



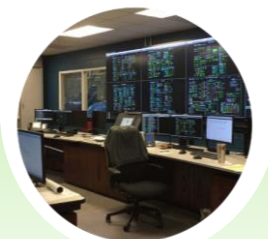
Session 2

Presentation: Innovative Technologies, Operational Efficiency and Consumer Engagement in Odisha

Presented By

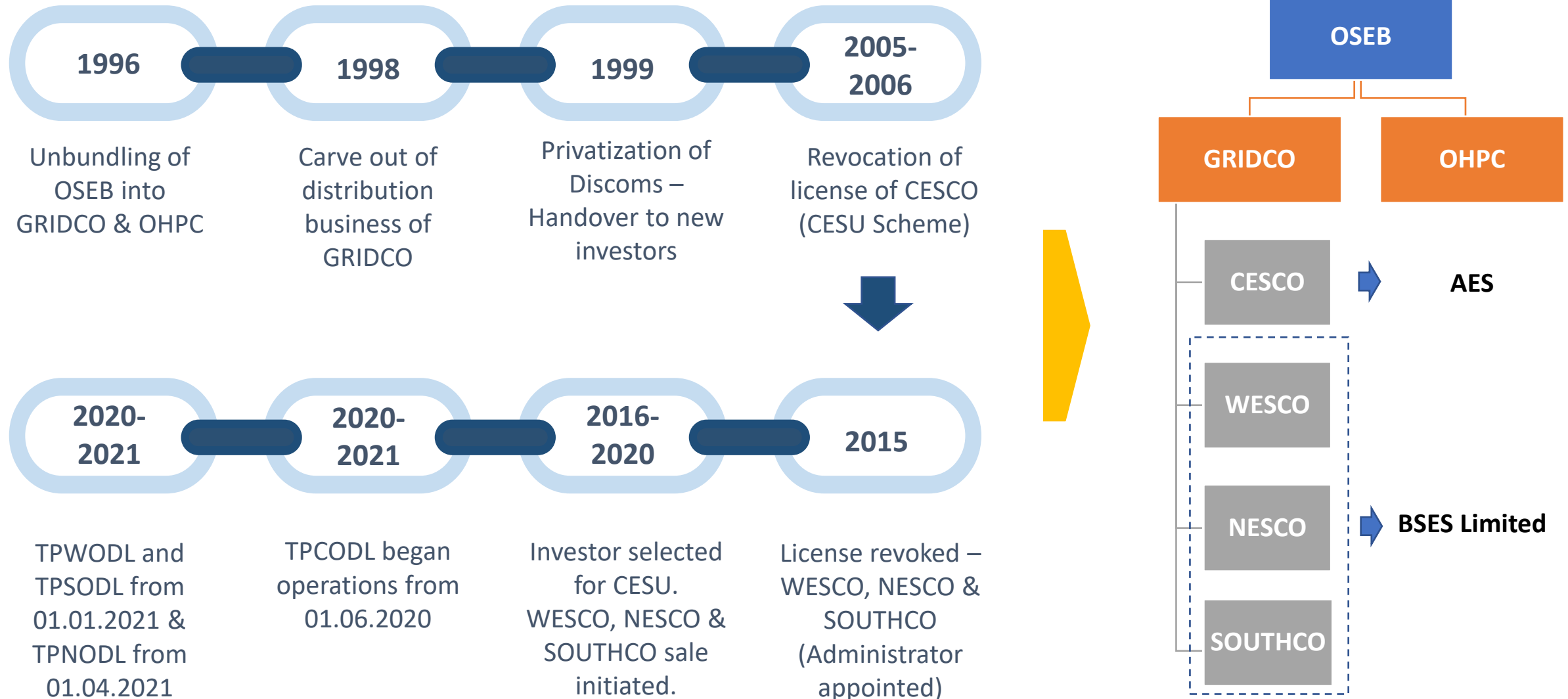
ARVIND SINGH, CEO, TPCODL

Distribution Utility Meet | 14 - 15 November 2024 | www.dumindia.in



Odisha's Reform Journey

Odisha has been a pioneer in Power Sector Reforms – Both pre and post Electricity Act 2003



Odisha Discoms (As taken over)

