3	Revenue from Monthly Fixed Charges	Rs Cr	126.0	0.0	0.0	126.0	133.8	0.0	0.0	133.8
4	Revenue from Customer Service Charges	Rs Cr	0.0	3.5	0.1	3.6	0.0	3.6	0.1	3.7
5	Revenue from Energy Charge	Rs Cr	2208.4	1053.4	931.2	4193.0	2435.6	1117.4	1084.9	4638.0
<b>6</b>	<b>Total</b>	<b>Rs Cr</b>	<b>2335.7</b>	<b>1239.4</b>	<b>1050.1</b>	<b>4625.3</b>	<b>2570.8</b>	<b>1326.3</b>	<b>1247.0</b>	<b>5144.0</b>
7	Less : Rebate	Rs Cr	27.5	13.6	10.5	51.6	30.3	14.7	12.5	57.4
8 =6-7	Net Revenue	Rs Cr	2308.2	1225.9	1039.6	4573.7	2540.5	1311.6	1234.5	5086.6

# Employee Expenditure



*All Amount in Rs. Cr*

Sr No	Particular	FY-23 Approved	FY-23 (Estimated)	FY-24 (Projected)
1	Salaries of existing CESU Employees (including Outsourced Employees)	677.4	686.9	720.8
2	Salaries of New TPCODL Employees	98.1	110.5	132.7
<b>3</b>	<b>Total Gross Employee Cost</b>	<b>775.5</b>	<b>797.4</b>	<b>853.5</b>
4	Less: Employee Cost Capitalized	23.9	23.9	26.3
5= 3-4	Net Employee Cost	751.6	773.5	827.2

## % increase in Employee Cost over the years

Item	#FY-22 Actuals	FY-23 (est)	FY -24 (Projected)
Emp Cost (Rs. Cr)	743.1	797.4	853.5
Growth (%)		7%	7%

# Rs. 33.9 Cr towards 7th Pay Arrear has been excluded from FY-22 actuals



**Reasonable Growth of 7%**

## Manpower Ratio per thousand Consumers

Period	Estimated Consumer Nos. at the end of FY (i.e. 31st Mar of the FY)	Manpower Numbers			Estimated Manpower at the end of FY (i.e. 31st Mar of the FY)	Manpower (on Rolls) Ratio per Thousands Consumers
		Opening Nos as on at the beginning of the FY	Estimated No. of Separations during the FY	Estimated Manpower Addition during the FY		
<b>For FY 2021-22</b>	2927466				5265	<b>1.8</b>
<b>FY 2022-23</b>	3038435	5265	195	100	5170	<b>1.7</b>
<b>FY 2023-24</b>	3145177	5170	178	200	5192	<b>1.7</b>

As per CEA benchmarking report of O&M Cost, manpower ratio per thousands consumers for private sector is 1.69 and state sector 2.41.

Proposed 200 Additional Manpower recruitment is necessary

# R&M Expenditure



## 1. R&M cost

*in Rs. Cr*

Particular	FY-23 (Approved)	FY-23 (est.)	FY-24 (est.)
R&M Cost	239.85	239.87	291.29

## 2. R&M cost (est.) for FY 2023-24

*All Amount in Rs. Cr*

Sr No	Particular	Estimate for FY 2023-24
1	R&M on Own Asset @ 4.2% of Opening GFA	220.79
2	R&M on Assets not in books of TPCODL @ 3% of opening GFA	71
<b>5</b>	<b>Total estimated R&amp;M for FY 2023-24</b>	<b>291.29</b>

## 3. R&M on own Asset @ 4.2%

*All Amount in Rs. Cr*

Sr No	Particulars	FY 2020-21 (Actual 10 Months)	FY 2021-22	FY 2022-23	FY 2023-24
<b>R&amp;M on Own Assets</b>					
1	Opening GFA ( As per Approved Opening Balance sheet as on 01.06.2020)	3403.73	3637.04	4357.09	5256.99
2	Addition	233.31	733.49	925.32	
3	Retirement /Deletion	0.00	13.44	25.42	
4=1+2-3	Closing	3637.04	4357.09	5256.99	
<b>5</b>	<b>R&amp;M on Own Asset at 4.2 % of the Opening GFA</b>				<b>220.79</b>

## 4. R&M on Asset not in books@ 3%

SI No	Name of Scheme	Asset Amount (Rs.Cr)
1	ODSSP (Net of Rs 99.94 Cr of Assets Transferred by GRIDCO in lieu of equity )	533.58
2	SCRIPS	665.27
3	DDUGJY	289.96
4	IPDS	217.73
5	SOUBHAGYA	168.99
6	Nabakalebar	158.83
7	RGGVY	38.93
8	ODAFFP	6.58
9	BGJY (OPTCL DTR)	153.33
<b>A</b>	<b>Total (A)</b>	<b>2,233.20</b>
<b>Less:</b>		
10	SOUBHAGYA	168.99
11	BGJY	153.33
12=A-10-11	<b>Total Govt Asset</b>	<b>1,910.88</b>
13	Capitalization in FY-23 estimated out of FY-22 CWIP	439.16
14=12+13	<b>Total GFA as on 31.03.2023</b>	<b>2,350.04</b>
15	<b>R&amp;M @ 3%</b>	<b>70.50</b>

As specified in Notes to Accounts of TPCODL for FY 2021-22.

