TP WESTERN ODISHA DISTRIBUTION LIMITED

CAPEX Plan for FY 2023-24

Detailed Project Report (DPR)

CORPORATE OFFICE

Burla, Sambalpur, Odisha, Pin-768017

CONTENT

Executive Summary

TP Western Odisha Distribution Limited (TPWODL) was established as a joint venture under the Public-Private Partnership (PPP) model, Tata Power holding majority stake by (51%) and the Government of Odisha by 49%. TPWODL took over the license for power distribution in the western part of Odisha, which was previously held by the former WESCO, on 01.01.2021 through a competitive bidding process. TPWODL's utility business is governed by the provisions of the license issued by Honb'le OERC for distribution and sale of electricity in western Odisha. The OERC regulates the functioning of the entire power sector in the state of Odisha, including the determination of tariffs for end-users and the setting of performance standards (primarily related to loss reduction, security, reliability of power supply and provision of services to consumers).

TPWODL has a vast distribution area in Western part of Odisha serving population of 88 lacs with a Customer Base of more than 21 lacs 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 202 Sections which manages the commercial and O&M activities in order to serve its consumer. 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 33KV from Odisha Power Transmission Company Limited’s (OPTCL) 220/132/33 kV Grid Substations and then distributes the power at 33KV / 11KV / 440V / 230V depending on the demand of the consumers.

One of the major challenges for TPWODL is the present network condition which are very old and at some locations these networks are not compliant to statutory guidelines and pose threat to safety of employees, public at large and animals. The Distribution lines are lengthy and most of the feeders are of radial nature. Even some of the spans have under-rated / uneven sized conductor thus compromising the circuit capacity as per the lowest capacity of the conductor available in the network even if for a small section. O/H network have worn out conductors, poor Earthing, damaged / tilted poles/ accessories resulting into abnormal sag.

Similarly, 33/11KV Primary substation and 11/0.415 kV Distribution Substations are in very deteriorated condition. In Primary Substations faulty equipment exists which are either bypassed or removed and supply is being managed without proper switching devices resulting into escalation of faults / cascade tripping to upstream devices thereby impacting the large consumer base. In Distribution Substations the Airbreak Switch, HG/DO Fuse units, LV Protection devices are not functioning at most of the locations. Fuse arrangements installed at Distribution Substations are installed at lower height and exposed thereby creating a potential safety hazard for human being and animals. 33/11 kV Primary Substation's (PSS) boundary walls are broken and there is no fencing to the outdoor switchyards. This makes the PSS unsafe for stray animals and any unauthorized entry. Apart from this, earthing system is in a very poor condition; many breakers and CTs are bypassed resulting into non-availability of basic protection system.

In TPWODL System Many Distribution Transformers are Installed in near about 25 to 30 years back. These Transformers are failing because of over age and frequent faults in the system. These Transformers are either not repairable or if repairable but having high No Load losses. Also, the cost of repair of these transformers is comparatively high as compare to new Transformer. which is also causing reliability of power supply to the Consumers. Hence instead of repairing these old age transformers it is better to replace with new one. Over aging is also impacting the technical losses of the system. Also, over the period of operations of the 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. However, the condition of the network has been improved after infusing Capex expenditure in last two years and proper maintenance of the network.

To address the above key challenges and to safeguard the assets along with consumer interest, substantial investment has been planned to enhance reliability, reduction in AT&C losses, safe environment, meeting new load requirement and efficiency improvement along with customer satisfaction.