TPWODL

Area (Sq. km)	48,000
AT&C (%)	28.56
Provisional Billing (%)	25

TPNODL

Area (Sq. km)	28,000
AT&C (%)	25.17
Provisional Billing (%)	19

TPSODL

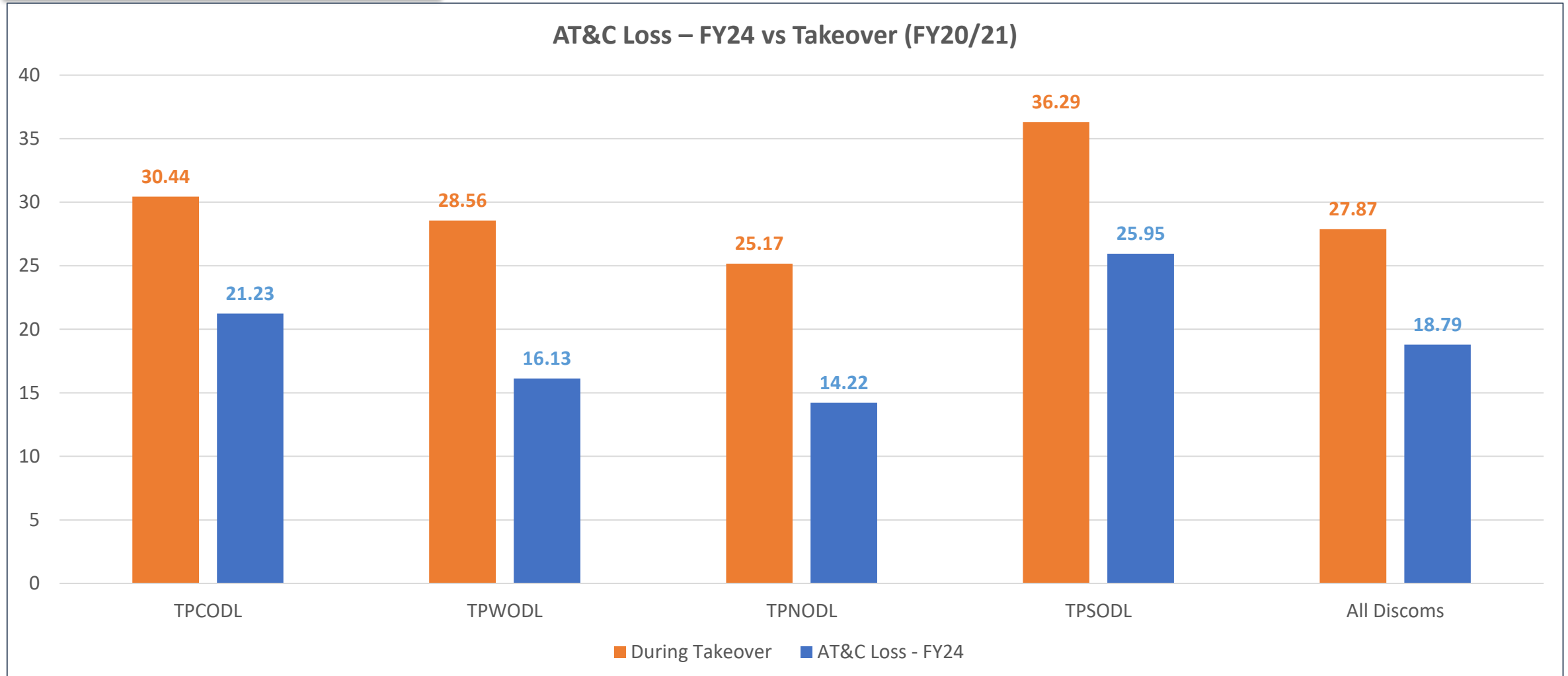
Area (Sq. km)	47,000
AT&C (%)	36.29
Provisional Billing (%)	26

TPCODL

Area (Sq. km)	29,354
AT&C (%)	30.44
Provisional Billing (%)	38.4

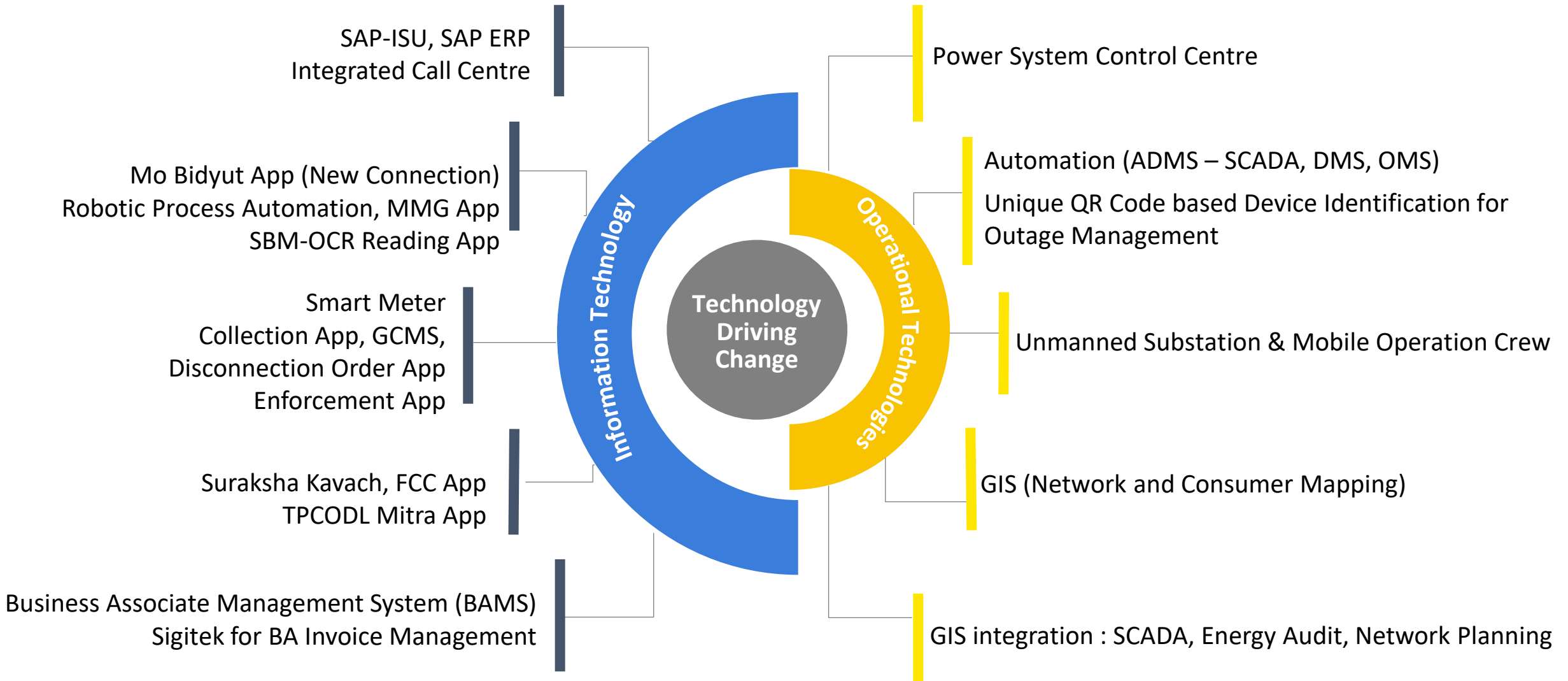


AT&C Losses Reduction(%)