Note: Against the estimated GFA addition of Rs. 925 Cr for FY-23 , Rs. 620 Cr of GFA has been added as on Dec 2022



## 1. A&G Cost

Particular	in Rs. Cr		
	FY-23 (Approved)	FY-23 (est.)	FY-24 (est.)
A&G Cost	132.72	132.85	163.51

## 2. Estimate based on Norms

Sr No	Particular	Amount (Rs.Cr)
1	A&G Cost Approved in FY-23 Tariff Order	132.72
2	A&G Cost for FY 2023-24 considering 7% escalation	142
3	Special /Additional Expenditures for meeting Enhanced Activities in the areas of Billing and Collection for FY 2023-24	20
<b>4 =2+3</b>	<b>Total Approval sought towards A&amp;G Expenditure</b>	<b>162</b>

Special A&G expenses towards additional resources & initiatives for improving Billing & Collection incl. WSGH,OCR reading.

## 3. Estimate on ' Zero Based Budgeting'

Particulars	Rs. Cr	
		Total Estimate for (FY-2023-24)
Rental of land, buildings, plant and equipment, etc		7.45
Electricity consumption expenses		3.50
Telephone & Communication expenses		2.14
Foods and conveyance		0.49
Bank & other charges		3.75
Office expenses + Facility Management and House Keeping etc		8.13
Travelling expenses		5.78
Insurance premium		4.28
Legal and professional charges		8.56
Software & IT expenses		1.07
Other Finance/Statutory Expenses		8.56
Advertisement & marketing expenses		1.61
Metering and billing expenses Collection, Payment Transcation Charges, Customer Awareness for Digital/Prompt/Regular Payments, Customer Service (Cust. Care, Call Center, Meter Services etc.)		105.33
Printing and stationary		1.80
Miscellaneous expenses including Contingency		1.07
<b>TOTAL</b>		<b>163.5</b>

# Estimated Capex



Sr No	Major Category	Capex approved for FY 2020-21	Capex approved for FY 2021-22	Capex approved for FY 2022-23	Supplementary Approval	Total Cumulative Approved till FY-2022-23	Total estimated Capex till 31.03.2023	Est capex against Supplementary Approval	Proposed Capex for FY 2023-24
1	Statutory and Safety	68.17	17.59	17.66		103.42	94.84		22.00
2	Loss Reduction	39.63	67.36	52.85		159.84	134.16		63.00
3	Reliability	72.48	114.42	87.77	43.86	274.67	254.57		267.00
4	Load Growth	9.00	30.52	24.86	93.40	64.38	20.32	80.00	75.00
5	Technology & Infrastructure	91.35	68.84	60.16		220.35	191.12		85.00
	<b>Total</b>	<b>280.63</b>	<b>298.73</b>	<b>243.30</b>	<b>137.26</b>	<b>822.66</b>	<b>695.0</b>	<b>80.00</b>	<b>512.00</b>

# Other Cost : - Depreciation & RoE



## Depreciation

		<i>In Rs. Cr</i>	
<b>Particular</b>		<b>FY-23</b>	<b>FY-24</b>
Total Depreciation estimated to be booked in the Accounts		169.39	206.99
<b>Less:</b>	Depreciation on Meters	22.82	30.72
<b>Less:</b>	Amortization on Opening Assets	71.09	71.09
<b>Less:</b>	Amortization on Grants	7.49	12.02
<b>Less:</b>	Amortization on Consumer Contribution	8.55	11.78
<b>A</b>	<b>Total Depreciation for ARR</b>	<b>59.4</b>	<b>81.4</b>
<b>Less:</b>	Depreciation on Assets Created out of Own Capex (excluding Meters)	30.47	51.83
<b>Total Depreciation available for funding of ASL</b>		<b>28.97</b>	<b>29.55</b>

Depreciation claimed in ARR is net of Depreciation on Meters, Amortization on opening Assets, Grants & Consumer Contribution

For Repayment of Loan

For funding of ASL payments

## RoE

		<i>All Amount in Rs. Cr</i>			
<b>Sr No</b>	<b>Equity Addition &amp; RoE</b>	<b>FY-21 (June'20 - Mar'21)</b>	<b>FY-22</b>	<b>FY-23</b>	<b>FY-24</b>
a	Capitalization excluding meters from TPCODL's own capex(including IDC & Emp Cost)	66.13	237	341.61	527.66
b	GRIDCO's Contribution in kind in lieu of Equity	0	99.9	6.6	84.5
c=a+b	Total Capitalization	66.13	336.79	348.23	612.15
<b>d</b>	<b>Total Equity = 30% of C</b>	<b>19.84</b>	<b>101.04</b>	<b>104.47</b>	<b>183.65</b>
	<b>RoE</b>		<b>Rs Cr</b>	<b>Rs Cr</b>	<b>Rs Cr</b>
1	Opening Equity	300	319.84	420.88	525.35
2	Addition	19.84	101.04	104.47	183.65
3=1+2	Closing Equity	319.84	420.88	525.35	708.99
4	<b>RoE = Average (1,3) X 16%</b>	<b>41.32</b>	<b>59.26</b>	<b>75.70</b>	<b>98.75</b>

RoE computed at 16 % (post tax) as per Tariff Regulations, 2022.

Computed on normative average equity for the year (Reg. 3.6.4).

