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ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR, BHUBANESWAR -751021
TEL. No. 2721048, 2721049
E-MAIL: oerc@odisha.gov.in / orierc@gmail.com
WEBSITE: www.orierc.org

Together, Let us light up our lives

Case No. 82/2025

PUBLIC NOTICE

Hearing Application for approval of Capital Investment Plan for the FY 2026-27 in its licensed area of supply as per para 3.2 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations,2022.

.

M/s. Tata Power Western Odisha Ltd. has filed an application for approval of Capital Investment Plan for the FY 2026-27 in its licensed area of supply as per para 3.2 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations,2022. The Commission has registered it as **Case No. 82 of 2025** and has decided to dispose of this case through a public hearing vide order dated 23.12.2025. The petition along with all Annexures submitted by M/s.TPWODL in this regard is available in OERC website (www.orierc.org) and also in M/s. TPWODL's website www.tpwesternodisha.com**.**The persons/ organizations those who are interested to participate in the above proceeding may file their views/objections/suggestions, if any, on the petition of M/s. TPWODL on or before **05.01.2026** through affidavits with a copy to the Petitioner. M/s. TPWODL is directed to file its rejoinders, if any, to the objections/suggestions of the Respondents before this Commission on or before the date of hearing with a copy to the Respondents. Those persons who have filed their objections/suggestions/views by the due date to the above application of M/s. TPWODL shall participate in the hearing of the application by the Commission. The case shall be heard on **09.01.2026** at 11.00 AM by the Commission through Hybrid mode in its Office at Bhubaneswar. No further notice will be given in this regard.

By Order of the Commission

Dated:23.12.2025

Sd/-
S E C R E T A R Y

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ODISHA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR, BHUBANESWAR -751021
TEL. No. 2721048, 2721049
E-MAIL: oerc@odisha.gov.in / orierc@gmail.com
WEBSITE: www.orierc.org

No.1632/dt. 23.12.2025

Case No. 82/2025

To

The Chief Executive Officer, TPWODL,
At/Po : Burla, Dist : Sambalpur-768017.

Sub: Public Notice for hearing of Application for approval of Capital Investment Plan for the FY 2026-27 in its licensed area of supply as per para 3.2 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations,2022.

Sir,

I am directed to inform that you are required to publish the matter as attached to this letter in English language in one issue of a daily English newspaper and in Odia language in Odia newspaper having wide circulation in the State of Odisha. The publication shall be made on **24.12.2025**.

You are directed to keep your application in your web- site immediately.

You may file your rejoinder to the objections filed by any objector on or before **09.01.2026** serving copy to the concerned objector.

The proof of publications published in English and Odia dailies shall be furnished to the Commission within five days of such publication.

By Order of the Commission

Encl : As above

Sd/-
SECRETARY

BEFORE THE HON'BLE
ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR, CHANDRASEKHARPUR,
BHUBANESWAR-751021

Filing No: 01

In the matter of: **An application on submission for approval of Annual Capex Plan of TPWODL for FY 26-27 in line with Board approval & compliance to Hon'ble Commission's direction vide para 39 of the Vesting Order dated 28.12.2020 (Case No. 82 of 2020) and Para 3.2 of OERC (Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations, 2022;**

AND

In the matter of:

M/s. TP Western Odisha Distribution Ltd. (TPWODL)
Regd. Office Burla, Sambalpur, Odisha-768017

AFFIDAVIT

I, Manoj Kumar Panda, aged about 54 years, son of Sri Ramesh Chandra Panda, presently working as the Head (Regulatory Affairs & PMAG), TP western Odisha Distribution Limited, do hereby solemnly affirm and state as follows: -

1. That, I am the authorized representative of TPWODL, the Applicant in the instant case and competent to swear this affidavit for and on behalf of the licensee.
2. That, I have gone through the contentions in the present application and understood the contents thereof.
3. That, the facts stated in the present application are true to the best of my knowledge and belief and the same are basing upon available records.

S. No. 1520
Dt. 10/09/2025
10/09/2025
K.P. MISHRA
Notary
Regd. No. ON 23/94
Sambalpur, Odisha

DEPONENT

VERIFICATION

Solemnly affirmed at Sambalpur on this 10th day of September, 2025 that the contents of the above affidavit are true to my knowledge (as derived from the records), no part of it is false and nothing material has been concealed there from.

The deponent solemnly affirms today at about 4.15 A.M/P.M.

DEPONENT

PLACE: Sambalpur
DATE: 10-09-2025

10/09/2025

K.P. MISHRA, NOTARY
Regd. ON-23/94
SAMBALPUR,ODISHA

BEFORE THE HON'BLE
ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR, CHANDRASEKHARPUR,
BHUBANESWAR-751021

Filing No: 01

In the matter of: **An application on submission for approval of Annual Capex Plan of TPWODL for FY 26-27 in line with Board approval & compliance to Hon'ble Commission's direction vide para 39 of the Vesting Order dated 28.12.2020 (Case No. 82 of 2020) and Para 3.2 of OERC (Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations, 2022;**

AND

In the matter of:

M/s. TP Western Odisha Distribution Ltd. (TPWODL)
Regd. Office Burla, Sambalpur, Odisha-768017

Most Respectfully Sheweth,

1. That, TPWODL has taken over the distribution business from erstwhile WESCO utility w.e.f. 01.01.2021 in accordance with the terms of Vesting Order.

2. That, TPWODL has a vast distribution area in western part of Odisha serving population of 88 lacs with a consumer base of more than 27 lakhs and covering 48,373 sq.km, across 9 revenue districts of Odisha such as Bargarh, Bolangir, Deogarh, Jharsuguda Kalahandi, Nuapada, Sambalpur, Sonepur and Sundargarh. For effective operations, license area is divided in 5 circles, which is further sub divided in 17 Divisions, 57 Sub-division and 201 Sections which manages the commercial and O&M activities in order to serve its consumer.

3. That, as per the commitment and mandate of Vesting Order, TPWODL has to invest Rs.1663 Cr towards CAPEX to ensure reliable power supply to the end customer. Since, such a huge investment would adversely affect tariff, so investment has been staggered in 5 years in following manner:

(Rs. Cr.)

FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
306	500	333	322	202	1663

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Regd. No. ON 23/94
SAMBALPUR-ODISSA

4. That, upon proposal of TPWODL regarding CAPEX requirement for FY 21-22, FY 22-23, FY 23-24, FY 24-25 and FY 25-26 & Additional CAPEX for FY 24-25 & FY 25-26, the Hon'ble Commission through regulatory proceedings approved the Capital Expenditure for the 5 years vide Order dated 18.09.2021, 08.07.2022, 21.06.2023, 12.12.2023 and 24.03.2025 respectively. The following table provides the CAPEX approvals vis-à-vis the TPWODL proposals in the said years:

S. No.	Particulars	FY 22	FY 23	FY 24	FY 25	FY 26	Addnl. CAPEX FY-25 & 26
1	CAPEX proposed by TPWODL (Rs. Cr.)	462.42	582.18	398.84	571.97	403.13	175.93
2	CAPEX approved by Hon'ble Commission (Rs. Cr.)	333.13	477.72	381.91	493.77	336.6	111.13

5. That, as can be seen from the above table, the cumulative approval provided by the Hon'ble Commission is Rs. 2134.26 Cr. (incl. Addnl. Approval) till FY 25-26 out of the Vesting Order committed CAPEX of Rs. 1663 Cr. for 5 years. Accordingly, the Licensee has capitalized Rs. 1541.85 Cr. till August 2025. The balance amount of Rs. 592.41 Cr. is planned for capitalization in phased manner.

6. That, the Hon'ble Commission vide its letter No. DIR(T)- 319/08/580 dated 08.05.2025 through the Minutes of Meeting on the Safety Aspect of the Power Sector in Odisha held on 28.04.2025 at OERC office has deliberated safety aspects of Human being, animals and electrical installation of the power system in the state. The Hon'ble Commission has directed certain action points for DISCOMs to which TPWODL has already provided the ATR in detail vide its letter no. TPWODL/RA&S/2025/036 dated 31.05.2025.

7. That, further by way of a DPR the Licensee has submitted a proposal for investment required under DPR facilitating a provision for ensuring safety under the scheme "Revamping of Electrical Network for ensuring safety" with an amount of Rs. 592.39 Cr. which has been registered as Case No. 48 of 2025.

8. That, the Hon'ble Commission vide its letter no OERC/Engg-01/2023/705 dated 05-06-2025 has sought details on physical progress of CAPEX by the DISCOMS in a specified format to which the Licensee has submitted the progress report vide its letter dated 01-08-2025 having letter no – TPWODL/RA/2025/049.

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9. That, vide its letter No. OERC-Engg.-09/2022/530 dated 02.05.2025, the Hon'ble Commission directed the Licensee to carry out a system study and prepare a Detailed Project Report (DPR), including the required CAPEX, for strengthening the distribution infrastructure to ensure minimal power interruptions in the city of Rourkela within a period of 18 months. In compliance with these directions, the Licensee conducted a detailed system study and submitted the DPR vide letter No. TPWODL/RA&S/2025/050 dated 08.08.2025, proposing a project cost of Rs. 813.87 Crore. Upon approval of the Hon'ble Commission, the execution plan will be structured on a priority basis and phased over a period of 3 years.

10. That, the Hon'ble Commission vide its Order dated 24.03.2025 in Case No. 50 of 2024 had emphasized the need for enhanced investments towards network development—particularly under loss reduction, load growth and reliability improvement. Such investments are critical for strengthening the existing network, reducing technical losses and enhancing the reliability and availability of power supply to end consumer. Accordingly, TPWODL while preparation of DPR for FY 26-27 has considered all the above factors and has proposed around 82% of total CAPEX proposed towards Network Reliability, Load Growth and Loss Reduction.

11. That, the present CAPEX proposals have been made by the Licensee for FY 26-27 majorly considering the following:

    a) **Statutory, Safety & Security**: TPWODL prioritizes compliance and safety through initiatives like underground cabling, deployment of insulated conductors, installation of intermediate poles for maintaining ground clearance, provision of safety gear, establishment of testing facilities and improvement of substation infrastructure. Such measures will aim to reduce accidents, enhance reliability and protect consumers and assets. Proposed CAPEX: Rs. 49.83 Cr (9% of FY 2026-27 CAPEX).

    b) **Loss Reduction**: Focus on smart metering, energy audits and replacing LT bare conductors with AB cables to reduce technical losses, curb pilferage and improve billing accuracy, transparency and safety. Proposed CAPEX: Rs. 41.59 Cr (8% of FY 2026-27 CAPEX).

    c) **Network Reliability**: Investments include breakers, relays, lightning arresters, AB switches, isolators, auto-reclosers, sectionalizers, FPIs, RMUs and other critical line equipment will enhance grid automation, improve fault

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detection, enable faster restoration thus minimize outage durations and reduce supply interruptions. Proposed CAPEX: Rs. 177.18 Cr (34% of FY 2026-27 CAPEX).

d) **Load Growth**: New substations, 33/11 kV lines, addition / augmentation of transformers and LT ABC networks to meet rising demand, enable new connections and support urban, industrial and economic growth. Proposed CAPEX: Rs. 211.93 Cr (40% of FY 2026-27 CAPEX).

e) **Technology & Infrastructure**: Deployment of IT systems, data centres, cybersecurity, training centres, office and store infrastructure to improve efficiency, workforce capability and service delivery. Proposed CAPEX: Rs. 44.77 Cr (9% of FY 2026-27 CAPEX).

12. That, TPWODL humbly submits that with the steady increase in consumer demand across LT and HT categories, a significant portion of new service connections necessitates network augmentation and system strengthening to ensure reliable and quality power supply. Further, the actual execution cost of LT extension works has risen considerably in recent years (Rs. 26070/- per span), far exceeding the OERC approved benchmark cost of Rs. 8000/- per span, due to escalation in material prices, labor charges and statutory compliances.

13. That, the Hon'ble Commission in Order dated 10-07-2025 vide Case No. 80 of 2024 has directed as under:

> *"23 (iv) The petitioner has submitted that in order to meet the increasing power demand, the existing distribution network infrastructure needs to be augmented / strengthened / expanded to release the new connection. The petitioner has proposed Rs.15.00 Crores for carrying out such work including the differential cost for LT line extension. Further, the petitioner has proposed Rs. 6.00 Cr to meet the differential cost (over the standard service connection charges) for providing new connections. The cost-of-service cable for new connection forms part of expenditure to be borne by the consumer.* ***However, the additional expenditure for new connection release would be considered by the Commission during the True Up exercise for the financial year on the actual basis."***

In light of the above, TPWODL respectfully prays that any additional expenditure incurred towards network upgradation, extension or differential cost for catering to new service connections may kindly be considered during the Truing Up exercise for the respective financial year on an actual basis.

14. That, the Hon'ble Commission at Para 49 (ii) of the CAPEX Order dated 21.06.2023 in Case No. 97 of 2022 had directed TPWODL to submit CAPEX proposals along with the approval of Board of Director for FY 24-25 onwards for consideration.

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15. That, accordingly, considering the decision of the Board of Directors (BoD), the DPR of CAPEX Plan for FY 26-27 is hereby proposed for an amount of Rs. 525.00 Cr. respectively. Accordingly, TPWODL is herewith enclosing a certified true copy of the resolution passed at the board meeting from Company Secretary with regards to Board's Approval as **ANNEXURE-A**.

16. That, as like of last five years, the Applicant proposes to invest its Capital Expenditure under five major heads in following manner:

S. No.	Particulars	FY 26-27 (Rs. Cr.)	% Contribution
1	Statutory, Safety & Security	49.83	9 %
2	Loss Reduction	41.59	8 %
3	Reliability	177.18	34 %
4	Load Growth	211.93	40 %
5	Technology adoption & infrastructure	44.77	9 %
TOTAL		**525.30**	**100 %**

17. That, the details of proposed investment under different categories and sub-categories for FY 26-27, as approved by the Board is summarized below:

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
1	**Statutory, Safety and Security**	Life enhancement of network and maintaining safe horizontal / vertical clearances	Laying of 33 kV Underground Cable at NH / SH Crossings	2.86
			Installation of 11 kV Overhead Cradle Guard at Road Crossings	1.97
			Laying of 33 kV and 11 kV Underground Cables at Railway Crossings	2.30
			Replacement of HT Bare Conductor with Insulated Conductor	3.12
			Intermediate Pole to increase height of 33 kV & 11 kV Network	5.00
		Provision for Testing and Safety Equipment for workforce	Procurement of Testing Equipment	7.42
			Meter Testing Lab	4.50
			Procurement of Safety Equipment	1.59
		Infrastructure works at Primary & Distribution Substation	Access Road for inside and outside of PSS	2.00
			Renovation / Construction of Control Room Building in PSS	4.00
			Provision for Water Supply arrangement for PSS	1.45
			PSS Boundary wall	3.00
			DSS Fencing	6.00

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Regd. No. ON 2303

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
			Earthing for PSS & DSS	4.62
Sub Total - Statutory, Safety and Security				**49.83**
2	**Loss Reduction**	Energy Audit & Meter related activity	Installation of 1ph Smart Meters	17.46
			Installation of 3ph Smart Meters at Agriculture LI Connections	2.33
			Installation of Meters inside PSS for Energy Audit	1.97
			DTR Smart Metering for Energy Audit	3.40
			High Value Industrial Audit Point Metering	1.05
			LT Check Metering on HT consumers for Energy Audit	0.30
		Replacement of LT Bare Conductor with AB Cable	Replacement of LT Bare Conductor with AB Cable	15.08
Sub Total - Loss Reduction				**41.59**
3	**Network Reliability**	Replacement / Addition of network component in 33 / 11 kV Primary Substation	Installation / Replacement of 33 kV Breaker / Group Breaker	16.09
			Installation / Replacement of 11 kV Breaker / Group Breaker	10.27
			Installation of LA (33 kV & 11 kV) in PSS	2.31
			Replacement of Feeder / Transformer protection Relays (O/C & E/F)	0.76
			Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	0.88
			Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel	1.15
			Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	3.33
			Automation of Non-ODSSP & SCADA integration in PSS	1.53
		Replacement / Addition of Network Component in 11kV / 33kV Line	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	39.02
			Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	37.48
			Installation of 33 kV & 11 kV FPI	5.39
			Installation of 33 kV & 11 kV AB Switches, Isolator & RMU	14.02
			33 kV & 11 kV Polymer Insulator / LA	2.17
			33 kV & 11 kV Auto Recloser / Sectionalizer	6.11

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
		Replacement / Addition of network component in Distribution Substation	Mobile DT	1.41
			Model Village – Installation of LT Distribution Box & Service Cable	20.17
		LI Point Regularization	LI Point Regularization - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	15.09
Sub Total - Network Reliability				**177.18**
4	**Load Growth**	Network Enhancement	Construction of 33 kV New Line	93.31
			Construction of 11 kV New Line	34.92
			Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D)	31.57
			Addition / Augmentation of PTR	10.56
			Addition / Augmentation of DTR	15.89
			Provision of LT Protection (ACB / MCCB) for DTR	8.75
			Addition of New LT ABC Network	16.93
Sub Total - Load Growth				**211.93**
5	**Technology & Infrastructure**	Technology Intervention – IT & Technology	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	6.43
			Augmentation of IT Applications & Software	2.78
			Enhancement of Cybersecurity Solutions	9.07
		Improvement of Civil Infrastructure	Construction of Office Buildings	18.14
			Establishment of Technical and Safety Training Centre and mobile training facility	2.92
		Store Infrastructure	Store Infrastructure	2.85
		Ready to Use assets for Offices	Ready to Use assets for Offices	2.58
Sub Total - IT & Infrastructure				**44.77**
GRAND TOTAL				**525.30**

18. That, in addition to the above, the Hon'ble Commission has provided certain directions vide para no. 52 of the CAPEX Order dated 12.12.2023 for FY 24-25 & FY 25-26 in Case No. 101 of 2023 regarding submission of CAPEX DPR for future period. In compliance to the said directions, the Applicant has covered all such

PART OF AFFIDAVIT
NOTARY
Regd. No. ON 23/9
MUMBAI

aspects considering the field conditions and available information while preparing the Detailed Project Report (DPR) for FY 26-27.

19. That, considering the voluminous nature of the CAPEX plan for FY 26-27, the Licensee has divided the CAPEX Plan into 2 volumes (Volume-1: Affidavit & CAPEX DPR and Volume-2: Annexures to the DPR).

20. That, all the expenditures are estimated based on comprehensive field studies, which may vary on actual.

21. That, the funding of the proposed CAPEX of Rs. 525.30 Cr. shall be made with loan of 70% and balance 30% with equity contribution.

PRAYER

In view of the above and pursuant to the direction of the Hon'ble Commission vide suo motu proceeding in case no 82/2020 dated 28.12.2020, para 39, TPWODL is hereby submitting the CAPEX Plans for FY 26-27 and prayed as follows to:

- Admit the CAPEX Plans for FY 26-27 along with Annexures in Volume-2.
- Approve the CAPEX plans to the extent of Rs. 525.30 Cr. for FY 26-27 excluding IDC and employee cost capitalization.
- Permit Carrying forward of the unspent Capital Expenditure to subsequent years.
- It is submitted that these expenses are estimated based on comprehensive field visit by the team across the utility area and may vary on actual.
- Grant any other relief as deemed fit & proper in the facts and circumstances of this submission.

Place: Sambalpur
Date: 10-09-2025

Applicant

For & On Behalf of TPWODL

PART OF AFFIDAVIT
10/09/25
NOTARY
Regd. No. ON 22[illegible]
SAMBALPUR

ANNEXURE-A.

TPWODL

Certified True Copy of the Resolution passed at the Board Meeting held on 23rd July 2025

"RESOLVED that Capital Expenditure (Capex) of the Company for FY27, be and is hereby approved, as under, subject to the approval of Odisha Electricity Regulatory Commission (OERC):

(₹ in crore)

Sl. No.	Capex Head	Capex Budget for FY27	% Contribution
1.	Statutory, Safety and Security	54.00	10
2.	Loss Reduction	83.00	16
3.	Network Reliability	162.00	31
4.	Load Growth	190.00	36
5.	Technology and Infrastructure	36.00	7
	Total	**525.00***	**100**

**The proposed CAPEX cost is exclusive of Employee Cost, interest during construction (IDC) and GRIDCO equity contribution in kind.*

FURTHER RESOLVED that the Chief Executive Officer and Chief Financial Officer of the Company be and are hereby severally authorized to take all necessary steps in this regard."

