

# TPCODL

## TP CENTRAL ODISHA DISTRIBUTION LIMITED



- 1. Aggregate Revenue Requirement and Determination of Wheeling & Retail Supply Tariff for FY 2022-23**  
(Case no. 111 of 2021)
- 2. Determination of Open Access Charges for FY 2022-23**  
(Case no. 115 of 2021)  
&
- 3. Truing up for FY 2020-21**  
(Case no-118 of 2021)



# Agenda

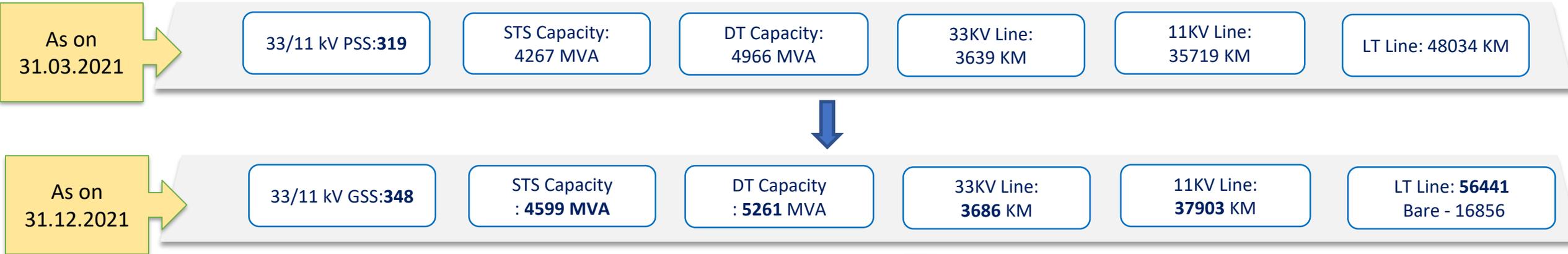


- 1**  **TPCODL at a Glance**
- 2**  **Our Approach as a Utility**
- 3**  **Capex Projects Progress at a Glance**
- 4**  **Commercial Performance**
- 5**  **ARR for FY 2022-23 (Case 111/2021) and Resulting OA Charges**
- 6**  **True up of FY 2020-21 (10 Months)**
- 7**  **Additional Submission : Tariff Rationalization & Other Proposals**

# 1. TPCODL AT A GLANCE



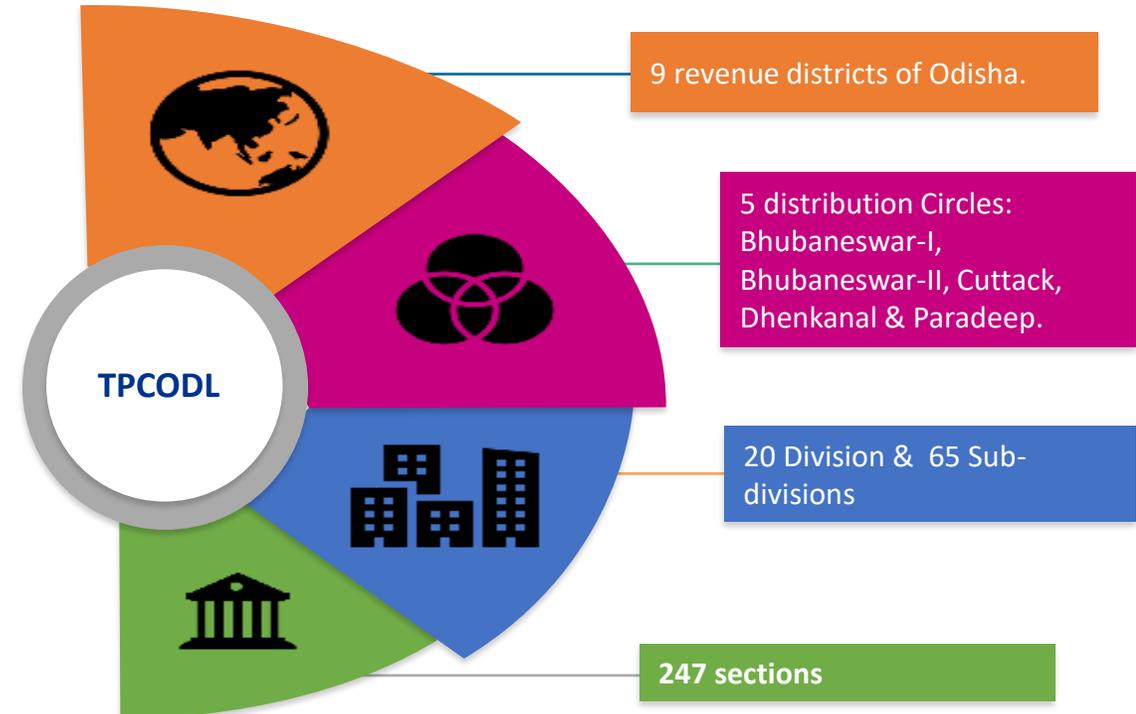
28.6 lakh customers spread across 29,028 sq.km



**69929 Consumers added till Dec'21 in FY-22**

**CD Enhancement: 257 MVA till Dec'21 in FY-22.**

Category	Consumer as on 31.03.2021 in Nos	CD as on 31.03.2021 in MVA	Consumer as on 31.12.2021 in Nos	CD as on 31.12.2021 in MVA
LT	2790260	4472.59	2859902	4584.73
HT (11 & 33kV)	2482	683.51	2766	785.66
EHT (132 kV)	31	456.87	34	499.34
<b>Total</b>	<b>2792773</b>	<b>5612.97</b>	<b>2862702</b>	<b>5869.73</b>



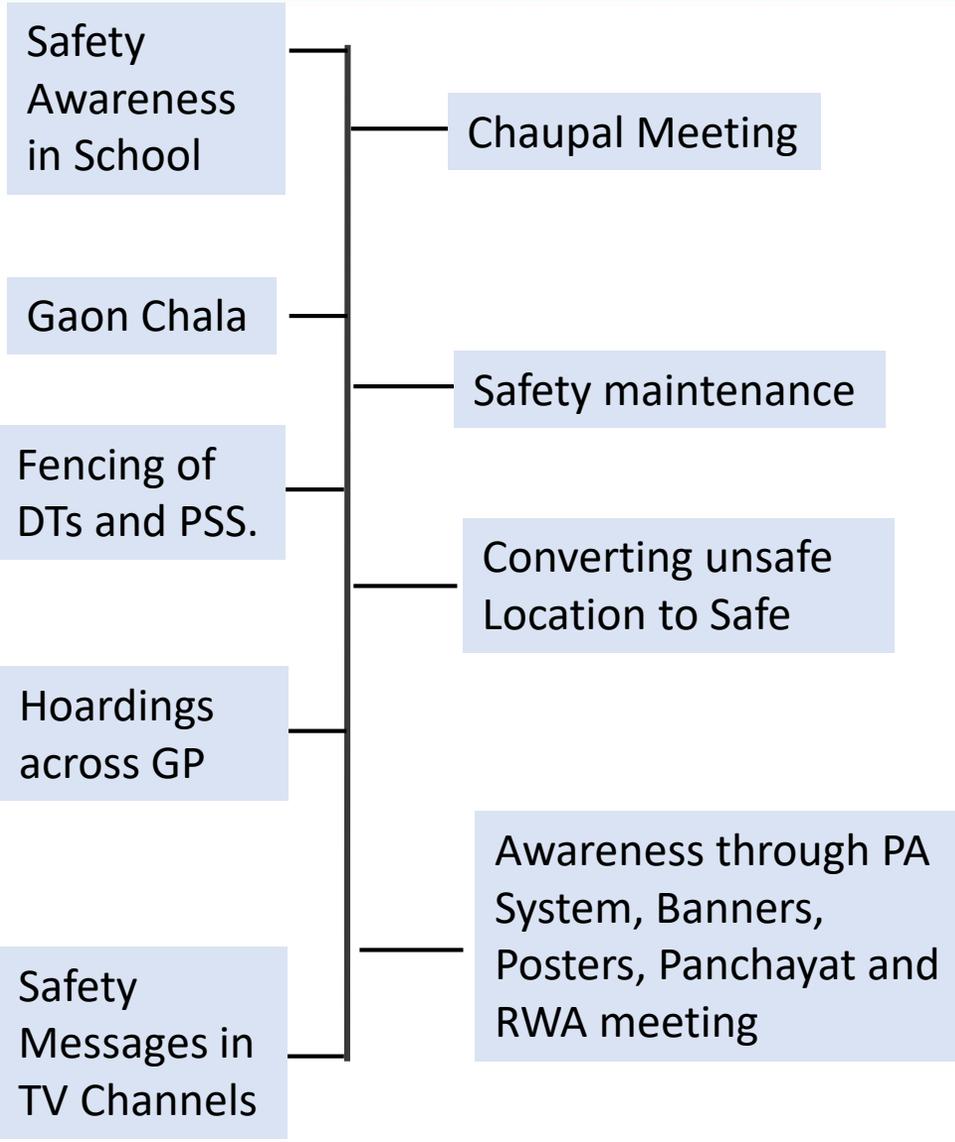


## 2. Our Approach as a Utility & the journey so far

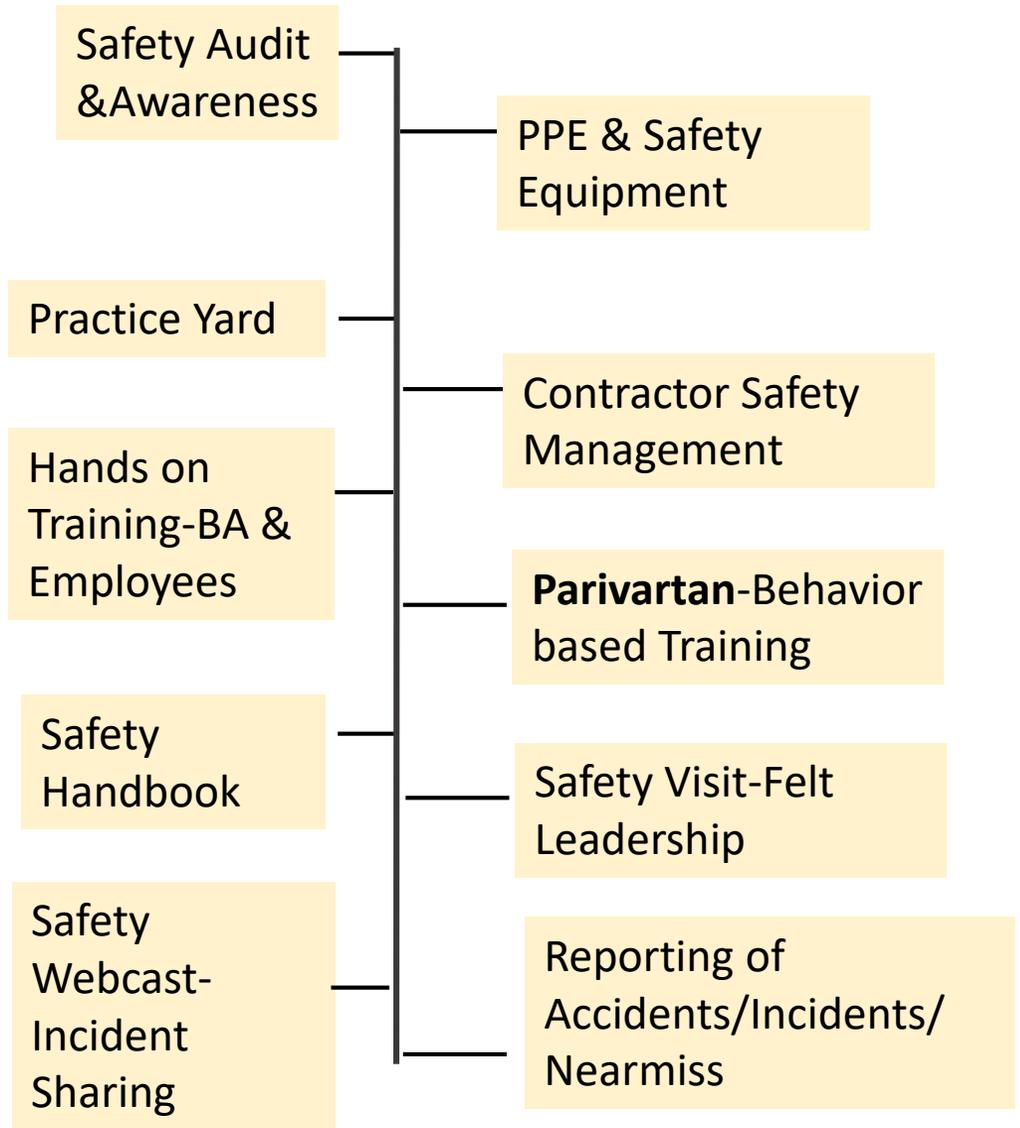
- a. Creating **Safe Environment** for Employees and Society
- b. Improvement in Operational Performance - **Reliability**
- c. Implementation of **Technology** for better services
- d. Providing means for better **customer experience**



# a. Safety Initiatives (1/5)



**Initiatives for Public Safety**



**Initiatives for Employee Safety**

- Initiatives for Animal Safety**
- ‘Surakhya Sachetan Rath’.
  - ‘Chaupadi’ Meetings
  - Fencing of DTs and PSS

# a. Safety Initiatives : Public Safety Awareness (2/5)



Public Safety awareness through 'Surkhya Sachetan Rath' ( Mobile LED Display Van at animal poaching prone areas

Awareness in schools



Playing of Safety Jingles through public address system on maintenance vehicles



Chaupadi meetings with villagers at animal poaching prone areas

# Safety Initiatives.... (3/5)



## Safety Initiatives

## Status

BBS training through external agency (M/s Parivartan)

16383 No's of employees Trained (TPCODL+BA)

Hands-on training in Practice Yard

19 no's of Practice Yards  
Hands on training- 16383 employees (TPCODL+BA) trained.