Reg 3.6.5 allows assets transferred by GRIDCO in lieu of equity to be considered in GFA for RoE



## Other Cost : - Interest on Working Capital

All Amount in Rs. Cr

Interest on Working Capital (Normative)	FY 2023-24	
O&M Expenses for One Month	Rs Cr	109.03
Power Purchase Cost for One Month (incl. Transmission & SLDC Charges)	Rs Cr	300.86
Maintenance Spare at 20% of R&M expenses for one Month	Rs Cr	4.85
<b>Total Working Capital</b>	<b>Rs Cr</b>	<b>414.74</b>
*Applicable Interest Rate	%	11.30%
<b>Interest On Working Capital</b>	<b>Rs Cr</b>	<b>46.87</b>

\* Norm: SBI One year MCLR with effect from 15.12.2022 + 300 bps ( 8.3 % +300 basic point)

Further Base rate has been defined as :  
1.2

...

10) "Base Rate" shall mean the one-year Marginal Cost of Lending Rate ('MCLR') as declared by the State Bank of India (SBI) from time to time;

*3.10.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Wheeling and Retail supply business for the Financial Year. The working capital for the purpose of ARR calculation shall be computed as follows:*

- a. Operation and maintenance expenses for one month; plus*
- b. Maintenance spares @ twenty (20) % of average R&M expense for one month; plus*
- c. Power Purchase Cost for one (1) month*

.....

*Provided that, the variation between the normative interest on working capital recomputed at the time of Truing-up and the actual interest on working capital incurred by the Distribution Licensee, substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss, as the case may be, on account of controllable factors.*

# Other Cost : - Interest on Loan Capital & Non Tariff Income



## Interest on Capital Loan

*in Rs. Crores*

Interest on Capital Loan						
Sr No	Particular	Unit	FY-21	FY-22	FY-23	FY-24
1	Opening Balance	Rs Cr	0	43.56	266.01	479.30
2	Addition	Rs Cr	46.291	235.75	243.76	428.51
3	Repayment = Depreciation on Assets Created out of Own Capex (excluding meters)	Rs Cr	2.73	13.31	30.47	51.83
4=1+2-3	Closing Balance	Rs Cr	43.56	266.01	479.30	855.98
5= Average(1,4)	Average Balance	Rs Cr			372.65	667.64
6	Period	Years			1.00	1.00
7	Weighted Average Interest Rate (estimated)	%			8.06%	8.62%
8= 5 X 6 X 7	<b>Interest Amount</b>	<b>Rs Cr</b>			<b>30.0</b>	<b>57.6</b>

## Debt Component for Int. on Loan

*All Amount in Rs. Cr*

Sr No	Equity Addition & RoE	FY-21 (June'20 - Mar'21)	FY-22	FY-23	FY-24
a	Capitalization excluding meters from TPCODL's own capex(including IDC & Emp Cost)	66.13	236.85	341.61	527.66
b	GRIDCO's Contribution in kind in lieu of Equity	0.00	99.94	6.62	84.49
<b>c=a+b</b>	<b>Total Capitalization</b>	<b>66.13</b>	<b>336.79</b>	<b>348.23</b>	<b>612.15</b>
<b>d</b>	<b>Total Debt = 70% of C</b>	<b>46.291</b>	<b>235.8</b>	<b>243.8</b>	<b>428.5</b>

## Non Tariff Income

*All Amount in Rs. Cr*

Sr No	Head of Income/ GL Description	Estimate for FY-24	Remark
1	Miscellaneous Revenue	39.63	5% escalation for FY-23 and FY-24 over FY-22 Actuals
2	Other Income	14.72	5% escalation for FY-23 and FY-24 over FY-22 Actuals
3	Interest on Bank Deposits	28.97	5% escalation for FY-23 and FY-24 over FY-22 Actuals
4	Rebate on Power Purchase Cost including Transmission and SLDC Charges	36.10	Estimated ,Refer Table 2.4 of ARR Petition
5	Delayed Payment Surcharge (DPS)	12.82	5% escalation for FY-23 and FY-24 over FY-22 Actuals
6	Less: Rebate allowed to Consumers	57.43	Estimated ,Refer Table 4.25 of ARR Petition
<b>A</b>	<b>Total Non Tariff Income</b>	<b>74.82</b>	
<b>B</b>	<b>Income From Open Access</b>	<b>34.74</b>	5% escalation for FY-23 and FY-24 over FY-22 Actuals
<b>C=A+B</b>	<b>Total Non Tariff Income /Misc Receipts including Income from Open Access Charges</b>	<b>109.56</b>	

# Other Costs:-Additional Serviceable Liability (ASL)



## 1 Total settlement done till Mar 2022

Particular	Amount (Rs. Cr)
Settlement of Liabilities (under ASL) approved by the Hon'ble OERC in FY-22	77.74
Payment made by TPCODL but approval is pending with the Hon'ble OERC	44.26
Power Purchase Bills for Apr and May 2020	225.16
Less: Amount Recovered from Apr and May '20 Bills	-124.25
Add: Negative Arrear	25.91
Add: Shortfall in Revenue in June '20 over expenditure	78.64
Add: 100% Deposit Work payment of Rs 24.37 Cr made from Jun'20-Sep'21 out of DW bank balance of Rs 299.80 Cr.	24.37
<b>Total ASL Paid</b>	<b>351.83</b>
Less:	
Free Cash in Opening Balance Sheet	-73.5
Depreciation for 1st Year on Opening Assets (Net of Amortization on Consumer Contribution)	-12.55
Depreciation for 2nd Year on Opening Assets (Net of Amortization on Consumer Contribution)	-27.94
<b>Net ASL for Funding</b>	<b>237.84</b>