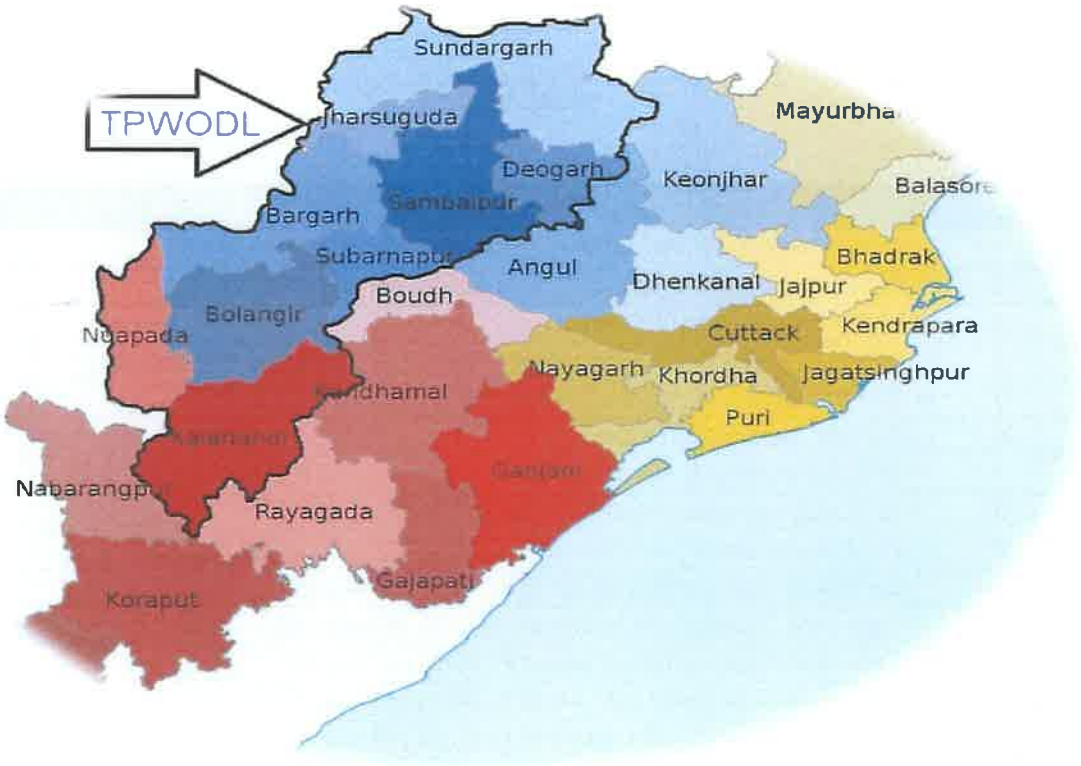
Certified True Copy
For **TP Western Odisha Distribution Limited**

Kanaklata Swain
(Company Secretary)
ACS:47407
Regd./Corporate Office: Wesco Corporate Building Burla,
Besides Burla Police Station, Burla - 768017, Sambalpur, Odisha

TPWODL

CAPEX Detailed Project Report (DPR) for FY 2026-27

Volume – 1



Submitted By

TP Western Odisha Distribution Ltd.

Regd. Office: Corporate Office, Burla, Sambalpur - 768017

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INTRODUCTION

TP Western Odisha Distribution Limited (TPWODL) emerged from a collaborative effort under the Public-Private Partnership (PPP) model, with Tata Power taking the majority stake of 51% and the remaining 49% owned by the Government of Odisha. The transformation occurred on 1st January 2021, following a rigorous competitive bidding process.

The operation of TPWODL's utility business is conducted in accordance with the licensing terms prescribed by the Hon'ble Odisha Electricity Regulatory Commission (OERC). Hon'ble OERC plays a pivotal role in regulating the entire power sector in the state of Odisha. This oversight encompasses determining tariffs for end-users and establishing performance standards that primarily focus on loss reduction, ensuring the security and reliability of power supply and delivering quality services to consumers.

TPWODL's power supply is secured through its association with GRIDCO, a designated bulk supply aggregator tasked with procuring electricity in bulk from various generators located within Odisha, as well as the state's allocation of power from central generators. The transmission process starts with TPWODL receiving electrical power at a sub-transmission voltage of 33 kV, originating from the 220 / 132 / 33 kV Grid Substations managed by the Odisha Power Transmission Company Limited (OPTCL). TPWODL subsequently tailors the distribution to meet consumer demands, offering various voltage levels such as 33 kV, 11 kV, 440 V and 230 V as required by its diverse customer base.

With the objective of ensuring reliable power supply and ensuring best customer services to the end consumers, TPWODL, in the last 5 Year CAPEX submissions, has come up with capital investment plan in five major categories viz Statutory, Safety & Security, Network Reliability, Loss Reduction, Load Growth and Technology & Infrastructure. These same categories will continue for this year CAPEX plan also. The details of each head are subsequently mentioned along with estimated CAPEX requirement and associated activities.

TPWODL, in compliance with the provisions of the Vesting Order, is required to obtain approval for its Capital Expenditure Plan in accordance with the OERC (Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations, 2022. As per the commitments made in its bid submitted in response to the RFP, TPWODL has proposed a capital expenditure of Rs 1663 Crores for the period FY 2021-22 to FY 2025-26, as detailed in Table – 1.

Table – 1

CAPEX Commitment (In Rs. Cr.)	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Year-Wise Capital Expenditure Commitment	306	500	333	322	202
Cumulative Capital Expenditure Commitment	306	806	1139	1461	1663

As detailed in Table – 2, TPWODL has proposed a Capital Expenditure of Rs 2594.47 Crores for FY 2021-22 to FY 2025-26, against which the Hon'ble OERC has approved Rs. 2134.26 Crores.

Table – 2

CAPEX Submission vs Approval (In Rs. Cr.)	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Additional FY 24-25 and FY 25-26	Total
CAPEX Proposal Submitted by TPWODL	462.42	582.18	398.84	571.97	403.13	175.93	2594.47
CAPEX Approved by Hon'ble OERC	333.13	477.72	381.91	493.77	336.60	111.13	2134.26

Table – 3 highlights the year-wise details of CAPEX approval received, Capital Expenditure incurred, Capitalisation achieved, along with the balance and WIP as on 31st August 2025.

Table – 3

Financial Year	CAPEX Approved (In Rs. Cr.)	Capital Expenditure done (In Rs. Cr.)	Capitalisation done (In Rs. Cr.)	Balance & WIP (In Rs. Cr.)
FY 2021-22	333.13	333.49	333.15	-0.02
FY 2022-23	477.72	468.19	460.50	17.22
FY 2023-24	381.91	369.78	362.24	19.67
FY 2024-25	566.11	405.32	368.41	197.70
FY 2025-26	375.39	63.43	17.54	357.85
TOTAL	**2134.26**	**1640.21**	**1541.85**	**592.41**

The distribution system plays a crucial role in the power delivery chain, ensuring last-mile connectivity with consumers, who form the primary source of revenue for the power sector. Over the past 5 years of operations in Odisha, TPWODL, has undertaken several initiatives aimed at system strengthening, reduction of distribution losses, enhancement of safety for personnel and equipment and resolution of metering and billing-related issues. These collective efforts have received recognition at the national level, with Odisha DISCOMs being ranked among the top-performing utilities in the country.

At the same time, TPWODL acknowledges that, considering the prevailing consumer density and the consumer mix largely dominated by domestic consumers, further focused action is required. Key areas include addressing low-voltage issues, reducing high LT losses, improving the reliability and availability of supply and meeting consumer expectations. These steps are essential to ensure that TPWODL, as a licensee, becomes both operationally efficient and financially sustainable.

In this context, TPWODL proposes a Capital Expenditure of Rs. 525.30 Crores in FY 2026-27 across five major categories, namely:

1. **Statutory, Safety and Security:**

   TPWODL places utmost priority on compliance with statutory requirements and strengthening safety across its distribution network. The proposed investments in this category include underground cabling, deployment of insulated conductors, installation of intermediate poles for maintaining ground clearance, provision of advanced safety gear, establishment of testing facilities and improvement of substation infrastructure.

   These initiatives are aimed at ensuring adherence to regulatory standards, enhancing workplace safety for field staff and providing greater protection to consumers and assets. In addition, measures such as underground cabling at road and railway crossings significantly reduce the risk of accidents, while the adoption of insulated conductors minimizes the likelihood of electrical hazards. Strengthening both physical and electrical safety will contribute to improved system reliability, reduction in outages and long-term resilience of the distribution system.

   *With the above objective, TPWODL proposes a CAPEX investment of **Rs. 49.83 Crores** under the Statutory, Safety & Security category, which constitutes **9 %** of the total Capital Expenditure planned for FY 2026-27.*

2. Loss Reduction:

TPWODL recognizes that reducing distribution losses is critical for improving both financial sustainability and service quality. Under this category, the company proposes targeted investments in key initiatives such as large-scale deployment of smart meters, conducting comprehensive energy audits, and replacing LT bare conductors with LT AB cables.

Smart metering will significantly improve billing accuracy, minimize human intervention, and curb pilferage, thereby enhancing consumer trust and transparency. Energy audits will help in identifying high-loss pockets and enable data-driven planning of corrective measures. Replacement of LT bare conductors with AB cables will not only reduce technical losses but also strengthen network safety and reliability, particularly in theft-prone and densely populated areas.

*With this objective, TPWODL proposes a CAPEX investment **of Rs. 41.59 Crores** under the Loss Reduction category, which accounts for **8 %** of the total Capital Expenditure planned for FY 2026-27.*

3. Network Reliability:

Ensuring uninterrupted, safe and quality power supply to consumers remains a core priority for TPWODL. To achieve this, the company is focusing on strengthening its network through systematic upgradation of key assets and deployment of advanced technologies. The proposed investments under this category include provision of breakers, relays, lightning arresters, AB switches, isolators, distribution lines and substations.

In addition, TPWODL plans to install auto-reclosers, sectionalisers, Fault Passage Indicators (FPIs), Ring Main Units (RMUs) and other critical line equipment. These modern technologies will enhance grid automation, improve fault detection and enable faster isolation and restoration of supply in case of network disturbances. Such interventions will minimize outage durations, reduce supply interruptions and significantly improve system resilience.

*With this objective, TPWODL proposes a CAPEX investment of **Rs. 177.18 Crores** under the Network Reliability category, which represents **34 %** of the total Capital Expenditure planned for FY 2026-27.*

4. Load Growth:

To meet the growing electricity demand arising from rapid urbanization, industrialization and overall economic development in Western Odisha, TPWODL is prioritizing investments in network expansion and capacity enhancement. Under this category, the focus will be on the construction of new substations, establishment of 33/11 kV lines, augmentation and addition of transformers and large-scale expansion of LT Aerial Bunched Cable (ABC) networks.

These initiatives will not only strengthen system capacity but also ensure that the distribution network is adequately prepared to cater to increasing consumption across domestic, commercial, and industrial categories. Further, facilitating new service connections, including those under remunerative schemes, will support wider electrification, encourage industrial growth, and contribute to the State's economic progress.

*With this objective, TPWODL proposes a CAPEX investment of **Rs. 211.93 Crores** under the Load Growth category, which constitutes **40 %** of the total Capital Expenditure planned for FY 2026-27.*

5. Technology and Infrastructure:

Investments under this category are directed towards strengthening both technological and physical infrastructure. Key initiatives include the deployment of advanced IT applications, establishment of robust data centres, enhancement of cybersecurity measures and modernization of hardware to support digital operations.

Alongside technology enablement, TPWODL also plans to develop technical and safety training centres, development of division / section offices, and improve store infrastructure. These measures will enhance workforce capability, operational efficiency and service delivery standards. By integrating digital tools with improved physical assets, TPWODL aims to evolve into a smarter, more resilient utility capable of delivering reliable, secure and consumer-focused services well into the future.

*With this objective, TPWODL proposes a CAPEX investment of **Rs. 44.77 Crores** under the head Technology & Infrastructure category which constitutes **9 %** of the total Capital Expenditure planned for FY 2026-27.*

CAPEX PLAN FOR FY 2026-27

Table – 4

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
1	Statutory, Safety and Security	Life enhancement of network and maintaining safe horizontal / vertical clearances	Laying of 33 kV Underground Cable at NH / SH Crossings	2.86
			Installation of 11 kV Overhead Cradle Guard at Road Crossings	1.97
			Laying of 33 kV and 11 kV Underground Cables at Railway Crossings	2.30
			Replacement of HT Bare Conductor with Insulated Conductor	3.12
			Intermediate Pole to increase height of 33 kV & 11 kV Network	5.00
		Provision for Testing and Safety Equipment for workforce	Procurement of Testing Equipment	7.42
			Meter Testing Lab	4.50
			Procurement of Safety Equipment	1.59
		Infrastructure works at Primary & Distribution Substation	Access Road for inside and outside of PSS	2.00
			Renovation / Construction of Control Room Building in PSS	4.00
			Provision for Water Supply arrangement for PSS	1.45
			PSS Boundary wall	3.00
			DSS Fencing	6.00
			Earthing for PSS & DSS	4.62
Sub Total - Statutory, Safety and Security				**49.83**
2	Loss Reduction	Energy Audit & Meter related activity	Installation of 1ph Smart Meters	17.46
			Installation of 3ph Smart Meters at Agriculture LI Connections	2.33
			Installation of Meters inside PSS for Energy Audit	1.97
			DTR Smart Metering for Energy Audit	3.40
			High Value Industrial Audit Point Metering	1.05
			LT Check Metering on HT consumers for Energy Audit	0.30
		Replacement of LT Bare Conductor with AB Cable	Replacement of LT Bare Conductor with AB Cable	15.08
Sub Total - Loss Reduction				**41.59**
3	Network Reliability		Installation / Replacement of 33 kV Breaker / Group Breaker	16.09

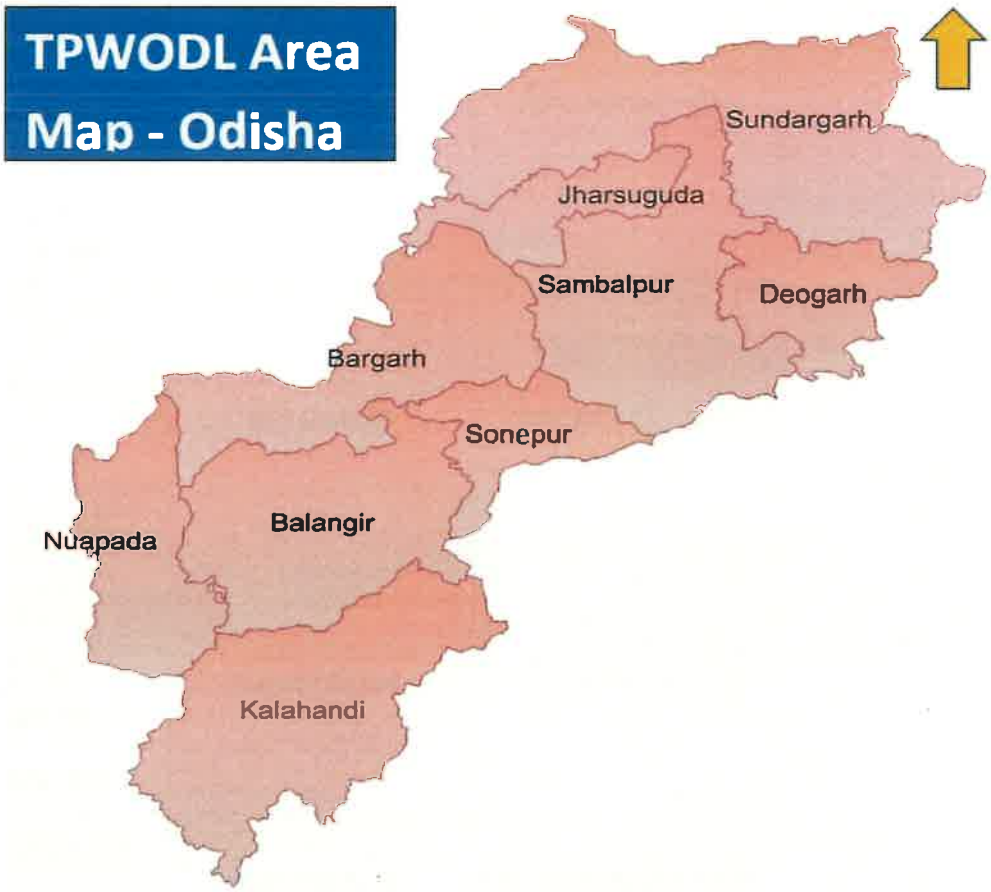
Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
		Replacement / Addition of network component in 33 / 11 kV Primary Substation	Installation / Replacement of 11 kV Breaker / Group Breaker	10.27
			Installation of LA (33 kV & 11 kV) in PSS	2.31
			Replacement of Feeder / Transformer protection Relays (O/C & E/F)	0.76
			Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	0.88
			Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel	1.15
			Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	3.33
			Automation of Non-ODSSP & SCADA integration in PSS	1.53
		Replacement / Addition of Network Component in 11kV / 33kV Line	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	39.02
			Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	37.48
			Installation of 33 kV & 11 kV FPI	5.39
			Installation of 33 kV & 11 kV AB Switches, Isolator & RMU	14.02
			33 kV & 11 kV Polymer Insulator / LA	2.17
			33 kV & 11 kV Auto Recloser / Sectionaliser	6.11
		Replacement / Addition of network component in Distribution Substation	Mobile DT	1.41
			Model Village – Installation of LT Distribution Box & Service Cable	20.17
		LI Point Regularisation	LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	15.09
Sub Total - Network Reliability				**177.18**
4	**Load Growth**	Network Enhancement	Construction of 33 kV New Line	93.31
			Construction of 11 kV New Line	34.92
			Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D)	31.57
			Addition / Augmentation of PTR	10.56
			Addition / Augmentation of DTR	15.89
			Provision of LT Protection (ACB / MCCB) for DTR	8.75
			Addition of New LT ABC Network	16.93

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
Sub Total - Load Growth				**211.93**
5	**Technology & Infrastructure**	Technology Intervention – IT & Technology	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	6.43
			Augmentation of IT Applications & Software	2.78
			Enhancement of Cybersecurity Solutions	9.07
		Improvement of Civil Infrastructure	Construction of Office Buildings	18.14
			Establishment of Technical and Safety Training Centre and mobile training facility	2.92
		Store Infrastructure	Store Infrastructure	2.85
		Ready to Use assets for Offices	Ready to Use assets for Offices	2.58
Sub Total - IT & Infrastructure				**44.77**
GRAND TOTAL				**525.30**

It may be noted that the above cost has been estimated excluding Employee Cost (5% of total CAPEX requirement) and Interest During Construction (IDC).

Furthermore, certain critical schemes, earlier submitted under "Revamping of Electrical Distribution Network for Ensuring Safety" and "Interruption Free of Rourkela City", have been duly considered in this DPR proposal for FY 26-27, in view of their importance and urgency.

TPWODL OVERVIEW



TP Odisha DISCOM is a joint venture between Tata Power and Government of Odisha with the majority stake being held by The Tata Power Company Limited (51%). Traditionally, the distribution network in Odisha is mainly divided into four divisions, TPCODL, TPNODL, TPWODL and TPSODL. TPWODL license area is spread over a geography of 48373 sq. km with population served around 95 lakhs and serve the registered consumer base of 28.64 lakhs. TPWODL procures power from GRIDCO which is a state-owned company, engaged in the business of purchase of electricity in bulk from various generators located inside Odisha and the state share of power from Central generators for supply in all power distribution utilities, including TPWODL. It receives electrical power at a sub transmission voltage of 33 kV from Odisha Power Transmission Company Limited's (OPTCL) 220 / 132 / 33 kV Grid Substations and then distributes the power at 33 kV / 11 kV / 440 V / 230 V depending on the demand of the consumers. For making reliable power supply, along with prompt service to its consumers, this power distribution company (TPWODL) in Odisha has divided its area of power distribution into 5 Circles, 17 Divisions and 57 Sub-divisions as per Table – 5.