With this objective of ensuring reliable power supply and ensuring best customer services to the end consumers, TPWODL, in the last two-year Capex submission, has come up with capital investment plan in five major heads viz Statutory and Safety, Reliability, Loss reduction, Load Growth and Infrastructure and Technology adoption, same heading 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 Vesting Order has to seek the approval of the Capital Expenditure Plan in line with the regulations. The extracts from the Vesting Order in its Bid submitted in response to the RFP, TPWODL committed capital expenditure of Rs. 1,663 crores (Indian Rupee One Thousand Six Hundred and Sixty-Three crore) only for period FY 2022 to FY 2026 as follows:

TPWODL	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Total
Year wise Committed	306	500	333	322	202	1663
Cumulative	306	806	1139	1461	1663	1663

TPWODL has proposed capital expenditure of Rs. 1044.60 Cr in FY 21-22 & FY 22-23 and Hon'ble OERC has approved the Capital expenditure of Rs 810.85 Cr, details are mentioned in table-1 and table-2 shows the FY21-22 & FY22-23 expenditure details.

TPWODL	FY21-22	FY22-23	Total
Proposal submitted	462.42	582.18	1044.60
OERC Approved CAPEX	333.13	477.72	810.85

As per the order received dated 08.07.2022 referring to points 66 & 67, Hon'ble OERC has advised putting the below-mentioned points in DPR CAPEX Plan for FY 2023-24.

- The Commission suggests that due care on the following aspects shall be taken by the DISCOM while submitting the Capex proposals for subsequent years:

a) Planning of distribution network (at least considering downstream network upto 11/0.4 kV transformers) has to be based on load flow study for different time frames (short term: for one year and long term for five years) considering the projected load growth including industrial load, (n-1) contingency criteria for 33kV lines & 33/11 kV transformers and permissible range of operating voltage. The summary of study report for different time frame shall bring out:

i. List of existing lines getting over loaded at 33 kV & 11 kV level

ii. List of existing 33/11 kV, 11/0.4 kV sub-stations with over loaded transformers

iii. Requirement of additional lines & sub-stations

iv. Low voltage pockets

v. Technical loss etc.

The implementation plan in stages has to be formulated accordingly. The distribution planning study shall take to account the capital investment by Govt. in form of transmission and distribution assets.

b) DPR is to be prepared based on above studies covering required augmentation/strengthening of existing distribution infrastructure and requirement of additional infrastructure (new sub-station and lines at 33 kV & 11 kV level) to meet the projected demand in different time frame.

c) The projected peak demand &energy requirement in area of operation of the DISCOM is to be indicated (for current FY 2022-23 and subsequent financial year upto the end of FY 2026-27). The projected load and energy requirement for each circle and divisions (for current FY 2022-23 and subsequent financial years upto the end of FY 2026-27) is also to be indicated.

d) Details of Distribution infrastructure, load & energy requirement are to be

submitted in format provided in Annexure- 1.

e) Details of existing & proposed new lines and sub-station (considered for distribution network load flow study) are to be submitted. A suggested format with typical example is enclosed as Annexure-2, 3, 4, 5.

f) The DPR shall be prepared based on the Standardization of (a) maximum MVA capacity of sub-station (33/11 kV, 11/.4 kV) for Urban & Rural area, (b) rating of Distribution Transformer (DT) & Power Transformer (PT), (c) (n-1) contingency Criteria for PT (d) maximum line length and the power flow in 11 kV & 33 kV lines, (e) span length of 33 kV & 11 kV overhead lines, (f) type (ACSR/AAAC/High Tempt & low Sag/any other) & size (Dia & Area)of conductor for 33kV & 11kV overhead lines, (g) Rating of 33kV,& 11kV Switchgear/Air

break switch/Air Circuit Breaker(A, kA & duration, Type : SF/ Vacuum/ MCCB/ ACB/ Air break switch), (h) rating of RMU, Auto-recloser & sectionaliser, etc.

g) The specification for Distribution Transformer (DT) & Power Transformer (PT), switchgear, conductor, insulator, overhead structure (pole/Lattice structure/joist/PCC, etc. underground cable, transformer foundation, foundation for LT & HTpoles, lightening protection, firefighting system, lighting system, AC/DC system, auto-recloser and RMU etc. need to be standardized across the DISCOMs keeping in view the development of cyclone resilient Distribution infrastructure, wherever required. This would facilitate interchangeability of equipment / material and spares across the DISCOMs and would also facilitate the common pooling of spares.