## 2 Recovery of ASL payment claimed in ARR

Sr No	Particular	UoM	Rs. Cr	
			FY-23	FY24
1	Opening ASL	Rs. Cr	237.84	261.10
2	ASL estimated to be paid during the FY	Rs. Cr	52.23	50
3	Depreciation Available for ASL funding	Rs. Cr	28.97	29.55
4=1+2-3	Closing ASL/ Net ASL to be funded	Rs. Cr	261.10	281.55
5=4-1	ASL Repayment Claimed in ARR	Rs. Cr	23.26	20.45

## 3 Estimated ASL Settlement in FY-23

Sr No	Particulars	Amount (Rs. Cr)
1	Approved by the Hon'ble Commission vide letter dt. 5th April'22 & 8th June '22	4.31
2	Letters pending for Approval	2.13
3	Payable to FEDCO - Approved by the Hon'ble Commission	16.17
4	Differential GST to L&T on account R-APDRP PFC loan	3.62
5	Estimated Payable to ENZEN (excl. FANI payment)	26
	<b>Total</b>	<b>52.23</b>

# Estimated ARR for FY 2023-24

Particular	Estimated Gap/Surplus FY-24 (as per ARR FY-24 petition)
<b>III ARR</b>	
a Actual Power Purchase (MU)	10999
b BSP Rate (Rs/kWh)	3.00
c Power Purchase Cost from GRIDCO	3299.73
d Transmission Charges (Rs/kwh)	0.28
e Transmission Cost (Rs. Cr)	307.98
f SLDC Charges (Rs.Cr)	1.8
g Total Power Purchase ,Transmission & SLDC Cost	3609.46
h Less : Rebate	36.09
<b>A=g-h Net Total Power Purchase ,Transmission &amp; SLDC Cost</b>	<b>3573.37</b>
1 Employee Cost	853.52
2 R&M Expenditure	291.29
3 A&G Expenses	163.51
4 Provision for Bad & Doubtful Debt	50.87
5 Depreciation	81.38
6.a Interest on Consumer Security Deposit	65.56
6.b Interest on Long Term Loan	57.55
6.c Interest on Working Capital Loan	46.87
6.d Financing Cost	1.00
6.e Less Interest Capitalized	10.94
<b>6 Total Interest on CSD and Long Term Loan,Working Capital Loan and Financing Cost</b>	<b>160</b>
<b>B Total Operation &amp; Maintenance Cost and Other Cost</b>	<b>1600.61</b>
7 Less: Emp Cost Capitalized	26.29
8 RoE	99
9 Tax on RoE	33.21
<b>C Total Distribution Cost</b>	<b>1706.28</b>
10 Less: Misc Receipt/Non Tariff Income (including Open Access Charges)	109.56
<b>D Net Distribution Cost (C-10)</b>	<b>1596.72</b>
E Provisional Surplus Considered in Tariff Order	
F Gain / (Loss) due to AT&C Loss Achievement	<b>0.85</b>
<b>11 Total Revenue Requirement (A+D-E+F)</b>	<b>5207.03</b>
12= X Estimated Revenue at existing Tariff	5144
<b>13= 12-11 (Gap) / Surplus</b>	<b>-62.98</b>
14 Recovery of ASL Payments	20.45
<b>15=13-14 (Gap) / Surplus after considering ASL Repayment</b>	<b>-83.43</b>

Particular	Estimated Gap/Surplus FY-24 (as per ARR FY-24 petition)
<b>I AT&amp;C Loss , Distribution Loss &amp; C.E</b>	
a Actual AT&C Loss	21.98%
b Normative AT&C Loss	22.0%
c Actual Distribution Loss	21.19%
d Normative Distrubition loss	21.21%
e Actual Collection Efficiency	99.00%
f Normative Collection Efficiency	99%
<b>II Sales and Revenue</b>	
a Sales (MU)	8668
b ABR (Rs/kWh) before Rebate	5.93
c= a xb/10 Revenue before Rebate	5144.00
d Rebate / Cash Discount	57.40
<b>X= c-d Net Revenue after Cash Discount</b>	<b>5086.60</b>

Gain / (Loss) due to AT&C Loss Achievement		
Sr No	Particular	Amount
1	Estimated Power Purchase MU	10999
2	Estimated Power Purchase Cost (incl. Transmission & SLDC Charges) (Rs.Cr)	3609
<b>Normative Power Purchase Cost -- &gt;</b>		
3	Normative Power Purchase MU	11002
4	BSP Rate (Rs./kwh)	3
5	Transmisson Charges (Rs./kwh)	0.28
6	SLDC Cost (Rs. Cr)	1.76
7	Total Power Purchase Cost (Rs.Cr) incl. Transmission & SLDC charges	3610.3
8=7-2	Gain / (Loss) of Power Puchase due to AT&C Loss Achievement(Rs.Cr)	<b>0.85</b>