INNOVATIVE TECHNOLOGIES



Technological Initiative

INFORMATION TO TP CENTRAL ODISHA DISTRIBUTION LIMITED CONSUMER CARE

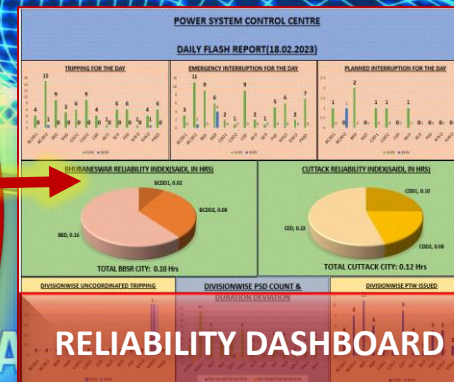
SOOCHNA

PSCC Outage Information System

Login ID:

Password:

Login



PTW INFORMATION TO WORKING PARTY

TPW Number: BED, BBSR/ 421591 issued to CHABINDRA BEHERA On NAKHARA-PAHAL for Transformer/DT Repair/ Upgrade at 14-12-22 12:46

Issued by Maneesha Samantray

PSCC...TPCODL

TP Central Odisha Distribution

View PTW Doc

INFORMATION TO CONSUMER

We regret outage of Power Supply at your premise, the outage is due to Jumpering Work\ Conductor snap and expected to restore by 24-JAN-2023 18:15. TPCODL

Jan 24, 6:00 PM • Vi - Primary

Suraksha Kavach

IT IMPLEMENTATION - A SAFETY SHIELD - CENTRALIZED & DE-CENTRALIZED CONTROL

TPCODL

TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED

TPCODL

TP CENTRAL ODISHA DISTRIBUTION LIMITED

Standard Operating Procedure (SOP)

For

Remote Operations & Issue of PTW for 33kV and 11 kV Feeders emanating from Unmanned 33/11kV TPCODL Sub-Station under Power System Control Centre (PSCC).

SOP - IMS DOCS

Authorized Person w.r.t. each Substations is maintained in the Database

Conditional Drop-down feature available

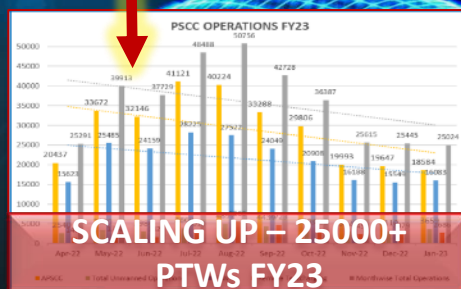
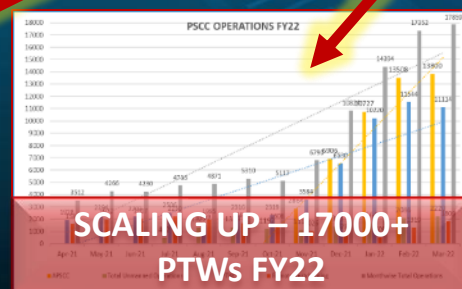
Application ensures that only pre-authorized person is allowed to request for PTW

AUTHORIZATION - 1750+ EMPs.