Table – 5

Circle Name	Division Name	District Name	Sub-Division Name
SAMBALPUR	SED – SAMBALPUR	SAMBALPUR	SDO-I, AINTHAPALI, SBP
			SDO-II, KHETRAJPUR, SBP
			ELECTRICAL SUB-DIVISION, BURLA
			ELECTRICAL SUB-DIVISION, HIRAKUD
	SEED – SAMBALPUR	SAMBALPUR	SDO-I, BHUTAPADA
			SDO-II, DHANUPALI
			SDO, RENGALI
			SDO, RAIRAKHOL
	JED – JHARSUGUDA	JHARSUGUDA	SDO NO-1, JHARSUGUDA
			SDO NO-2, JHARSUGUDA
			SDO, KUCHINDA
	BED – BRAJRAJNAGAR	JHARSUGUDA	SDO, BRAJRAJNAGAR
			SDO, BELPAHAR
	DED – DEOGARH	DEOGRAH	SDO, DEOGARH
ROURKELA	RSED – ROURKELA	SUNDARGARH	SDO NO-1, ROURKELA
			SDO NO-5, ROURKELA
			SDO NO-7, ROURKELA
	RED – ROURKELA	SUNDARGARH	SDO NO-2, ROURKELA
			SDO NO-3, ROURKELA
			SDO NO-4, ROURKELA
			SDO NO-6, ROURKELA
	SED – SUNDARGARH	SUNDARGARH	SDO, SUNDARGARH
			SDO, UJALPUR

Circle Name	Division Name	District Name	Sub-Division Name
	SED – RAJGANGPUR	SUNDARGARH	SDO-I, RAJGANGPUR
			SDO-II, RAJGANGPUR
			SDO, KALUNGA
			SDO, KUARMUNDA
BARGARH	BED – BARGARH	BARGARH	SDO NO-I, BARGARH
			SDO NO-II, BARGARH
			SDO, BHATLI
			SDO, BHEDEN
			SDO, ATTABIRA
	BWED – BARGARH	BARGARH	SDO, BARPALI
			SDO, PADAMPUR
			SDO, PAIKMAL
			SDO, SOHELA
BOLANGIR	BED – BOLANGIR	BOLANGIR	SDO-I, BOLANGIR
			SDO-II, BOLANGIR
			SDO, TUSURA
			SDO, LOISINGHA
	SED – SONEPUR	SONEPUR	SDO, SONEPUR
			SDO, BINKA
			SDO, B.M.PUR
	TED – TITILAGARH	BOLANGIR	SDO-I, TITILAGARH
			SDO-II, TITILAGARH
			SDO, KANTABANJI
			SDO, PATNAGARH
KALAHANDI	NED – NUAPARA	NUAPADA	SDO, NUAPARA
			SDO, KHARIAR ROAD

Circle Name	Division Name	District Name	Sub-Division Name
			SDO, KHARIAR
	KEED – KALAHANDI	KALAHANDI	SDO NO-I, BHAWANIPATNA
			SDO NO-II, BHAWANIPATNA
			SDO, NARLA
			SDO, KESINGA
	KWED –KALAHANDI	KALAHANDI	SDO, JUNAGARH
			SDO, DHARMAGARH
			SDO, CHARBAHAL

Distribution Network:

As on 31st March 2025, there are 220 numbers of 33 kV exchange feeders with a combined circuit length of around 6168 Ckt. kM, supplying power to 317 numbers of 33 / 11 kV Primary Substations. The 33 kV supply is stepped down to the 11 kV level through 692 numbers of 33 / 11 kV Power Transformers with a total installed capacity of 3671 MVA at these primary substations. Further, around 1236 numbers of 11 kV feeders emanate from the 33 / 11 kV Primary Substations, having a cumulative length of around 52873 Ckt. kM and supply power to HT consumers connected at the 11 kV level and LT customers connected through 11 / 0.415 kV and 11 / 0.230 kV distribution substations. A total of 82,752 numbers of Distribution Transformers are installed across all five circles, with a combined installed capacity of 4292 MVA. The length of the LT network is around 72,788 Ckt. kM. These LT feeders supply power to both three-phase and single-phase consumers.

Table – 6: TPWODL Network Summary

Circle	UoM	Rourkela	Sambalpur	Bargarh	Bolangir	Kalahandi	Total
Consumer (Live)	Nos.	427573	442646	316485	495464	484346	2166514
33 / 11 kV PTR	Nos.	141	178	102	153	118	692
33 / 11 kV PTR capacity	MVA	760.55	965.45	611.40	770.25	563.55	3671
11 / 0.415 kV DTR	Nos.	16867	19159	12606	17842	16278	82752
11 / 0.415 kV DTR Capacity	MVA	853.97	1050.96	693.92	933.51	759.3	4292
33 kV Line (O/H & U/G)	Nos.	58	57	32	41	32	220
33 kV Line (O/H & U/G)	Ckm.	1360.78	1416.08	886.66	1160.29	1344.52	6168
11 kV Line (O/H & U/G)	Nos.	235	317	177	288	219	1236
11 kV Line (O/H & U/G)	Ckm.	12163	10282.5	7370.63	12502.7	10554	52873
LT Line (ABC)	Ckm.	10131	7642	6240	9942	13154	47109
LT Bare Line	Ckm.	4912	4927	4763	8595	2482	25679

The above network details are as on 31st March, 2025.

EXISTING NETWORK CONDITIONS

In the operational areas of TPWODL, the distribution network is characterized by varying conditions, each posing unique challenges. Several stretches of the network are lengthy, dilapidated and unsafe, thereby posing risks to the public, employees and animals in the vicinity. Such conditions adversely affect the safety, reliability, and overall performance of the distribution system.

A number of critical issues have been observed across different locations, which demand immediate and focused intervention. Addressing these challenges is essential to strengthen the network, enhance operational safety, ensure statutory compliance and deliver reliable and quality power supply to consumers.

Unsafe horizontal / vertical clearances in 33 kV, 11 kV and LT feeders.	Damaged conductors / poles / stay wires.	Poor earthing of the poles and structures.
Absence of cradle wire in overhead MV feeders.	Poor condition / absence of fencing / boundary wall at most of the Distribution Substations and 33 / 11 kV Primary Substations (Structure's).	Inadequate DC and protection system.
Dilapidated civil infrastructure and no maintenance.	Unsafe condition for employees, public and animal.	Frequent power supply failure.
No LT protection in distribution substations.	Higher failure rate of distribution transformers.	Aged power transformers.

Unsafe horizontal / vertical clearances in 33 KV, 11KV and LT feeders:

The power distribution utility is obligated to adhere to all statutory compliances, as any deviation not only attracts penalties but also adversely impacts its brand image. A large portion of the existing network is old and constructed on 8 meter / 9 meter poles with long spans. Since, as per construction standards, one-sixth of the pole length is buried underground, the effective height above ground is approximately between 6.5 meter to 7.5 meter. After accommodating fittings and accessories, very limited clearance remains to address increased sag or changes in road level.

The issue is further aggravated by span lengths ranging from 60 – 120 m, which significantly increase sag. Additionally, several locations currently do not comply with statutory guidelines, necessitating substantial funding and effort to ensure network safety. In certain places, road reconstruction has further reduced the vertical clearance of conductors to hazardous levels, leading to non-compliance.

To address these challenges, TPWODL proposes the installation of mid-poles along with refurbishment and life-extension measures for existing lines. However, given the large number of such critical locations, significant investments spread over several years will be essential to eliminate all deficiencies.

Photographs of feeders having unsafe horizontal / vertical clearances are as follows:

Damaged conductors / poles / stay wires:

Due to the vast geographical spread of the network and the absence of adequate Capex investment in the past, the existing infrastructure has become weak, primarily on account of ageing and frequent tripping. The major factors contributing to this deterioration include damaged poles, worn-out conductors and defective stay wires.

In several locations, poles and support structures are rusted, damaged, or tilted. Structural deterioration of poles, floods, Kal-baisakhi storms and heavy vegetation growth are among the key reasons for this damage.

Tilting of poles increases conductor sag and if timely replacement of tilted or broken poles is not undertaken, the mechanical strength of the line reduces significantly, making it vulnerable to collapse during high-speed winds or storms. Such incidents not only pose the risk of fatal accidents but also jeopardize reliable power supply, as restoration may take several days depending on the location and severity of the damage.

To prevent poles from tilting under abnormal wind pressure, proper installation of stay wires is essential. However, at many locations, stay (guy) insulators are either missing or damaged, creating serious safety risks for both the public and animals in case of leakage current.

Additionally, other issues have further weakened the network, such as the use of undersized conductors in overhead feeders, poor conductor conditions, multiple joints within a single span and defective binding wire joints. These deficiencies often create hotspots and increase the likelihood of jumper parting.

As part of its refurbishment and life-extension program, TPWODL has proposed several corrective measures, including replacement of damaged poles, replacement of worn-out conductors, re-sagging of lines, installation of mid-span poles and provision of stay wires.

Photographs of conductors and poles in damaged condition are as follows:

Poor earthing of the poles and structures:

Further, as per Rule 42, every installation with a connected load of above 5 kW and voltage exceeding 250 V shall have a suitable earth leakage protective device to isolate the load in case of earth fault or leakage in the circuit. In case the earthing of any power equipment or network becomes weak or defective due to corroded connections or damaged connection, clearance of fault may take more time and putting stress on the equipment connected in the network.

During the site visits, it is observed that at most of the places, proper earthing was not evident and at some of the 33/11 kV primary substation, earthing is not adequate. This situation is dangerous for the stability of power system and there are chances of electric shock to the human beings and animals. TPWODL proposes to strengthen the earthing system by introducing fresh earthing in both DSS and PSS as part of refurbishment activity. This will enhance life not only of equipment but shall also help in proper functioning of protection relays.

Absence of cradle wire in overhead MV feeders:

Guarding is an arrangement provided in overhead MV/HV/LV feeders, by which a live conductor, when accidentally gets broken, is prevented to come in contact with public or animals and vehicles moving beneath the road. By having cradle guards in place, immediately after a live conductor breaks, it first touches the cradle guard thus completing the electrical circuits necessary for the operation of the protection relays installed at substations. This in-turn trips the circuit breaker and danger to any living object is averted. At present, most of the network is overhead and there is no provision of guard or cradle wire installed beneath the overhead conductors this pose serious safety threat to the public since the network is in dilapidated condition and possibility of conductor parting cannot be ruled out. In such scenario, cradle guard will help in avoiding accidents caused by snapping of conductors of overhead MV feeders. TPWODL proposes to put in place the cradle wire/guard wire on National Highway and State Highway crossings near school, college, Hospitals and market area.

Inadequate DC and protection system:

Many PSS does not have adequate protection system as many feeders are running on group breaker, many PTRs and feeders are in use without breaker. Battery and Battery charges are not operational and needs immediate replacement at various PSS.

Dilapidated civil infrastructure and no maintenance:

TPWODL currently have offices in all the five circles and subdivisions. Some of them are owned and various offices are on rented property. TPWODL is facing challenge while accommodating additional new employees in current office buildings and infrastructure. The current existing infrastructure are old and needs modernization to provide hygienic, well-ventilated and spacious work environment. These office locations are touch base points between end consumers and utility. Hence aesthetic along with safety of each stakeholders needs to be focused.

Photographs of condition of some poor office buildings are as follows:

Unsafe condition for employees, public and animal:

It is observed that most of the accident happened either due to deficiency in the network infrastructure or easy accessibility of the live parts to the Public and Animals. It is pertinent to mention here that the number of fatal accidents outgo the number of non- fatal accident, for both Human and Animals. Below figure shows the detailed accident analysis of Humans. Hence, potentially unsafe locations need to be addressed and attended time to time to ensure safe network for employees, Public and Animals.

Table – 7 below shows year wise details of Fatal / Non-fatal accidents occurred under TPWODL operational area during Calendar Year 2021-2025:

Table – 7

TPWODL Incident Summary													
Circle	DIVISION	FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26 (Till Aug'25)		Total Fatal	Total LWDC
		Fatal	LWDC	Fatal	LWDC	Fatal	LWDC	Fatal	LWDC	Fatal	LWDC		
Sambalpur	SED, Sambalpur		1		3								4
	SEED, Sambalpur		1		2	1	1					1	4
	DED, Deogarh	1	2		3	1	1		1			2	7
	JED, Jharsuguda		3						3				6
	BNED, Brajrajnagar			1	2		1					1	3
Bargarh	BED, Bargarh		2		1	1	1		1	1		2	5
	BWED (I&II), Bargarh	1				2	1					3	1
Bolangir	BED, Bolangir							1			1	1	1
	SED, Sonepur				1					1		1	1
	TED, Titlagarh		1		2								3
Rourkela	RED, Rourkela		1		2	1						1	3
	RSED, Rourkela Sadar				1								1
	RGP, Rajgangpur				2					1		1	2
	SED, Sundargarh		1	1								1	1
Kalahandi	KEED, Kalahandi		1		2								3
	KWED, Kalahandi West		1		1				1				3
	NED, Nuapada		2			1	1					1	3
	Total	2	16	2	22	7	6	1	6	3	1	15	51

Frequent power supply failure:

TPWODL gives utmost importance to resolve consumer grievances as quickly as possible. The DISCOM operates a 24x7 toll-free call centre (1912 / 1800-345-6798) with IVRS and integrated systems for prompt registration and resolution of customer queries and complaints. Queries are resolved instantly wherever possible, while complaints are logged into the FG CRM system and automatically routed to the relevant department through a system-defined escalation matrix. In addition, customers can register service requests through a range of digital and physical platforms including the TPWODL website, My Tata Power Consumer App, Roshni chatbot, WhatsApp bot, social media channels, email, section and division offices and 15 dedicated customer care centres, of which 4 are operated exclusively by women and 1 by Divyang (differently abled) persons. Complaint handling is system-driven with automated tracking, escalation protocols and quality monitoring including call recordings and periodic audits.

Table – 8 shows the number of 'No Supply' complaints received and average time taken to resolve the no supply complaints from year 2021 to 2025 in TPWODL area:

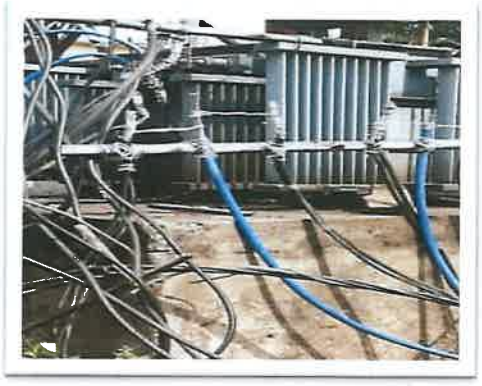
Table – 8

Sl. No.	Parameter	UoM	2021	2022	2023	2024	2025
1	Number of 'No Supply' Complaints Received Per Month	Nos. Per Month	53613	282064	528743	759330	318245
2	Average Time Taken in Resolving No Supply Complaints	Minutes	925	850	521	537	515

No LT protection in distribution substations:

In addition to the high incidence of accidents, a major concern is the elevated failure rate of distribution transformers, coupled with a significantly high number of interruptions at both the 33 kV and 11 kV levels. These issues, primarily arising from poor network conditions, severely impact the reliability and stability of the power supply system, resulting in frequent disruptions and consumer inconvenience.

Below are some of the images where no LT protection is available:



Aged power transformers:

Over the period of operations of these PTRs, based on the various conditions, there are instances of failures which are attributable to multiple reasons. Some of these include overloading due to growth demand, insufficient protection schemes, multiple fault feedings on distribution network, ageing of the transformers leading to natural deterioration of the winding insulation. Table – 9 shows the year-wise PTR failure trend from FY 2021-22 to FY 2024-25.

Table – 9

Sl. No.	Parameter	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	PTR Failure (In Nos.)	16	16	12	04
2	PTR Failure (In MVA)	61.8	80.8	63.75	16.3

TPWODL has taken prudent steps to ensure that external factors leading to these failures are arrested and eradicated. These include upgrading the protection schemes by having the latest numerical relays, ensuring coordinated tripping based on the fault, proactive replacement of protective elements like lightning arrestors across 33kV and 11 kV system and proactive steps of off-line testing of the equipment to have data and future trending to see the deterioration over time if any.

While the above-mentioned measures will help in ensuring a healthy and reliable system in the future, factors owing to ageing and load augmentation still needs to be addressed. Additionally, to ensure that system reliability is ensured through the (N-1) philosophy, there is a requirement of installing additional PTRs of suitable ratings. This will also ensure the availability of spare capacity to have in place necessary maintenance practices which will help in increasing the life of the asset.

Reasons for replacement of PTR:

The major reasons to carry out the replacement of PTRs are brought out below:

a. **Ageing:** One of the most important reasons for failure of PTR is due to the natural ageing. Many of the PTRs in TPWODL system have been in service for more than 25 years before and have served their useful life. These PTRs have been in service for long and would have experienced many hostile operating conditions during their lifetime. This may be abnormal conditions like heavy fault in line and multiple charging of PTRs. Over the years this would lead to gradual degradation of the winding insulation causing PTR failures. Repairs to these transformers would not yield the same kind of efficiency and quality leading to future failures. Considering the overall cost benefit and incremental losses from these aged transformers,

it becomes worthwhile to procure new transformers to replace the aged asset. This will help in improving the reliability and reduction in the losses.

b. **Repaired PTRs:** During field verification and system reliability inspection it has been observed that many PTRs are already rewound multiple times after having failed in the past. It is observed that the failure rate in such rewound / repaired PTRs are high. Additionally, rewinding doesn't guarantee the same losses and the overall efficiency of the transformer is also reduced (which is much lesser than a newly designed transformer). Considering the deterioration of winding insulation of these repaired transformers and combined with external factors like overloading and system conditions, such PTRs are more prone to failure.

c. **Over loading:** With increase in the load demand, many of the PTRs are reaching or exceeding the rated capacity. This phenomenon is further aggravated with the use of ageing asset leading to an increase in the failure. Multiple schemes proposed by the Government ensures addition of distribution transformers (DTR) across the system. These ultimately is fed through the existing PTRs which would have reached the load limit. Every Year 20000 new connections given to our new consumer in various TPWODL area in Existing Distribution Transformer adding load to PTRS.

d. **Deteriorating testing parameters:** During testing of PTRs, it is observed that some of the PTRs test results indicate deteriorating winding insulation and high core loss. It is recommended to replace such PTRs in a planned and phased manner in order to avoid loss of supply to consumers.

e. **Improving System Reliability:** Many of the PSS across the various circles are not provided with the requisite redundancy at the PTR level. Non availability of the PTR in these substations will lead to load diversions or load shedding. To prevent the same and ensuring the necessary (N-1) redundancy, critical substations need to be augmented with additional PTR of suitable capacity. This will help in catering to preventive maintenance while having the continuity of supply to consumers.

LOAD FLOW ANALYSIS

TPWODL has completed the load flow studies for 33 kV and 11 kV network after modelling the existing GIS network in CYMDIST Software and prioritized the proposals based on the load flow study. Load flow study consists of 33 kV feeder loading report, PTR loading report, 11 kV feeder loading report, DTR loading report, abnormalities observed in 33 kV and 11 kV feeders. Load Flow study is also used to calculate the technical loss in the 33 kV and 11 kV network. Load flow study is done on Base – 1 (existing network) and Base – 2 (existing network with approved scheme after considering load growth).

This study is done for the following objectives:

- Modelling of detailed electrical network of 33 kV and 11 kV network with all relevant technical details for Base – 1 and Base – 2 study.
- Identification of abnormal conditions (under voltage, over voltage, over loading, N-1 redundancy of critical feeders) in 33 kV and 11 kV network as per loading of year 2025 and future load growth of 1 year.
- Calculation of accurate technical losses with respect to different loading conditions of the network (for feeders and transformers).
- Plan mitigation proposals for identified abnormalities to cater future load demand.
- Prepare and submit detailed study report after load flow study to mitigate over loading, under voltage and N-1 of critical feeders.
- Ensuring adequacy of the network to serve the objectives of schemes to provide reliable and uninterrupted power supply for all consumers.

A power system built on any electrical network develops gradually, in response to the growth in demand for electrical energy in the area it serves. The load growth is witnessed not only in terms of increment in its value at a given point, but also geographically, over the years. The unpredictable nature of load growth impacts the operation and performance of the distribution network.

To improve the performance of the network, one needs to analyse the existing electrical network and optimize them so that they can cater the future load with high reliability and reduced losses.

The pre-requisites for this study are:

- Electrical network data / SLDs / diagram for considered voltage levels.
- Interconnections details with (NO and NC) points.
- Actual peak load details of 33 kV feeders, 11 kV feeders, PTRs and DTRs.
- Electrical network connectivity of approved proposals with major equipment details.

Modes of study:

Under this study it is planned to perform following assessment:

- Model detailed electrical network of existing 33 kV and 11 kV with all relevant technical details.
- Assessment of present network conditions and evaluate network adequacy for Distribution network.
- Identify the abnormal conditions in the network as per present loading conditions.
- Use method of load allocation as per 'Actual kVA method' to allocate loading on DTR loads and PTR loads.
- Perform load flow analysis on the existing network and identify the abnormal conditions (over voltage, under voltage, overloading of equipment) in the network. Generate study report for loading and technical losses in the system.
- Model detailed electrical network of approved (YTS and WIP proposals) 33 kV and 11 kV networks with all relevant technical details.
- Perform load flow analysis on Base – 2 network and identify the abnormal conditions (over voltage, under voltage, overloading of equipment) in the network. Generate study report for loading and technical losses in the system.
- Identify network reinforcement for catering future load demand.
- Discuss with field team and model the plan network after finalisation of proposals.
- Prepare and submit detailed study report on various system studies by following voltage limits which are specified in Electricity Supply Code for Study.

Voltage variation:

The Licensee shall maintain the voltage at the point of commencement of supply to a consumer within the limits stipulated here under, with reference to declared voltage.
In case of High Voltage (30.03 kV to 33 kV), +6% and -9%

For simulating the power flow analysis, the following assumptions are considered:

1. Peak demand of FY 2026 assigned to the distribution transformers
2. LLF considered is 0.47

The load flow analysis has been simulated using the Newton-Raphson unbalanced method for power flow for the current network in 2025 and for the network with forecasted load growth.