Competency mapping of 11 KV AMC employees

BBS – II Circle completed. 2000 employees mapped

Safety Audits through Corporate and field safety teams

275 no's of safety audits conducted.

Distribution of Safety Pamphlets

Distributed 20 lakh Pamphlets among customers

Safety Messages scrolled on the leading TV channels

Aired TV scrolls in major media like OTV, Kanak TV, News7, Zee Odisha, Nandighosh and TV 18 for 15 days

Circulation of Public Safety Videos

6 safety videos have been shared through WhatsApp till date

Communication through Gaon Chalo program

Standees on Do's and Don't were prepared & being displayed in this program

Ensure Daily Safety & Energy conservations jingles played on AMC vehicles.

8 no's of jingles across TPCODL; 4884 no's of villages covered

Safety Vinyl stickers on Public Safety on AMC vehicles

500 no's vinyl stickers fixed on AMC vehicles.

Safety Hoarding in GPs and own offices

1622 Hoardings installed



Distribution of Safety pamphlets



Practice Yard -19 Nos



Suraksha Sachetan Rath



Safety Audit



Installation of Safety Hoardings in GP and TPCODL Offices



Media TV Scrolls



Village Safety awareness



Competency Assessment



# Unsafe Situations made Safe - FY 22.... (4/5)

Circle	Pole Straightening / Stay support - New & Repair in Nos.	Re-sagging (with out Pole - HT) in Span	Re-sagging (with out Pole - LT Bare and ABC) in Span	Mid Pole for long span (HT) in Nos.	Mid Pole for long span (LT) in Nos.
BBSR-1	499	2043	6112	141	541
BBSR-2	325	2822	8058	818	1685
Cuttack	586	2417	7709	543	1195
Paradip	221	2314	5574	498	940
Dhenkanal	1352	3625	12529	469	1528
<b>Total</b>	<b>2983</b>	<b>13221</b>	<b>39982</b>	<b>2469</b>	<b>5889</b>
<b>Total unsafe to safe</b>					<b>64,544</b>

**In FY 2020-21, about 1.47 Lakh locations made safe**



Before

After

Before

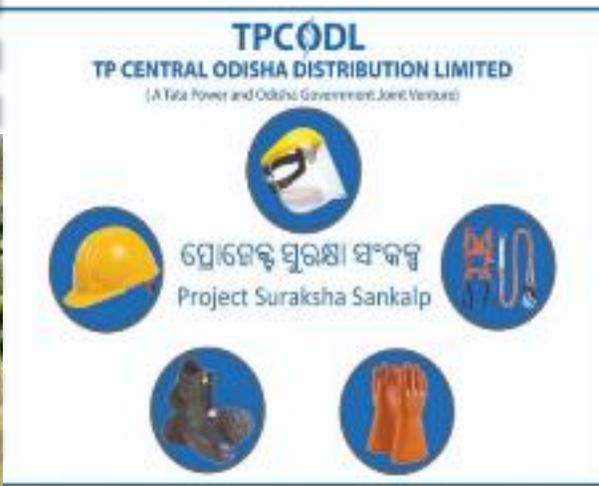
After

Before

After

# Innovative Safety measures Implemented in FY-22....(5/5)

Elephant Intrusion Detection and Repellent System



Safety Inspector Mobile APP



Job Specific Safety Do's & Don'ts- Project Suraksha Sankalp Pocket Book



Reflector Tabs on Road Crossing Guard Wire



Corrosion Proof Danger Plates with 7 Years warranty.



## 2. Reliability



# b. Yaas: Pre-cyclone preparation & Restoration (1/3)

PRE-CYCLONE PREPARATIONS

Loading of Material



Positioning of Men & Material



Pre-Monsoon preparation



BC & DMP plan prepared in advance, Mock drill done

EXTENT OF DAMAGE



RESTORATION UNDER ADVERSE CONDITIONS



All out support from Government of Odisha was received based on previous experiences, tools & tackles, various rate finalisation etc and seamless execution ensured restoration

# Yaas: Priority Restoration of COVID Hospitals and Oxygen Plants (2/3)



No.s	Supply Restored in Duration(hrs.)					Total	Remarks
	0 Tripping	<2 hr.	2 to 4 hr.	4 to 10 hr.	10-18 hr.		
Nos. of COVID Hospital	7	11	2	3	2	25	The 2 Hospital where restoration was late were in Kendra Para where the impact of cyclone was more with heavy wind.
Nos. of Oxygen Plant	1	4	1	2	1	9	1 Oxygen plant was of Talcher where there was heavy rainfall & wind which delayed the supply restoration.

**We have achieved**

- COVID HOSPITAL- Supply restored on the same day by 1800 Hrs
- Oxygen Plant-Supply restored for all Oxygen plants on the same day by 1500 hrs.

Damage Assessment Started @1300 Hrs of 26.05.2021			Restoration Status			
Asset Details	Total Population	Total Affected	26.05.2021	27.05.2021	28.05.2021	29.05.2021
			2359 HRS	2359 HRS	2359 HRS	2130 HRS
<b>33 KV Feeders</b>	220	84	69	78	84	84
<b>33/11 KV SS</b>	317	149	106	134	149	149
<b>11 KV Feeders</b>	1134	509	333	437	508	509
<b>PTR</b>	714	221	178	190	220	221
<b>DTR</b>	71558	37018	22050	30552	36701	37018
<b>Customers</b>	27,63,965	1318803	765690	1243072	1311896	1318803
		<b>% Consumer Restored</b>	<b>58</b>	<b>94</b>	<b>99.47</b>	<b>100</b>

# Yaas: Keeping up the Momentum & Getting appreciation (3/3)



▲  
*Platform for Communication*

**4500 +** Calls per day attended

Approx. **40 Lakhs** SMS Send to Customers

**29 posts** Updated on Twitter and 200+ Queries responded within 3 days

**18** Updated on Twitter

**12** Updated on Twitter

▲  
*Communication Methodology*

*Pre Cyclone*  
*Public Safety Message*  
*Preparation – Man, Material, Machine*

*During Cyclone*  
*Public Safety Messages*  
*Do's & Don't for Customers*

*Post Cyclone*  
*Restoration Work and Team Efforts*  
*Complaint Registration Avenues*

▲  
*Appreciation Received*



*Apart from appreciation from Odisha Govt and other officials*

- **2500 + Likes on the Tweets, Facebook etc.**
- **290 Times TPCODL efforts were re-tweet**
- **200 + positive feedback from customers.**

# b. Operational Performance Highlights (1/3)

## Performance Indicator

KPI	UoM	FYT-21 (Actual)	FY-22 Target	YTD Dec 2021
SAIDI	Hrs	290.4	232	159.23
SAIFI	Nos	415.84	360	333.17
GRID Availability (ASAI-Average Service Availability Index)	%	96.67	97.35	97.63
DTR Failure Rate	%	4.74	4.5	3.99

- **SAIDI** calculation with IEEE p1366
- **SAIFI** Non availability of LT protection and faulty AB switches.

- *Identification and repair of defunct/faulty AB switches*
- *Q3 are 1663 and in YTD are 4500.*
- *9500 Defective Switches yet to be repaired*

### Condition Based Maintenance: Dissolved Gas Analysis

- Total PTR Samples taken: 390
- Total number of abnormal cases found: 46

### Condition Based Maintenance: Ultrasonic detection

- Abnormal Cases: 120

### Condition Based Maintenance: Thermography

- No. of hotspots detected: 3214
- No. of hotspots identified: 1748

### Mass Maintenance of Urban and Industrial Feeders

- 23 Nos 33 kV Feeders and 43 Nos 11 kV Feeders

### Sub Station unmanning – 50 Nos

### 11 kV Feeder Modelling

- 1142 Nos feeders out of 1165 modelled in CYME

### New Connection (>70 kW category)

- 99 Nos of cases received with a total load of 44.5 MW
- Average Cycle Time – 11 days

### SAP PM Module

- 4347 Nos of notification raised in E&MR/ 7105 Nos of notifications raised in Operation Services

### E&MR

- Master Trip relay: 172 No's Installed
- Charger controller commissioning: 40 no's
- In situ Repair of PTR: 5 no's
- ONAN to ONAF: 10 no's

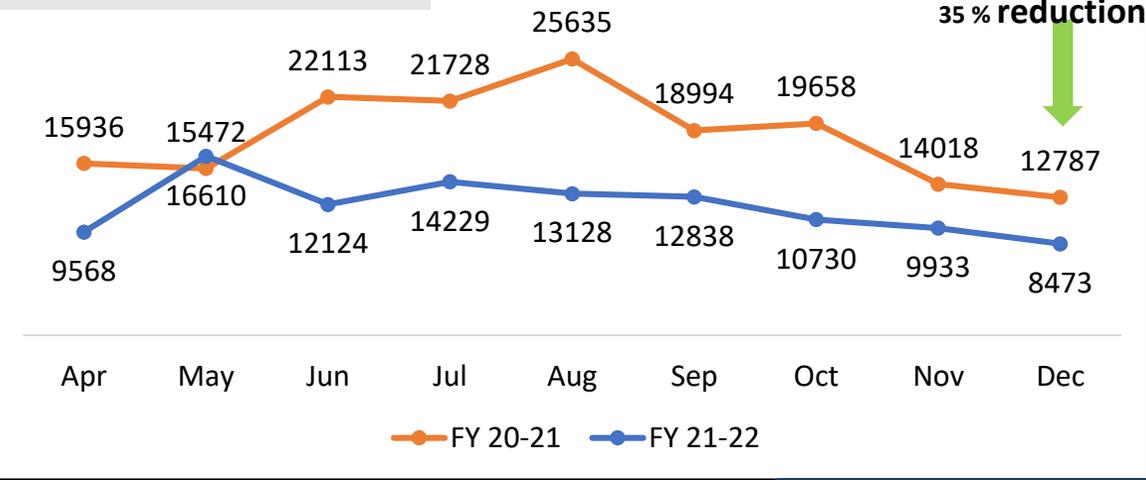
### Other Highlights

- Finalization of **Bhubaneswar City reliability Plan**
- **Low cost SCADA pilot project** along with Siemens at Darpnarayan
- **Support to other Discoms:**
  - 1.Design and detailed BoQ for proposals under ODSSP Phase IV
  - 2.Technical Booklet and construction drawing Concept of common inventory across all DISCOMs
- Permission from OPTCL for 1MVA & above cases is now tracked closely to reduce the overall cycle time.
- **DT Workshop** commenced operations from Dec 21. 15 Nos DTs repaired, 44 Nos DTs overhauled.
- **Interruption free Junior Men's hockey world-cup** (24.11.2021-05.12.2021)
- All 1632 no's of AB switches in BCDD-I have been made functional.