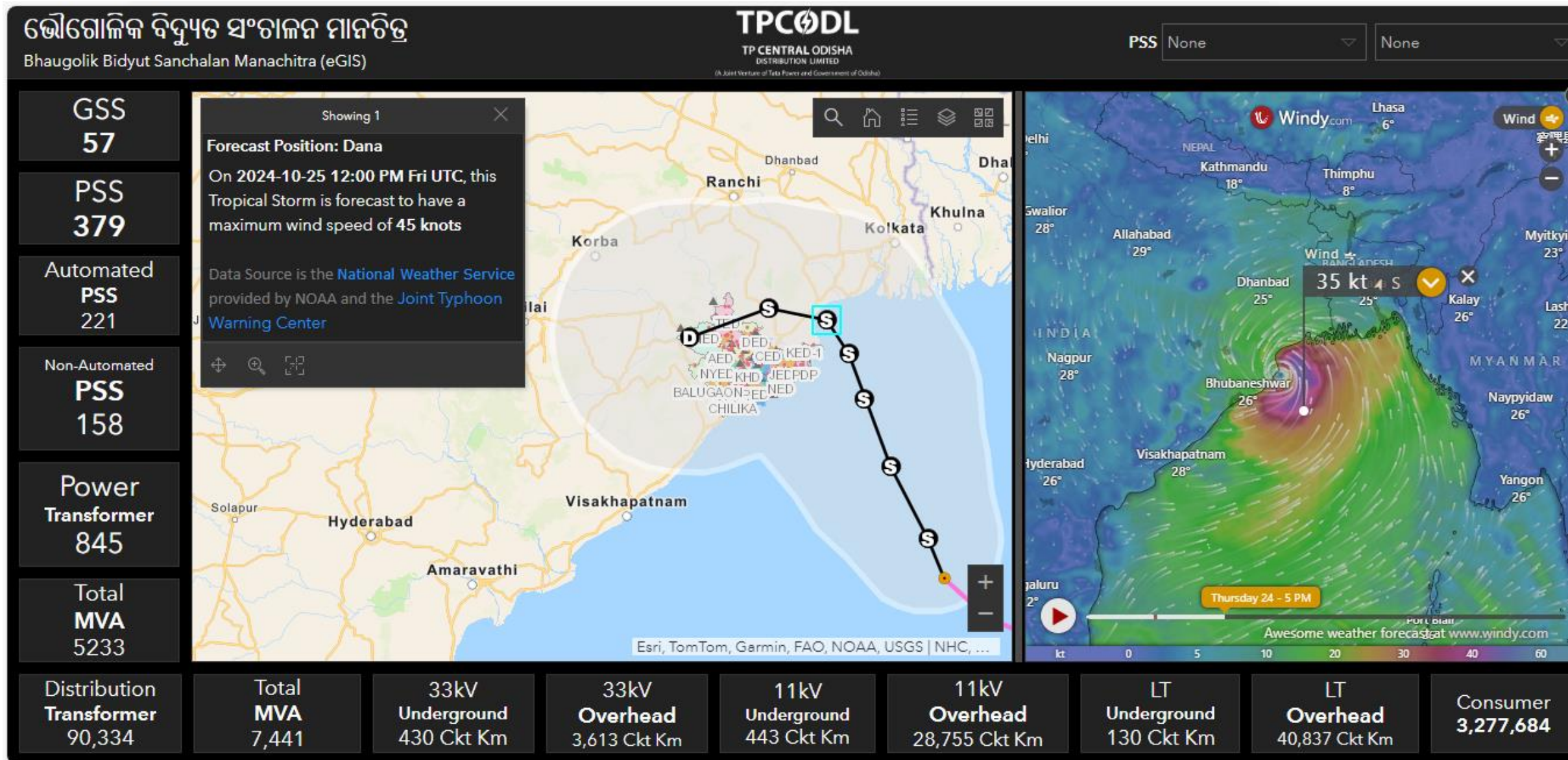
SIGN WRITING - 12000+ EQIPs.