h) Planning of new Sub-station shall have adequate provision for future expansion (additional bays for future lines & transformers) to avoid creation of another substation in nearby area.

i) The present status and identification of area &planning for conversion of radial system to ring main and time frame for implementation need to be indicated in the DPR.

j) The present status and the future planning of underground cable system or conversion of overhead to underground system indicating the area and the time frame for implementation are to be mentioned in the DPR.

k) Planning for establishment of fibre optic communication network and identification of area (indicating the lines with voltage level) for implementation of AB cable or covered conductor need to be brought out clearly.

- The Petitioner is also directed to:

a) Expedite the execution of pending works (approved for the FY 2021-22) and submit the report on the execution of the activities approved in CAPEX Plan for FY2021-22 along with actual Capital Expenditure and actual Capitalisation along with the ARR & Tariff Petition.

b) Submit the Capital investment plan strictly adhering to the provisions of the Tariff Regulations, Vesting Order and the license conditions from FY 2023-24 onwards.

c) More focus should be on the Safety aspects such as proper earthing, utilisation of proper testing equipment and other measures to ensure safety of human & animals as well as assets of distribution system;

d) Standard specification is to be followed for development of cyclone resilient Distribution infrastructure, wherever required for Distribution Transformer (DT) & Power Transformer (PT), switchgear, conductor, insulator, overhead structure (pole/Lattice structure/joist/ PCC, etc. underground cable, transformer foundation, foundation for LT & HT poles, lightening protection, fire fighting system, lighting system, AC/DC system, auto-recloser and RMU etc.

e) Planning of new Sub-station shall be done having adequate provision for future expansion (additional bays for future lines & transformers) to avoid creation of another sub-station in nearby area.

f) Proper utilisation of the feeders available in the OPTCL substations is desired.

g) Submit the System study report along with details of Augmentation works and establishment of new infrastructure mentioning the name of lines & sub-stations in the format suggested at Annexure- 2, 3, 4, 5;

h) Provide Cost Benefits analysis including ROI from Beneficiary/ Consumer Point of View (Comparison for impact on tariff with and without the proposed investment), Target (Year wise Projection), Year wise Tariff impact due to Investment in terms of % of ARR and Rs./kWh, Payback Period, NPV, IRR and other Financial Parameters for project assessment.

i) Provide justification for cost increment (if any) due to proposal for any specific quality product or increased no. of quantity than normally required. Further justification is also desired on why alternatives cannot be possible.

j) Submit the details of compliances of the directions given in the CAPEX Order of previous years.

k) Submit quarterly progress report of the works along with the details of materials utilized vis-à-vis various activities shown in the DPR.

l) Take stock of the inventory available in the stores and make its effective utilization.

m) Procure the material/award the Contracts only through transparent open competitive bidding process;

n) Approach the Commission for prior approval if the awarded cost of any work is exceeding

the cost approved by the Commission;

o) Effort should be made to optimize project cost with efficient project management and leveraging various technology options so that the benefit can be passed on to consumers.

Adhering to the points mentioned above, we have added all the asked details in the DPR.

TPWODL proposes to invest Capital Expenditure of Rs. 398.84 Cr. in FY 23-24 under five proposed major categories i.e.

1. Statutory, Safety and Security
2. Loss Reduction
3. Reliability
4. Load Growth
5. Technology adoption & Infrastructure