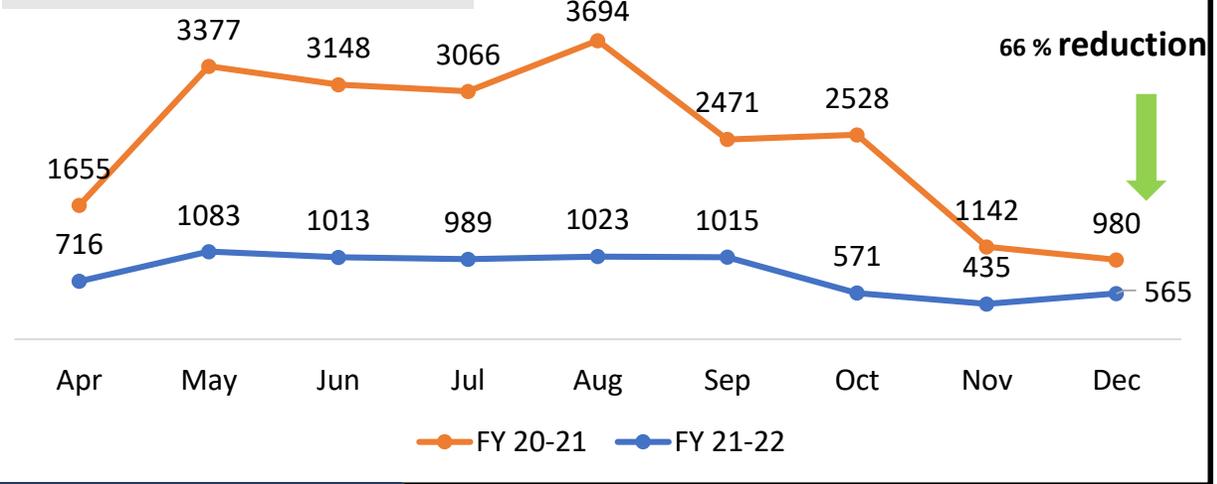
## b. Operational Parameters Trend (2/3)



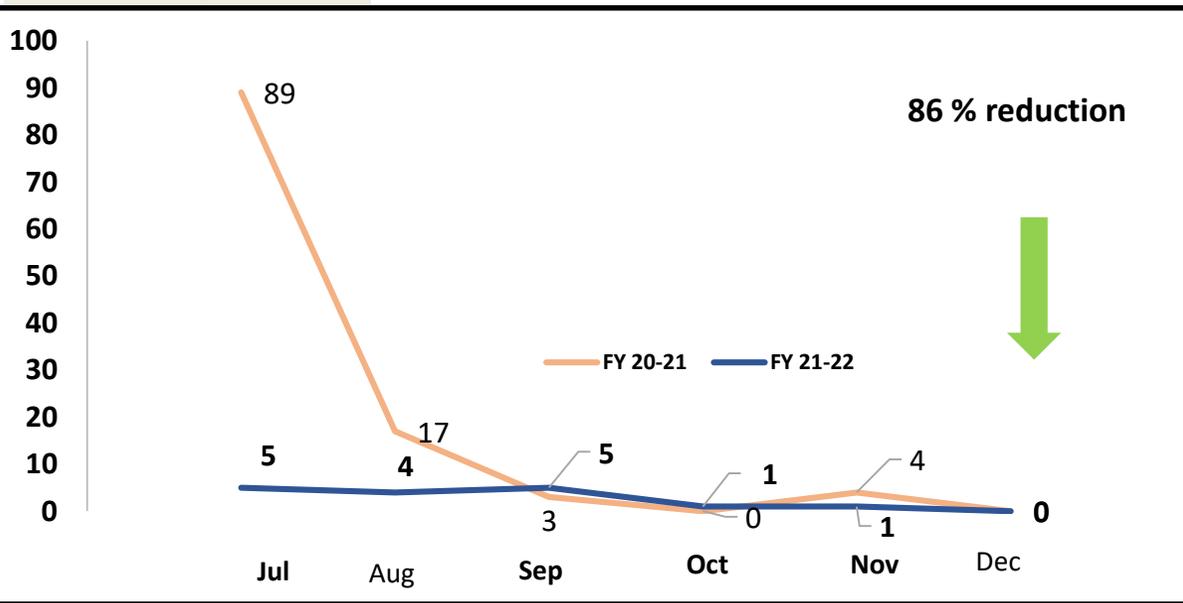
11kV Interruption Trend



33kV Interruption Trend

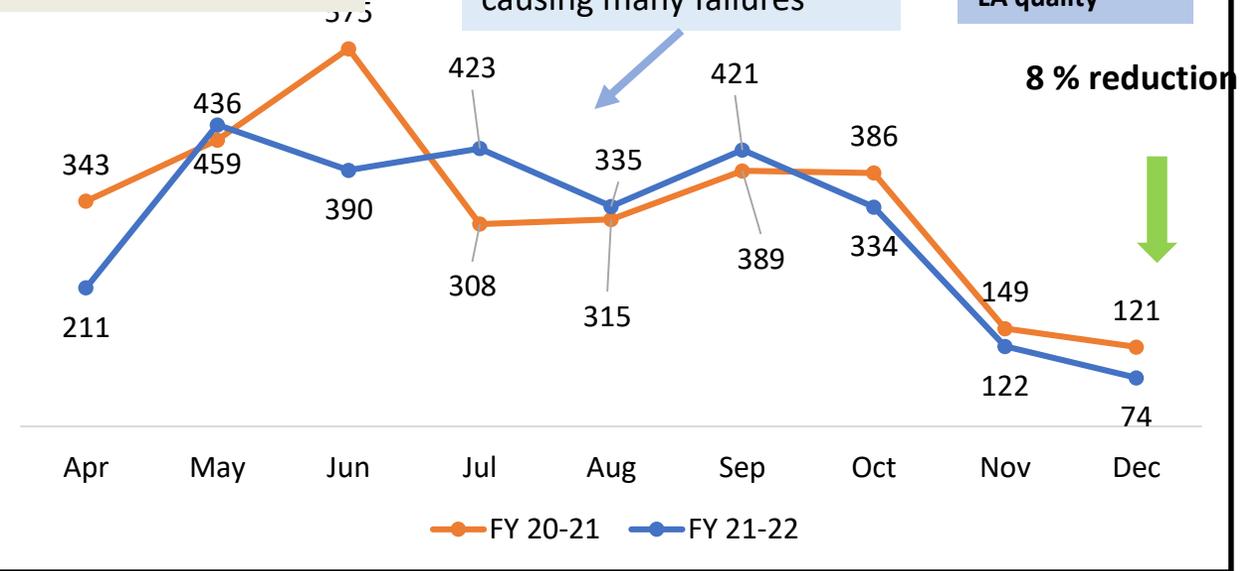


PTR Interruption



Feeder tripping reduced by 39% in the last one year.

DTR Failure



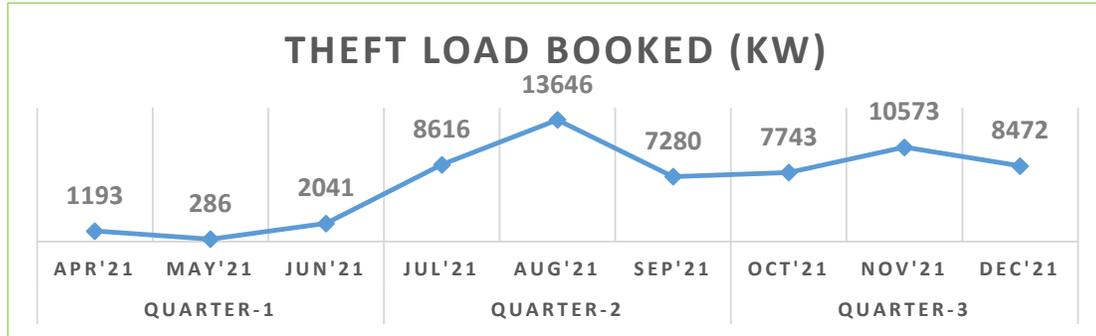
LA quality

## b. Operational Parameters Trend (3/3)



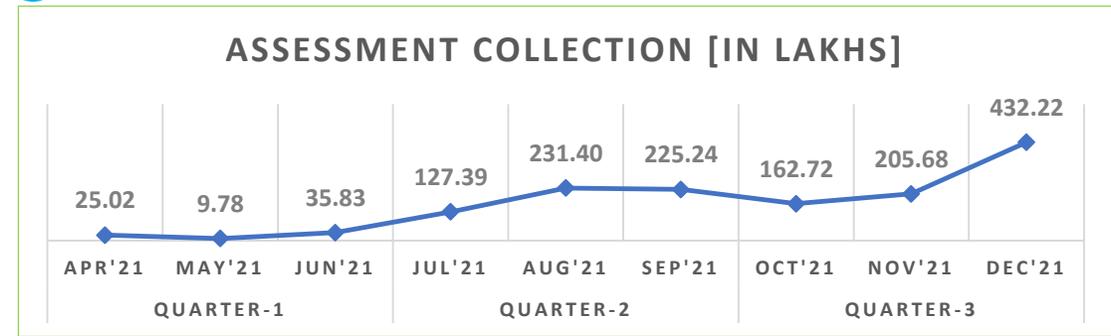
### Load Booking

Total Theft Load Booked till Feb '22 of FY-22 is **70 MW**

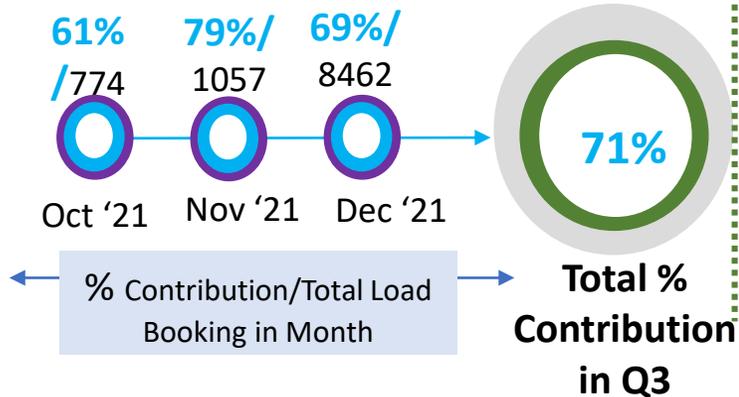


### Assessment Collection

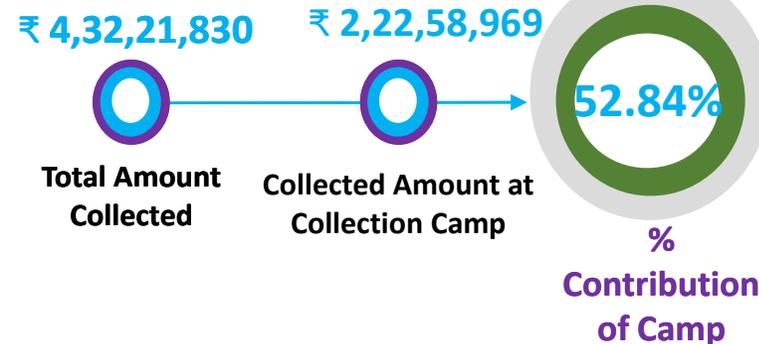
Total Assessment Recovered till Dec'22 of FY-22 is **Rs 14.55 Crs**