TRAINING

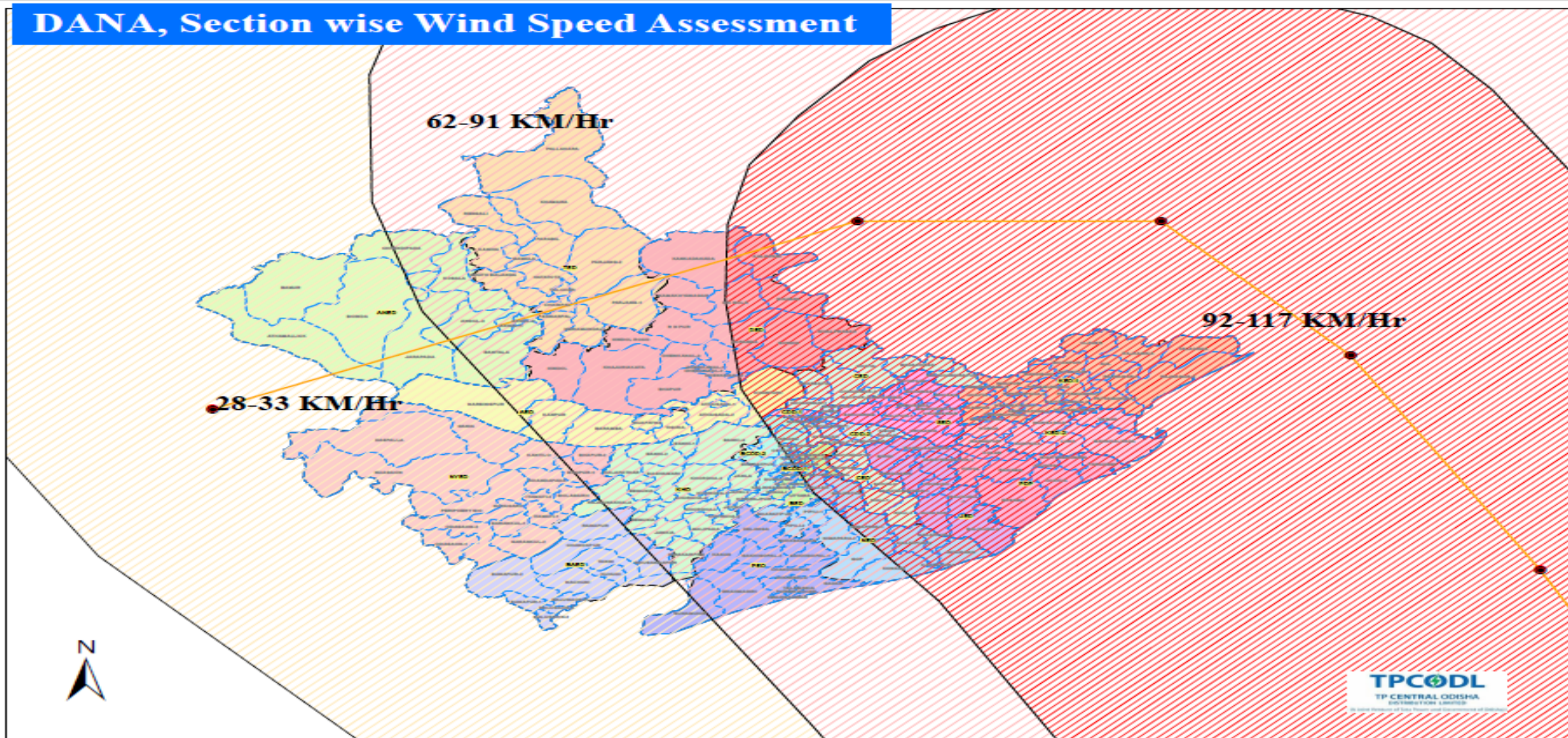


Live Monitoring of Cyclone Dana

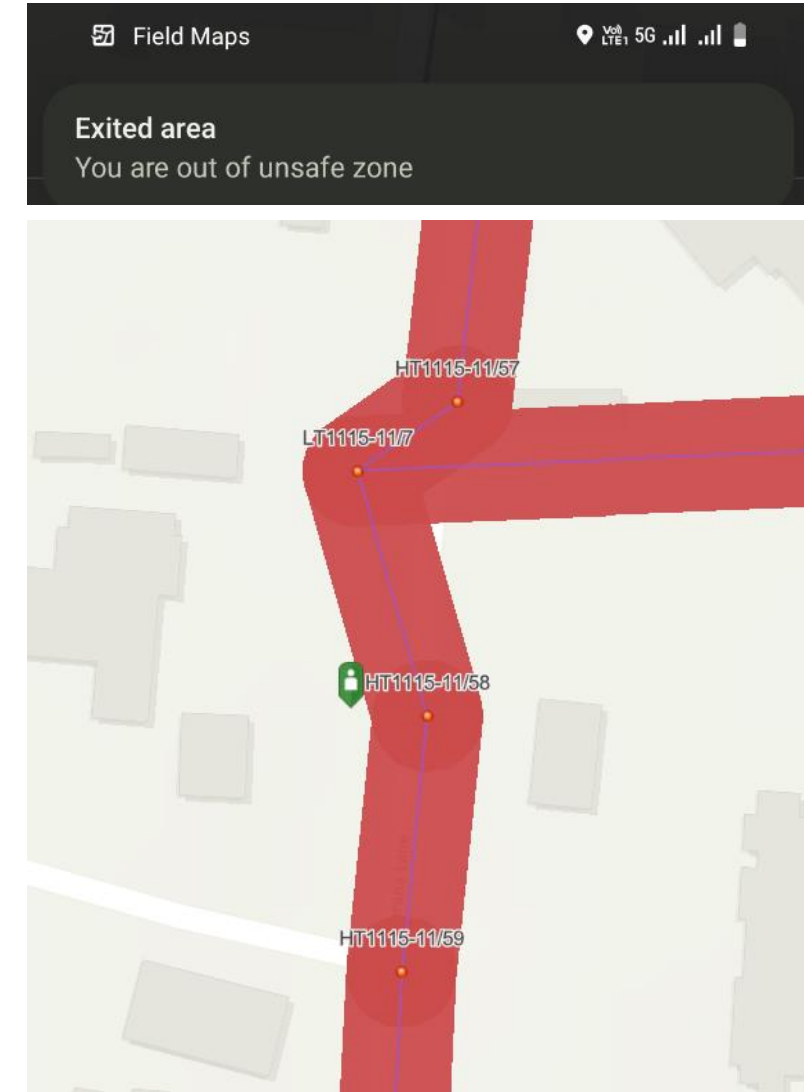
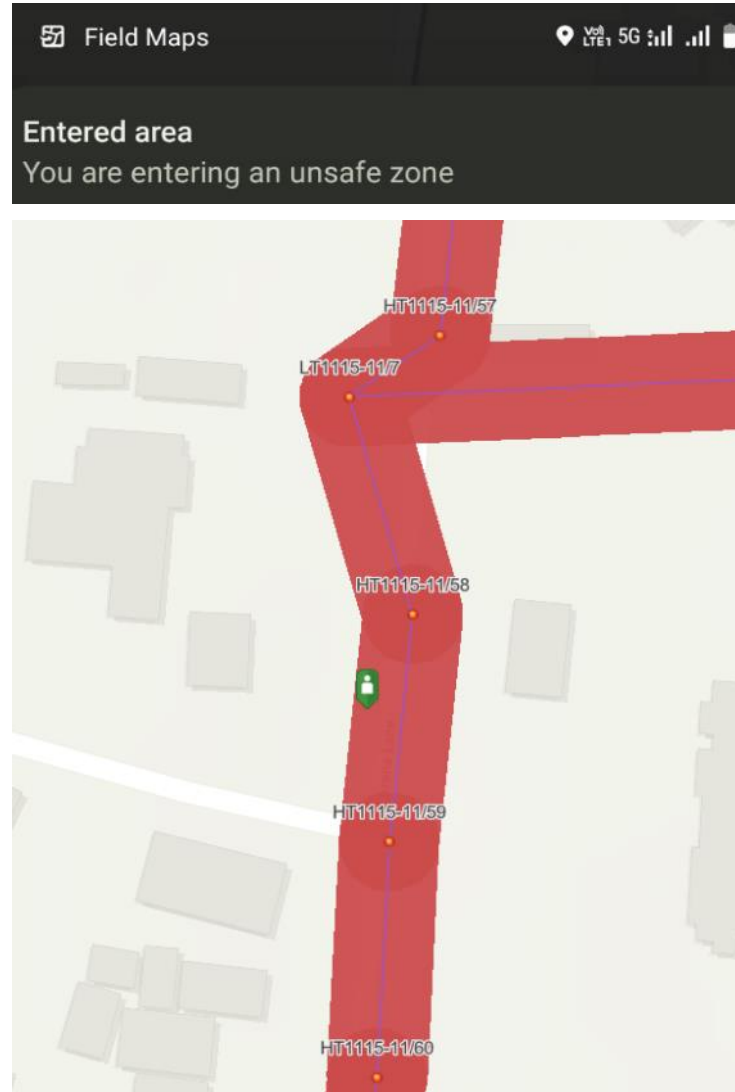