Proposed Capex Plan FY 23-24

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
1	Statutory, Safety and Security	i) Life enhancement of network and maintaining safe horizontal / vertical clearances	Intermediate Pole Increase of height for 11 kV and 33 kV sagging line.	2.00
			National Highway, SH & River Crossing with Guarding	1.99
			Replacement of Open Conductor with Covered Conductor inside forest city and high-density public area	5.03
		ii) Provision of Testing Equipment & PPEs to workforce	Testing equipment	1
			Safety Equipment (Discharge Rod, Man lifter, Neon Tester etc.)	2.79
		iii) Fencing, Boundary Wall and infrastructure works at Primary & Distribution substation	Fencing of Distribution Substation	4.80
			Boundary wall of Primary Substation	10.00
			Gravel filling for Primary substation	1.61
			Access road for inside and outside PSS.	1.65
			Civil work for control room/other building in PSS- Repair	2.75
			provision for water supply for PSS/Offices (Watering for Earth pit)	0.50
	Sub Total- Statutory, Safety and Security			**34.12**
2	Loss Reduction	i) Energy Audit & Meter related activity	LT DB installation on Existing Pole	14.54
			Installation of Metering Unit, Meters and Modems at PSS Boundary Points	2.50
			DTR Smart Metering above 100 KVA above up to 250 kVA	10.00
			Installation of CT, PT, Meters & Modems for High value Industrial Consumers	1.00
		ii) Replacement of LT Bare conductor with AB cable	Replacement of LT Bare conductor with AB cable	31.96
	Sub Total-Loss Reduction			**60.00**
3	Reliability	i) Replacement/Addition of network component in 33/11KV Primary Substation.	Refurbishment work in PSS (Structure Replacement / Yard Refurbishment)	1.96
			Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new (O/D CT-) (including civil & control cable)	4.01
			Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new (O/D CT-) (including civil & control cable)	2.21
			Replacement of Defective Relay	1

Capex plan for FY 23-24

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
			Replacement of Indoor switchgear Protection Panel along with associated equipment	2.00
			Replacement of Sub station Transformer -33/0.4KV 100KVA Trf.	0.49
			Replacement of Battery & Battery Charger	1.21
			Implementation of Automation/Scada	13.50
			Roof top for Office/ Building lighting	1.50
			High Mast/Lighting arrangement for PSS/Store	0.50
		ii) Replacement/Addition of network component in 33KV & 11KV Line.	Refurbishment/Augmentation of old 11KV line along	17.01
			Refurbishment/Augmentation of old 33KV line	6.02
			Installation of 11KV & 33 KV FPI	0.98
			Installation of 11KV & 33 KV AB switches, Isolator & RMU	5.00
			New Tower Addition/Replacement	0.98
			Railway X-ing using U/G Cable	1.03
			33KV & 11kV Auto Recloser & Sectionaliser/ AVR/Capacitor Bank/Voltage Improvement Equipment	5.06
		iii) Replacement/ Addition of network component in Distribution Substation.	Refurbishment of above 100 KVA DTR along with LT Protection, Earthing etc. (Other than Augmentation)	10.03
	Sub Total-Reliability			**74.49**
4	Load Growth	i) Network enhancement / Unforeseen emergency.	Construction of 33 KV New/Link Line	8.87
			Construction of 11KV New/ Link Line	8.16
			Construction of new PSS/Renovation of Aged PSS.	18.00
			Addition/Augmentation of PTR of various ratings	3.87
			Addition/Augmentation of DTR of various ratings	19.93
			Addition of New LT ABC Network	8.99
	Sub Total- Load Growth			**67.82**
5A	IT Infrastructure	i) Technology Intervention-IT & Technology.	Disaster Recovery Center - HW & SW	20.15
			DC Hardware	11.04
			DC Software & Licences	4.75