Load flow Study Outcome:

a. Existing Network Analysis Report for:
   - Voltage Regulation
   - Technical Losses
   - Overloading both Conductor / Cable and Power Transformers
   - N-1 Redundancy at Lines, Power Transformers and Sources (OPTCL / Other Discom)
   - Network Inadequacy

b. Base – 2 Network Analysis Report for:
   - Voltage Regulation
   - Technical Losses
   - Overloading both Conductor / Cable and Power Transformers
   - N-1 Redundancy at Lines, Power Transformers and Sources (OPTCL / Other Discom)
   - Network Inadequacy

c. Mitigation Plan and Recommendations.

d. Planned Network Analysis Report for:
   - Voltage Regulation
   - Technical Losses
   - Overloading both Conductor / Cable and Power Transformers
   - N-1 Redundancy at Lines, Power Transformers and Sources (OPTCL / Other Discom)

CAPITAL EXPENDITURE STATUS

With the completion of various projects undertaken under CAPEX schemes as well as other Government-funded initiatives, significant improvements have been observed in the condition of the existing distribution network. A glimpse of these improvements is reflected in the photographs provided. The table below presents the Capital Expenditure status for FY 2021-22, FY 2022-23, FY 2023-24, FY 2024-25 and FY 2025-26 (Till August-2025).

Table – 10: CAPEX and Capitalisation Progress of FY 2021-22 Budget (Till August-2025):

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
1	Statutory, Safety and Security	Life Enhancement of Feeder Network in respect of Maintaining Safe Horizontal / Vertical Clearances	20.54	20.47	20.44	20.38	0.08
		Provision of Safety Equipment & PPEs to Workforce	12.05	12.08	12.07	12.05	0.03
		Meter Testing Lab	10.35	10.40	10.38	10.38	0.02
		Earthing, Fencing and Boundary Wall	55.54	55.54	55.53	55.53	0.01
Sub-Total: Statutory, Safety and Security (I)			**98.48**	**98.48**	**98.42**	**98.34**	**0.14**
2	Loss Reduction	Energy Meter Replacement	4.08	4.08	4.08	3.99	0.09
		Refurbishment / Augmentation of 33 kV / 11 kV / 0.415 kV Network to Reduce Losses	38.40	38.40	38.31	38.29	0.11
Sub-Total: Loss Reduction (II)			**42.48**	**42.48**	**42.39**	**42.28**	**0.20**
3	Network Reliability	Refurbishment / Life Enhancement of 33 / 11 kV Primary Sub-station / Additional New Sub-station	20.16	20.11	19.87	19.80	0.31
		Installation of AB Switches / Isolators / Insulators on 33 kV and 11 kV Network	14.30	14.35	14.25	14.24	0.11

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
		Pilot Project for installation of Fault Passage Indicator (FPI)	2.00	2.00	1.99	1.99	0.01
		Augmentation of LV side Protection System along with DT LA	12.45	12.46	12.46	12.46	0.00
Sub-Total: Network Reliability (III)			**48.91**	**48.91**	**48.56**	**48.49**	**0.42**
4	**Load Growth**	Network Enhancement / Unforeseen Emergency CAPEX Requirement	39.71	39.71	39.67	39.62	0.09
Sub-Total: Load Growth (IV)			**39.71**	**39.71**	**39.67**	**39.62**	**0.09**
5	**Technology & Infrastructure**	IT & Technology for Process Efficiency	42.02	45.62	45.62	45.62	0.00
		SCADA Implementation	15.30	15.30	15.30	15.30	0.00
		GIS Implementation	5.00	6.44	6.44	6.44	0.00
		GSAS Implementation	9.52	7.30	7.30	7.29	0.01
		Improvement of Civil Infrastructure	25.66	23.60	23.60	23.60	0.00
		Security System in Central Stores	1.05	1.01	1.01	1.01	0.00
		Ready to Use Assets for Offices	5.00	5.17	5.17	5.16	0.01
Sub-Total: Technology & Civil Infrastructure (V)			**103.55**	**104.44**	**104.44**	**104.42**	**0.02**
Grand Total (I+II+III+IV+V)			**333.13**	**334.02**	**333.49**	**333.15**	**0.87**

Table – 11: CAPEX and Capitalisation Progress of FY 2022-23 Budget (Till August-2025):

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
1	Statutory, Safety and Security	Life Enhancement of Network and Maintaining Safe Horizontal / Vertical Clearances	15.09	14.73	14.52	14.49	0.24
		Provision of Testing Equipment & PPEs to Workforce	4.31	4.67	4.66	4.56	0.11
		Boundary Wall and Infrastructure works at Primary Sub-station	17.50	17.50	17.49	17.49	0.01
		Earthing and Fencing	15.50	15.50	15.39	15.37	0.13
Sub-Total: Statutory, Safety and Security (I)			**52.40**	**52.40**	**52.07**	**51.91**	**0.49**
2	Loss Reduction	Energy Audit & Meter Related Activity	13.52	13.52	13.31	11.75	1.77
		Spot Billing Devices	3.20	1.25	1.24	1.24	
		Replacement of LT Bare Conductor with AB Cable	30.08	32.03	31.84	31.83	0.20
Sub-Total: Loss Reduction (II)			**46.80**	**46.80**	**46.39**	**44.82**	**1.97**
3	Network Reliability	Replacement / Addition of Network Component in 33 / 11 kV Primary Sub-station	51.74	51.93	51.54	51.49	0.44
		Replacement / Addition of Network Component in 33 kV / 11 kV Line	52.00	51.81	50.18	49.34	2.47
		Replacement / Addition of Network Component in Distribution Sub-station	14.60	14.60	14.00	12.03	2.57
Sub-Total: Network Reliability (III)			**118.34**	**118.34**	**115.72**	**112.87**	**5.47**
4	Load Growth	Network Enhancement / Unforeseen Emergency	145.57	145.57	140.69	137.69	7.88
Sub-Total: Load Growth (IV)			**145.57**	**145.57**	**140.69**	**137.69**	**7.88**
5	Technology & Infrastructure	Technology Intervention - IT & Technology	48.19	47.28	47.28	47.28	0.00
		Technology Intervention - GIS, SCADA & Others Implementation	40.10	39.65	39.29	39.19	0.46

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
		Improvement of Civil Infrastructure	18.00	18.50	18.50	18.50	0.00
		Infrastructure to meet Customer Needs	2.78	2.29	1.36	1.35	0.94
		Store Infrastructure	4.04	5.40	5.40	5.40	0.00
		Ready to Use Assets for Offices	1.50	1.50	1.50	1.50	0.00
Sub-Total: Technology & Civil Infrastructure (V)			**114.61**	**114.61**	**113.32**	**113.21**	**1.41**
Grand Total (I+II+III+IV+V)			**477.72**	**477.72**	**468.19**	**460.50**	**17.21**

Table – 12: CAPEX and Capitalisation Progress of FY 2023-24 Budget (Till August-2025):

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
1	**Statutory, Safety and Security**	Life Enhancement of Network and Maintaining Safe Horizontal / Vertical Clearances	9.02	8.28	7.56	7.46	0.82
		Provision of Testing Equipment & PPEs to Workforce	3.79	4.53	4.52	4.36	0.17
		Fencing, Boundary Wall and Infrastructure works at Primary Sub-station	21.31	21.31	21.31	21.31	0.00
Sub-Total: Statutory, Safety and Security (I)			**34.12**	**34.12**	**33.40**	**33.13**	**0.99**
2	**Loss Reduction**	Energy Audit & Meter Related Activity	27.04	27.04	26.69	23.21	3.83
		Replacement of LT Bare Conductor with AB Cable	31.96	31.96	31.26	31.15	
Sub-Total: Loss Reduction (II)			**59.00**	**59.00**	**57.96**	**54.36**	**3.83**

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
3	Network Reliability	Replacement / Addition of Network Component in 33 / 11 kV Primary Sub-station	23.37	23.81	23.21	23.19	0.62
		Replacement / Addition of Network Component in 33 kV / 11 kV Line	36.08	35.64	32.65	31.61	4.03
		Replacement / Addition of Network Component in Distribution Sub-station	10.03	10.03	9.66	8.99	1.04
Sub-Total: Network Reliability (III)			**69.48**	**69.48**	**65.52**	**63.79**	**5.69**
4	Load Growth	Network Enhancement / Unforeseen Emergency	67.82	67.82	63.18	61.98	5.84
Sub-Total: Load Growth (IV)			**67.82**	**67.82**	**63.18**	**61.98**	**5.84**
5	Technology & Infrastructure	IT & Technology Intervention	67.48	62.48	62.45	62.43	0.05
		OT - GIS, Communication & Other Infrastructure	62.21	51.71	51.17	50.44	1.27
		Improvement of Civil Infrastructure	15.65	30.01	30.00	30.01	0.00
		Infrastructure - Stores	4.35	4.35	3.17	3.17	1.18
		Infrastructure - Admin	1.80	2.94	2.94	2.94	0.01
Sub-Total: Technology & Civil Infrastructure (V)			**151.49**	**151.49**	**149.73**	**148.98**	**2.51**
Grand Total (I+II+III+IV+V)			**381.91**	**381.91**	**369.78**	**362.24**	**18.86**

Table – 13: CAPEX and Capitalisation Progress of FY 2024-25 Budget (Till August-2025):

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
1	Statutory, Safety and Security	Life Enhancement of Network and Maintaining Safe Horizontal / Vertical Clearances	9.74	9.74	6.67	5.88	3.86
		Provision of Testing Equipment, Safety Equipment & PPEs to Workforce	11.20	9.94	7.50	7.15	2.79
		Fencing, Boundary Wall and Infrastructure works at Primary Sub-station	30.59	31.85	30.97	30.81	1.04
Sub-Total: Statutory, Safety and Security (I)			**51.53**	**51.53**	**45.14**	**43.84**	**7.69**
2	Loss Reduction	Energy Audit & Meter Related Activity	43.68	42.48	38.75	35.36	7.12
		Replacement of LT Bare Conductor with AB Cable	10.93	12.13	9.78	8.95	
Sub-Total: Loss Reduction (II)			**54.61**	**54.61**	**48.53**	**44.31**	**7.12**
3	Network Reliability	Replacement / Addition of Network Component in 33 / 11 kV Primary Sub-station	28.58	31.91	27.07	26.13	5.78
		Replacement / Addition of Network Component in 33 kV / 11 kV Line	114.55	111.22	59.25	55.92	55.30
		Replacement / Addition of Network Component in Distribution Sub-station	12.97	12.97	4.79	1.71	11.26
		Reliability Enhancement for Bolangir Town & Patnagarh Town Areas	17.59	17.59	1.97	0.00	17.59
Sub-Total: Network Reliability (III)			**173.69**	**173.69**	**93.08**	**83.76**	**89.93**
4	Load Growth	Network Enhancement / Unforeseen Emergency	208.27	208.27	166.31	145.62	62.65
Sub-Total: Load Growth (IV)			**208.27**	**208.27**	**166.31**	**145.62**	**62.65**
5	Technology & Infrastructure	IT & Technology Intervention	16.63	17.22	16.35	16.26	0.97

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
		OT - GIS, Communication & Other Infrastructure	17.65	17.62	3.70	2.77	14.85
		Improvement of Civil Infrastructure	37.00	37.50	25.18	24.84	12.66
		Infrastructure - Stores	5.26	6.05	5.28	5.28	0.77
		Infrastructure - Admin	1.47	1.80	1.75	1.73	0.07
Sub-Total: Technology & Civil Infrastructure (V)			**78.01**	**80.19**	**52.27**	**50.88**	**29.31**
Grand Total (I+II+III+IV+V)			**566.11**	**568.29**	**405.32**	**368.41**	**196.70**

Table – 14: CAPEX and Capitalisation Progress of FY 2025-26 Budget (Till August-2025):

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
1	**Statutory, Safety and Security**	Life Enhancement of Network and Maintaining Safe Horizontal / Vertical Clearances	8.98	8.98	3.04	0.00	8.98
		Provision of Testing Equipment, Safety Equipment & PPEs to Workforce	4.20	4.20	0.05	0.00	4.20
		Fencing, Boundary Wall and Infrastructure works at Primary Sub-station	30.11	30.11	6.20	5.43	24.68
Sub-Total: Statutory, Safety and Security (I)			**43.29**	**43.29**	**9.29**	**5.43**	**37.86**
2	**Loss Reduction**	Energy Audit & Meter Related Activity	37.12	33.50	7.31	3.01	30.49
		Replacement of LT Bare Conductor with AB Cable	10.00	13.62	4.78	1.82	
Sub-Total: Loss Reduction (II)			**47.12**	**47.12**	**12.09**	**4.83**	**30.49**

Sl. No.	Category	Sub-Category	OERC Approval (Rs. Cr.)	Amount After Swapping (OERC Approval ± Swapped Value) (Rs. Cr.)	Cumulative Work Complete (Rs. Cr.)	Cumulative Amount Capitalised (Rs. Cr.)	Work in Progress (Rs. Cr.)
A	B	C	D	E	F	G	H = E-G
3	Network Reliability	Replacement / Addition of Network Component in 33 / 11 kV Primary Sub-station	18.76	18.76	4.26	0.88	17.88
		Replacement / Addition of Network Component in 33 kV / 11 kV Line	111.98	113.98	13.53	1.19	112.79
		Replacement / Addition of Network Component in Distribution Sub-station	8.59	6.59	0.00	0.00	6.59
Sub-Total: Network Reliability (III)			**139.33**	**139.33**	**17.79**	**2.07**	**137.26**
4	Load Growth	Network Enhancement / Unforeseen Emergency	119.95	119.95	24.26	5.22	114.73
Sub-Total: Load Growth (IV)			**119.95**	**119.95**	**24.26**	**5.22**	**114.73**
5	Technology & Infrastructure	IT & Technology Intervention	5.28	5.28	0.00	0.00	5.28
		OT - GIS, Communication & Other Infrastructure	7.12	7.12	0.00	0.00	7.12
		Improvement of Civil Infrastructure	10.00	10.00	0.00	0.00	10.00
		Infrastructure - Stores	3.30	3.30	0.00	0.00	3.30
Sub-Total: Technology & Civil Infrastructure (V)			**25.70**	**25.70**	**0.00**	**0.00**	**25.70**
Grand Total (I+II+III+IV+V)			**375.39**	**375.39**	**63.43**	**17.54**	**346.05**

CAPEX PROPOSALS FOR FY 2026-27

Capital investments are proposed under the following major categories that shall be aligned with multiple initiatives and schemes to reduce AT&C losses, improve system reliability and augment the network to support continuous load growth. Further, a need is also felt to improve the existing civil infrastructure and IT facilities to provide a better consumer experience and a modern, rich and conducive work environment to all employees for better performance.

The key activities proposed under each category are listed below:

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
1	**Statutory, Safety and Security**	Life enhancement of network and maintaining safe horizontal / vertical clearances	Laying of 33 kV Underground Cable at NH / SH Crossings	2.86
			Installation of 11 kV Overhead Cradle Guard at Road Crossings	1.97
			Laying of 33 kV and 11 kV Underground Cables at Railway Crossings	2.30
			Replacement of HT Bare Conductor with Insulated Conductor	3.12
			Intermediate Pole to increase height of 33 kV & 11 kV Network	5.00
		Provision for Testing and Safety Equipment for workforce	Procurement of Testing Equipment	7.42
			Meter Testing Lab	4.50
			Procurement of Safety Equipment	1.59
		Infrastructure works at Primary & Distribution Substation	Access Road for inside and outside of PSS	2.00
			Renovation / Construction of Control Room Building in PSS	4.00
			Provision for Water Supply arrangement for PSS	1.45
			PSS Boundary wall	3.00
			DSS Fencing	6.00
			Earthing for PSS & DSS	4.62
Sub Total - Statutory, Safety and Security				**49.83**
2	**Loss Reduction**	Energy Audit & Meter related activity	Installation of 1ph Smart Meters	17.46
			Installation of 3ph Smart Meters at Agriculture LI Connections	2.33
			Installation of Meters inside PSS for Energy Audit	1.97
			DTR Smart Metering for Energy Audit	3.40

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
			High Value Industrial Audit Point Metering	1.05
			LT Check Metering on HT consumers for Energy Audit	0.30
		Replacement of LT Bare Conductor with AB Cable	Replacement of LT Bare Conductor with AB Cable	15.08
Sub Total - Loss Reduction				**41.59**
3	**Network Reliability**	Replacement / Addition of network component in 33 / 11 kV Primary Substation	Installation / Replacement of 33 kV Breaker / Group Breaker	16.09
			Installation / Replacement of 11 kV Breaker / Group Breaker	10.27
			Installation of LA (33 kV & 11 kV) in PSS	2.31
			Replacement of Feeder / Transformer protection Relays (O/C & E/F)	0.76
			Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	0.88
			Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel	1.15
			Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	3.33
			Automation of Non-ODSSP & SCADA integration in PSS	1.53
		Replacement / Addition of Network Component in 11kV / 33kV Line	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	39.02
			Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	37.48
			Installation of 33 kV & 11 kV FPI	5.39
			Installation of 33 kV & 11 kV AB Switches, Isolator & RMU	14.02
			33 kV & 11 kV Polymer Insulator / LA	2.17
			33 kV & 11 kV Auto Recloser / Sectionaliser	6.11
		Replacement / Addition of network component in Distribution Substation	Mobile DT	1.41
			Model Village – Installation of LT Distribution Box & Service Cable	20.17
		LI Point Regularisation	LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	15.09
Sub Total - Network Reliability				**177.18**

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)
4	**Load Growth**	Network Enhancement	Construction of 33 kV New Line	93.31
			Construction of 11 kV New Line	34.92
			Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D)	31.57
			Addition / Augmentation of PTR	10.56
			Addition / Augmentation of DTR	15.89
			Provision of LT Protection (ACB / MCCB) for DTR	8.75
			Addition of New LT ABC Network	16.93
Sub Total - Load Growth				**211.93**
5	**Technology & Infrastructure**	Technology Intervention – IT & Technology	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	6.43
			Augmentation of IT Applications & Software	2.78
			Enhancement of Cybersecurity Solutions	9.07
		Improvement of Civil Infrastructure	Construction of Office Buildings	18.14
			Establishment of Technical and Safety Training Centre and mobile training facility	2.92
		Store Infrastructure	Store Infrastructure	2.85
		Ready to Use assets for Offices	Ready to Use assets for Offices	2.58
Sub Total - IT & Infrastructure				**44.77**
GRAND TOTAL				**525.30**

1 Statutory, Safety and Security

1.1 Life enhancement of network and maintaining safe horizontal / vertical clearances

1.1.1 Laying of 33 kV Underground Cable at NH / SH Crossings:

Safe and reliable power supply across highways is critical for ensuring uninterrupted electricity distribution. Presently, overhead lines crossing National and State Highways pose significant challenges such as frequent damages due to vehicular accidents, increased vulnerability to storms, and safety hazards for commuters. By shifting to underground cabling at these critical crossing points, TPWODL will enhance the reliability of supply, reduce the risk of outages and ensure compliance with statutory safety norms.

Investment in this activity is essential as it provides a long-term, sustainable solution that eliminates recurring maintenance and restoration costs associated with overhead line damages. Moreover, it aligns with the government's vision of building resilient infrastructure and ensuring public safety. Funding support under CAPEX will enable TPWODL to implement this initiative across major highway crossings, directly improving consumer satisfaction, reducing technical interruptions and strengthening the overall reliability of the distribution network in the region.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Laying of 33 kV Underground Cable at NH / SH Crossings	Nos.	88	14	74	10	64	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.1.1	Laying of 33 kV Underground Cable at NH / SH Crossings	Laying of 33 kV UG Cable at NH / SH Crossings	Nos.	10	2.86	Annexure - 1

1.1.2 Installation of 11 kV Overhead Cradle Guard at Road Crossings:

At road crossings, overhead 11 kV lines are highly exposed to risks of accidental contact with tall vehicles, construction equipment, or falling of conductors in case of snapping. Such incidents can result in electrical faults, prolonged outages, and, more critically, pose a severe threat to public safety. The installation of cradle guards at these crossings acts as an effective protective measure by preventing direct contact with live conductors, thereby ensuring both system reliability and public safety. This intervention also helps mitigate the chances of electrical accidents and reduces the risk of damage to distribution infrastructure.

Investment in this activity is vital as it provides a cost-effective yet impactful safety reinforcement across TPWODL's distribution network. CAPEX funding for cradle guard installation will not only safeguard lives and property but also minimize supply interruptions and improve compliance with safety regulations.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
11kV Road Crossing with Cradle Guard	Nos.	729	0	729	40	689	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.1.2	Installation of 11 kV Overhead Cradle Guard at Road Crossings	11kV Road Crossing with Cradle Guard	Nos.	40	1.97	Annexure - 2

1.1.3 Laying of 33 kV and 11 kV Underground Cables at Railway Crossings:

Railway crossings are critical junctions where uninterrupted power supply and utmost safety are essential. Overhead lines at these locations often face challenges such as insufficient clearance, frequent interruptions and safety risks to railway operations as well as the public. Shifting these lines underground provides a permanent, reliable, and secure solution. By laying 33 kV and 11 kV underground cables at railway crossings, TPWODL will eliminate the risks of accidental contact, minimize outages, and ensure seamless coordination with Indian Railways' operational and safety standards. This infrastructure improvement will also help avoid recurring disruptions caused by maintenance activities or shifting demands at these sensitive sites.