Live Monitoring of Cyclone Dana

DANA, Section wise Wind Speed Assessment



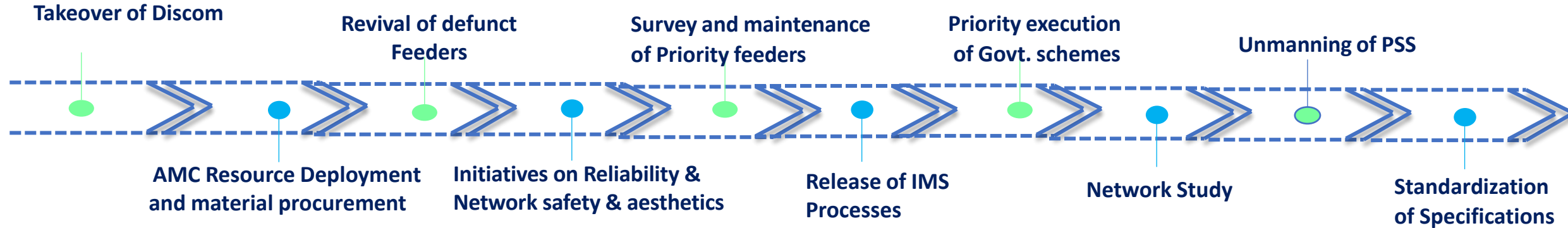
Geofencing – Alert for Entering Unsafe Zone





OPERATIONAL EFFICIENCY

Journey Towards Operational Excellence



Key Focus Areas

PSS

Priority Feeders

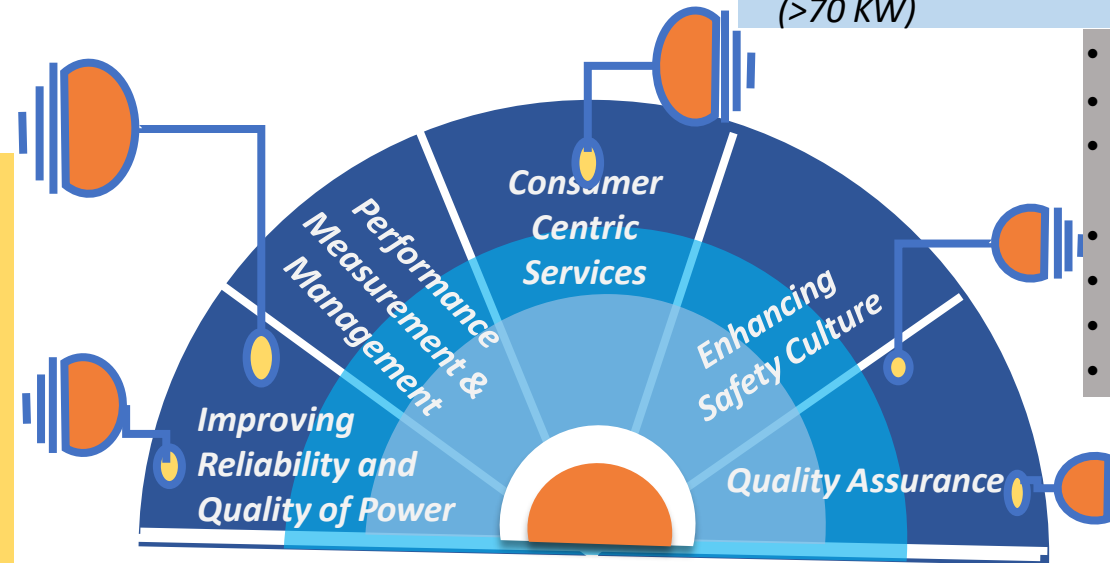
> 100 KVA Distribution Sub Station

- Daily monitoring of interruptions & Complaints
- **Daily Flash report** with Reliability Indices
- Maintenance Matrix to capture compliance

- Resource mobilization to facilitate New connections
- Technical feasibility and estimate preparation centrally (>70 KW)

- **Safety week & Safety Month**
- Formulation of **Safety Policies**
- Setting up of **Skill Development Centre and Practice Yards**.
- Availability of **PPEs** with all field personnel
- Employee & Public safety initiatives
- **Contractor Safety management.**
- **Elephant Care Control Room**

- Release of **technical booklets** & drawings
- Evaluation and finalization of approved vendors
- Inward material inspection **QA/QC**



- Moving to **Preventive maintenance**
- A workforce of 6,000 BA employees has been added for carrying out the O&M activities across TPCODL
- CAPEX Plan focused on **safety & reliability.**
- In house **FLC & switchgear teams**
- Focused Maintenance of high tripping/high priority feeders.
- Monitoring & take-over of ODSSP & SCRIPS

FCC App

Fuse Call Centre Application is developed for supporting existing process to monitor and resolve the No Power Supply, Low Voltage and Commercial complains.