Capex plan for FY 23-24

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
			Front End Devices and End user	12.18
			Locational Network	5.02
			DR Setup for Other DISCOMs	18.35
			Digitization of legacy documents	6.21
	SubTotal- IT Infrastructure			**77.70**
5B	OT Infrastructure	ii) Technology Intervention- GIS, Communication & Others Implementation .	Implementation of GIS	38.60
			Communication Infrastructure	11.00
			Smart meter Backend Infra	11.81
			Procurement of Drones	0.80
	SubTotal- OT Infrastructure			**62.21**
5C	Civil, Admin and Other Infrastructure	iii) Improvement of Civil Infrastructure	New wash room	2.00
			Additional Material Storage area	2.00
			New store building	0.60
			New Scrap Yard, Pole Storage location	0.30
			New Building for Division/ Subdivision/Section/Commercial Office.	7.00
			Refurbishment of old building for office at various location	3.00
			Infrastructure for fuse call center	0.75
		iv) store infrastructure	store infrastructure, Secutity System and fire Hydrant System in Store	4.35
		v) Ready to Use assets for Offices	Purchase of EV vehicles & other vehicles for employees	1.00
			Ready to Use assets for Offices	1.50
	Sub Total- Civil & Admin Infrastructure			**22.50**
	Sub Total-Technology & Infrastructure			**162.41**
	Grand Total			**398.84**

*The Grand Total cost is exclusive of Project Employee Cost and calculated Interest during Construction (IDC) @4.5 %. The IDC would be approximately Rs.23.24 Cr. Project Employees Cost for Capex job @5% would be approximately Rs. 25.82 Cr.

Overview: TP Western Odisha Distribution Limited

TP Western Odisha Distribution Limited (TPWODL) is a joint venture between Tata Power and Government of Odisha with the majority stake being held by The Tata Power Company Limited (51%). The Discom TPWODL serves a population of 88 lacs with a Customer Base of more than 21 lacs. It has a vast Distribution Area in Western part of Odisha covering 48,373 sq. km across nine revenue districts of Odisha. For making reliable power supply, along with prompt service to its consumers, this power distribution company in Odisha has divided its area of power distribution into 5 Circles and 17 Divisions as under.

Table 1 indicates the details of Circle, Division & Sub- Divisions

Circle Name	Division Name	District Name	Sub Division Name
Sambalpur Circle	SED – SAMBALPUR	Sambalpur	SDO-I, AINTHAPALI, SBP
			SDO-II, KHETRAJPUR, SBP
			ELECTRICAL SUB DIVISION, BURLA
			ELECTRICAL SUB-DIVISION, HIRAKUD
	SEED – SAMBALPUR	Sambalpur	SDO-I, HUTAPARA
			SD0-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	Deogarh	SDO, DEOGARH
Rourkela Circle	RSED – ROURKELA	Sundargarh	SDO No –I, 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

Capex plan for FY 23-24

Circle Name	Division Name	District Name	Sub Division Name
	SED – RAJGANGPUR	Sundargarh	SDO-I, RAJGANGPUR
			SDO-II, Rajgangpur
			SDO, KALUNGA
			SDO, KUARMUNDA
Bargarh Circle	BED –BARGARH	Bargarh	SDO No-I, BARGARH
			SDO No-II, BARGARH
			SDO, BHATLI
			SDO, BHEDEN
			SDO, ATABIRA
	BWED – BARGARH	Bargarh	SDO, BARPALLI
			SDO, PADAMPUR
			SDO, PAIKMAL
			SDO, SOHELA
Bolangir Circle,	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
Bhawani-Patna Circle	NED – NUAPARA	Nuapada	SDO, NUAPARA
			SDO, KHARIAR ROAD
			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

TPWODL Operational Structure

TPWODL receives electrical power at 33KV level from 49 numbers of 220/33KV or 132/33KV transmission substation (OPTCL) located within and in the vicinity of TPWODL operational area. TPWODL distributes the power at 33KV / 11KV / 440V / 230V depending on the demand of the consumers.

Presently, there are 172 numbers of 33KV feeders with a combined circuit length of approximately 5632 KMs supplying power to 300 numbers of 33/11KV Primary Substation (Structures). The 33KV supply is stepped down to 11KV level through 668 numbers of 33/11KV power transformers with an installed capacity of 3350 MVA at these primary substations.1134 numbers of 11KV feeders emanates from the 33/11KV primary substations having cumulative length of approximately 52870 KMs and supply power to HT consumers connected at 11KV level and other LT customers connected to 11/0.415KV distribution substation. Approx. 72769 numbers of distribution transformers are installed in all five circles with an installed capacity of 3488 MVA. The length of the LT network is approximately 62858 KMs. These LT feeders supply power to three phase and single-phase consumers.