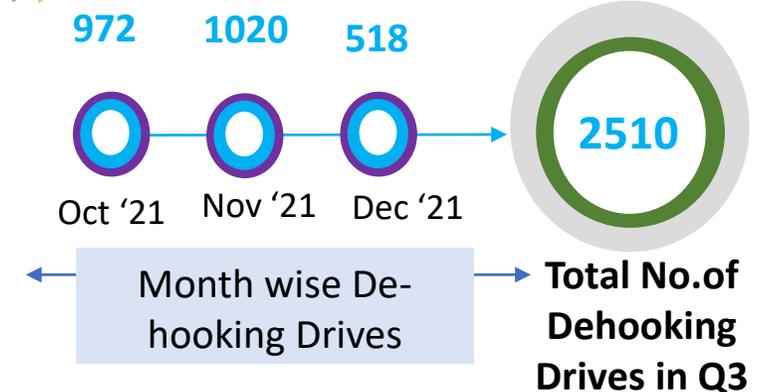
### Operation Clean Drives



### Enforcement Assessment Collection Camp (New Initiative)



### De-hooking Drives



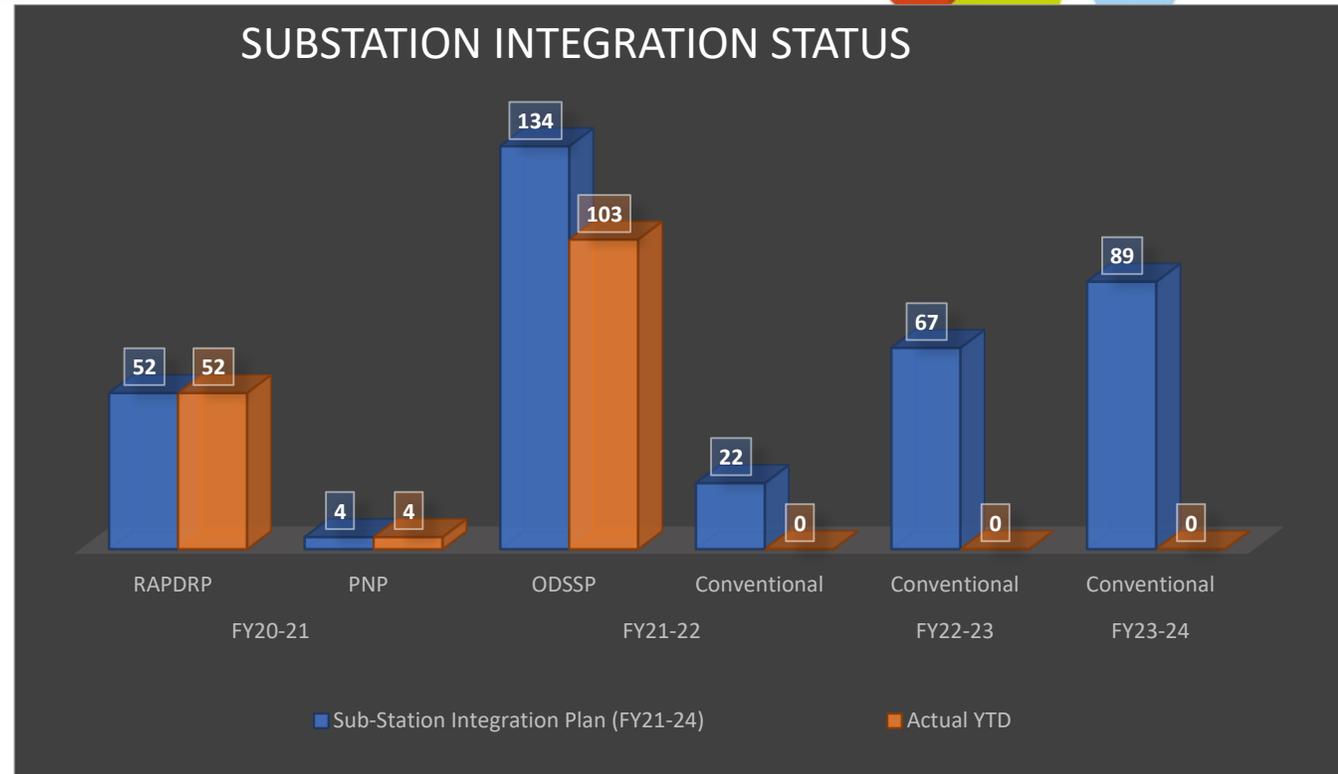


## 3.0 Technology

# Sub-Station Automation System Status and Plan



Financial Year	Scheme	Sub-Station Integration Plan (FY21-24)	Actual YTD	Current Status of Integrated Substations
FY20-21	RAPDRP	52	52	56
	PNP	4	4	
FY21-22	ODSSP	134	103	103
	Conventional	22	-	-
FY22-23	Conventional	67	-	-
FY23-24	Conventional	89	-	-
Total		368	159	



**\*Integration of 103 Nos. of Substation under ODSSP Scheme**

**Total Integrated Substation (As on 31.01.2022)**

**159**

Automation of **51** Nos. Sub Stations has been done and is unmanned.

1. 159 Nos. of Substations integrated with SCADA System out of 190 Substations are planned for FY2021-22.
2. 111 Nos. of Communication link established between ODSSP Substation and Control Center (As on Date)

Although 71 Nos of PSS have been added since June'20 , no additional manpower has been recruited. Further 41 PSS will be added by FY 2024 but no manpower will be added.

# Overlay of Active Cyclones (Weather Plugin) on Section Maps



arcgis.com/home/webmap/viewer.html?webmap=4e9602c1231345cea8b4ccbf4392df7a&extent=83.3692,19.0063,89....

ArcGIS Weather TPCODL Open in new Map Viewer Modify Map Sign In

Details Basemap Share Print Measure Find address or place

Legend

- Active Hurricanes, Cyclones and Typhoons - Forecast Position
  - Tropical Low
  - Tropical Depression
  - Tropical Storm
  - Hurricane
  - Major Hurricane
- Active Hurricanes, Cyclones and Typhoons - Observed Position
  -
- Active Hurricanes, Cyclones and Typhoons - Forecast Track
  -

0 30 60km

POWERED BY esri

Esri, HERE, Garmin, FAO, NOAA, USGS | NHC, Esri

09:28 70%

arcgis.com/home/webmap/viewer.html?webmap=4e9602c1231345cea8b4ccbf4392df7a&extent=83.3692,19.0063,89....

Weather TPCODL

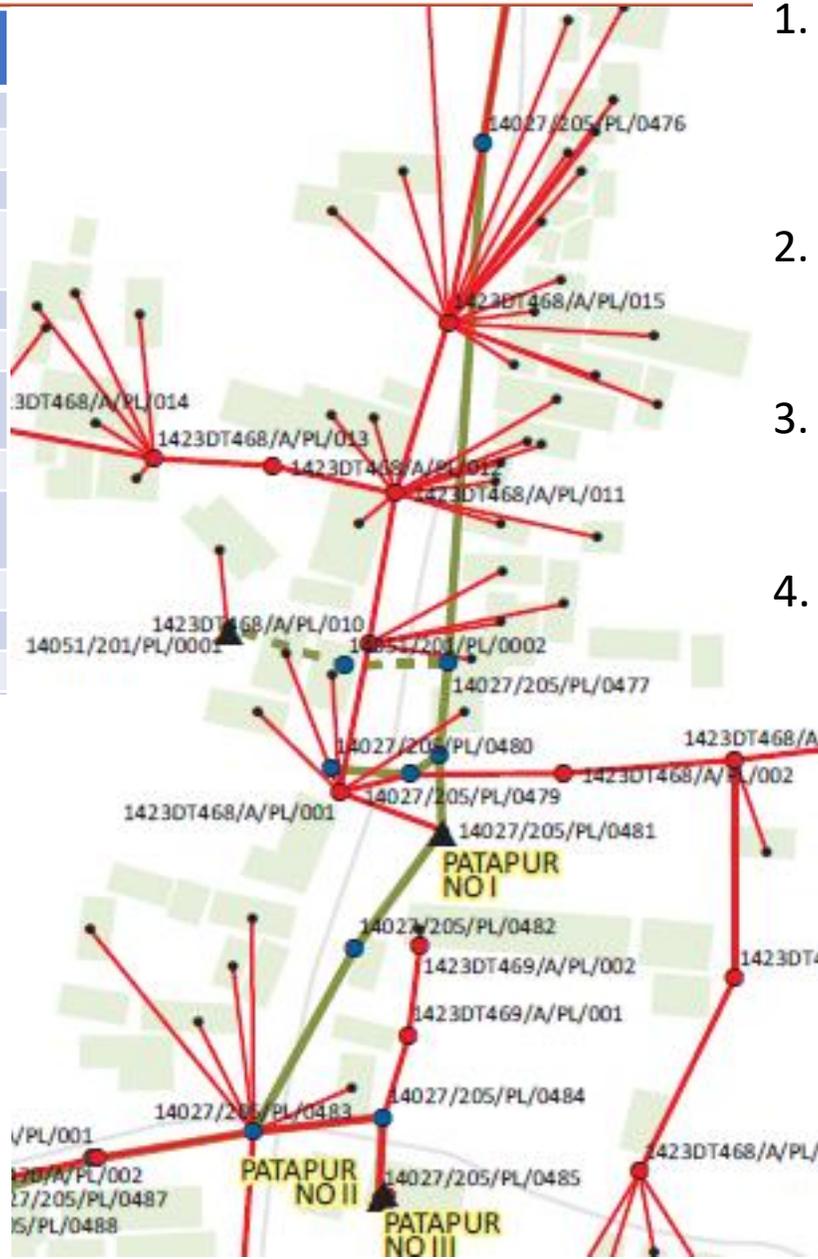
POWERED BY esri

Esri, HERE, Garmin, FAO, NOAA, USGS | NHC, Esri

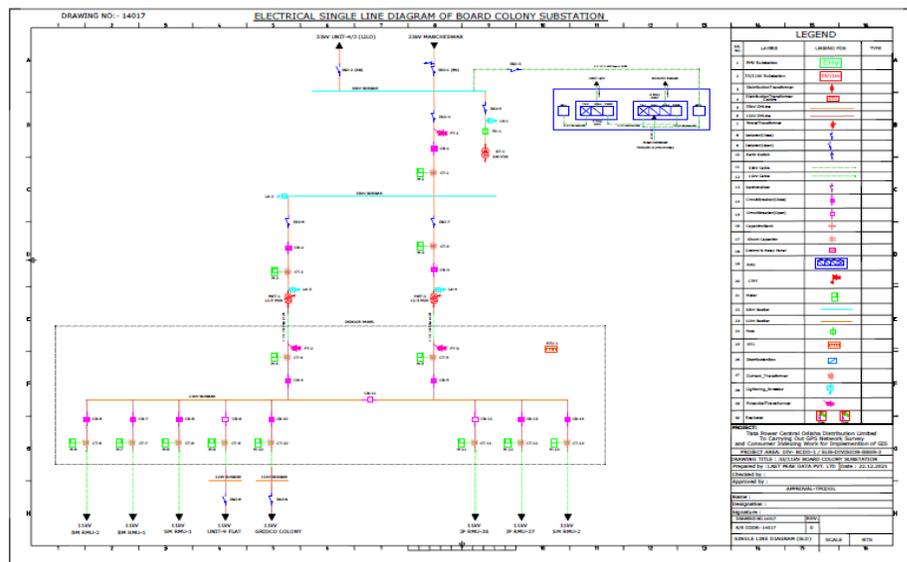
# Multiple benefits of Consumer Indexing in Nimapara Division



Sr. No	Feeder Code	Feeder Name	Count of DT	Count of Consumer
1	14023/202	11 kV BHINGARPUR	32	539
2	14024/201	11 kV BALIPATANA	88	2398
3	14024/202	11 kV BUDHIPARA	214	3492
4	14024/203	11 kV BANAMALIPUR-1	25	1499
5	14024/204	11 kV NARADA	114	3409
6	14025/201	11 kV BALAKATI	89	3004
7	14025/202	11 kV SATYABHAMAPUR	136	3627
8	14025/203	11 kV BAINCHUA	22	1056
9	14026/201	11 kV KAUSHALYAGANGA	13	336
10	14027/201	11 kV CHARICHHAK	184	6533
11	14027/203	11 kV DANDIPUR	258	9711
12	14027/204	11 kV OMFED	48	3013



1. Feeder wise DT and consumer mapping will help in Energy audit, monitoring SAIDI/SAIFI and Feeder wise loss assessment.
2. Geographical mapping of consumer helped in redefining the MRU sequence.
3. Address not found cases resolved and reading started for all such Not Read cases.
4. SLD so prepared is being used by PSCC for network operation.



# GIS Implementation



Activities in FY 22	FY 22	Progress made in YTD FY 22	Target Timelines
<b>All administrative boundaries</b>	All 20 Divisions	All 247 Nos Completed	-
<b>33/ 11 kV S/S &amp; its network (Entire TPCODL)</b>	All 20 Divisions	Nimapada Division Completed. Survey started for BBSR I, Cuttack, Paradeep, Dhenkanal and BBSR II Circle. 222 out 371 S/S completed.	All 5 Circles shall be completed by Mar'22
<b>11 kV Network</b>	9 Divisions (BBSR – I & Cuttack)	Nimapada Division Completed. Survey of BBSR I and Cuttack Circle in Progress	6 divisions of CTC and BBSR I will be rolled out
<b>Consumer Indexing</b>	11 Lacs	5.5 Lacs	6 divisions of CTC and BBSR I will be rolled out
<b>Business Process Integration</b>	100%	Integration touch points identified	Mid of July
<b>Arc GIS &amp; Arc FM License Upgradation</b>	100%	Work order was given on 9 <sup>th</sup> Feb '22. Hardware Server procurement is in progress.	Upgradation to be completed by Mid of July
<b>Custom Application Development</b>	100%	YTS	Mid of July

## Benefits realized so far:

- Section Boundaries being used during cyclone for mapping and planning of affected sections
- Entire 11 kV network of Nimapada is taken to Cyme for planning and load flow analysis by NEG
- Consumer Indexing of Nimapada data being used for Energy Audit



## 4.0 Customer Services



## Customer Care Centre Across TPCODL

With the aim to provide better Customer Service to our Customers, TPCODL has added 11 Customer Care Centre to it's network and a central Call Centre Team. The Current Operational Customer Care Centre are BCDD1, BED, Dhenkanal, CDD2, Balugaon, Puri, Salipur, Nayagarh, Angul, CDD1, Talcher.