- Consumer registers complaint at 1912.
- The complaint is forwarded directly to FCC. FCC addresses the complaint and closes the complaint in app after resolution.
- Mobile application for using anytime from anywhere
- Reduction in time for restoration due to optimized process
- Real time MIS for analysis of Complains received Vs Resolved
- Help management in decision making

Model Gram Panchayat Concept

- Reduction of AT&C Loss
- No Provisional Bills & Zero Billing Dispute
- Zero No meter, Defective & Mechanical Meter
- 100% Billing and Collection Coverage
- Energy Club for School & Colleges
- Zero unauthorized Hooking and Theft
- Zero Unsafe Location
- Improved reliability
- Regular Interaction with Sarapanch



CONSUMER ENGAGEMENT

Consumer Experience Enhancement

Call Centre

- Integrated Call Center – 200 Seats
- IVRS & ASPECT (Call Management System) implemented with additional features of system based analysis, call segregation, emergency transfer to agent mobile



Social Media Complaint Handling

- 24*7 Social Media Command Centre with dedicated manpower.
- 99% compliance of complaints received on social media.



Digital Journey

- 6.71 Lakh online Transactions.
- 4.04 Lakh TPCODL Mitra App.
- QR based Payment system on Spot Bills

Customer Care Centre

- Total 20 CCC Operationalized including one mobile CCC



Customer Satisfaction

- CSI Index – 88%
- Happy Calling
- Bill Pay & Win Schemes and Cash back schemes

Customer Connectivity

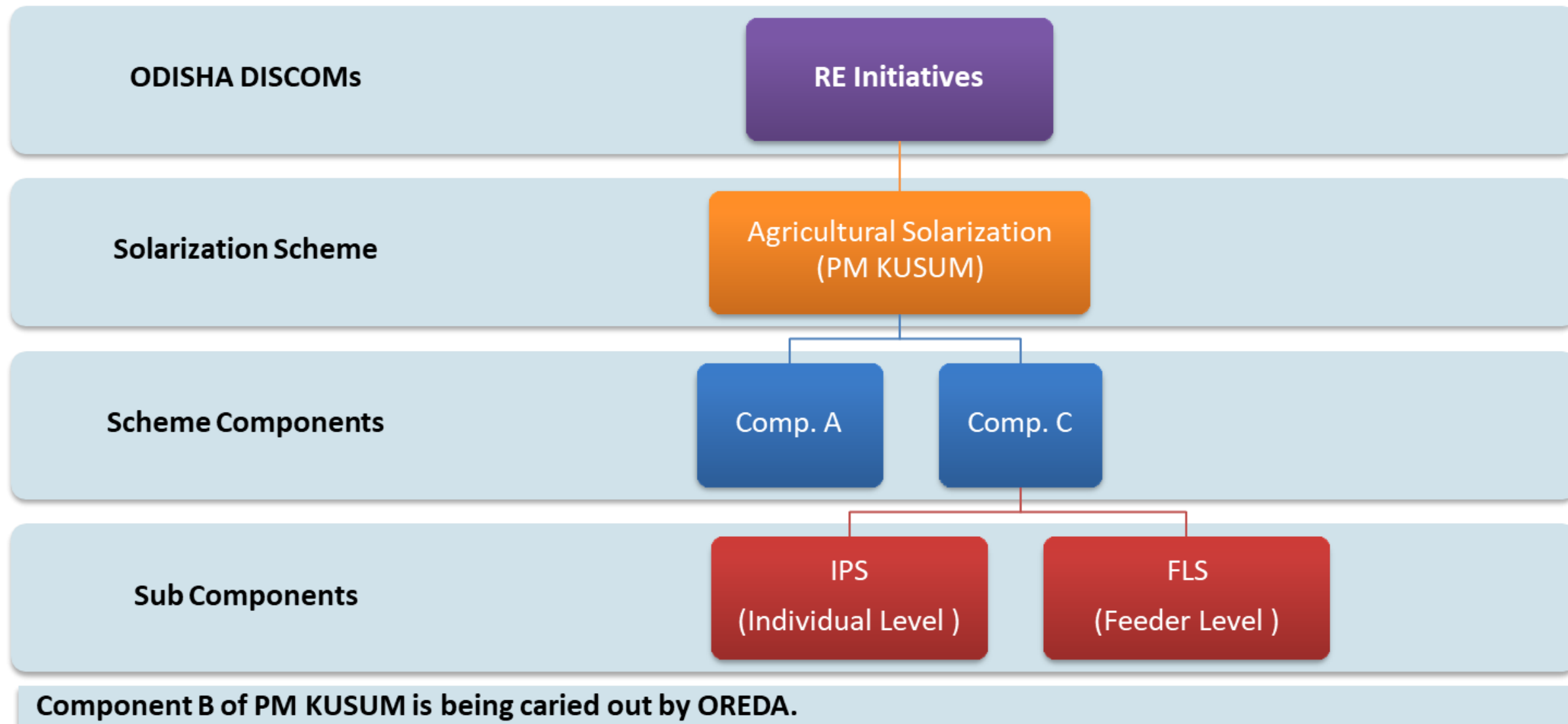
- Contact numbers update for direct communication
- Gaon Chalo Camps
- Meetings with RWAs and IWAs
- Consumer Awareness camps
- SMS based communication for Outages





PM KUSUM

Agricultural Solarization Initiatives at a Glance



- ❑ **Aim:** Set up 10,000 MW of decentralized ground-mounted or stilt-mounted solar power or other RE plants (500 kW – 2.0 MW) by farmers on their land.
- ❑ **Installation by:** Individual farmers, groups, cooperatives, Panchayats, FPOs, WUAs, independently or through a developer.
- ❑ **Developer model:** Farmers receive lease rent per acre/per annum or per unit/per acre.
- ❑ **Preferred location:** Within a 5 KM radius of a 33/11 KV sub-station.