Investment in this activity is crucial to strengthening the reliability and safety of the distribution network in western Odisha. Underground cabling at railway crossings not only reduces operational hazards but also significantly lowers long-term maintenance costs associated with overhead infrastructure. With CAPEX funding, TPWODL can implement this initiative at key railway crossing points, thereby ensuring uninterrupted supply

for consumers, safeguarding critical railway signalling systems and supporting the region's infrastructure growth with a robust and future-ready distribution network.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV Railway Crossing using U/G Cable	Nos.	17	0	17	4	13	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
11 kV Railway Crossing using U/G Cable	Nos.	65	47	18	6	12	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.1.3	Laying of 33 kV and 11 kV Underground Cables at Railway Crossings	33 kV Railway Crossing using U/G Cable	Nos.	4	1.14	Annexure - 3
		11 kV Railway Crossing using U/G Cable	Nos.	6	1.16	
		TOTAL			**2.30**	

1.1.4 Replacement of HT Bare Conductor with Insulated Conductor:

Bare conductors in HT lines are highly vulnerable to faults arising from direct contact with trees, birds, and other objects, leading to frequent interruptions, energy loss and safety hazards. In rural and semi-urban areas, these risks are further compounded by narrow corridors and high vegetation density. Replacing bare conductors with insulated conductors will substantially reduce earth faults, short circuits, and tripping incidents. This will not only enhance supply reliability but also improve safety for the public, especially in densely populated and roadside areas. Additionally, insulated conductors are more resilient to adverse weather conditions, thereby reducing outage frequency and maintenance requirements.

Investment in this activity is essential for modernizing TPWODL's distribution network and aligning it with contemporary safety and reliability standards. The transition to insulated conductors will minimize technical losses and lower the risk of electrical accidents. With CAPEX support, TPWODL will be able to replace critical

stretches of bare conductor across its network, leading to higher operational efficiency, reduced downtime and enhanced consumer satisfaction through a more stable and secure power supply.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
11kV Bare to Insulated Conductor	Ckm.	5562	39.92	5522	8	4414	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
33kV Bare to Insulated Conductor	Ckm.	519.13	3.59	515.54	5	510.54	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.1.4	Replacement of HT Bare Conductor with Insulated Conductor	Replacement of 33 kV Bare Conductor with Insulated Conductor	Ckm.	5	1.52	Annexure - 4
		Replacement of 11 kV Bare Conductor with Insulated Conductor	Ckm.	8	1.60	
		TOTAL			**3.12**	

1.1.5 Intermediate Pole to increase height of 33 kV & 11 kV Network:

In several parts of the distribution network, existing 33 kV and 11 kV lines face clearance challenges due to road expansions, new construction, or natural obstacles such as trees. Insufficient ground clearance not only creates safety hazards for the public but also increases the risk of conductor snapping and supply interruptions. Installation of intermediate poles to increase the height of these lines ensures adequate statutory clearance, reduces chances of accidental contact and strengthens the physical stability of the network. This intervention directly enhances system reliability and compliance with safety norms.

Investment in this activity is vital as it addresses a recurring field challenge across western Odisha, where rapid infrastructure growth often conflicts with existing line alignments. By providing the necessary clearance through intermediate poles, TPWODL will minimize outages, lower the frequency of breakdowns, and reduce

risks to both people and property. CAPEX funding for this initiative will enable the company to systematically strengthen vulnerable stretches of the network, ensuring uninterrupted power supply, improved safety and long-term sustainability of the distribution infrastructure.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV Intermediate Pole	Nos.	4962	786	4176	335	3841	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
11 kV Intermediate Pole	Nos.	56574	16244	40330	835	39495	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.1.5	Intermediate Pole to increase height of 33 kV & 11 kV Network	33 kV Intermediate Pole	Nos.	335	2.53	Annexure - 5
		11 kV Intermediate Pole	Nos.	835	2.47	
		TOTAL			**5.00**	

1.2 Provision for Testing and Safety Equipment for workforce

1.2.1 Procurement of Testing Equipment:

Reliable operation of the distribution network depends not only on strong infrastructure but also on accurate diagnosis and timely maintenance of system components. Currently, limitations in field testing equipment slow down fault detection, preventive maintenance and condition monitoring of assets such as transformers, cables, and switchgear. By procuring advanced testing equipment, TPWODL can significantly improve its diagnostic capability, enabling faster fault identification, reduced outage duration and proactive maintenance interventions. This will enhance both supply reliability and consumer satisfaction while ensuring safer operating conditions for technical staff.

Investment in modern testing tools is essential for strengthening asset management practices and optimizing network performance. Advanced equipment such as relay testers, cable fault locators and insulation resistance testers will not only improve the accuracy of field operations but also reduce dependency on external resources, thereby lowering long-term operational costs. CAPEX funding for this activity will allow TPWODL to build in-house capacity for quick fault resolution, extend the life of critical assets and ensure a more resilient and efficient distribution network for the western region of Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.2.1	Procurement of Testing Equipment	Procurement of Testing Equipment	LS	-	7.42	Annexure - 6

1.2.2 Meter Testing Lab:

TPWODL has a large distribution area of 48373 sq. km. At the time of inception (vesting), there were no dedicated in-house Meter Testing Lab (MTL) available for statutory and routine meter testing. Post vesting, 3 Nos. MTL have been successfully established and are operational at Burla, Bolangir and Rajgangpur. These labs are currently catering to the meter testing needs of their respective regions.

However, with increasing consumer base, enhancement of metering systems, and strict enforcement of CEA Metering Regulations and other statutory standards, the existing capacity is inadequate to cater to the entire operational area. Hence, to meet the growing demand and statutory compliance, an expansion plan for establishing additional 6 Nos. MTL have been envisaged under CAPEX and will be put up for approval in the subsequent years in a phased manner.

In FY 2026-27, it is proposed to establish 1 No. MTL at Kesinga, which will cater to the testing requirements of the Kalahandi and nearby areas.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Meter Testing Lab	Nos.	9	3	6	1	5	An MTL is proposed at Kesinga to cover the entire Kalahandi circle, where the no of consumers is substantial and transportation costs are high, as every meter currently has to be sent to the Bolangir MTL for testing.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.2.2	Meter Testing Lab	Meter Testing Lab	LS	-	4.50	Annexure - 7

1.2.3 Procurement of Safety Equipment:

Ensuring the safety of field staff is a top priority in distribution operations, as they are routinely exposed to high-risk environments such as live-line maintenance, pole climbing, underground cabling and fault rectification in adverse weather conditions. Procuring safety equipment such as Multi-function Discharge Rod and Neon Tester across all divisions to strengthen workplace safety and significantly reduce workplace accidents, improve compliance with statutory safety regulations and boost workforce confidence while carrying out critical jobs.

Investment in safety equipment is essential as it directly impacts both employee well-being and network reliability. Safer working conditions lead to fewer incidents, reduced downtime, and better operational efficiency. Moreover, adherence to safety norms aligns with the government's focus on employee welfare and sustainable operations. CAPEX funding for this initiative will enable TPWODL to standardize safety practices across its operational areas, instil a strong safety culture and ensure uninterrupted, secure and reliable power distribution for consumers in western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.2.3	Procurement of Safety Equipment	Multi-function Discharge Rod	Nos.	412	1.00	Annexure - 8
		Neon Tester	Nos.	206	0.59	
		TOTAL			**1.59**	

1.3 Infrastructure works at Primary & Distribution Substation

1.3.1 Access Road for inside and outside of PSS:

Primary Sub-stations (PSS) form the backbone of TPWODL's distribution system, and their reliable operation depends on timely access for inspection, maintenance, and emergency restoration. Many substations in the western region of Odisha are in remote or semi-urban areas where proper approach roads are either unavailable or in poor condition. This makes it difficult for staff and maintenance vehicles to reach the site, especially during monsoon seasons, leading to delays in fault rectification and increased outage durations. Constructing and strengthening access roads within and outside the PSS premises will ensure uninterrupted mobility, faster response to breakdowns and safe movement of heavy equipment required for substation operations.

Investment in this activity is critical to improving the operational readiness and reliability of the distribution network. Well-constructed access roads will reduce downtime, improve asset upkeep, and enhance safety for both personnel and equipment. CAPEX funding for this initiative will allow TPWODL to systematically develop durable approach routes to substations, ensuring continuous accessibility under all weather conditions. This will directly contribute to improved supply reliability, faster restoration and greater consumer confidence in the quality of electricity distribution services.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Access Road for inside and outside of PSS	Nos.	166	93	73	20	53	Priority considered in: 1. Sambalpur and Rourkela main town. 2. Town areas in all five circles.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.1	Access Road for inside and outside of PSS	Access Road for inside and outside of PSS	Nos.	20	2.00	Annexure - 9

1.3.2 Renovation / Construction of Control Room Building in PSS:

The Control Room building in Primary Sub-station (PSS) serves as the operational hub, housing critical equipment such as control panels, relay systems, SCADA terminals, and communication infrastructure. In many substations across TPWODL, existing control room buildings are either old, inadequate in space, or in poor structural condition, thereby posing risks to equipment safety and restricting efficient operation. Renovation and new construction of control room buildings will ensure secure housing of vital assets, proper working conditions for operators and reliable functioning of protection and control systems.

Investment in this activity is essential as it directly safeguards high-value assets and improves the efficiency of substation operations. A well-designed and robust control room will enhance equipment lifespan, reduce the risk of failures due to environmental exposure, and create a safe workspace for staff. CAPEX funding will enable TPWODL to upgrade and modernize control rooms at priority substations, ensuring better monitoring, faster fault response and strengthened reliability of the overall distribution network.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Renovation of Control Room Building in PSS	Nos.	146	76	70	10	60	Priority considered in: 1. Sambalpur and Rourkela main town. 2. Town areas in all five circles.
Construction of Control Room Building in PSS	Nos.	20	5	15	4	11	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.2	Renovation / Construction of Control Room Building in PSS	Renovation of Control Room Building in PSS	Nos.	10	2.00	Annexure-10
		Construction of Control Room Building in PSS	Nos.	4	2.00	
		TOTAL			**4.00**	

1.3.3 Provision for Water Supply arrangement for PSS:

Continuous and reliable operation of Primary Sub-station (PSS) requires basic utilities such as water supply for equipment maintenance, fire protection systems, and staff facilities. At many substations in western Odisha, there is no permanent water source, which creates challenges in routine cleaning of equipment, cooling-related needs, firefighting preparedness and maintaining hygiene standards for staff working on-site. Provision of dedicated water supply arrangements, such as borewells, overhead tanks and internal distribution pipelines, will ensure uninterrupted availability of water within substations for both operational and safety requirements.

Investment in this activity is important as it directly contributes to the upkeep, safety, and reliability of substation operations. Adequate water availability enhances firefighting readiness, supports preventive maintenance of equipment and ensures a safe and hygienic environment for employees. CAPEX funding for water supply infrastructure will allow TPWODL to systematically equip its substations with reliable water facilities, thereby strengthening operational resilience, improving staff welfare and reducing risks associated with emergencies.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Provision for Water Supply arrangement for PSS	Nos.	166	108	58	58	0	As water connection is very essential in PSS, balance all 58 Nos. borewell have been proposed for FY 2026-27.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.3	Provision for Water Supply arrangement for PSS	Provision for Water Supply arrangement for PSS	Nos.	58	1.45	Annexure - 11

1.3.4 PSS Boundary Walls:

Primary Sub-stations (PSS) house critical distribution infrastructure and equipment that must be adequately secured to prevent unauthorized access, theft, and vandalism. Many substations across western Odisha either lack proper boundary walls or have old and damaged structures, making them vulnerable to security breaches, animal intrusion and environmental exposure. Constructing and strengthening boundary walls around PSS will provide a secure perimeter, protect high-value assets and ensure the safety of both equipment and operating staff.

Investment in this activity is essential for safeguarding critical assets and maintaining uninterrupted operations. Strong boundary walls act as a deterrent to theft of conductors and other vital components, while also ensuring compliance with safety norms by restricting public entry into high-risk zones. CAPEX funding for boundary wall construction will enable TPWODL to systematically secure all vulnerable substations, thereby enhancing asset protection, improving operational reliability and strengthening consumer confidence in the robustness of the distribution system.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
PSS Boundary Wall	Nos.	166	126	40	10	30	Priority considered in: 1. Sambalpur and Rourkela main town. 2. Town areas in all five circles.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.4	PSS Boundary Wall	PSS Boundary Wall	Nos.	10	3.00	Annexure - 12

1.3.5 DSS Fencing:

Distribution Transformers (DTRs) are among the most critical assets in the electricity distribution network, serving as the last-mile link for delivering power to consumers. However, many DTRs installed in open areas remain exposed to theft, vandalism, unauthorized tapping, and accidental contact by the public or animals.

Such incidents lead to frequent breakdowns, safety hazards, and financial losses. Providing proper fencing around DTRs will safeguard these assets, prevent unauthorized access, and ensure uninterrupted supply to consumers.

Investment in this activity is crucial for protecting valuable distribution infrastructure and improving network reliability. A secure fencing system reduces the risk of transformer oil theft, conductor damage, and electrical accidents, thereby lowering maintenance costs and outage frequency. CAPEX funding will enable TPWODL to implement fencing across vulnerable DTR installations in the western region of Odisha, enhancing asset protection, improving safety, and ensuring dependable electricity supply to end-users.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
DSS Fencing	Nos.	82752	3319	79433	545	78888	Priority considered in: 1. Sambalpur and Rourkela main town. 2. Town areas in all five circles.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.5	DSS Fencing	DSS Fencing	Nos.	545	6.00	Annexure - 13

1.3.6 Earthing for PSS & DSS:

Effective earthing is a fundamental requirement for the safe and reliable operation of both Primary Sub-stations (PSS) and Distribution Sub-stations (DSS). Inadequate or damaged earthing systems can result in dangerous step and touch voltages, compromise the effectiveness of protection systems and increase the risk of equipment failure or fatal electrical accidents. Strengthening and standardizing earthing arrangements across substations ensures the safe dissipation of fault currents, protects high-value equipment and provides a secure working environment for staff. This also helps in maintaining system stability and ensuring reliable supply to consumers.

Investment in this activity is essential as it directly impacts both safety and operational continuity. Proper earthing reduces equipment damage, minimizes outages caused by protection malfunctions, and ensures compliance with statutory safety standards. CAPEX funding will allow TPWODL to upgrade and implement robust earthing systems across its PSS and DSS locations, thereby safeguarding assets, enhancing personnel safety, and improving the overall resilience of the distribution network in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Earthing for PSS	Nos.	3288	1915	1373	916	457	Priority considered in PSS where earthing resistance value is more than 10 Ohms.
Earthing for DSS	Nos.	23334	5637	17697	2649	15048	Priority considered in: 1. Sambalpur and Rourkela main town. 2. Town areas in all five circles.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
1.3.6	Earthing for PSS & DSS	Earthing for PSS	Nos.	916	1.19	Annexure - 14
		Earthing for DSS	Nos.	2649	3.43	
		TOTAL			**4.62**	

2 Loss Reduction

2.1 Energy Audit & Meter related activity

2.1.1 Installation of 1ph Smart Meters:

The Hon'ble Odisha Electricity Regulatory Commission (OERC) has mandated Odisha DISCOMs to modernize the metering infrastructure and prioritize the implementation of smart meters, in line with the Government of India's mission. This aligns with the national objective of improving energy efficiency, enhancing billing transparency, and reducing distribution losses through advanced metering infrastructure.

As of FY 2025-26, 4.68 lakh 1ph Smart Meters have been installed out of a total consumer base of 21.26 lakh 1ph consumers. This leaves a balance of over 16.58 lakh consumers yet to be migrated to smart metering infrastructure.

TPWODL plans to complete the remaining smart meter installation in a phased manner under subsequent CAPEX proposals, with a focus on improving billing efficiency, reducing AT&C losses, and ensuring regulatory compliance. The present proposal is part of this roadmap, targeting the next major tranche of installations in FY 2026-27.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Replacement of 1ph Static Faulty meters with Smart Meters Mass Meter Replacement 1ph Smart Meter installation (replacement of old static meters > 5 Years)	Nos.	2126985	611785	1515200	230000	1285200	Faulty meters and old meters age > 5 Years.
1ph Smart Meter Installation in old unbilled connections availing power from network	Nos.	52000	35500	16500	16500	0	Need to bring all consumers under billing net.
Shifting of existing meters from inside to outside / lowering of height	Nos.	170000	60000	110000	15000	95000	Prioritized as per high loss villages identified.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.1	Installation of 1ph Smart Meters	Installation of 1ph Smart Meters	LS	-	17.46	Annexure - 15

2.1.2 Installation of 3ph Smart Meters at Agriculture LI Connections:

The Hon'ble Odisha Electricity Regulatory Commission (OERC) has mandated Odisha DISCOMs to modernize the metering infrastructure and prioritize the implementation of smart meters, in line with the Government of India's mission. This aligns with the national objective of improving energy efficiency, enhancing billing transparency, and reducing distribution losses through advanced metering infrastructure.

To address this, TPWODL initiated a phased smart meter rollout for agriculture LI consumers. As of FY 2025-26; 62,761 Nos. Smart Meters have been installed out of a total 1,04,867 Nos. agriculture LI connections. The remaining 42,106 Nos. connections are proposed to be covered in successive CAPEX cycles.

The current proposal for FY 2026-27 focuses on high-loss regions and critical feeders to further reduce technical and commercial losses and to bring the remaining agriculture LI consumers under smart metering.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Installation of 3ph Smart Meters at Agriculture LI Connections	Nos.	104867	62761	42106	22000	20106	Considered divisions with high AT&C loss.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.2	Installation of 3ph Smart Meters at Agriculture LI Connections	Installation of 3ph Smart Meters at Agriculture LI Connections	Nos.	22000	2.33	Annexure - 16

2.1.3 Installation of Meters inside PSS for Energy Audit:

Accurate measurement and monitoring of energy flow is essential for effective loss reduction and efficiency improvement in the distribution network. At present, many PSS lack adequate metering at outgoing feeders and critical points, which restricts TPWODL's ability to carry out precise energy audits. Installation of meters

inside PSS will provide real-time and reliable data for energy accounting, enabling identification of technical and commercial losses, better load management, and targeted interventions for system improvement.

Investment in this activity is important as it supports transparent energy accounting and strengthens TPWODL's efforts toward reducing Aggregate Technical & Commercial (AT&C) losses. With accurate feeder-level metering, the company can pinpoint high-loss areas, improve billing efficiency, and ensure compliance with regulatory requirements on energy auditing. CAPEX funding for this initiative will allow systematic installation of modern, tamper-proof meters at substations, thereby promoting operational efficiency, financial sustainability, and consumer confidence in the distribution system.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV I/C Feeder Metering	Nos.	464	349	115	115	0	All balance considered.
11 kV O/G Feeder Metering	Nos.	1236	1176	60	60	0	All balance considered.
PTR Metering	Nos.	692	0	692	306	390	Non-DLMS meters and at HV side of PTR are considered.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.3	Installation of Meters inside PSS for Energy Audit	33 kV I/C Feeder Metering	Nos.	115	0.47	Annexure - 17
		11 kV O/G Feeder Metering	Nos.	60	0.25	
		PTR Metering	Nos.	306	1.25	
		TOTAL			**1.97**	

2.1.4 DTR Smart Metering for Energy Audit:

Distribution Transformers (DTRs) are the critical link between the distribution network and end consumers, and accurate metering at this level is essential for precise energy accounting. At present, the absence of DTR-level metering limits visibility of technical and commercial losses in the last-mile network. Installation of smart meters at DTRs will provide real-time data on energy input and consumption patterns, enabling effective

energy audits, detection of theft or pilferage, and identification of overloaded transformers. This will allow TPWODL to undertake timely corrective actions, improve load balancing, and enhance network efficiency.

Investment in this activity is vital as it directly contributes to AT&C loss reduction and financial sustainability. Smart meters at DTRs enable granular monitoring, support remote data acquisition, and improve transparency in energy flow analysis. With CAPEX funding, TPWODL can implement large-scale DTR smart metering across its service area in western Odisha, strengthening operational control, ensuring compliance with regulatory directives on energy accounting, and enhancing consumer trust by delivering a more reliable and accountable power supply.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
100 kVA & above DTR Smart Metering	Nos.	12061	8313	3748	1000	2748	DTs connected to industrial, town, and high-revenue feeders taken as priority.
100 kVA & below DTR Smart Metering	Nos.	85073	0	85073	1000	84073	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.4	DTR Smart Metering for Energy Audit	100 kVA & above DTR Smart Metering	Nos.	1000	1.59	Annexure - 18
		100 kVA & below DTR Smart Metering	Nos.	1000	1.81	
		TOTAL			**3.40**	

2.1.5 High Value Industrial Audit Point Metering:

High-value industrial consumers form a major share of energy demand and revenue for TPWODL. Accurate and reliable metering of these consumers is essential to ensure correct billing, prevent revenue leakage, and maintain transparency in energy accounting. In many cases, existing metering arrangements need upgradation to modern, high-accuracy meters with advanced features such as tamper detection, remote data acquisition

and load profiling. Establishing dedicated audit point metering for high-value industrial consumers will provide precise measurement, reduce commercial losses and enable timely detection of anomalies.