# Estimated ARR for FY 2022-23



Particular	Approved in ARR FY-23	Estimated Gap/Surplus FY-23 (as per ARR FY-24 Petition)
<b>III ARR</b>		
a Actual Power Purchase (MU)	9790	10112
b BSP Rate (Rs/kWh)	3.00	3.00
c Power Purchase Cost from GRIDCO	2937	3033.74
d Transmission Charges (Rs/kwh)	0.28	0.28
e Transmission Cost (Rs. Cr)	274.12	283.15
f SLDC Charges (Rs.Cr)	1.75	1.8
g Total Power Purchase ,Transmission & SLDC Cost	3212.87	3318.64
h Less : Rebate		33.19
<b>A=g-h Net Total Power Purchase ,Transmission &amp; SLDC Cost</b>	<b>3212.87</b>	<b>3285.45</b>
1 Employee Cost	775.49	797.45
2 R&M Expenditure	239.85	239.87
3 A&G Expenses	132.72	132.85
4 Provision for Bad & Doubtful Debt	34.28	45.74
5 Depreciation	48.34	59.44
6.a Interest on Consumer Security Deposit	30.78	38.27
6.b Interest on Long Term Loan	20.00	30.04
6.c Interest on Working Capital Loan		51.34
6.d Financing Cost		1.00
6.e Less Interest Capitalized		2.21
<b>6 Total Interest on CSD and Long Term Loan,Working Capital Loan and Financing Cost</b>	<b>50.8</b>	<b>118.4</b>
<b>B Total Operation &amp; Maintenance Cost and Other Cost</b>	<b>1281.46</b>	<b>1393.79</b>
7 Less: Emp Cost Capitalized	23.90	23.90
8 RoE	48	76
9 Tax on RoE		25.46
<b>C Total Distribution Cost</b>	<b>1305.56</b>	<b>1471.05</b>
10 Less: Misc Receipt/Non Tariff Income (including Open Access Charges)	107.21	112.44
<b>D Net Distribution Cost (C-10)</b>	<b>1198.35</b>	<b>1358.61</b>
E Provisional Surplus Considered in Tariff Order	140.00	
F Gain / (Loss) due to AT&C Loss Achievement	0.00	-2.74
<b>11 Total Revenue Requirement (A+D-E+F)</b>	<b>4271.22</b>	<b>4641.32</b>
12= X Estimated Revenue at existing Tariff	4273	4574
<b>13= 12-11 (Gap) / Surplus</b>	<b>1.78</b>	<b>-67.59</b>
14 Recovery of ASL Payments		23.26
<b>15=13-14 (Gap) / Surplus after considering ASL Repayment</b>	<b>1.78</b>	<b>-90.85</b>

Particular	Approved in ARR FY-23	Estimated Gap/Surplus FY-23 (as per ARR FY-24 Petition)
<b>I AT&amp;C Loss , Distribution Loss &amp; C.E</b>		
a Actual AT&C Loss	23.7%	23.76%
b Normative AT&C Loss	23.7%	23.7%
c Actual Distribution Loss	22.93%	22.99%
d Normative Distrubition loss	22.93%	22.93%
e Actual Collection Efficiency	99.00%	99.00%
f Normative Collection Efficiency	99%	99%
<b>II Sales and Revenue</b>		
a Sales (MU)	7545	7788
b ABR (Rs/kWh) before Rebate	5.66	5.94
c= a xb/10 Revenue before Rebate	4273.00	4625.30
d Rebate / Cash Discount		51.60
<b>X= c-d Net Revenue after Cash Discount</b>	<b>4273.00</b>	<b>4573.70</b>

Gain / (Loss) due to AT&C Loss Achievement		
Sr No	Particular	Value
1	Estimated Power Purchase MU	10112
2	Estimated Power Purchase Cost (incl. Transmission & SLDC Charges) (Rs.Cr) after Rebate	3285.45
<b>Normative Power Purchase Cost -- &gt;</b>		
3	Normative Power Purchase MU	10104
4	BSP Rate (Rs./kwh)	3
5	Transmisson Charges (Rs./kwh)	0.28
6	SLDC Cost (Rs. Cr)	1.8
7	Total Power Purchase Cost (Rs.Cr) incl. Transmission & SLDC charges	3316
8	Less: Rebate (Rs.Cr)	33
9	Net Power Purchase Cost after rebate (Rs.Cr)	3283
10=9-2	Gain / (Loss) of Power Puchase due to AT&C Loss Achievement(Rs.Cr)	-2.74



## 5. Tariff Rationalization Proposal

# Tariff Rationalization Measures 1/2



Sl. No.	Description
1	<b>Levy of Cyclone Resilient Network Cess @ 2 paise/ unit</b> for all Consumer Categories, except Kutir Jyoti.
2	<b>Amendment to the Time of Day Tariffs:</b> For summers - 1.00 Hours to 6:00 Hours & from 16:30 Hours to 18:00 Hours For Winters- 00.00 Hrs to 05:00 Hrs.
3	<b>Revision in Smart meter 1 phase Meter Rent:</b> @ Rs. 80 per month to be recovered over 90 months. (existing Rs.60/month for 60 months)
4	<b>All New Connection with monthly consumption &gt; 100 unit</b> ,shall be through <b>Smart Prepaid Meters Only</b> .
5	<b>Full recovery of Smart Meter Cost :</b> Revision The Hon'ble Commission may issue appropriate directions in view Gol mandate to replace all meters with Smart Prepaid meters by 2025 as it is imperative that full cost of New Meter is covered.
6	<b>All consumer with CD&lt;=70 kVA, shall be billed on LT tariff</b> irrespective of supply voltage and category
7	<b>All consumer with CD&gt;=110 kVA, shall be liable for overdrawal penalty and the demand charge shall be levied on the 80% of CD or MD whichever is higher</b> , Irrespective of supply voltage and category.
8	<b>Separate tariff Category for HT Public lighting</b>
9	<b>Creation of Energy Police Station :</b> At least 5 EPS, one in each circles