# Customer Service Highlights



- **1<sup>st</sup> Key Consumer Meet:** With and Objective of understanding changing requirement & emerging expectation of high end customers, TPCODL organized 1st Key Customer Meet on 25th Nov'21. The customer meet witnessed an overwhelming participation of 83 eminent customers from various industries.
- **'Gaon Chalo' & RWA Meets:** Till Dec'21, Total 322 Gaon Chalo camps have been organized across 20 Divisions wherein approx. 79.50 Lakhs have been collected and 450 consumers have been converted to Digital Platforms. To connect with Urban Customers, 38 Resident Welfare Meetings organized in different societies.
- **Digital Payment Promotion:** In order to boost digital payments a Cashback offers is being launched by our Payment Partners (PhonePe, Amazon, PayTM) from 1st Nov'21 onwards.
- **Introduction of Pay and Win Scheme:** Pay and Win Scheme introduced in Dec'21 to Promote Digital Payments as well as to reward to the regular payers to improve the customer behaviour & payment pattern.  
*(Till Dec'21, total 2.37 lakh are the digital payers and approx. 51% increase in first 9 months vis a vis LFY)*

11<sup>th</sup> Customer Care Centre at Talcher



1<sup>st</sup> Key Consumer Meet



Cashback Offers for TPCODL Consumers



**Pay and Win Scheme for TPCODL Consumers**

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

amazon  
Cashback offers

PAY YOUR ELECTRICITY BILLS THROUGH DIGITAL MODE BEFORE

**31<sup>st</sup> DECEMBER**  
AND STAND A CHANCE TO WIN EXCITING PRIZES

LED TV

MOBILE

OTG

TPCODL Website and Mobile Application- TPCODL MITRA

Digital Payment Option:

Glimpses of Gaon Chalo Camps



# Online Service Enhancement



- 100% increase TPCODL Mitra App Downloads in last 7 months.
- Total App download is at 1.37 Lakh as on Jan'22

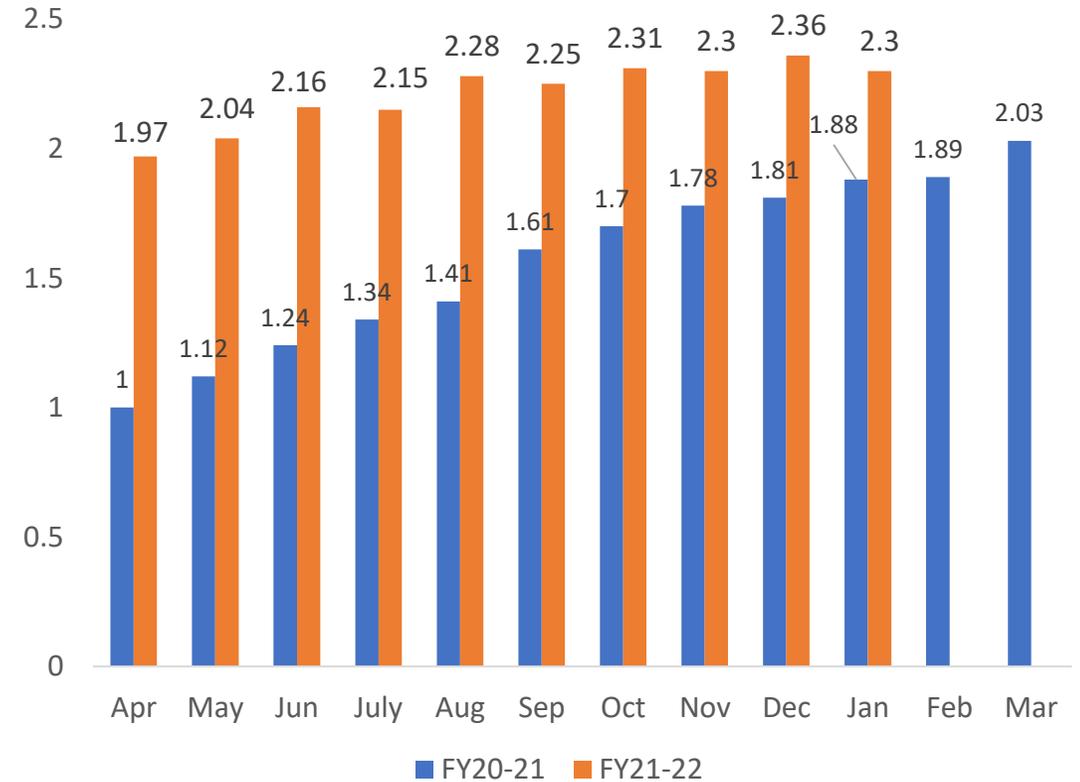
Cash Collection Van – Introduce for behavior change from Door to Door to Counter Payment



Pay & Win Scheme



## Online Payment Trend



- 50% increase in first 10 month vis a vis LFY.
- Collaboration with Bharat Money Store (approx. 8600+) and CSC (6500+) is done for accepting payment at their counter.



### 3. Capex Projects Progress at a Glance

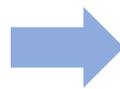
- a. Capex progress of schemes approved for FY 21 and FY 22 upto January 22
- b. Physical Progress shown under Truing up petition of FY 2020-21

# Capex Plan

Sr No	Project Heads	Approved for FY-21	Capex in FY-21	Approved for FY-22	Estimated Capex in FY-22	Proposed Capex FY-23
1	Statutory , Safety & Security	68.17	18.84	17.59	66.92	21.21
2	Loss Reduction	39.63	7.17	67.36	52.01	74.12
3	Reliability	72.48	21.42	114.42	110.39	112.80
4	Load Growth	9.00	0.16	30.52	16.84	25.00
5	Technology & Infrastructure	91.35	36.97	68.84	101.41	78.65
6	Unforeseen Capex					20.00
7	Bhubaneswar Reliability Plan					100.00
8	Low Voltage in Urban Areas					50.00
	<b>Total</b>	<b>280.63</b>	<b>85</b>	<b>298.73</b>	<b>347.57</b>	<b>481.78</b>

Proposal for FY 2022-23 being discussed with Gridco and OPTCL and will be submitted shortly

Vesting Order Mandate: Min Rs. 904 Cr Capex by FY-23



Sr No	Particulars	Rs Cr
1	Cumulative Capex committed till FY 2022-23	904
	Less	
2	Capital Expenditure approved in FY 2020-21	280.63
3	Capital Expenditure approved in FY 2021-22	298.73
4	Total	579.36
<b>5=1-4</b>	<b>Amount for FY 2022-23</b>	<b>324.64</b>

• Capex Approval for FY 2020-21 received in Sep 2020 and Capex approval for FY 2021-22 in Sep 2021.

# Glimpses of Projects - Achieved So Far



Road Crossing 576



Pole 41639 New and Interposing



Fencing 583



HT Conductor 3082km



2.12 Lakh Locations Safe



LT Protection ACB - 495



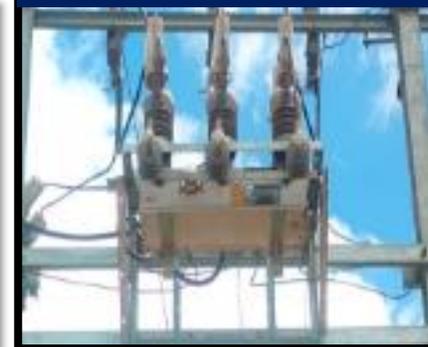
MCCB 1093



DSS -612



AR -96



ABS 987



FDS -99



Earthing-355



DCDB 38



VCB - 48



RMU - 63





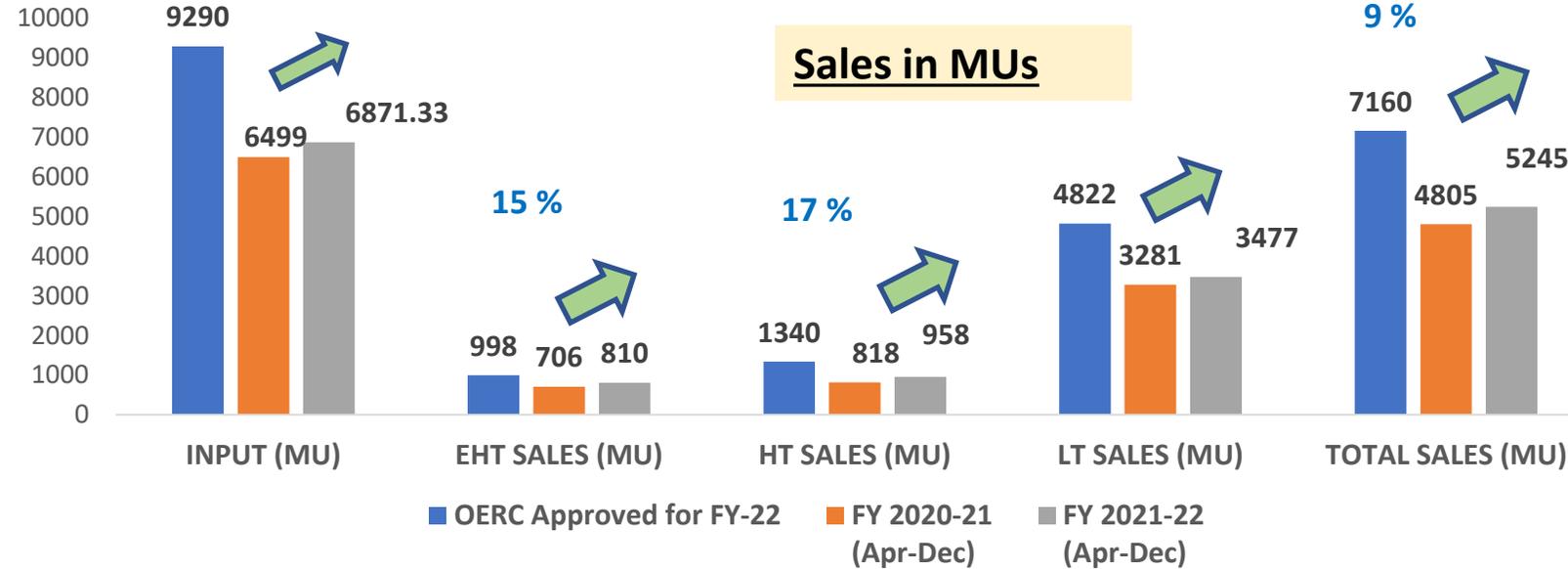
## 4. Commercial Performance

# Overall Performance (Apr-Dec FY22 Vs FY21)



### Apr-Dec Sales (MU) FY-22 Vs FY-21

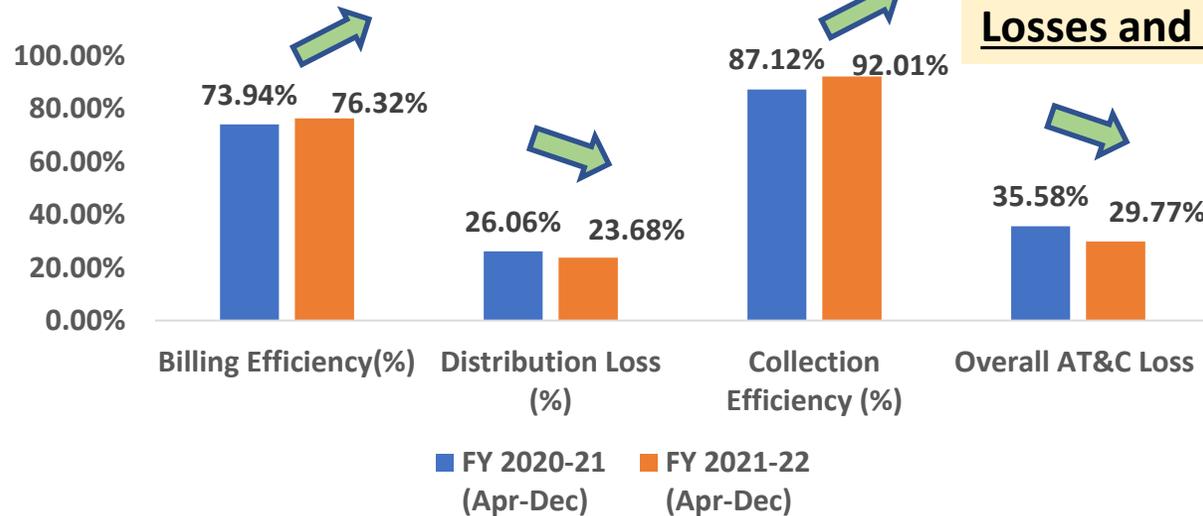
#### Sales in MUs



#### Growth Rate in Sales

Particular	FY 2020-21 (Apr-Dec)	FY 2021-22 (Apr-Dec)	% Increase in FY-22 over FY-21
INPUT (MU)	6499	6871	6%
EHT SALES (MU)	706	810	15%
HT SALES (MU)	818	958	17%
LT SALES (MU)	3281	3477	6%
TOTAL SALES (MU)	4805	5245	9%