Investment in this activity is critical as it directly impacts financial sustainability and compliance with regulatory requirements. Advanced metering at industrial audit points will improve billing efficiency, enhance consumer confidence through transparent measurement, and support better demand forecasting. CAPEX funding for this initiative will allow TPWODL to implement robust metering infrastructure for its most critical consumer segment, thereby strengthening revenue assurance, improving operational efficiency and aligning with the broader objectives of accurate energy accounting and loss reduction.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
High Value Industrial Audit Point Metering	Nos.	63	47	16	16	0	100% metering activity will be cover for identified audit point.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.5	High Value Industrial Audit Point Metering	High Value Industrial Audit Point Metering	Nos.	16	1.05	Annexure - 19

2.1.6 LT Check Metering on HT consumers for Energy Audit:

HT consumers constitute a significant portion of the revenue base, and ensuring accurate measurement of their consumption is critical for both financial sustainability and regulatory compliance. While primary metering is installed at the HT level, discrepancies sometimes arise due to technical factors, meter accuracy issues, or tampering attempts. By installing LT check meters on HT consumers, TPWODL can validate primary meter readings, detect anomalies in consumption data, and carry out more reliable energy audits. This dual-layer metering arrangement enhances transparency, reduces disputes and strengthens loss control measures.

Investment in this activity is vital as it directly supports revenue assurance and improves confidence in billing accuracy. LT check metering will allow early detection of deviations, help in identifying potential pilferage, and provide additional data points for energy accounting. CAPEX funding for this initiative will enable TPWODL to implement check metering systematically across high-value HT consumers, ensuring robust monitoring, strengthening audit practices and contributing to reduction in AT&C losses while improving overall trust between utility and consumers.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
LT Check Metering on HT consumers for Energy Audit	Nos.	2521	2331	190	190	0	100% check metering activity will be cover for identified HT consumers.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.1.6	LT Check Metering on HT consumers for Energy Audit	LT Check Metering on HT consumers for Energy Audit	Nos.	190	0.30	Annexure - 20

2.2 Replacement of LT Bare Conductor with AB Cable

2.2.1 Replacement of LT Bare Conductor with AB Cable:

The existing LT bare conductor network is highly vulnerable to theft, hooking, and faults due to direct contact with trees, animals, and other objects. This not only contributes significantly to AT&C losses but also poses serious safety hazards for the public. Replacing bare conductors with AB Cables offers a reliable solution, as the insulated bundled design prevents power theft through hooking, reduces fault frequency, and enhances safety in densely populated and roadside areas. AB cables also require less corridor clearance, minimizing tree-cutting and making them suitable for urban, semi-urban, and rural networks alike.

Investment in this activity is crucial for improving the efficiency, safety, and sustainability of the distribution system in western Odisha. Adoption of AB cables will significantly reduce technical and commercial losses,

lower maintenance requirements, and improve quality of supply. With CAPEX support, TPWODL can systematically replace vulnerable stretches of LT bare conductor with AB cable, leading to reduced outages, enhanced consumer satisfaction, and long-term financial benefits through loss reduction.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Replacement of LT Bare Conductor with 95 sq. mm AB Cable	Ckm.	2337.89	854.89	1483	100	1383	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
Replacement of LT Bare Conductor with 120 sq. mm AB Cable	Ckm.	903.16	361.12	542.04	100.83	441.21	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
2.2.1	Replacement of LT Bare Conductor with AB Cable	Replacement of LT Bare Conductor with 95 sq. mm AB Cable	Ckm.	100	6.89	Annexure - 21
		Replacement of LT Bare Conductor with 120 sq. mm AB Cable	Ckm.	100.83	8.19	
		TOTAL			**15.08**	

3 Network Reliability

3.1 Replacement / Addition of network component in 33 / 11 kV Primary Substation

3.1.1 Installation / Replacement of 33 kV and 11 kV Breaker / Group Breaker:

Circuit breakers are critical protection devices that ensure safe and reliable operation of the 33 kV and 11 kV distribution network by isolating faulty sections during abnormal conditions. Many existing breakers and group breakers in TPWODL's network have become old, outdated, or are facing frequent operational issues, leading to delayed fault clearance, higher outage durations, and increased risk of equipment damage. Installation of new breakers and replacement of obsolete ones will enhance system protection, improve fault management, and ensure compliance with modern operational standards.

Investment in this activity is essential to strengthen the protection backbone of the distribution system in western Odisha. Modern breakers with advanced operational features provide faster response, greater reliability, and reduced maintenance needs. CAPEX funding for this initiative will enable TPWODL to upgrade critical substations with robust breaker systems, thereby reducing downtime, protecting valuable assets like transformers and feeders, and ensuring uninterrupted and safe power supply to consumers.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV I/C Feeder VCB	Nos.	178	127	51	36	15	1. To attend no VCB Cases. 2. For protection of PTR bay. 3. For critical Feeder bays.
33 kV PTR VCB	Nos.	201	152	49	34	15	
11 KV O/G Feeder VCB	Nos.	423	289	134	50	84	
11 KV PTR VCB	Nos.	232	129	103	30	73	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.1	Installation / Replacement of 33 kV and 11 kV Breaker / Group Breaker	Installation / Replacement of 33 kV Breaker / Group Breaker	Nos.	70	16.09	Annexure - 22
		Installation / Replacement of 11 kV Breaker / Group Breaker	Nos.	80	10.27	
		TOTAL			**26.36**	

3.1.2 Installation of LA (33 kV & 11 kV) in PSS:

Lightning and switching surges are among the most common causes of damage to substation equipment such as transformers, breakers, and control systems. Inadequate protection against these surges can lead to equipment failure, prolonged outages, and high restoration costs. Installation of Lightning Arresters (LAs) at 33 kV and 11 kV levels in PSS provides a first line of defence by safely diverting surge energy to the ground, thereby protecting critical assets and ensuring supply reliability.

Investment in this activity is vital for safeguarding high-value infrastructure and maintaining uninterrupted power distribution in western Odisha. Properly installed and maintained LAs significantly reduce the risk of breakdowns during lightning events and adverse weather conditions, minimizing outages and maintenance costs. CAPEX funding for this initiative will enable TPWODL to strengthen the resilience of its substations, extend the lifespan of costly equipment, and deliver safer and more reliable electricity supply to consumers.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Installation of 33 kV LA inside PSS	Nos.	4721	3161	1560	474	1086	Priorities were given to installation of LAs on both sides of PTRs.
Installation of 11 kV LA inside PSS	Nos.	7317	4266	3051	933	2118	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.2	Installation of LA (33 kV & 11 kV) in PSS	Installation of 33 kV LA inside PSS	Sets	158	1.28	Annexure - 23
		Installation of 11 kV LA inside PSS	Sets	311	1.03	
		TOTAL			**2.31**	

3.1.3 Replacement of Feeder / Transformer protection Relays (O/C & E/F):

As TPWODL is moving towards complete automation and SCADA enabled PSS, it is critical to ensure that all protective relays are compatible with future operational and communication protocols. Currently, several PSS installations are equipped with outdated, malfunctioning, or non-IEC 61850 compatible relays. These legacy devices are either no longer supported by their OEMs or are prone to operational issues such as display failures, communication errors, or frequent system hangs. Such limitations hinder remote operation through SCADA and mobile operating crew systems, reducing reliability and increasing operational risk.

Investment under this activity is essential to enable seamless operation under the future automation framework, Including SCADA integration and remote operation, it is essential to replace these outdated devices with modern numerical relays that fully support IEC 61850 protocol.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Replacement of Feeder / Transformer protection Relays (O/C & E/F)	Nos.	536	476	60	60	0	To complete balance relay replacement work: 1. Outgoing feeders 2. Transformer feeders

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.3	Replacement of Feeder / Transformer protection Relays (O/C & E/F)	Replacement of Feeder / Transformer protection Relays (O/C & E/F)	Nos.	60	0.76	Annexure - 24

3.1.4 Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer:

Station Transformers are essential for meeting the auxiliary power requirements of substations, such as lighting, control room operations, battery chargers, cooling systems, and other auxiliary loads. In several substations under TPWODL, the absence of a dedicated station transformer or reliance on old, under-rated units results in unreliable auxiliary supply, which can hamper smooth operation of protection, control, and communication systems. Installing 33 / 0.4 kV, 100 kVA station transformers will ensure a dependable low-voltage supply within substations, thereby supporting uninterrupted functioning of critical systems.

Investment in this activity is crucial as it strengthens the self-sufficiency and operational reliability of substations. A dedicated station transformer not only ensures continuous auxiliary supply but also improves safety, reduces dependency on external sources, and supports the integration of modern monitoring and automation equipment. CAPEX funding for this initiative will allow TPWODL to equip its substations with

reliable auxiliary supply infrastructure, thereby enhancing operational efficiency, reducing downtime, and ensuring robust performance of the distribution network in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	Nos.	59	53	6	6	0	Considered all balance PSS.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.4	Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	Nos.	6	0.88	Annexure - 25

3.1.5 Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel:

Reliable auxiliary power supply is critical for the smooth functioning of protection, control, and communication systems in substations. Batteries, battery chargers, and associated ACDB (AC Distribution Board) and DCDB (DC Distribution Board) panels ensure uninterrupted DC and AC supply to relays, breakers, and control equipment even during grid disturbances or outages. However, many of these components in existing substations have aged, leading to frequent failures, reduced backup capacity, and increased risk of maloperation of protection systems. Replacing these with modern, high-reliability units will ensure dependable auxiliary power, minimize equipment downtime and safeguard the integrity of substation operations.

Investment in this activity is essential as it directly impacts system reliability and safety. Modern battery banks and chargers provide higher efficiency, better monitoring features, and longer life, while upgraded ACDB and DCDB panels improve load management and protection of auxiliary systems. CAPEX funding for this initiative will enable TPWODL to systematically upgrade critical auxiliary power infrastructure across substations, thereby ensuring uninterrupted functioning of control and protection systems, enhancing network stability, and improving consumer confidence in the reliability of electricity supply.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Replacement of Battery	Nos.	194	179	15	15	0	All balance Battery and Battery Chargers are considered for replacement.
Replacement of Battery Charger	Nos.	130	117	13	13	0	
Replacement of ACDB Panel	Nos.	69	45	24	10	14	PSS in Town and Industrial areas are considered.
Replacement of DCDB Panel	Nos.	55	37	18	10	8	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.5	Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel	Replacement of Battery	Nos.	15	0.20	Annexure - 26
		Replacement of Battery Charger	Nos.	13	0.42	
		Replacement of ACDB Panel	Nos.	10	0.38	
		Replacement of DCDB Panel	Nos.	10	0.15	
		TOTAL			**1.15**	

3.1.6 Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.):

Power Sub-Stations (PSS) are critical nodes in the distribution network, and their safe, efficient operation depends on a combination of robust civil and electrical infrastructure. Over time, many substations under TPWODL have developed structural deficiencies such as damaged fencing, inadequate bus clearances, eroded earth pits, broken trench covers and weakened boundary structures. These issues compromise equipment safety, increase risks of electrical accidents, and hinder routine maintenance activities. Refurbishment of PSS through measures such as switchyard fencing, bus heightening, proper water arrangements for earth pits, strengthening of cable trenches, provision of trench covers, and construction of toe walls will restore operational safety and reliability.

Investment in this activity is essential to protect valuable substation assets and to comply with statutory safety standards. Timely refurbishment will extend the life of existing infrastructure, reduce outage risks, and improve the working environment for staff. CAPEX funding will enable TPWODL to systematically address structural and safety gaps across substations, ensuring robust asset protection, operational resilience, and reliable power delivery to consumers in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	Nos.	317	243	74	11	63	Priority of PSS which were having a large number of high revenue feeders and catering the load of city, town and industrial areas.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.6	Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	Nos.	11	3.33	Annexure - 27

3.1.7 Automation of Non-ODSSP & SCADA integration in PSS:

Automation of substations is a key step toward modernizing the distribution network and ensuring efficient, reliable, and safe operations. While several substations under ODSSP (Odisha Distribution System Strengthening Project) are already equipped with automation, many non-ODSSP substations continue to operate manually, resulting in delayed fault detection, slower restoration, and limited visibility of real-time operating conditions. By extending automation and integrating these substations with SCADA (Supervisory

Control and Data Acquisition) systems, TPWODL can achieve centralized monitoring and control, faster fault isolation, and improved load management.

Investment in this activity is vital as it aligns with the vision of creating a smarter, more resilient power distribution system. SCADA-enabled substations will reduce outage duration, improve data-driven decision-making, and enhance preventive maintenance through real-time insights. CAPEX funding for this initiative will allow TPWODL to standardize automation across substations, integrate them into the SCADA platform, and build a future-ready grid that ensures higher reliability, reduced operational costs, and improved consumer satisfaction across western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Automation of Non-ODSSP & SCADA integration in PSS	Nos.	317	274	43	43	0	100% PSS Automation planned by FY 2026-27.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.1.7	Automation of Non-ODSSP & SCADA integration in PSS	Automation of Non-ODSSP & SCADA integration in PSS	Nos.	43	1.53	Annexure - 28

3.2 Replacement / Addition of network component in 33 kV & 11 kV Line

3.2.1 Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage):

The 33 kV network is the backbone of the distribution system, carrying bulk power from grid substations to downstream 11 kV feeders. However, several 33 kV lines in western Odisha are decades old, with deteriorated conductors, leaning poles, and compromised clearances, resulting in frequent tripping and high technical losses. In addition, increased demand from industrial growth, irrigation, and rural electrification has caused significant overloading on many existing feeders, leading to undervoltage and unreliable supply. Augmentation of these aged and overloaded 33 kV lines through reconductoring with higher capacity conductors,

strengthening of support structures, and realignment where necessary will restore efficiency and improve supply reliability.

Investment in this activity is essential to ensure safe and efficient evacuation of power across the region. Strengthening old 33 kV lines will reduce outages, improve voltage stability, and support load growth without compromising reliability. CAPEX funding will enable TPWODL to modernize critical 33 kV corridors, reduce technical losses, and create adequate capacity for future demand, thereby ensuring robust, high-quality power distribution across western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.1	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	39.02	Annexure - 29.1 to Annexure - 29.23

33 kV Line Augmentation Proposals and Cost Break Up for FY 2026-27:

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
1	33 kV line augmentation of Agalpur (Melchhamunda) feeder from Barpali GSS to T-off of Charmunda PSS	2.42	29.1
2	33 kV line augmentation of Thuapali feeder from Thuapali PSS to Bheden PSS	2.65	29.2
3	33 kV line augmentation of Patnagarh feeder from Patnagarh GSS to Patnagarh PSS	0.99	29.3
4	33 kV line augmentation of Dharamgarh new feeder from Brundabahal GSS to Dharamgarh PSS	3.62	29.4
5	33KV Bhawanipatna-2 feeder augmentation from Tapping of Utkela Airport to Raisingpur PSS	4.91	29.5
6	33KV Bhawanipatna-2 feeder augmentation from Kesinga Chowk to Christian House	0.45	29.6
7	33KV Bhawanipatna-2 feeder augmentation from Kesinga Chowk to Karlapada Tapping	4.84	29.7
8	33 kV Rourkela-I feeder trunk line augmentation from Mandiakudar PSS to Bajrang Steel	1.59	29.8
9	33 kV line augmentation of Lephripada feeder Kalobahal 4 pole to Garjanbahal PSS	1.45	29.9
10	33KV line augmentation of PGCIL outgoing feeder from NIT PSS to PGCIL	0.91	29.10
11	33 kV line augmentation of Basanti feeder from Chhend GSS (near by) to Ring road	0.05	29.11

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
12	33KV line augmentation of Industrial Estate feeder from Kachrapulia to Utkal Flourmill	1.66	29.12
13	33KV line augmentation of Pilot Project feeder from Kachrapulia to STI overbridge	0.90	29.13
14	33KV line augmentation of Purnapani feeder from Akanksha Hostel to Sarvesh Factory	2.42	29.14
15	33V line augmentation Rajamunda feeder from Rajamunda PSS to Vidya Minerals	0.72	29.15
16	33 kV line augmentation Bonai feeder from Bonai PSS to Shivshakti Metallics	0.72	29.16
17	33 kV line augmentation of Industrial -1 feeder from Budhipadar GSS to first DP structure and T-off to JYOTI PETRO CHEMICALS (HTC)	0.11	29.17
18	33 kV line augmentation of Cheruapada feeder near Queens play school	0.05	29.18
19	33 kV line augmentation With Covered Conductor From Powerhouse Pada To Nursinga Mandir	0.15	29.19
20	33 kV line augmentation of Jharupada feeder from Kanjihjaran to Balaji Road	0.91	29.20
21	33 kV line augmentation of OPGC feeder from Remja GSS to Bandhbahal PSS	4.83	29.21
22	33 kV line augmentation of Godbhaga feeder from Gosala PSS to Godbhaga PSS	1.93	29.22
23	Replacement of Sick Cable from Akankshya Hostel to Kalinga Bihar PSS of 33 kV Kalinga Bihar PSS	0.72	29.23
Total		**39.02**	

3.2.2 Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / under-voltage):

The 11 kV network forms the backbone of power distribution, carrying electricity from substations to distribution transformers and ultimately to end consumers. However, many stretches of 11 kV lines in western Odisha are decades old and suffer from frequent breakdowns due to conductor sagging, weakened poles, and insulation deterioration. In addition, growing demand in certain pockets has resulted in overloading of feeders, leading to undervoltage issues, frequent trippings, and consumer dissatisfaction. Augmentation of old and overloaded 11 kV lines through reconductoring, strengthening, and load balancing will ensure reliable power delivery, improved voltage profile, and reduced interruptions.