# Tariff Rationalization Measures 2/2



Sl. No.	Description
10	<p><b>Billing of Public Lighting:</b> Wherever meter not installed considering 11 Hours burning time at average of Summer &amp; Winter usages.</p> <p>All New Streetlights points under various Govt. Schemes shall be metered mandatorily.</p>
11	<p><b>Provision regarding Industries owning Generation Stations and Captive Power Plants availing Emergency Supply only</b></p> <ul style="list-style-type: none"><li>• Emergency supply to be restricted within 10% of load factor of highest capacity generating unit or maximum demand upto 100% of highest generation capacity. In case any one of the parameter is breached for consecutively 3 months, it shall attract two-part tariff with ceasing of emergency power supply status.</li><li>▪ Further, if SMD of the Discom is breached due overdrawal by the Consumer drawing Emergency Power; overdrawal penalty on the excess demand of 10% of the highest generating unit shall be charged to the consumer at the same rate applicable for the HT &amp; EHT consumers.</li></ul>
12	<p><b>Proposal for considering Contract Demand in case of conversion of connection from Emergency Supply into two-part tariff after continuous violation for 3 months</b></p> <ul style="list-style-type: none"><li>▪ In case of conversion from Emergency Supply to two part tariff in the event of continuous violation for 3 months, the Contract demand to be considered as 10% of the highest generation capacity for calculating the demand charges (as per 80% CD or MD whichever is higher) as the consumption of electricity has been restricted upto 10% of highest generation capacity.</li></ul>



Open Access Charges for FY 2023-24  
(Case 89 /2022)



# Computation of Wheeling Business ARR & Wheeling Charges

Sr No	Particulars	Total (Rs Cr)	Wheeling Business Share	Retail Supply Business Share	Wheeling Business ARR (Rs Cr)	Retail Supply ARR (Rs Cr)
1	Cost of Normative power Purchase (including Transmission Charge and SLDC Charges)	3610.3	0%	100%	0.00	3610.31
	O&M Charges					
2	Employee Costs (Net of capitalization)	827.23	60%	40%	496.34	330.89
3	Repairs and Maintenance	291.29	90%	10%	262.17	29.13
4	Admin and General	163.51	50%	50%	81.75	81.75
5	Bad and Doubtful Debt including Rebate	50.87	0%	100%	0.00	50.87
6	Depreciation	81.38	90%	10%	73.24	8.14
7	Interest for Capital Loan (Net of Capitalization)	46.61	90%	10%	41.95	4.66
8	Interest for Working Capital	46.87	10%	90%	4.69	42.18
9	Interest on Security Deposits	65.56	0%	100%	0.00	65.56
10	Return on Equity	98.75	90%	10%	88.87	9.87
11	Tax on RoE	33.21	90%	10%	29.89	3.32
12	Interest on ASL	0.00	90%	10%	0.00	0.00
13	ASL Repayment	20.45	90%	10%	18.41	2.05
14	Non Tariff Income-Wheeling	-109.56			-74.82	
15	Non Tariff Retail Income					-34.74
	<b>Total</b>	<b>5226.48</b>			<b>1022.49</b>	<b>4203.99</b>

**Wheeling Business ARR**

**Wheeling Charges Computation**

Sr No	Particulars	Unit	Value
1	Wheeling ARR	Rs Cr	1022
2	Energy Input to TPCODL	Mus	10999
3	Less EHT Sales	MUs	-1858
4	Energy input for wheeling computation	MUs	9141
5	Average Load served by the Distribution Licensee	MW	1043.45
6	Wheeling Charges for Medium Term and Long Term	Rs/MW/Day	26847
7	Wheeling Charges for Short Term	Rs/Kwh	1.12

# CSS and Additional Surcharge



## 1. Computation of CSS

Sr No	Particulars	Units	EHT	HT
1	Projected Revenue from Energy Charges	Rs Cr	1085	1117.44
2	Energy Projected	Mus	1858.00	1908.00
3	Average Energy Charge	Rs/Kwh	5.84	5.86
4	Demand Charges	Rs/KVA/Month	250	250
5	PF Considered		0.97	0.94
6	Average Hours in a month	Hrs	730	730
7	Demand Charges converted with 100 % LF	Rs/Kwh	0.353	0.364
8	Total Tariff for CSS considered ( 3+7)	Rs/Kwh	6.19	6.22
9	Cost of Power Purchase	Rs/Kwh	3	3
10	Applicable Losses	%	3%	8%
11	Wheeling Charge	Rs/Kwh	0	1.12
<b>12</b>	<b>CSS</b>	<b>Rs/KWh</b>	<b>3.10</b>	<b>1.84</b>

CSS Computed based on Formula:  $S = T - [C / (1 - L/100) + D + R]$

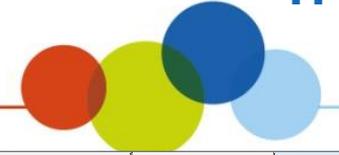
Demand Charges Converted for 100% Load Factor(LF)