#### Losses and Efficiency



• AT&C Loss for FY 2021-22 estimated to be less than **24.5%** as against 26.87% of Vesting Order

## Replacement of Meters – Loss Reduction Measures



### Replacement of Meters achieved so far

Sr No	Perticulars	Meters replaced in FY 21	Meters replaced in FY 22 till Feb-22	Total Meters Replaced till Feb-22
1	1 Phase Defective Meter Replaced	219740	190036	409776
2	Mechanical Meter Replaced	0	164647	164647
3	Total	219740	354683	574423

### NABL LAB SET UP

- **Bench Procurement Complete**
- ✓ **20 position Single Phase : 2 nos Both Installation *at Bhubaneswar***
- ✓ **20 position Three Phase : 2 nos Installation at B *One at Bhubaneswar, One at Cuttack***
- ***Benches at Bhubaneswar and Cuttack Commissioned..***
- ***NABL Accreditation for Bhubaneswar Lab by Sep 2022.***

# Status on CSR Initiatives



## 1 Mobile Health Dispensary

- 1<sup>st</sup> Mobile Health Dispensary Launched on Oct 2nd 2021 for Dhenkanal circle catering to Dhenkanal, Angul and Talcher Divisions.
- 2<sup>nd</sup> Mobile Health Dispensary launched on Jan 7th 2022 for Cuttack Circle catering to Athgarh, Salepur and CED Divisions.
- **10000+** beneficiaries covered till date in 480 villages covering 94 Gram Panchayats on schedule basis.



## 2 Club Enerji & Blood Donation

- Club Enerji session conducted in schools where students from **23** schools covered so far and **3000+** students sensitized.
- More than **2000** saplings planted.
- **03** Blood Donation Camps conducted so far wherein



## 3 Vocational Training Program

- Program Launched on 16th Oct 2021 at Naraz, Cuttack.
- Courses covered: Stitching & Tailoring, Computer Training & Tutorial Classes wherein **156** beneficiaries enrolled so far



## 4 Women Literacy Centre

- **10** Women Literacy Center started in Saliasahi, Adhiakhala and Mahiskhala slum on 01st February 2022
- **200** women beneficiaries are enrolled in this centers and are being imparted training



**502 WSHGs engaged in livelihood opportunities 11 divisions**



Plan for Q4

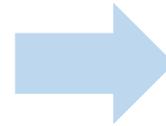
- Eye Check Up camps for beneficiaries
- Implementation of Tata Volunteering Week - 17

- Implementation of Adhikaar Program, target - 3000 beneficiaries



## Challenges faced

- ❖ **Low Voltage in pockets**
  - ✓ Voltage fall below the limit (-9%) prescribed
  - ✓ Voltages low from 33 KV onwards - Has a great impact on 415 V end voltage
- ❖ **Inadequate HT and LT Protection**
  - ✓ Impacts reliability
- ❖ **Collection from Low end consumers**
  - ✓ About 11 lakh customer between 0-50 Units consumption
  - ✓ About 20 Lakh Rural consumer base
- ❖ **Network prone to frequent cyclones**



## Mitigation Measures

- ❖ Low Voltage being addressed through Capital Expenditure planned in FY 2022-23 and FY 23 – 24 for network strengthening.
- ❖ Being Addressed through Capital expenditure for Ring Main Unit (RMU), Sectionalisers, Auto reclosures, LT Distribution Boxes with MCCB
- ❖ Proposal to provide discount of additional 5 paise per unit if they pay at the collection center
- ❖ Wind zoning study completed and network designs finalized for different wind zones. New pole design also done to improve pole resiliency

# Cyclone Resilient Network Study



**Coalition for Disaster Resilient Infrastructure (CDRI)** - comprehensive report to develop Disaster resilient power infrastructure across the state of Odisha - **Central Govt. assistance**

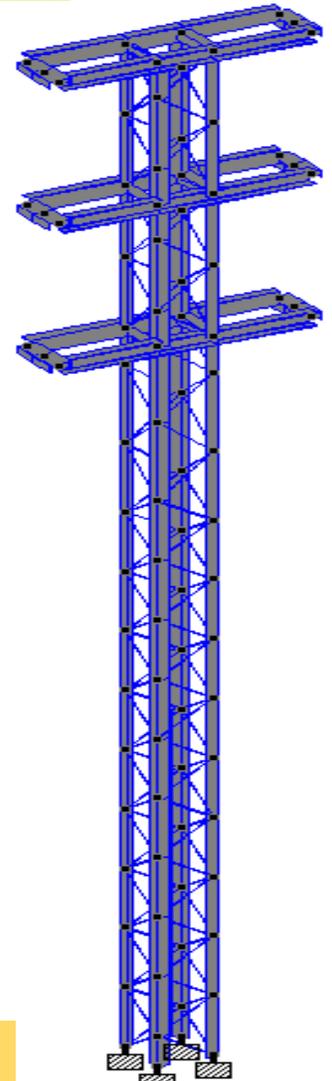
This study is entrusted on **PRDC and its Consortium Partner KPMG and TARU Leading Edge.**

Consortium Status - currently they are in the advanced stage of the Study – **Mid March**

## **Cyclone resilient Study by TPCODL with support from TCE.**

- ❖ TPCODL along with **TCE** has completed the Cyclone / HIW study and defined the micro zoning for design optimization purpose. Zone – I is 20 Km from Coastline and Zone – II is from 20 – 70 Km.
- ❖ Network Design for Zone – I has been completed and for Zone – II TPCODL has already completed the 50% of the Design Basis Report and Drawings.
- ❖ Some of the existing Poles / Structures had analyzed to check whether they have enough mechanical strength to withstand the pressure of the Cyclonic wind. Most poles did not pass the test in the modelling software.
- ❖ **A new pole Design i.e. Reybar Lacing Pole (RLP)** has been designed which is more resilient as compared to the H Pole currently being used. Next week it will be sent to CPRI for testing and thereafter will implement basis on the results.

# Cyclone Resilient Structure – New Rebar Lacing Pole (RLP)



Rebar Lacing Pole

	Existing H Pole ISMC 200	Proposed Rebar Lacing Pole (RLP)
Weight per Pole (Kg)	545 Kg	450 Kg
Max. Wind speed the Pole can withstand	265 Kmph	300 Kmph
Safe max. Span limit (for 300 Kmph)	45 m	80 m
No. of Poles per Km line	22	13
Weight per Pole (Kg) per Km line	11990 Kg	5850 Kg
Ease of procurement	ISMC 200 readily available	MS Angle & 16mm MS Bar readily available
Ease of Fabrication	Plate Cutting + Bolting + Hot dip Galvanisation	Bar bending + Welding + Hot dip Galvanisation
Structural Performance	Transverse Stiffness is Good	Transverse Stiffness is Good
	Longitudinal Stiffness is Weak	Longitudinal Stiffness is Good
	Axial + bending inferior performance	Axial + better performance
	Cannot withstand Broken Wire Scenario	Withstand Broken Wire Scenario
	Lower Strength in Longitudinal Cascade	Higher Strength in Longitudinal Cascade

**For 1 Ckm Line, 33KV line with RLP pole is approx. 7 Lacs cheaper than the line constructed with H Pole. Other benefits are better cyclone resiliency and ease in handling due to comparatively lighter in weight.**



Existing H Pole

## Awards and Accolades



In 'National Convention of Quality Concept'-NCQC 2021,TPCODL's 4 QC projects were conferred with 'Par Excellence' award and 2 QC projects were awarded in 'Excellent' category in NCQC-2021. The Awardees have qualified for ICQC-International convention which will be held in 2022.



TPCODL won "34th CII Eastern Region Quality Circle Convention" organized by Confederation of Indian Industry (CII). The Awardees have qualified for CII National Quality Circle Competition which will be held in March, 2022.



State Level Convention  
on  
Quality Circle



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 conferred with 'Consolation Award' in 34th State Level convention on 'Quality Circle' and 17th EHS Award on 'Environment, Health and Safety (EHS)' which was organised by CII in collaboration with Department of Industries, Government of Odisha 18th & 25th August 2021.



# ARR for FY 2022-23

# Gist of the ARR and Approach



## Basis

- OERC Tariff Regulations, 2014.
- Vesting Order dated 26.05.2020.
- Capex Order dated 08.09.2020.
- Opex Order dated 16.11.2020
- Capex Order dated 18.09.2021
- Carved Out Balance Sheet Order dated 30.09.2021



Capex Proposed for FY 2022-23

Opex estimated for FY 2021-22 & for FY 2022-23

Gap Computed for FY 2021-22 & FY 2022-23

# Sales Projection & Purchase Requirement for FY21-22 and FY 2022-23



Sr No	Particulars	FY 2020-21 Actuals	Approved for FY 2021-22 (OERC)	FY 2021-22	FY 2022-23 Projection
				<b>Total estimate for the year</b>	
1	Domestic Including Kutir Jyoti	3045		3475	3759
2	LT Sales other than Domestic	955		996	1038
3	Total LT Sales	4000	4822	4471	4796
4	HT Sales	1254	1340	1406	1468
5	EHT Sales	948	998	1044	1096
6	<b>Total Sales</b>	<b>6202</b>	<b>7160</b>	<b>6922</b>	<b>7360</b>

← Sales Projection



Sr No	Particulars	FY 2020-21 Actuals	Approved for FY 2021-22 (OERC)	FY 2021-22	FY 2022-23 Projection
				<b>Total estimate for the year</b>	
1	<b>Power Purchase (MUs)</b>	<b>8370</b>	<b>9290</b>	<b>9038</b>	<b>9437</b>

← Purchase Requirement

# OPEX for FY 21-22 and FY 22-23 - Employee Expenditure (1/2)



Sr No	Particular	FY 2021-22 (Approved)	Estimate for FY 2021-22 (as Submitted in ARR FY-23)	Estimate for FY 2022- 23 (as Submitted in ARR FY-23)
1	Employee Salaries & Wages (including Outsourced ) without 7th Pay Arrears	634.68	700.64	780.61
2	Add: 7th Pay Arrears	0	0	75.00
3	<b>Less: Employee Cost Capitalized</b>	29	22.3	24
4	<b>Total</b>	<b>606</b>	<b>678.3</b>	<b>831.71</b>
5	<b>Total without 7th Pay Commision</b>	<b>606</b>	<b>678.3</b>	<b>756.71</b>

- In ARR FY-23 Submission, 7<sup>th</sup> Pay Arrear - Nil in FY-22 and Rs. 75 Cr in FY-23.
- Further to GoO notification and Hon'ble Commission's approval, 30% of 7<sup>th</sup> Pay Arrear of Regular Employees (~ 35 Cr) will be Released in FY-22 and balance (75-35= 40 Cr) in FY-23
- Impact of revised Medical Allowance including arrears not included in the projections

## Basis of Projection for FY 2021-22:

- 3% Hike in Basic for existing Employees.
- DA for FY-23 taken at 37% for existing Employees.
- Nominal increase in Other Allowance/benefit for existing Employees.
- Group Health Insurance for FY-23 : Rs. 5.42 Cr taken (New for FY-23) for Existing Employees.