Table 2 gives a snapshot of vital parameters and asset base of all five circles of TPWODL.

SL. No	Circle	Rourkela	Sambalpur	Bargarh	Bolangir	Kalahandi	Total
1	No. of Consumers	417588	425838	287462	496802	461135	2088825
2	No of 33/11KV Substation	61	72	44	67	56	300
3	No. of PTR 33/11 KV	143	160	101	147	117	668
4	PTR capacity 33/11KV(MVA)	738	838	548	703	523	3350
5	No. of DTR 11/0.415 KV	14228	13264	14521	15889	14777	72679
6	DTR capacity 11/0.415 KV (MVA)	648	728	701	823	588	3488

Capex plan for FY 23-24

SL. No	Circle	Rourkela	Sambalpur	Bargarh	Bolangir	Kalahandi	Total
7	33KV Line (O/H & U/G-Ckt Km)	1228	1321	723	1235	1125	5632
8	No of 11kV line (OH&UG)	222	271	163	272	206	1134
9	11KV Line (O/H & U/G-Ckt Km)	10635	13089	7710	10804	10632	52870
10	LT Line (ABC-Ckt Km)	8993	5893	4304	8165	6398	33753
11	LT bare line (in Ckt Km)	5574	3864	5646	8442	5579	29105

Note: Division wise details of various network parameters are mentioned in Annexure-1

Existing Network Condition

In TPWODL, the network conditions in different areas possess different challenges related to unsafe networks for our employees, public and animals and equipment. The following issues are observed and the same needs urgent attention to strengthen network and make network safe, reliable and statutory compliant:

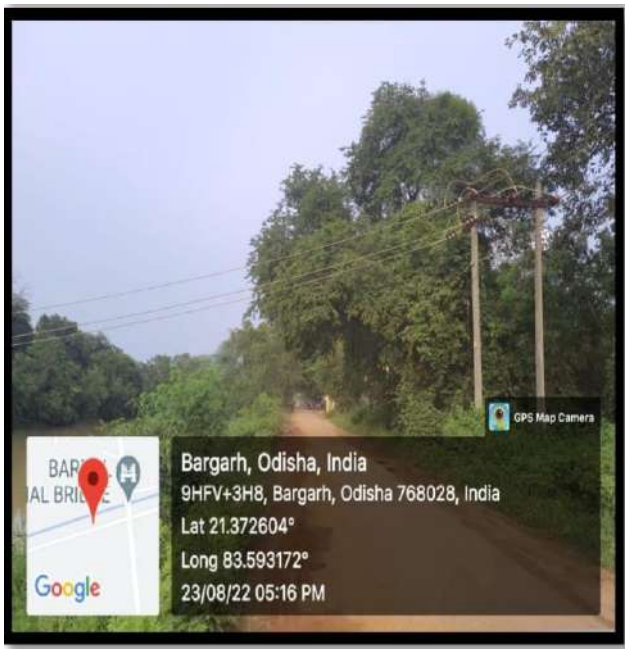
- Unsafe horizontal / vertical clearances in 33 KV, 11KV and LT feeders.
- Damaged Conductor / Poles / Stay wire
- Poor Earthing of the Poles & Structure.
- Absence of cradle wire in overhead MV feeders.
- Poor condition/Absence of fencing/ boundary wall at most of the Distribution Substations & 33/11KV Primary Substations (Structure's)
- Inadequate DC and protection system.
- Dilapidated Civil Infrastructure and no maintenance
- Damaged 33 KV Tower at River Crossing
- Unsafe Condition for employees, public and animal
- Higher Tripping in 11KV feeders
- No Supply Complaints
- No LT Protection in Distribution substation.
- Higher Distribution Transformers Failure Rate
- Aged Power Transformer