- OREDA was sanctioned a target of **500 MW in FY 2020-21**.
- DISCOMs identified 638 PSS with an additional injection capacity 2260 MW.
- 375 farmers offered 2000 acres for solar power projects.
- **OERC determined a tariff of Rs 3.08/kWh.**
- **5 developers** selected by OREDA for **12.75 MW** through bidding.
- Developers sought a tariff revision due to price escalation
- OREDA petitioned OERC for **a tariff revision to Rs 3.33/kWh.**
- OERC dismissed the petition, citing the original tariff was mutually proposed by OREDA and GRIDCO also the scheme transferred to DISCOMs.

- The **scheme was transferred to Odisha DISCOMs in February 2023.**
- The Rs 3.08 tariff was unacceptable to SPGs, competitive bidding to propose the discovered tariff to OERC.
- In the bid floated by TPCODL, total 5 (two individual farmers and three developers qualified technically) for a total of 10 MW in November 2023.
- The discovered tariff from the financial bids arrives at Rs. 4.40/- per unit & sent to GRIDCO for necessary approval.

DISCOM	Nos. of Selected PSS for Component A implementation	Evacuation Capacity in (MW)	Total SPV Capacity Planed (MW)	Total Capacity Tendered (MW)	Nos. of Bidder Selected	SPV Capacity Allocated (MW)	Present Status
TPWODL	165	-	1101	1101	-	-	Vendor Selected: 05 Nos.
TPCODL	94	-	212	212	-	-	Applied capacity in MW: 12.5 MW
TPSODL	127	491	491	491	-	-	Quoted Tariff Rs. 4.40/- per kWh
TPNODL	64	-	90	90	-	-	Present Status:
Total	449	-	1946	1946	05	-	Petition filed by TPCODL on 06.07.2024 .

- Last Hearing held on 4th Nov;
- Final order is expected soon.

Way forward:

- ☐ After approval of the tariff, fresh expressions of Interest will be invited at the approved tariff.
- ☐ Determination of Uniform Lease Rent for land to be leased out by farmers under PM-KUSUM scheme.

Present Scheme & Activity undertaken under Agricultural Solarization (PM KUSUM “C”)

Nos of Pump Solarization target		
DISCOM	IPS (C1)	FLS (C2)
	Total nos.	Total nos.
TPCODL	6000	1500
TPSODL	6800	1700
TPWODL	20000	5000
TPNODL	7200	1800
Total	40000	10000

The above allocated quantities are sanctioned by MNRE. As communicated by MNRE the sunset date of the projects is 31st March 2026.

DISCOMs prioritize Individual pump solarization Due to:

1. Limited dedicated agricultural feeders
2. Land unavailability



Individual pump solarization faces challenges due to:

1. Lower agricultural tariff (Rs 1.5/Kwh)
2. Poor financial ability of farmers



DISCOM's mitigation plan for the above challenges:

1. Gross Metering with feed-in-tariff with due approval of OERC
2. Interest and AMC Cost Socialization through DISCOM ARR



Hon'ble OERC approved State Specific Model Project for IPS

DISCOM Support & Regulatory Approvals:

- Energy Accounting through Gross metering
- Shortfall if any limited to Interest and AMC shall be borne by DISCOM through its ARR
- Early repayment of Loan has been encouraged with 10% discount (by DISCOM) on outstanding amount.
- Evacuation Based Incentives (EBI) Rs. 1 per unit to reduction of misuse (subject to approval State Commission)
- State Government considers to increase the state subsidy to 50% of bench mark/discovered cost

Further Support & Approval from MNRE/State Govt./Regulator:

- Cluster base approach instead of Individual mode
- Relaxation in CIBIL.
- Direction to the co operative banks to extend loans to farmers

Progress under Component C Feeder Level Solarisation FLS (C2)

DISCOM	Nos. of Selected Feeder for FLS implementation	Nos of AG feeder Available	Total Nos of Pump	Total Capacity Planed (MW)	Total Capacity Tendered (MW)	Estimated Cost (Cr.)	Status of Tender
TPWODL	22	03	6004	34.9	34.9	160	Vendor Selected: 03 Capacity proposed: 36.16 MW Proposed Tariff Rs. 3.75/- per kWh Present Status: sent to OREC by TPCODL for approval
TPCODL	21	-	1560	10.82	10.82	54	
TPSODL	20	01	1700	13.29	13.29	66.45	
TPNODL	30	-	1856	15.12	15.12	14	
Total	93	04	11120	74.13	74.13	370.65	

- Hearing concluded on 4th Nov 2024 ;
- Final Tariff order is awaited after which LOAs will be issued to existing bides and EOIs will be issued for balance capacity.

Support Required:

- ✓ Making land around substations available to developers for solar installation.
- ✓ In order to provide better comfort to farmers and developers, government may consider to take land on lease from farmers and sublease the same to the developers.
- ✓ Availability of prospective land details through an online portal will help developers
- ✓ Under Odisha RE policy, a centralized Online land bank may be created in consultation with DISCOM.
- ✓ An online portal will assist stakeholders in accessing land data and details.
- ✓ Farmers & Government land also may be enlisted & utilized through a mini solar park model.

ORGANIZER

ISGF

India Smart Grid Forum



**DISTRIBUTION
UTILITY MEET
DUM 2024**

THANK YOU

For discussions/suggestions/queries email: dum@indiasmartgrid.org

www.dumindia.in

ceo@tpcentralodisha.com

Distribution Utility Meet | 14 - 15 November 2024 | www.dumindia.in