# OPEX for FY 21-22 and FY 22-23 - Employee Expenditure (2/2):

## Approval and Recruitment of Manpower

- The Hon'ble Commission approved the following Manpower (798 Employees till 31<sup>st</sup> March 2022)
  - a) 8% of the proposed ( 532 Employees) in ABP Order
  - b) Against depletion ( 266 Employees) for FY 2021-22
- The Hon'ble Commission set a norm for Employees at 1.4 per Thousand consumers
- TPCODL proposes to reduce the manpower to the norm of 1.4 per Thousand in 5 years**

## Proposed Manpower Movement of TPCODL

Period	Consumer Nos. ('000)*	Opening No.	Number of Separation	Proposed Yearly Manpower Addition	Projected Manpower @ end of FY	Manpower ratio per '000 Consumer
Till 31-03-2022	2897				5265	1.82
FY 23	3007	5265	195	200	5170	1.72
FY24	3117	5170	168	50	5102	1.64
FY25	3227	5102	169	50	5033	1.56
FY26	3337	5033	157	50	4936	1.48
FY27	3447	4936	155	50	4831	1.40

\* Projection from 31st Mar 22 at the rate of 1.1 Lakhs/Annum

**Request Hon'ble Commission to approve recruitment of 200 No of Manpower for TPCODL in FY 2022-23**

# OPEX for FY 21-22 and FY 22-23 – R&M Expenditure



## 1 R&M Expenditure Proposed

All Amount in Rs. Cr

Sr No	Particulars	FY 2020-21 (Actual 10 Months)	FY 2021-22	FY 2022-23
1	Opening GFA ( As per Approved Opening Balance sheet as on 01.06.2020)	3403.73	3,637.05	4,302.85
2	Addition	233.32	665.80	
3	Retirement			
4 = 1+2-3	Closing	3,637.05	4,302.85	
5	<b>R&amp;M at 5.4% of the Opening GFA</b>			<b>232.35</b>
6	Special R&M for maintaining Assets not in the books of TPCODL (Govt Funded Assets)			20.00
7 = 5+6	<b>Total R&amp;M</b>	<b>142</b>	<b>203</b>	<b>252.35</b>

- Special R&M of Rs. 20 Cr sought for Assets not in books ( Rs 2624 Cr) but being maintained by TPCODL.
  - Against 5.4% of Rs.2624Cr (i.e Rs. 142 Cr), we are seeking Rs.20 Cr.

## 2 GFA Addition

GFA Addition

Particular	FY-21 (June- Mar)	FY-22
From Opening CWIP	<b>129.31</b>	<b>131.81</b>
New Capex against Govt/Cons Funded Scheme		
RAPDRP	<b>0.00</b>	<b>18.65</b>
Saubhagya	<b>13.39</b>	<b>8.07</b>
Division wise CWIP (Deposit works & Other Govt Schemes) incl. Consumer Contribution	<b>2.57</b>	<b>10.47</b>
TPCODL Capex including IDC ,Emp Cost & GRIDCO Contribution	<b>66.60</b>	<b>407.45</b>
TPCODL -Meters	<b>21.91</b>	<b>89.35</b>
<b>Total</b>	<b>233.78</b>	<b>665.80</b>

## 3 Special R&M for Assets not in Books of TPCODL

Sr No	Assets under Schemes being Maintained by TPCODL	Asset value (Rs. Cr)
1	ODSSP	619.6
2	IPDS	162.67
3	SCRIP	507.39
4	RGGVY	1338.94
5	BGJY	54.80
6	<b>Total</b>	<b>2683.4</b>
7	Less: GRIDCO's Contribution in Kind in FY-21 and FY-22	<b>59.8</b>
8	Total after Transfer of Assets in lieu of GRIDCO's Contribution	<b>2624</b>

# OPEX for FY 21-22 and FY 22-23- A&G Expenditure



## 1 Normative A&G Costs

### A&G Costs

Sr No	Particulars	Rs Cr
1	Normal A&G Cost approved in FY 2020-21 CESU Tariff Order	58.8
2	Additional A&G Cost Approved for 10 Months in Opex Order of 16th Nov 2020 = 60% of Rs. 63 Cr	37.8
3= ( 2 x 1.2 + 1) X 1.07	Normal A&G Cost for FY 2021-22 considering 7% escalation as per Tariff Regulations	111.5
4= 3 x 1.07	Normal A&G Cost for FY 2022-23 considering 7% escalation over FY 2021-22 as per Tariff Regulations	119.3
5	Special/Additional A&G Expenditure approved for FY 2021-22	20
<b>6=(4+5)</b>	<b>Total Normative A&amp;G Cost for FY 2022-23</b>	<b>139.3</b>
7	Special /Additional Expenditure for meeting Enhanced Activities in the areas of Billing and Collection for FY 2022-23	10
<b>8-6+7</b>	<b>Total Approval Sought towards A&amp;G Expenditure</b>	<b>149.3</b>

A&G Cost Requested for FY-23 is Rs. 147 Cr.

Actual A&G Expenditure incurred ( in Rs. Cr)

FY-21 (Apr-May)	FY-21 (Jun-Mar)	Total FY-21	FY-22 (Apr-Dec)
28.15	84.72	112.87	84.78

## 2 Estimated A&G Cost for FY-23: Zero Based Budgeting

Particulars	Ensuing Year (FY-22-23)
Rental of land, buildings, plant and equipment, etc	7.79
Electricity consumption expenses	1.50
Telephone & Communication expenses	0.10
Foods and conveyance	2.57
Bank & other charges	3.01
Office expenses + Facility Management and House Keeping etc	8.10
Travelling expenses	5.40
Insurance premium	8.51
Legal and professional charges	8.33
Software & IT expenses	4.82
Other Finance/Statutory Expenses	2.83
Advertisement & marketing expenses	2.00
Metering and billing expenses Collection, Payment Transaction Charges, Customer Awareness for Digital/Prompt/Regular Payments, Customer Service (Cust. Care, Call Center, Meter Services etc.)	87.37
Printing and stationery	2.00
Miscellaneous expenses including	1.00
Additional Expenses: BIRD Cell	0.50
Business Excellence ,Process Improvement	1.00
<b>Total</b>	<b>147</b>

- A large number of heads under this Expenditure is mandatory for running the business
  - ✓ Metering Billing and Collection Activity
  - ✓ Insurance, Audit Expenses, Bank Expenses, Directors Fees, Credit Rating Fees
  - ✓ SAP License Fees and communication charges.

# Computation of ARR and Gap



## 1 ARR for FY-22 and FY-23

Sr No	Particulars	Rs Cr		
		True Up FY 2020-21 (Jun-Mar)	FY 2021-22	FY 2022-23
1	Cost of Power Purchase(Net of Rebate of 1 %)	1982.73	2784.43	2907.00
2	Emp Cost	598.41	678.30	831.71
3	A&G Cost	84.72	120.83	146.84
4	R&M Cost	142.33	203.00	252.35
5	Interest Long Term Debt	1.45	14.31	39.69
6	Interest on Working Capital	35.29	43.40	48.19
7	Depreciation	14.82	29.94	55.99
8	Return on Equity	41.32	60.98	84.66
9	Income Tax	13.90	20.51	28.47
10	Interest on Security Deposit	22.00	29.54	30.78
11	Provision for Bad Debts	28.16	39.29	41.54
12	Interest on ASL		5.12	14.12
13				
14	Expenditure on DSM			1.0
	<b>Less</b>			
15	Non Tariff Income	-79.24	-89.45	-82.26
16	Receipts on account CSS	-20.79	-24.95	-24.95
<b>17</b>	<b>Total ARR</b>	<b>2865.11</b>	<b>3915.25</b>	<b>4375.13</b>

## 2 Gap computation

Sr No	Particulars	Units	FY 2021-22	FY 2022-23
1	ARR with Actual Distribution Loss	Rs Cr	3915	4375
2	Less Power Purchase Costs	Rs Cr	2784	2907
3=1-2	ARR without Power Purchase Costs	Rs Cr	1131	1468
4	Add Normative Power Purchase Costs	Rs Cr	2767	2942
5=3+4	ARR with Normative Distribution Loss	Rs Cr	3898	4410
6	Revenue at Existing Tariff	Rs Cr	3928.51	4154.46
7	(Gap) /Surplus	Rs Cr	31.0	-255.7

## 3 Gap computation

Sr No	Particular		FY 2020-21	FY 2021-22	FY 2022-23
1	Opening Gap with interest	Rs Cr	0.00	76.64	50.14
2	Addition	Rs Cr	73.54	-30.97	255.70
3	Closing Gap	Rs Cr	73.54	45.67	305.84
4	Interest Rate	%	8.45%	7.30%	7.45%
5	Interest	Rs Cr	3.11	4.46	13.26
6	Closing Gap with Interest	Rs Cr			319.10



## Additional Submission : Tariff Rationalization & Other Proposals

## 5. Other Submissions and Clarification Sought (1/2)



### Tariff Rationalisation Proposal

TPCODL has not proposed any Tariff hike. It is expecting to increase its Revenues to reduce the Gap through the following Tariff Rationalization measures



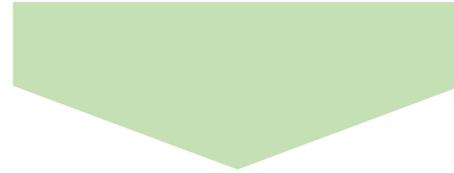
Next Few Slides

# 5. Other Submissions



## Tariff Rationalisation Proposal

TPCODL has not proposed any Tariff hike. It is expecting to increase its Revenues to reduce the Gap through the following Tariff Rationalization measures



Next Few Slides

## 1. PROPOSALS ON RE POWER (1/2)



### Levy of CSS on RE Power

- Presently **CSS & 80%** of Transmission and wheeling is exempted on RE power
- Most of the states have **already abolished exemption on CSS**
- Procurement of RE power has increased **600%** in the current year as compared with last year
- Cost of RE power has reduced considerably and separate power market (GDAM) also encouraging sourcing of same
- In line with other states **all DISCOMS prays for levy of 100% CSS, Transmission & wheeling charges on RE power**
- Benefit will be passed on to consumer to protect **tariff shock**

### Rationale for reducing the concessions

- Adequate Renewable Capacity being added – No further fillip to be given to Renewable through concessions
- Cost of generation from Solar and Wind has reduced substantially
- Several States have reduced such concessions
- National Tariff Policy allows waivers for Inter State Charges only and not for Intra State Charges as well as on CSS
- Adverse Impact on discoms due to such concessions



### Green Tariff Proposal

- Green Tariff proposed in addition to existing Tariff.
- Applicable to All type of consumers who wish to buy green power voluntarily – Voluntary
- Certificate by Discoms for appreciation
- In case the consumers purchases Green Power but not for RPO, then such power may be considered for meeting the RPO of Gridco

## 2. ENHANCED BENEFIT TO LT DOMESTIC & LT GP SINGLE PHASE CONSUMERS



### Incremental digital rebate for LT Domestic, LT GP single phase & Single-phase irrigation consumers

- The consumer coverage in LT sector is still **lagging**
- To increase coverage DISCOMs are proposing to increase **the digital rebate from 2% to 3% for LT 1-ph Domestic & GP category. Additional 2% Digital rebate is proposed for rural domestic consumer (total 5% for rural domestic consumer)**
- This benefit may be extended to 1-ph Irrigation consumers also
- **Incidental cost** towards collection can be avoided.
- **Collection efficiency** will increase

### Discount to Domestic Rural Consumers

- Presently LT rural consumers are eligible for additional rebate of **5 p/u** if paid within due date if consumed on actual meter reading
- DISCOMs are proposing to increase the rebate from **5 p/u to 10 p/u**
- Consumer will be encouraged to **draw through correct meter**
- Lead to **payment of bill on time**
- **Rural LT sector coverage** will improve
- Special Cash Discount of 5 paise per Kwh to Rural Consumer to be provided when payment is made at the counter, rather than through Door to Door collection

### 3. PROPOSALS FOR INDUSTRIES (1/3)



#### Special tariff to steel industry

- Most of the **steel industries in Odisha** have **closed in recent past** and many of them are **shifting** their units to adjacent states due to **cheaper price**
- Contribution of steel industries under HT sector helps licensee to **bear higher BSP**
- To protect such industries it is proposed to provide special tariff to all steel industry having **load >1MW at 33 KV level & No CGP**  
(75-80)% LF :-8%,  
(80-90)% LF :-9%,  
(> 90)% LF :-10% discount on total energy charges)

#### Special tariff for industries those who have closed their units if reopen/starts

- The licensee has made an attempt to reopen the closed industries
- So, a Special tariff for industries which are closed for a period of more than one year till 31<sup>st</sup> Dec-21, who want to reopen can avail **discount of 50 p/u on incremental units** over & above the average monthly consumption of twelve months prior to closing of the industry. This benefit will be applicable only on twelve month continuous operation after reopening.
- Running of industries will help **growth of industrialization**
- Create **employment opportunity**
- Improvement in **national GDP**
- Benefit to **subsidized category** of consumers
- **Tariff shock** will be avoided



#### Special Tariff for upcoming new industries with guaranteed period of business continuity

- Govt. of Odisha is **promoting industrialization**
- Industrialization will help **in more employment** and **development of socio economic condition**
- Contribute towards **subsidized sector**
- Business continuity for **5 years** will also help towards **economic growth**  
*Discount (based on total consumption) :*
  - 1<sup>st</sup> year - 50 p/u**
  - 2<sup>nd</sup> year- 40 p/u**
  - 3<sup>rd</sup> year- 30 p/u**
- No open access allowed for initial three-years.
- In case industry intends to opt out before initial three years the benefits so availed shall be withdrawn along with recovery of other applicable Fixed Cost for the unexpired period of 5 year.