**2. No Additional Surcharge** has been proposed



6. True up for FY 2021-22 (Case 90/2022) and True up for FY 2020-21 (10 months)-  
Case -91 /2022

# True up FY-21 ( 10 Months) and FY-22



Particular	True up FY 2020-21 (Jun'20 to to Mar'21)	Approved in ARR FY-22	True up FY 2021-22
<b>III ARR</b>			
a Actual Power Purchase (MU)	6961	9290	8817
b BSP Rate (Rs/kWh)	2.7	2.83	2.83
c Power Purchase Cost from GRIDCO	1876.69	2629.07	2494.46
d Transmission Charges (Rs/kwh)	0.25	0.28	0.280
e Transmission Cost (Rs. Cr)	174.35	260.12	246.91
f SLDC Charges (Rs.Cr)	1.20	1.60	1.60
g Total Power Purchase ,Transmission & SLDC Cost	2052.24	2890.79	2742.97
h Less : Rebate	18.14		27.31
<b>A=g-h Net Total Power Purchase ,Transmission &amp; SLDC Cost</b>	<b>2034.10</b>	<b>2890.79</b>	<b>2715.66</b>
1 Employee Cost	587.17	634.68	776.62
2 R&M Expenditure	142.33	202.94	203.25
3 A&G Expenses	84.72	82.94	122.94
4 Provision for Bad & Doubtful Debt	28.12	32.05	39.78
5 Depreciation	15.33	43.57	41.25
6.a Interest on Consumer Security Deposit	22.19	33.45	31.64
6.b Interest on Long Term Loan	1.40		11.92
6.c Interest on Working Capital Loan	35.16		43.92
6.d Financing Cost	1.21		0.99
6.e Less Interest Capitalized			2.86
<b>6 Total Interest on CSD and Long Term Loan,Working Capital Loan and Financing Cost</b>	<b>60.0</b>	<b>33.45</b>	<b>85.6</b>
<b>B Total Operation &amp; Maintenance Cost and Other Cost</b>	<b>917.63</b>	<b>1029.63</b>	<b>1269.45</b>
7 Less: Emp Cost Capitalized	2.73	29	22.34
8 RoE	41.32	48	59
9 Tax on RoE	13.9		19.93
<b>C Total Distribution Cost</b>	<b>970.12</b>	<b>1048.63</b>	<b>1326.30</b>
10 Less: Misc Receipt/Non Tariff Income (including Open Access Charges)	68.39	104.8	107.08
<b>D Net Distribution Cost (C-10)</b>	<b>901.73</b>	<b>943.83</b>	<b>1219.22</b>
E Provisional Surplus Considered in Tariff Order			
F Gain / (Loss) due to AT&C Loss Achievement	-51.37	0.00	-26.98
<b>11 Total Revenue Requirement (A+D-E+F)</b>	<b>2884.46</b>	<b>3834.62</b>	<b>3907.90</b>
12= X Estimated Revenue at existing Tariff	2791.6	3835.58	3932
<b>13= 12-11 (Gap) / Surplus</b>	<b>-92.89</b>	<b>0.96</b>	<b>24.39</b>
14 Recovery of ASL Payments			237.84
<b>15=13-14 (Gap) / Surplus after considering ASL Repayment</b>	<b>-92.89</b>	<b>0.96</b>	<b>-213.45</b>

Particular	True up FY 2020-21 (Jun'20 to to Mar'21)	Approved in ARR FY-22	True up FY 2021-22
<b>I AT&amp;C Loss , Distribution Loss &amp; C.E</b>			
a Actual AT&C Loss	25.5%	23.7%	25.7%
b Normative AT&C Loss	23.7%	23.7%	23.7%
c Actual Distribution Loss	24.90%	22.93%	23.69%
d Normative Distrubition loss	22.93%	22.93%	22.93%
e Actual Collection Efficiency	99.20%	99.00%	97.36%
f Normative Collection Efficiency	99%	99%	99%
<b>II Sales and Revenue</b>			
a Sales (MU)	5226	7160	6728
b ABR (Rs/kWh) before Rebate	5.39	5.36	5.90
c= a xb/10 Revenue before Rebate	2816.50	3835.58	3968.33
d Rebate / Cash Discount	24.90		36.05
<b>X= c-d Net Revenue after Cash Discount</b>	<b>2791.60</b>	<b>3835.58</b>	<b>3932.28</b>

Gain / (Loss) due to AT&C Loss Achievement			
Sr No	Particular	FY-21 (10 Months)	FY-22
1	Actual Power Purchase MU	6961	8817
2	Actual Power Purchase Cost (incl. Transmission & SLDC Charges) (Rs.Cr) after Rebate	2034.10	2715.66
<b>Normative Power Purchase Cost -- &gt;</b>			
3	Normative Power Purchase MU	6781.02	8729.2
4	BSP Rate (Rs./kwh)	2.70	2.83
5	Transmission Charges (Rs./kwh)	0.25	0.28
6	SLDC Cost (Rs. Cr)	1.20	1.60
7	Total Power Purchase Cost (Rs.Cr) incl. Transmission & SLDC charges	2000	2715.73
8	Less: Rebate (Rs.Cr)	18	27.05
9	Net Power Purchase Cost after rebate (Rs.Cr)	1983	2689
10=9-2	Gain / (Loss) of Power Purchase due to AT&C Loss Achievement(Rs.Cr)	-51.37	-26.98