Investment in this activity is essential for modernizing TPWODL's distribution network and meeting rising consumer demand. Strengthening of aged lines will minimize technical losses, extend the life of network assets, and enhance operational safety. CAPEX funding will allow TPWODL to systematically upgrade critical feeder sections, eliminate chronic undervoltage and overloading issues, and deliver stable, high-quality power supply to both domestic and industrial consumers in western Odisha, thereby directly contributing to economic growth and consumer satisfaction.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.2	Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	37.48	Annexure - 30.1 to Annexure - 30.45

11 kV Line Augmentation Proposals and Cost Break Up for FY 2026-27:

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
1	11 kV line augmentation of Bondamunda feeder from PSS to Kapatmunda (Tail end)	3.01	30.1
2	11 kV line augmentation of Overloaded cable of MS Pali feeder near PSS	0.09	30.2
3	11 kV line augmentation of OSAP feeder from NIT PSS to Sector-5	2.29	30.3
4	11 kV line augmentation of Industry-I feeder from Koida PSS to Sanikpur	1.09	30.4
5	11 kV line augmentation of OMC feeder from Sashyakela to Kurmitra Mines	1.23	30.5
6	11 kV line augmentation of BPUT feeder From Chhend PSS to RDA market	0.25	30.6
7	11 kV line augmentation of Lahunipara feeder from Rajamunda PSS to Kalaiposh	1.21	30.7
8	11 kV line augmentation of Rajgangpur Town-2 feeder from Surudihi to Line no-2	0.44	30.8
9	11 kV line augmentation of Rajgangpur Town-2 feeder from Liploi bridge to Kisanpada.	0.18	30.9
10	11 kV line augmentation of Rajgangpur Town-1 feeder from IT colony to Baba Talab.	0.82	30.10
11	11 kV line augmentation of Lamtibahal feeder from Brajrajnagar PSS to Infinite Hyper mart	0.18	30.11
12	11 kV line augmentation of Brajrajnagar feeder from Brajrajnagar PSS to Railway Hospital Brajrajnagar	0.55	30.12
13	11 kV line augmentation of Dhanupali feeder from Putibandh PSS to Dhanupali chowk	0.31	30.13
14	11 kV line augmentation Brookshill feeder from Putibandh PSS to Dhankuda	0.27	30.14
15	11 kV line augmentation of Sunapali feeder from Putibandh PSS to Sunapali Jhanda Chowk	0.44	30.15
16	11 kV line augmentation of 11 kV LIC feeder from Shakti Pitha to Radhamadhaba DSS	0.47	30.16
17	11 kV line augmentation of OMP feeder Sarasmal PSS to Shiv Mandir at Panchpoda road	0.84	30.17
18	11 kV line augmentation of Jharsuguda-I feeder from Sarasmal PSS to Hotel Konark	0.93	30.18

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
19	11 kV line augmentation Badbazar feeder from Badbazar PSS to Dhubapada Chowk	0.20	30.19
20	11 kV line augmentation of Bijepur feeder from Bandhapari PSS to 5T School Bengaon	1.42	30.20
21	11 kV line augmentation of Mednipur feeder from Kusadungri PSS to Deypur-1 Near Primary DTR	1.54	30.21
22	11 kV line augmentation of Balipada feeder from Narla PSS to Godabandh Uccha Vidyalaya	1.42	30.22
23	11 kV line augmentation of Gobra feeder From Bandhupala PSS to Badli-1 DTR	0.88	30.23
24	11 kV line augmentation of Chikli feeder from Godramal PSS to Bahirpada Village-25 kVA DTR	1.34	30.24
25	11 kV line augmentation of Mangalpur feeder from Mukhiguda PSS to ICRM church	0.95	30.25
26	11 kV line augmentation of Dhanpur feeder from Badkatru PSS to Dhanpur OLIC-2 25 kVA DTR	1.08	30.26
27	11 kV line augmentation of Gopalpur feeder from TH Rampur PSS to Kundabahal	1.08	30.27
28	11 kV line augmentation of Kendumunda feeder from Sinapali PSS to Tendpadar	1.21	30.28
29	11 kV line augmentation ofSingjhor feeder from Sinapali PSS to Singhijhor	0.84	30.29
30	11 kV line augmentation ofBhaleswar feeder from Bisora PSS to Bhakarmal OLIC	0.88	30.30
31	11 kV line augmentation of Barhaguda feeder from Pradhanpali PSS to NH Crossing	0.30	30.31
32	11 kV line augmentation of Debrigarh feeder from Baragarh Bus Stand to Attabira	0.73	30.32
33	11 kV line augmentation of Sargul feeder from Jharband PSS to Sargul DTR (25 kVA)	0.58	30.33
34	11 kV line augmentation of Lebdi feeder from Gaisilet PSS to near Dangabahal	0.58	30.34
35	11 kV line augmentation of 11 kV Palsada feeder from Near Rajendrapur DTR (25 kVA) to Near Balangir DTR (63 kVA).	0.61	30.35
36	11 kV line augmentation of Jagdalpur feeder from Godamal Road to Near Padampur Highway Road	0.65	30.36
37	11 kV line augmentation of Hardatal feeder from Jhankarpali to Dudukasira Village	0.68	30.37
38	11 kV line augmentation of Kansaripada feeder to from Sudpada PSS to Bypass Road	0.34	30.38
39	11 kV line augmentation of Sargada feeder from Sargad Village to Barkani Village	0.48	30.39
40	11 kV line augmentation of Arjunpur feeder From PSS to Kandhanbahal	1.08	30.40
41	11 kV line augmentation of Salepali feeder from Bhatabhali PSS	1.68	30.41

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
42	11 kV line augmentation Sargul feeder from Cherupali PSS	1.26	30.42
43	11 kV line augmentation of Kantabanji town 2 feeder from Kantabanji PSS to nearby Kantabanji Eidgaah	0.48	30.43
44	11 kV line augmentation of Bhatipada feeder from Titlagarh PSS to nearby railway track	0.27	30.44
45	11 kV line augmentation Patnagarh Town-2 feeder from Patnagarh PSS to nearby Tikapali govt school	0.32	30.45
Total		**37.48**	

3.2.3 Installation of 33 kV & 11 kV FPI:

Fault Passage Indicators (FPIs) are essential tools for improving fault detection and restoration efficiency in distribution networks. In the current system, identification of fault locations on 33 kV and 11 kV feeders often requires lengthy patrolling, resulting in extended outage durations and consumer inconvenience. By installing FPIs at strategic points, TPWODL can quickly identify the section of the line where the fault has occurred, enabling faster isolation and restoration of supply to unaffected areas. This not only reduces downtime but also improves overall reliability and operational efficiency.

Investment in this activity is crucial as it directly supports the goal of reducing SAIDI / SAIFI indices (outage frequency and duration) and enhancing consumer satisfaction. FPIs provide real-time fault information, improve the effectiveness of maintenance teams, and help in quicker decision-making during emergencies. CAPEX funding for this initiative will allow TPWODL to deploy FPIs across critical feeders, thereby reducing restoration time, lowering operational costs, and strengthening the resilience of the distribution network in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV FPI	Sets	1282	172	1110	120	990	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
11 kV FPI	Sets	1316	340	976	100	876	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.3	Installation of 33 kV & 11 kV FPI	33 kV FPI	Sets	120	2.94	Annexure - 31
		11 kV FPI	Sets	100	2.45	
		TOTAL			**5.39**	

3.2.4 Installation of 33 kV & 11 kV AB Switches, Isolator & RMU:

Effective sectionalizing and isolation equipment is essential for safe operation and maintenance of the distribution system. In many parts of the 33 kV and 11 kV network under TPWODL, the absence of sufficient Air Break (AB) switches, isolators, and Ring Main Units (RMUs) hampers operational flexibility, prolongs outage restoration, and exposes maintenance teams to safety risks. Installing these devices at critical points will enable safe isolation of faulty sections, facilitate load transfer, and improve supply continuity by minimizing the impact of faults on consumers.

Investment in this activity is critical to strengthen the reliability and maintainability of the distribution system. RMUs, in particular, are compact and suitable for urban areas, offering enhanced safety and provision for automation. AB switches and isolators provide essential manual control for maintenance and emergency operations. CAPEX funding will enable TPWODL to systematically deploy these devices across its network, thereby reducing downtime, enhancing operational safety, and ensuring uninterrupted supply to consumers in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
11 kV AB Switch	Nos.	6250	3464	2786	300	2486	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
33 kV Isolators	Nos.	333	82	251	100	151	
33 kV 3 Way RMU	Nos.	27	11	16	4	12	
33 kV 4 Way RMU	Nos.	18	6	12	6	6	
11 kV 3 Way RMU	Nos.	537	76	461	10	451	
11 kV 4 Way RMU	Nos.	142	13	129	10	119	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.4	Installation of 33 kV & 11 kV AB Switches, Isolator & RMU	11 kV AB Switch	Nos.	300	1.15	Annexure - 32
		33 kV Isolators	Nos.	100	3.99	
		33 kV RMU	Nos.	10	5.39	
		11 kV RMU	Nos.	20	3.49	
		TOTAL			**14.02**	

3.2.5 33 kV & 11 kV Polymer Insulator / LA:

Insulators and Lightning Arresters (LAs) are critical components of the distribution network, ensuring both operational reliability and safety. Many existing porcelain insulators and aged LAs in the 33 kV and 11 kV system have become prone to breakage, flashovers, and failure under mechanical and environmental stress. This results in frequent line tripping, safety hazards, and damage to costly equipment. Replacing them with modern polymer insulators and reliable lightning arresters will improve mechanical strength, reduce the risk of outages during lightning and adverse weather, and extend the life of distribution assets.

Investment in this activity is essential to modernize and strengthen TPWODL's network infrastructure. Polymer insulators are lighter, more durable, and resistant to vandalism and environmental degradation compared to traditional porcelain types, while new LAs provide robust protection against surges. CAPEX funding for this initiative will enable systematic replacement of old insulators and LAs, thereby enhancing network resilience, reducing maintenance costs, and ensuring safe and uninterrupted power supply to consumers in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
33 kV LA	Nos.	2361	429	1932	300	1632	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
11 kV LA	Nos.	34097	6063	28304	159	27875	
11 kV Polymer Pin Insulator	Nos.	221158	22422	198736	5000	193736	
11 kV Polymer Disc Insulator	Nos.	72124	593	71531	800	70731	
33 kV Polymer Pin Insulator	Nos.	43258	16860	26398	6000	20398	
33 kV Polymer Disc Insulator	Nos.	7173	2416	4757	100	4657	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.5	33 kV & 11 kV Polymer Insulator / LA	33 kV LA	Sets	100	0.81	Annexure - 33
		11 kV LA	Sets	53	0.18	
		33 kV Polymer Insulator	Nos.	6100	0.7	
		11 kV Polymer Insulator	Nos.	5800	0.48	
		TOTAL			**2.17**	

3.2.6 33 kV & 11 kV Auto Recloser / Sectionaliser:

Frequent transient faults such as those caused by lightning, vegetation contact, or animal interference are a major cause of outages in the distribution system. Manual intervention for fault clearance often leads to long interruptions and consumer dissatisfaction. Installation of Auto Reclosers and Sectionalisers at 33 kV and 11 kV levels will enable automatic detection, isolation, and restoration of supply in case of such faults. While reclosers can clear temporary faults by automatically restoring supply after a few cycles, sectionalisers work in coordination to isolate persistent faults, thereby minimizing outage impact on healthy sections of the network.

Investment in this activity is crucial to significantly improve network reliability, reduce outage duration, and enhance safety. These devices support faster restoration, lower operational costs by reducing manual patrolling, and form a vital component of future-ready smart grids by enabling integration with SCADA systems. CAPEX funding will allow TPWODL to deploy reclosers and sectionalisers across critical feeders, strengthening operational flexibility, reducing SAIFI / SAIDI indices, and ensuring uninterrupted power supply to consumers in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
11kV Auto-recloser and Sectionaliser	Nos.	1003	253	750	24	726	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.
33kV Auto-recloser and Sectionaliser	Nos.	217	96	121	12	109	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.2.6	33 kV & 11 kV Auto Recloser / Sectionaliser	33 kV Auto-recloser and Sectionaliser	Nos.	12	2.64	Annexure - 34
		11 kV Auto-recloser and Sectionaliser	Nos.	24	3.47	
		TOTAL			**6.11**	

3.3 Replacement / Addition of network component in Distribution Substation

3.3.1 Mobile DT:

At inception, no provision existed for quick restoration in case of DT failure. Consumers had to face long outages until the damaged DT was repaired or replaced. A few mobile DTRs have been procured and deployed on pilot basis, which proved effective in minimizing downtime. However, the current fleet is insufficient, and more units are required.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Mobile DT	Nos.	17	10	7	5	2	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.3.1	Mobile DT	Mobile DT	Nos.	5	1.41	Annexure - 35

3.3.2 Model Village – Installation of LT Distribution Box & Service Cable:

At the time of inception, majority of rural villages, including those with high AT&C losses, were served through basic distribution infrastructure – primarily comprising un-armoured LT service cables with multiple joints and direct connections from poles without any intermediate protection or isolation devices like LT Distribution Boxes (LTDBs).

Post vesting, infrastructure strengthening has been undertaken under various schemes. However, villages with high loss levels still suffer from inadequate infrastructure, including:

- Unprotected LT cables prone to faults and pilferage.
- Absence of LTDBs limiting system control and fault management.
- Loose connections and clustering of Service cables on poles leading to No Current Complaints.
- Un-balanced load distribution

These deficiencies have contributed to high technical losses, increased outages, and unsafe operating conditions. To address this, such villages are now identified and designated as Model Villages for better managed infrastructure under phased CAPEX plans.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Unarmoured to armoured service cable replacement	mtr.	800000	120000	680000	70000	610000	Considered divisions with high AT&C loss.
Installation of LTDB in Model villages	Nos.	138000	14000	124000	20000	104000	

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.3.2	Model Village – Installation of LT Distribution Box & Service Cable	Model Village – Installation of LT Distribution Box & Service Cable	LS	-	20.17	Annexure - 36

3.4 LI Point Regularisation

3.4.1 LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph):

To improve the overall billing efficiency in Bargarh Circle, there is a critical requirement for the installation of LT AB cables. Currently, the billing efficiency in the circle stands at a low as 48% (Billing Efficiency is 48% and Collection Efficiency is 84%). During field inspections in Bijepur, Bhatli, and Barpali sub-divisional areas, it has been observed that several LT transformers lack proper LT circuit extensions. As a result, unauthorized LT connections have emerged from these transformers, leading to unaccounted energy consumption and revenue loss.

To address this issue and bring such consumers into the metered network, it is essential to install LT AB cables to provide reliable, legal and safe LT connections.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
3.4.1	LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	km	248.93	15.09	Annexure - 37

4 Load Growth

4.1 Network Enhancement

4.1.1 Construction of 33 kV New Line:

The 33 kV network forms a critical link between primary substations and the 11 kV distribution system, directly influencing supply reliability and load management. In several parts of western Odisha, rapid load growth, establishment of new industries, and rural electrification initiatives have increased the demand on existing 33 kV feeders, many of which are already operating near capacity. This has resulted in frequent overloading,

voltage drops, and reduced reliability of supply. Construction of new 33 kV lines will help decongest overloaded feeders, provide alternate supply routes, and enable better load balancing across the network.

Investment in this activity is essential as it addresses both current and future demand requirements. New 33 kV lines will ensure availability of reliable power for consumers, facilitate faster integration of upcoming substations, and support industrial as well as agricultural growth in the region. CAPEX funding will allow TPWODL to strategically construct new 33 kV feeders, thereby improving operational flexibility, reducing technical losses, and ensuring a robust backbone for sustainable power distribution in western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.1	Construction of 33 kV New Line	Construction of 33 kV New Line	93.31	Annexure - 38.1 to Annexure - 38.28

33 kV New Line Proposals and Cost Break Up for FY 2026-27:

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
1	Construction of new 33 kV line from Agalpur GSS to Gaisilet PSS	8.08	38.1
2	Construction of new 33 kV line from Sarasmal GSS to near Balitikra PSS	1.85	38.2
3	Construction of new 33 kV line from Patrapali to Patrapali PSS	0.82	38.3
4	Construction of new 33 kV line from Sarandapali PSS to Sarandapali Chowk	0.59	38.4
5	Construction of new 33 kV line from Punjipathar PSS to Arda PSS	3.07	38.5
6	Construction of new 33 kV line from Thakpada tapping to Thakpada PSS with LILO arrangement	0.55	38.6
7	Construction of new 33 kV line from Birmaharajpur to Hikudi / Rexa Chowk PSS	7.29	38.7
8	Construction of new 33 kV line from Power House PSS to Industrial Estate PSS	4.56	38.8
9	Construction of new 33 kV line from proposed Sarasmal GSS to Pandkital PSS	2.43	38.9
10	Construction of new 33 kV line from proposed Sarasmal GSS to Bisalpali PSS	5.38	38.10
11	Construction of new 33 kV line from proposed M Rampur GSS to Balipada Tapping	4.51	38.11
12	Construction of new 33 kV line from proposed M Rampur GSS to Juradubra PSS	5.47	38.12
13	Construction of new 33 kV line from Khariar GSS to Badi tapping	0.59	38.13
14	Construction of new 33 kV LILO line at Utkela PSS	0.57	38.14
15	Construction of new 33 kV LILO line at Mahichala PSS	0.57	38.15

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
16	Construction of 33 kV UG line for Kuarmunda Industrial feeder.	0.58	38.16
17	33 kV LILO arrangement from Gobira (ODSSP-IV) PSS to Gobira Padha Ghar	0.92	38.17
18	33 kV new link line between 33 kV Pilot Project feeder and 33 kV Lathikata feeder	1.80	38.18
19	33 kV new link line to Panposh PSS from District Agricultural Office	0.83	38.19
20	33 kV new link line 33 kV IDC Industrial feeder and 33 kV Chhend Vedvyas feeder	0.16	38.20
21	33 kV new link line 33 kV IDC Industrial feeder and 33 kV Kalunga feeder	1.52	38.21
22	33 kV new Link Line from Lindra PSS to Jareikela Megalift	4.05	38.22
23	33 kV new link between 33 kV IDC (Balughat) feeder and Balanda feeder near Dandiapali PSS through JP Hospital T-off O/G line	4.03	38.23
24	33 kV new Line from Hirakud GSS to Badbazar PSS	16.78	38.24
25	33 kV new feeder from Chhend GSS to Civil Township PSS	5.73	38.25
26	33 kV new feeder from Chhend GSS to Power House PSS	7.64	38.26
27	33 kV new link from 33 / 11kV Goshala PSS and IIM Sambalpur	1.07	38.27
28	33 kV new Line from Kolabira PSS to Patrapali 4 Pole	1.85	38.28
Total		**93.31**	

4.1.2 Construction of 11 kV New Line:

The 11 kV distribution network is the mainstay of electricity delivery, connecting 33 kV substations to distribution transformers and end consumers. In many areas of western Odisha, existing 11 kV feeders are heavily loaded due to rising consumer demand, new electrification projects, and growing industrial and agricultural connections. Overloading not only causes undervoltage issues but also leads to frequent interruptions and higher technical losses. Construction of new 11 kV lines will help relieve overloaded feeders, improve voltage profile, and ensure reliable supply to both urban and rural consumers.

Investment in this activity is critical for meeting the region's increasing energy needs and supporting economic development. New 11 kV lines will enhance load management, provide flexibility for feeder reconfiguration during faults, and improve the overall efficiency of the distribution system. CAPEX funding for this initiative will allow TPWODL to expand and strengthen its 11 kV network, thereby delivering high-quality, uninterrupted power supply and aligning with the long-term vision of a robust and consumer-centric distribution system in western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.2	Construction of 11 kV New Line	Construction of 11 kV New Line	34.92	Annexure - 39.1 to Annexure - 39.38

11 kV New Line Proposals and Cost Break Up for FY 2026-27:

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
1	11 kV new link line between Old Udit Nagar feeder and RGH feeder	0.29	39.1
2	11 kV new link line between Stadium feeder and Balabhadra market feeder	0.97	39.2
3	11 kV new link line between Nayabazar feeder and Timber feeder	0.37	39.3
4	11 kV new feeder from Bondamunda PSS to bifurcate Bisra Road feeder	3.08	39.4
5	11 kV new link line between GB Pali feeder and MS Pali feeder	1.14	39.5
6	11 kV new link line within OSAP feeder to improve voltage	0.66	39.6
7	11 kV new link line between OSAP feeder and Nayabazar feeder	1.62	39.7
8	11 kV new link line for load shifting from Lahunipara & Roxy feeder to Phatangar feeder	1.06	39.8
9	11 kV new link line Between Industry-I & Industry-II feeder	0.62	39.9
10	11 kV new link line Between Boneikela & Tynser feeder	0.53	39.10
11	11 kV new link line between 11 kV College (Panposh) feeder and Panposhbasti feeder	0.63	39.11
12	11 kV new feeder from Panposh PSS to Tribal Museum Lane for N-1 of Birsa Munda feeder	0.94	39.12
13	11 kV new feeder from Civil Township 33 / 11 kV PSS to bifurcate College feeder	1.13	39.13
14	11 kV new line between 11 kV Biramitrapur Town-01 & 11 KV Biramitrapur Town-02 Rural feeder	0.12	39.14
15	11 kV new link line Between Lukumbeda & Sorda feeder	0.45	39.15
16	11 kV new link line from 11 kV College feeder to 11 kV Hospital feeder	0.18	39.16
17	11 kV new feeder from 33/11 kV Padiabahal PSS to bifurcate 11 kV Padiabahal feeder	1.92	39.17
18	11 kV new link line for load shifting of 11 kV Jarabaga feeder and Rengalbeda feeder	2.39	39.18
19	11 kV new link line between Jarabhaga feeder and Kesaibahal feeder	0.12	39.19
20	11 kV new feeder from Purna PSS to bifurcate Kalimandir feeder	2.91	39.20
21	11 kV new link line for load shifting of Samarkhai feeder to Basaloi & Dangasingha feeder	0.28	39.21
22	11 kV new link line for bifurcation of Risda feeder	0.69	39.22
23	11 kV new link between Doordarshan feeder & Town-3 feeder	0.21	39.23

Sl. No.	Proposal Name	Total Cost (In Rs. Cr.)	Annexure No.
24	11 kV new link line between Behera feeder and Dharmagarh Town feeder	0.56	39.24
25	11 kV new link line for bifurcation of Dharmagarh Town feeder	0.34	39.25
26	11 kV new link line between AshaKiran feeder and Bandutikra feeder	0.23	39.26
27	11 kV new link line between Hatpada feeder and Nadikhandi feeder	0.39	39.27
28	11 kV new feeder from Khedapali PSS to bifurcate Bardol feeder	1.00	39.28
29	11 kV link line within Lebidi feeder to improve voltage	0.40	39.29
30	new 11 kV feeder from Punjipathar PSS to bifurcate Kuchipali feeder	1.28	39.30
31	11 kV new link line for load shifting Saragada feeder to Jharmunda & Kusang feeder	1.04	39.31
32	11 kV new feeder from Deulpadar PSS to bifurcate Jogisurda (Menda) feeder	1.85	39.32
33	11 kV new link line between Chikalbahali feeder and Sibtala feeder	1.16	39.33
34	11 kV new feeder from Arjunpur PSS to bifurcate Mahalai feeder	1.76	39.34
35	11 kV new link line between Rengali feeder & Agalpur feeder	0.50	39.35
36	11 kV new feeder from Cherupali PSS to bifurcate Sargul feeder	1.25	39.36
37	11 kV new link line between Sargul feeder and Cherupali feeder	0.43	39.37
38	11 kV new link line between Sulia feeder and 11 kV Chadheipunk feeder	0.42	39.38
Total		**34.92**	

4.1.3 Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D):

TPWODL, in view of meeting the growing demands, has identified the area Daincha, SEED, Sambalpur to construct new conventional type PSS for providing reliable power supply and generate demand by establishment of New MSME, Agro-allied industries in Rural region. The project will also meet the enhancement of socio-economic development, generation of rural employment and reduce regional disparity.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.3	Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D)	New Court PSS, RED, Rourkela (2x5 MVA, 33 kV O/D, 11 kV I/D)	Nos.	1	18.22	Annexure – 40.1
		Daincha PSS, SEED, Sambalpur (2x3.15 MVA, 33 kV O/D, 11 kV I/D)	Nos.	1	13.35	Annexure – 40.2
		TOTAL			**31.57**	

4.1.4 Addition / Augmentation of PTR:

Power Transformers (PTRs) are the backbone of substations, stepping down bulk power from transmission to distribution levels. With growing consumer demand from residential, commercial, agricultural, and industrial sectors, several existing PTRs in western Odisha are running at or above their rated capacities. Continuous overloading not only increases technical losses and reduces efficiency but also accelerates transformer aging, raising the risk of unexpected breakdowns. Addition of new PTRs or augmentation of existing transformer capacity will help decongest overloaded substations, improve voltage profiles, and ensure reliable power supply to consumers.