## Special concessions for incentivizing HT and EHT industries to consume at High LF

### a. Proposal

In case the Load Factor (LF) is greater than 75% (upto 80%), then Tariff Reduction (i.e Energy Charges) of Rs 0.40 per Kwh for entire consumption. In case the LF is greater than 80% then Tariff Reduction of Rs 0.50 per Kwh for entire consumption. However, no concession is available if the LF is less than 75%

### b. Conditions for availing the proposal

The LF of the consumer in FY 2021-22 should be less than 55%

### c. Rationale for choosing a threshold LF of 55%

As LF rises, the Discom gets more contribution from such sale. However, when it crosses 75%, the entire sales is given a discount of Rs 0.40 per Kwh and when it crosses 80%, a rebate of Rs 0.50 per Kwh. Such concessions would imply that as the LF rises above 75%, the margin reduces. Hence based on existing tariff structure, it has been established that for a “Win Win” situation, a threshold LF of 55% is required. The benefits worked out at 1KVA Contract Demand (CD) at various Load Factors is as given in the table below

## 4. OTHER PROPOSALS (1/2)



### Introduction of Amnesty arrear clearance scheme for LT non industrial category of consumer

- DISCOMs are committed for arrear collection and this will **improve collection efficiency**
- **Additional collection** will be paid to **GRIDCO over and above committed amount**
- Will help **encouragement for out of court settlement**
- Alternately, **caping of two years old case** for disputed arrear may be lifted



### Charges for line extension to LT single phase connection up to 5 Kw

- The present level of **Rs.5000 per span** for LT extension is **insufficient**
- DISCOMs requesting for an amendment to **Rs.9300 for single phase & Rs.12000 for three phase**
- **Actual cost** is much **higher** in many cases
- Even if for single pole or two poles cases the transportation, loading & unloading, erection cost is much higher
- **Allow the Hon'ble Commission to recover the differential in the Capex in the time being**

### Rebate on prompt payment of BST bill

- Presently GRIDCO is offering **2% rebate on prompt payment within 2 days & 1% if paid within 30 days**
- DISCOMs are proposing **rebate on proportionate basis** :
  - 2% rebate on full payment within 5 days
  - 1.5% up to 20 Days thereafter
  - 1 % if cleared within 30 days
- This will help in **cash flow of GRIDCO**
  - Graded Rebate for prompt payment prior to Due Date to Gridco and OPTCL
  - In addition to graded rebate, additional rebate of 0.075% per day for any payment made on provisional basis prior to receipt of Bill but not before 1<sup>st</sup> of the relevant month.

## 5. Other Submissions and Clarification Sought (2/2)



### Other Points

1. **Meter Rent** to be renamed as **Fixed Charges for Meter**
2. **Graded Rebate for prompt payment prior to Due Date:** In addition to graded rebate, additional rebate of 0.075% per day for any payment made on provisional basis prior to receipt of Bill but not before 1<sup>st</sup> of the relevant month.
3. Separate Tariff Category for Consumer having load greater than 15 HP for Agricultural Category
4. Separate Category for Mega Lift Irrigation Projects.
5. Special Cash Discount to Rural Consumer to be given for paying at the Customer Care Centre
6. Recovery of Meter Installation Cost from the Consumers who are providing their own Meters.



Open Access Charges for FY 2022-23  
(Case 115/2021)

## 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)	2942.0	0%	100%	0.00	2942.03
	O&M Charges					
2	Employee Costs	831.71	60%	40%	499.02	332.68
3	Repairs and Maintenance	252.35	90%	10%	227.12	25.24
4	Admin and General	146.84	40%	60%	58.74	88.11
					0.00	0.00
5	Bad and Doubtful Debt including Rebate	41.54	0%	100%	0.00	41.54
6	Depreciation	55.99	90%	10%	50.39	5.60
7	Interest for Capital Loan	39.69	90%	10%	35.72	3.97
8	Interest for Working Capital	48.19	10%	90%	4.82	43.37
9	Interest on Security Deposits	30.781	0%	100%	0.00	30.78
10	Return on Equity	84.66	90%	10%	76.19	8.47
13	Non Tariff Income-Wheeling				-82.26	
14	Non Tariff Retail Income					-24.95
	<b>Total</b>	<b>4366.57</b>			<b>869.74</b>	<b>3496.83</b>

**Wheeling Business ARR**

**Wheeling Charges Computation**

Sr No	Particulars	Unit	Value
1	Wheeling ARR	Rs Cr	870
2	Energy Input to TPCODL	Mus	9550
3	Less EHT Sales	MUs	-1096
4	Energy input for wheeling computation	MUs	8454
5	Average Load served by the Distribution Licensee	MW	965.11
<b>6</b>	<b>Wheeling Charges for Medium Term and Long Term</b>	<b>Rs/MW/Day</b>	<b>24690</b>
<b>7</b>	<b>Wheeling Charges for Short Term</b>	<b>Rs/Kwh</b>	<b>1.03</b>

# CSS and Additional Surcharge



## 1. Computation of CSS

Sr No	Particulars	Units	EHT	HT
1	Projected Revenue from Energy Charges	Rs Cr	618	842.44
2	Energy Projected	Mus	1095.93	1468.12
3	Average Energy Charge	Rs/Kwh	5.64	5.74
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 ( 4+7)	Rs/Kwh	5.99	6.10
9	Cost of Power Purchase	Rs/Kwh	2.83	2.83
10	Applicable Losses	%	3%	8%
11	Wheeling Charge	Rs/Kwh	0	1.03
12	<b>CSS</b>	<b>Rs/KWh</b>	<b>3.07</b>	<b>2.00</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

## Landed Tariff for Open Access



Sr No	Particulars	Unit	Value	EHT	HT
1	Rate of Source of Power (Exchange)	Rs/Kwh		3.00	3.00
2	All India Loss	%	3.53%	0.11	0.11
3	OPTCL Loss	%	3%	0.09	0.09
4	Wheeling loss	%	8%		0.24
5	Central Transmission Charges (Odisha)	Rs/Kwh		0.43	0.43
6	Transmission Charges	Rs/Kwh		0.28	0.28
7	Wheeling Charges	Rs/Kwh			0.78
8	Cross Subsidy Surcharge	Rs/Kwh		1.64	1.02
9	Total Landed Cost of Power			5.55	5.95
	Tariff (LF < 60%) (EC with PF of 0.97 for EHT and 0.94 for HT)	Rs/Kwh		5.98	6.03
	Tariff (LF > 60%)	Rs/Kwh		5.00	5.05



True up for FY 2020-21 (Case 118/2021)



# FY 2020-21 Performance

## AT&C Loss Target as per Vesting Order

Year-->		0	1	2	3	4	5
As given in the Bid--->	a	34.07%	32.57%	30.07%	26.57%	24.57%	22.57%
	b= an/an-1		95.60%	92.32%	88.36%	92.47%	91.86%
<b>Revised Target</b>							
Year of Operation-->		Actual	1	2	3	4	5
	From	01-Apr-19	01-Apr-20	01-Apr-21	01-Apr-22	01-Apr-23	01-Apr-24
	To	31-Mar-20	31-Mar-21	31-Mar-22	31-Mar-23	31-Mar-24	31-Mar-25
	c= bx cn-1	30.44%	29.10%	26.87%	23.74%	21.95%	20.16%

Table 6 : 10-year AT&C Loss Trajectory for Tariff Determination

Financial Year	AT&C Loss
FY 2021	23.70%
FY 2022	23.70%
FY 2023	23.70%
FY 2024	22.00%
FY 2025	20.00%
FY 2026	18.00%
FY 2027	16.00%
FY 2028	15.00%
FY 2029	14.00%
FY 2030	13.50%

## Actual Performance

Sr No	Particulars	Units	From 1st April 2020 to 31st March 2021	From 1st June 2020 to 31st March 2021
1	Energy Inputs	Mus	8370	6961
2	Energy Billed	Mus	6202	5226
3=2/1	Billing Efficiency	%	74.1%	75.1%
4	Amount Billed	Rs Cr	3404	2889
5	Amount Collected	Rs Cr	3237	2865
6=5/4	Collection Efficiency	%	95.1%	99.2%
<b>7=100%- 3 x4</b>	<b>AT&amp;C Loss</b>	<b>%</b>	<b>29.54%</b>	<b>25.5%</b>



## Capitalization (Jun-Mar)

All Amount in INR Crores

Sr No	Particular	Total Capitalization as booked in Accounts	Total Capitalization Claimed in True Up for Depreciation and RoE purpose	Remark	Capex Funded By
<b>Out of Opening CWIP</b>					
1.1	Against R-APDRP Part-A Scheme	129.31	0		Govt Loan
<b>Out of Fresh Capex in June-Mar 2021</b>					
2.1	Against 'SAUBHAGYA' Scheme	13.39	0		Govt Grant
2.2	Against Consumer Contribution	2.57	0		Consumer Contribution
2.3	Against TPCODL's Capex Schemes	88.04	66.13	Capitalization of Rs.21.91 Cr against Meters not claimed in True Up	TPCODL by means of Debt & Equity
<b>Total</b>		<b>233.31</b>	<b>66.13</b>		

**Capitalization –Booked and Claimed for True Up**

## O&M Expenditure FY 2020-21 (Jun-Mar)

Sr No	Head of Expenditure	Approved	Actual
1	Employee Expenditure/Salaries	567.8	598.4
2	R&M Expenditure	142.6	142.3
3	A&G Expenditure	96.8	84.7
<b>Total</b>		<b>807.3</b>	<b>825.5</b>

## ARR and Revenue Gap

### ARR and Gap for FY 2020-21 (Jun-Mar)

Rs Cr

Sr No	Particulars	Approved Costs (Pro-rated for 10 months)	Actual Amount
1	Cost of Power Purchase	1982.73	1982.73
2	Emp Cost	567.84	598.42
3	A&G Cost	96.82	84.72
4	R&M Cost	142.63	142.33
5	Interest Long Term Debt	25.87	1.45
6	Interest on Working Capital	0.00	35.29
7	Depreciation	75.64	14.82
8	Return on Equity	9.70	41.32
9	Income Tax	0	13.90
10	Interest on Security Deposit paid	32.31	22.00
11	Provision for Bad Debts	28.12	28.16
<b>Less</b>			
13	Non Tariff Income	-149.15	-79.24
14	Receipts on account CSS	Embedded in Sr No 13	-20.79
<b>15</b>	<b>Total ARR</b>	<b>2812.50</b>	<b>2865.1</b>
<b>16</b>	<b>Revenue</b>	<b>2791.58</b>	<b>2791.58</b>
<b>17</b>	<b>Gap</b>	<b>-20.93</b>	<b>-73.54</b>

### Revenue for FY 2020-21 (Jun-Mar)

Sr No	Particular	Amount (in Rs. Cr)
1	Revenue from Sales of Power -LT	1,429.8
2	Revenue from Sales of Power -HT	866.5
3	Revenue from Sales of Power -EHT	557.4
<b>4=sum(1:3)</b>	<b>Sub Total</b>	<b>2,853.7</b>
5	Less: Electricity Duty	39.5
6	Add: Revenue From Sale of Power-Inter DISCOMS	0.2
7	Add: Penalty for theft of power	0.0
8	Add: Penalty received from consumers	0.7
9	Add: Misc. Charges From Cons.-Reliability Surchar	0.4
10	Add: Over drawal Penalty	0.9
<b>11 =</b>	<b>Total Revenue from Sale of Power</b>	<b>2,816.5</b>
<b>4-5+sum(6:10)</b>		
12	Less: Cash Disount	24.9
<b>13 =11-12</b>	<b>Net Revenue from Sales of Power</b>	<b>2,791.6</b>

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