## Years wise Gap/Surplus with carrying cost



### Year wise Revenue Gap

All Amount in Rs. Cr

Year	Standalone Gap/(Surplus) for the year	Recovery of Additional Serviceable Liabilities (ASL) Payments	Standalone Gap/(Surplus) for the year after considering ASL Payments	Carrying Cost ( Calculated on Average of Opening and Closing Gap) for the year	Standalone Closing Gap with Carrying Cost	Cumulative Closing Gap with Carrying Cost
	A	B	C=A+B	D	E=C+D	F
FY 2020-21 ( June '20 to Mar'21)-True up	92.89		92.89	3.92	96.81	96.81
FY 2021-22 (True up)	-24.39	237.84	213.45	14.86	228.31	325.12
FY 2022-23 (Estimated)	67.59	23.26	90.85	27.98	118.83	443.95
FY 2023-24 (Projected)	62.98	20.45	83.43	40.31	123.74	567.69
<b>Total</b>	<b>199.07</b>	<b>281.55</b>	<b>480.62</b>	<b>87.07</b>	<b>567.7</b>	



## 7. Business Plan for FY 2023-24 (Case No -11 /2023)

- The Business Plan for FY 2023-24 has been submitted based on our ARR filing for FY 2023-24
- In view of the Challenges in estimation and forecast, collation and analysis of significant amount of data on various operating areas such as capex ,opex, estimating consumer category wise demand, loss reduction etc. additional time is requested till 2<sup>nd</sup> week of April 2023 for submission of Business Plan for balance four years of control period ( i.e FY 24-25 to FY 27-28)



# Business Plan Parameters

## Sales, Power Purchase and AT&C Loss for FY 2023-24

Particular	UoM	FY-22 Actuals	FY-23 Estimated	FY-24 Projected	FY23 Over FY- 22	FY24 Over FY- 23
EHT Sales	MU	1149	1589	1858	38%	17%
HT Sales	MU	1462	1784	1908	22%	7%
LT Sales	MU	4117	4415	4902	7%	11%
<b>Total Sales</b>	MU	<b>6728</b>	<b>7788</b>	<b>8668</b>	<b>16%</b>	<b>11%</b>
Power Purchase	MU	8817	10112	10999	15%	9%
Billing Efficiency	%	76.31%	77.01%	78.81%		
Collection Efficiency	%	97.36%	99%	99%		
AT & C Loss	%	25.71%	23.76%	21.98%		

# Business Plan Parameters



## Business Plan Projections for FY 2023-24

Particular	Estimated Gap/Surplus FY-24 (as per ARR FY-24 petition)
<b>III ARR</b>	
a Actual Power Purchase (MU)	10999
b BSP Rate (Rs/kWh)	3.00
c Power Purchase Cost from GRIDCO	3299.73
d Transmission Charges (Rs/kwh)	0.28
e Transmission Cost (Rs. Cr)	307.98
f SLDC Charges (Rs.Cr)	1.8
g Total Power Purchase ,Transmission & SLDC Cost	3609.46
h Less : Rebate	36.09
<b>A=g-h Net Total Power Purchase ,Transmission &amp; SLDC Cost</b>	<b>3573.37</b>
1 Employee Cost	853.52
2 R&M Expenditure	291.29
3 A&G Expenses	163.51
4 Provision for Bad & Doubtful Debt	50.87
5 Depreciation	81.38
6.a Interest on Consumer Security Deposit	65.56
6.b Interest on Long Term Loan	57.55
6.c Interest on Working Capital Loan	46.87
6.d Financing Cost	1.00
6.e Less Interest Capitalized	10.94
<b>6 Total Interest on CSD and Long Term Loan,Working Capital Loan and Financing Cost</b>	<b>160</b>
<b>B Total Operation &amp; Maintenance Cost and Other Cost</b>	<b>1600.61</b>
7 Less: Emp Cost Capitalized	26.29
8 RoE	99
9 Tax on RoE	33.21
<b>C Total Distribution Cost</b>	<b>1706.28</b>
10 Less: Misc Receipt/Non Tariff Income (including Open Access Charges)	109.56
<b>D Net Distribution Cost (C-10)</b>	<b>1596.72</b>
E Provisional Surplus Considered in Tariff Order	
F Gain / (Loss) due to AT&C Loss Achievement	0.85
<b>11 Total Revenue Requirement (A+D-E+F)</b>	<b>5207.03</b>
12= X Estimated Revenue at existing Tariff	5144
<b>13= 12-11 (Gap) / Surplus</b>	<b>-62.98</b>
14 Recovery of ASL Payments	20.45
<b>15=13-14 (Gap) / Surplus after considering ASL Repayment</b>	<b>-83.43</b>

- Business Plan for One year i.e FY 2023-24 submitted at present
- Business Plan projections in line with the ARR for FY 2023-24 submitted
- Forecast of demand and consequently power purchase as challenge considering growth due to various factors such as 'Make in Odisha', disruption such as EV, prosumers etc.

- Request more time for balance Four years
- Pray for granting time till 2<sup>nd</sup> week of April 2023 for submission of the Business Plan for balance four years

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