Investment in this activity is essential to meet current and future load growth, minimize the risk of transformer failures, and enhance the overall resilience of the distribution network. Augmentation of PTR capacity also creates operational flexibility by enabling load transfer between transformers during contingencies or maintenance. CAPEX funding will allow TPWODL to strengthen its substation backbone through systematic addition and augmentation of PTRs, ensuring uninterrupted supply, reduced technical losses, and long-term sustainability of power distribution in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Addition / Augmentation of PTR	Nos.	70	37	33	5	28	PTRs are considered which are having loading more than 90 % in FY 2026-27 and load diversion is not possible due to site constraint.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.4	Addition / Augmentation of PTR	Addition of PTR	Nos.	1	2.56	Annexure - 41
		Augmentation of PTR	Nos.	4	7.61	
		Chain Augmentation of PTR	Nos.	6	0.39	
		TOTAL			**10.56**	

4.1.5 Addition / Augmentation of DTR:

Distribution Transformers (DTRs) form the most critical link in the last-mile delivery of power to consumers. In many areas of western Odisha, rapid growth in domestic, agricultural, and commercial demand has resulted in existing DTRs being heavily overloaded, causing frequent failures, high technical losses, and poor voltage quality. In addition, several older DTRs have outlived their economic life and no longer provide reliable service. Addition of new DTRs in load-concentrated areas and augmentation of capacity in overstressed locations will help balance the load, improve supply reliability, and ensure safe, efficient operation of the distribution system.

Investment in this activity is vital as it directly impacts consumer satisfaction and network stability at the grassroots level. By adding and augmenting DTRs, TPWODL can significantly reduce transformer failures, improve voltage profile, and enhance the quality of power supply to end consumers. CAPEX funding will enable systematic deployment of new and higher-capacity DTRs where required, ensuring robust last-mile connectivity, reduction of outages, and long-term sustainability of the distribution network in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Addition / Augmentation of DTR	Nos.	1379	379	1000	74	926	Over-loading (> 80 %) in FY 2026-27.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.5	Addition / Augmentation of DTR	Addition of DTR	Nos.	24	5.58	Annexure - 42
		Augmentation of DTR (3ph to 3ph)	Nos.	50	10.31	
		TOTAL			**15.89**	

4.1.6 Provision of LT Protection (ACB / MCCB) for DTR:

Distribution Transformers (DTRs) are critical assets in the last-mile supply chain, directly serving end consumers. However, in many locations, DTRs are operating without adequate LT protection on the secondary side, leaving them vulnerable to overloading, short circuits, and unbalanced loading conditions. Such stress often leads to transformer failures, extended outages, and high replacement costs. Provision of LT protection through Air Circuit Breakers (ACBs) or Moulded Case Circuit Breakers (MCCBs) ensures timely isolation of faults, protects the transformer from damage, and enhances the safety of the connected distribution network.

Investment in this activity is crucial for extending the operational life of DTRs and reducing system downtime. LT protection not only minimizes equipment damage and repair costs but also improves supply reliability for consumers by preventing prolonged interruptions caused by transformer failures. CAPEX funding will enable TPWODL to standardize LT protection across its DTR fleet, thereby safeguarding valuable assets, reducing technical losses, and ensuring safer, more reliable electricity distribution in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Provision of LT Protection (ACB / MCCB) for DTR	Nos.	24387	5377	19010	549	18461	Priority considered for: 1. Sambalpur and Rourkela main town areas. 2. Other town areas of Rourkela & Sambalpur Circle.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.6	Provision of LT Protection (ACB / MCCB) for DTR	ACB Installation	Nos.	257	6.52	Annexure - 43
		LT MCCB for Installation	Nos.	292	2.23	
		TOTAL			**8.75**	

4.1.7 Addition of New LT ABC Network:

The LT network is the final stage of electricity distribution, delivering power directly to consumers. In many areas of western Odisha, existing LT bare conductor lines are prone to high technical losses, frequent faults due to vegetation contact, theft, and safety hazards for the public. Addition of new LT Aerial Bunched Cable

(ABC) networks in load-dense and theft-prone areas will significantly improve supply reliability, reduce pilferage, and enhance consumer safety. ABC technology offers superior insulation, minimizes interruptions from external disturbances, and is particularly suited for congested urban and semi-urban areas.

Investment in this activity is essential to strengthen last-mile connectivity and safeguard revenue. The addition of LT ABC will not only improve the quality of supply and reduce outages but also reduce maintenance requirements and long-term operational costs. CAPEX funding for this initiative will enable TPWODL to systematically expand LT ABC networks in critical areas, thereby improving safety, reducing losses, and ensuring uninterrupted, high-quality power supply to consumers in western Odisha.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
Addition of New LT ABC Network	Ckm.	1518.59	442.75	1075.84	150	925.84	Cities & Towns are given higher priority.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
4.1.7	Addition of New LT ABC Network	Addition of New LT ABC Network	Ckm.	150	16.93	Annexure - 44

4.2 Network Upgradation / Extension for Catering New Service Connection

4.2.1 New Service Connections (HT & LT):

The DISCOM is witnessing a steady increase in consumer demand across LT and HT categories, leading to a continuous rise in new connection applications. To ensure reliable and quality power supply to such consumers, network augmentation and extension have become imperative.

During FY 2024-25, the DISCOM has released 13,308 LT three-phase connections. Out of these, around 1,600 connections have been assessed as requiring network augmentation and system strengthening. The estimated budgetary requirement for meeting this demand is Rs. 21.22 Cr in FY 2025-26, with a projected cumulative requirement of Rs. 129 Cr over the five-year period up to FY 2030-31.

Similarly, in FY 2024-25, 420 HT connections were released, of which 210 connections necessitated augmentation of network infrastructure based on cost-benefit analysis and compliance with technical standards. The estimated budgetary requirement for these works is Rs. 30.61 Cr in FY 2026-27, with a projected cumulative requirement of Rs. 187 Cr over the five-year horizon up to FY 2030-31, in accordance with the provisions of the Supply Code, 2019.

4.2.2 LT Extension for New Service Connections (Mo-Bidyut & Regular Connections)

It is respectfully submitted that the actual cost of execution for LT extension works has significantly increased in recent years. While the OERC-approved benchmark cost stands at Rs. 8,000 per span, the actual expenditure being incurred by the DISCOM is Rs. 26,070 per span amounting to Rs. 10.97 Cr. in FY 2026-27. This steep rise is primarily on account of escalation in material prices, higher labour charges, and compliance-related statutory obligations.

However, the Hon'ble Commission in Order dated 10-07-2025 vide Case No. 80 of 2024 has directed as under:

> *"23 (iv) The petitioner has submitted that in order to meet the increasing power demand, the existing distribution network infrastructure needs to be augmented / strengthened / expanded to release the new connection. The petitioner has proposed Rs. 15.00 Crores for carrying out such work including the differential cost for LT line extension. Further, the petitioner has proposed Rs. 6.00 Cr to meet the differential cost (over the standard service connection charges) for providing new connections. The cost-of-service cable for new connection forms part of expenditure to be borne by the consumer.* ***However, the additional expenditure for new connection release would be considered by the Commission during the True Up exercise for the financial year on the actual basis."***

Accordingly, TPWODL requests Hon'ble Commission for considering any additional expenditure on account of Network Upgradation / Extension for Catering New Service Connection (Differential cost) to be considered during Truing Up exercise for the FY on actual basis.

5 Technology & Infrastructure

5.1 Technology Intervention – IT & Technology

5.1.1 Build & Strengthen DC-DR Infrastructure & End-User IT Hardware:

Over the last four fiscal years (FY 2021–22 to FY 2024–25), TPWODL has strategically modernized its digital foundation to support evolving business needs and operational scale. This transformation focused on four key pillars: building a robust core IT infrastructure through the establishment of an enterprise network and scalable Data Centre; expanding the end-user ecosystem by integrating more employees and partners into digital platforms for improved collaboration; reinforcing cybersecurity with advanced threat detection and prevention

systems; and deploying critical business applications like ERP and CRM to automate and streamline core processes.

These initiatives have collectively enabled seamless business operations, enhanced data security, and accelerated TPWODL's digital transformation. The improvements have not only increased internal efficiency but also elevated service reliability and responsiveness for stakeholders. With a future-ready IT landscape now in place, TPWODL is well-positioned to scale further and embrace emerging technologies in its next phase of growth.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.1.1	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	LS	-	6.43	Annexure - 45

5.1.2 Augmentation of IT Applications & Software:

TPWODL has strategically modernized its digital foundation to support evolving business needs and operational scale. This transformation focused on building a robust core IT infrastructure and it's amply supplemented by Application & Software environment. through the establishment of a robust scalable ecosystem by integrating into digital platforms for improved collaboration and deploying critical business applications like ERP and CRM to automate and streamline core processes.

These initiatives have collectively enabled seamless business operations and accelerated digital transformation. The improvements have increased internal efficiency, elevated service reliability. With a future-ready IT landscape now in place, TPWODL is well-positioned to scale further and embrace emerging technologies in its next phase of growth.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.1.2	Augmentation of IT Applications & Software	Augmentation of IT Applications & Software	LS	-	2.78	Annexure - 46

5.1.3 Enhancement of Cybersecurity Solutions:

To strengthen TPWODL's cybersecurity posture and ensure compliance with ISO/IEC 27001, CERT-In guidelines, and mandates from the Ministry of Power, Ministry of Electronics and Information Technology (MeitY), and other relevant government agencies, we propose the implementation of a comprehensive suite of advanced cybersecurity solutions and data protection controls.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.1.3	Enhancement of Cybersecurity Solutions	Enhancement of Cybersecurity Solutions	LS	-	9.07	Annexure - 47

5.2 Improvement of Civil Infrastructure

5.2.1 Construction / Renovation of Office Buildings:

In continuation of our efforts towards upgrading existing infrastructure and creating new facilities, including shifting from rented offices to our own premises, TPWODL has achieved considerable milestones in providing decent, clean, and hygienic workplaces for employees and supporting operational needs. Some of offices are deteriorated to an extent that water leaks from roof during periods of rainfall. As of now lots of cracks are observed on old office wall and there is a lack of cleanliness and comfortable workspace for employees. Going forward, the proposed infrastructure is planned for execution in FY 2026-27 in a phased manner. This initiative is aimed at ensuring that employees feel comfortable and motivated in their workplaces, thereby enhancing their efficiency and contributing to the success of the organization as well as the welfare of the customers we serve.

Overview of Total Scope, Achieved / Planned till FY 2025-26 and Plan for Balance Requirement:

Activity / Scheme Description	UoM	Total Scope	Work Completed / Planned (Till FY 2025-26)	Bal. Req.	Proposed in FY 2026-27 DPR	Bal. Req. for Subsequent Years	Priority Criteria
		A	B	C = A-B	D	E = C-D	
SDO Office	Nos.	57	43	14	14	0	Balance all SDO offices considered.
Section Office	Nos.	201	151	50	31	19	Section office considered where there is no land issue.
M&T Lab	Nos.	2	0	2	2	0	All M&T lab considered.
M&T Store with Seating Arrangement	Nos.	13	0	13	13	0	All M&T store with seating arrangement considered.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.2.1	Construction of New Office Buildings	Construction of New Office Buildings	LS	-	18.14	Annexure - 48

5.2.1 Establishment of Technical and Safety Training Centre and mobile training facility:

TPWODL has established 05 Nos. of Technical & Safety training Centres in all 5 circles under FY 2024-25 CAPEX. These centres provide employees and Business Associates (Contractor) with practical / simulated training environments that will significantly enhance technical competency and reduce workplace incidents.

Hence, to increase the positive coverage of this initiative, TPWODL has proposed establishment of additional Technical & Safety Training centre at two remote locations of Nuapada and Sundargarh. Additionally, it has been proposed to procure and deploy specially designed "Training on Wheels" vehicles to spread mass technical and safety awareness at various work / public locations.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.2.2	Establishment of Technical and Safety Training Centre and mobile training facility	Technical and Safety Training Centre	Nos.	2	2.24	Annexure - 49
		Digital Van - "Training on Wheels"	Nos.	2	0.68	
		TOTAL			**2.92**	

5.3 Store Infrastructure

5.3.1 Store Infrastructure:

In TPWODL, having adequate stores infrastructure plays a pivotal role in ensuring timely availability of materials and equipment required for uninterrupted distribution operations. With increasing network expansion, higher inventory volumes, and evolving operational requirements, the existing store facilities are facing constraints in terms of space utilization, material handling, and compliance with modern safety standards. Inadequate infrastructure can lead to delays in material dispatch, inefficiencies in storage, and risks to both personnel and assets. Upgradation of store infrastructure, therefore, is essential to ensure smooth supply chain operations and to support the growing needs of TPWODL.

Investment in this activity is crucial for modernizing and standardizing store facilities across the region. Proposed initiatives such as optimized storage systems, mechanized material handling, enhanced safety provisions, robust documentation processes, and reliable power backup will significantly improve operational efficiency and scalability. CAPEX funding will enable TPWODL to create future-ready store infrastructure, ensuring timely material availability, better resource management, and stronger support to field operations for reliable power distribution in western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.3.1	Store Infrastructure	Store Infrastructure	LS	-	2.85	Annexure - 50

5.4 Ready to Use assets for Offices

5.3.2 Ready to Use assets for Offices:

Efficient office infrastructure is critical for the smooth functioning of distribution operations, customer service, and field coordination. At present, several TPWODL offices in western Odisha lack adequate furniture and other basic amenities like Battery, UPS, RO machine, water purifiers, desert coolers, etc. which are required for day-to-day functioning.

Investment in this activity is important as it directly supports operational efficiency and customer service delivery. Well-equipped offices improve workflow, facilitate faster response to consumer grievances, and enhance coordination between field and control teams. CAPEX funding will enable TPWODL to modernize its office infrastructure, ensuring standardized facilities across its operating region, boosting staff productivity, and ultimately contributing to reliable and consumer-centric power distribution in western Odisha.

Proposed Quantity and Cost Break Up for FY 2026-27:

Sl. No.	Activity / Scheme Description	Sub-Activity Description	UoM	Quantity Proposed in FY 2026-27 DPR	Total CAPEX Proposed (In Rs. Cr.)	Scheme Details (Reference Annexure)
5.4.1	Ready to Use assets for Offices	Ready to Use assets for Offices	LS	-	2.58	Annexure - 51

SUMMARY

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)	Reference
1	Statutory, Safety and Security	Life enhancement of network and maintaining safe horizontal / vertical clearances	Laying of 33 kV Underground Cable at NH / SH Crossings	2.86	Annexure - 1
			Installation of 11 kV Overhead Cradle Guard at Road Crossings	1.97	Annexure - 2
			Laying of 33 kV and 11 kV Underground Cables at Railway Crossings	2.30	Annexure - 3
			Replacement of HT Bare Conductor with Insulated Conductor	3.12	Annexure – 4
			Intermediate Pole to increase height of 33 kV & 11 kV Network	5.00	Annexure – 5
		Provision for Testing and Safety Equipment for workforce	Procurement of Testing Equipment	7.42	Annexure – 6
			Meter Testing Lab	4.50	Annexure – 7
			Procurement of Safety Equipment	1.59	Annexure – 8
		Infrastructure works at Primary & Distribution Substation	Access Road for inside and outside of PSS	2.00	Annexure – 9
			Renovation / Construction of Control Room Building in PSS	4.00	Annexure – 10
			Provision for Water Supply arrangement for PSS	1.45	Annexure – 11
			PSS Boundary wall	3.00	Annexure – 12
			DSS Fencing	6.00	Annexure – 13
			Earthing for PSS & DSS	4.62	Annexure - 14
Sub Total - Statutory, Safety and Security				**49.83**	
2	Loss Reduction	Energy Audit & Meter related activity	Installation of 1ph Smart Meters	17.46	Annexure – 15
			Installation of 3ph Smart Meters at Agriculture LI Connections	2.33	Annexure – 16
			Installation of Meters inside PSS for Energy Audit	1.97	Annexure – 17
			DTR Smart Metering for Energy Audit	3.40	Annexure – 18
			High Value Industrial Audit Point Metering	1.05	Annexure – 19
			LT Check Metering on HT consumers for Energy Audit	0.30	Annexure – 20
		Replacement of LT Bare Conductor with AB Cable	Replacement of LT Bare Conductor with AB Cable	15.08	Annexure - 21
Sub Total - Loss Reduction				**41.59**	
3	Network Reliability	Replacement / Addition of network component in 33 / 11 kV Primary Substation	Installation / Replacement of 33 kV Breaker / Group Breaker	16.09	Annexure – 22
			Installation / Replacement of 11 kV Breaker / Group Breaker	10.27	Annexure - 22
			Installation of LA (33 kV & 11 kV) in PSS	2.31	Annexure – 23
			Replacement of Feeder / Transformer protection Relays (O/C & E/F)	0.76	Annexure – 24

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)	Reference
			Installation of Station Transformer – 33 / 0.4 kV 100 kVA Transformer	0.88	Annexure - 25
			Replacement of Battery & Battery Charger / ACDB Panel / DCDB Panel	1.15	Annexure - 26
			Refurbishment of PSS (Switchyard fencing, Bus heightening, Earth Pit water arrangement, Cable Trench, Trench Cover, Toe wall, etc.)	3.33	Annexure – 27
			Automation of Non-ODSSP & SCADA integration in PSS	1.53	Annexure – 28
		Replacement / Addition of Network Component in 11kV / 33kV Line	Augmentation of old 33 kV Line (for aged lines or to mitigate overloading / undervoltage)	39.02	Annexure – 29
			Augmentation of old 11 kV Line (for aged lines or to mitigate overloading / undervoltage)	37.48	Annexure – 30
			Installation of 33 kV & 11 kV FPI	5.39	Annexure – 31
			Installation of 33 kV & 11 kV AB Switches, Isolator & RMU	14.02	Annexure – 32
			33 kV & 11 kV Polymer Insulator / LA	2.17	Annexure – 33
			33 kV & 11 kV Auto Recloser / Sectionaliser	6.11	Annexure – 34
		Replacement / Addition of network component in Distribution Substation	Mobile DT	1.41	Annexure – 35
			Model Village – Installation of LT Distribution Box & Service Cable	20.17	Annexure – 36
		LI Point Regularisation	LI Point Regularisation - Installation of Cables, Distribution Box, Installation of Smart Meters, etc. at LI connections (3ph)	15.09	Annexure – 37
Sub Total - Network Reliability				**177.18**	
4	**Load Growth**	Network Enhancement	Construction of 33 kV New Line	93.31	Annexure – 38
			Construction of 11 kV New Line	34.92	Annexure – 39
			Construction of New PSS (2x5 MVA, 33 kV O/D, 11 kV I/D)	31.57	Annexure – 40
			Addition / Augmentation of PTR	10.56	Annexure – 41
			Addition / Augmentation of DTR	15.89	Annexure – 42
			Provision of LT Protection (ACB / MCCB) for DTR	8.75	Annexure – 43
			Addition of New LT ABC Network	16.93	Annexure – 44
Sub Total - Load Growth				**211.93**	
5	**Technology & Infrastructure**	Technology Intervention – IT & Technology	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	6.43	Annexure – 45
			Augmentation of IT Applications & Software	2.78	Annexure – 46
			Enhancement of Cybersecurity Solutions	9.07	Annexure – 47

Sl. No.	Category	Sub-Category	Scheme / Activity Description	CAPEX Proposed in FY 2026-27 (In Rs. Cr.)	Reference
		Improvement of Civil Infrastructure	Construction of Office Buildings	18.14	Annexure – 48
			Establishment of Technical and Safety Training Centre and mobile training facility	2.92	Annexure – 49
		Store Infrastructure	Store Infrastructure	2.85	Annexure – 50
		Ready to Use assets for Offices	Ready to Use assets for Offices	2.58	Annexure – 51
Sub Total - IT & Infrastructure				**44.77**	
GRAND TOTAL				**525.30**	

The Hon'ble Commission is requested to kindly approve **Rs. 525.30 Cr.** Capital Investment Proposal of TPWODL for FY 26-27.