➢ **Unsafe horizontal / vertical clearances in 33 KV, 11KV and LT feeders.**

Power distribution utility is bound to comply all statutory compliance and any non- compliance attracts penalties apart from damage to brand image. Most of the network are very old and laid on 8 Mtrs / 9 Mtrs poles with lengthy span. As per construction practice, 1/6th of the total pole length is erected below the ground and thus only available length is approx. 7.5 Mtrs above ground. Considering the fittings and accessories installation, there is hardly any room to account for increased sag or rise in road level. To further worsen the problem; the span length varies from 60-120 Mtrs. More span length causes high sag. In WESCO licensed areas, there are many locations, which are not complying with the statutory guidelines and hence

require huge funds and efforts to make the network safe. At some places, due to re-construction of the roads, vertical clearances of the lines have reduced to the dangerous level causing violation of statutory guidelines. TPWODL proposes to take up installation of mid pole, refurbishment/life enhancement work for lines to rectify all such defects. Since the volume of such locations are high, huge investment spread across many years would be required to rectify all the deficiencies.

Feeders having Unsafe horizontal / vertical clearances Photos are as follows:



- **Damaged Poles / Conductors / Stay**

Due to vast geography widespread network and absence of Capex expenditure in past the existing network has become very weak due to ageing and repeated trippings. Major element, which resulted into weak network, includes damaged pole, worn out conductors, and damaged stay wires. At some locations, poles or support structure are damaged, rusted or tilted. Major factors causing damage to the poles includes structural deterioration of poles, flood, Kalbaisakhi, heavy vegetation etc. Tilting of poles has resulted in increase in conductor sag and if replacement /refurbishment of the tilted or broken pole is not done, mechanical strength of the line will reduce and may result into falling of line during high-speed winds / storms. Falling of line can cause fatal accident. It is also a major concern for ensuring reliable power supply to the consumers as restoration may take many days depending upon the location and severity of damage to the line. To prevent tilting of any pole from its normal position due to abnormal wind pressure, installation of Stay wire is required. At many places egg (stay/guy) insulators are either missing or damaged, which may cause major safety concern not only for the safety of Public but animal also in case of leakage current. Moreover, there are other reasons, which have resulted into depletion of existing network such as use of undersized conductor in overhead feeders, poor condition of the conductor, multiple joints in a single span in many sections, poor binding wire joints etc. witnessed in the sections causing hot spot and may result into jumper parting. Under the refurbishment/life enhancement activity TPWODL has planned to replace damaged poles, replacement of worn-out conductor, re-sagging of the conductor, installation of mid-span pole, introduction of stay-wire at start, end and at every H- pole with at least two stays together.

Condition of Damaged Conductors & Poles Photos are as follows:

➢ **Poor Earthing of the Poles & Structure**

Further, according to rule 42, installation with 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 33/11KV 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.

Condition of Poor Earthing of the pole Photos are as follows:

- **Absence of Cradle/Guard wire in Overhead MV feeders crossing the road.**

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.

Absence of Cradle/Guard wire in Overhead line Photos are as follows:

- **Poor condition/ Absence of fencing/ boundary wall at Distribution Substations & 33/11KV Primary Substations**

Absence of boundary walls and fencing around the Primary Substation and Distribution Substations has exposed the live power distribution equipment to the human beings and animals, who are not aware of the consequences of coming in direct contact or in the arching zone of high voltage equipment. There are high chances of entry of unauthorized persons or animals in high voltage switchyards. There are information's regarding electrocution of

human beings and animals at substations in the past. TPWODL proposes to put up fencing/build boundary wall under the DSS and PSS Refurbishment.

Absence of boundary wall at Distribution substation Photos are as follows:

- **Inadequate DC, non-availability of protection system for breaker & relay:**

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. TPWODL proposes to replace/ add the Battery & Battery chargers, relays, breakers in FY23-24 Capex year also.

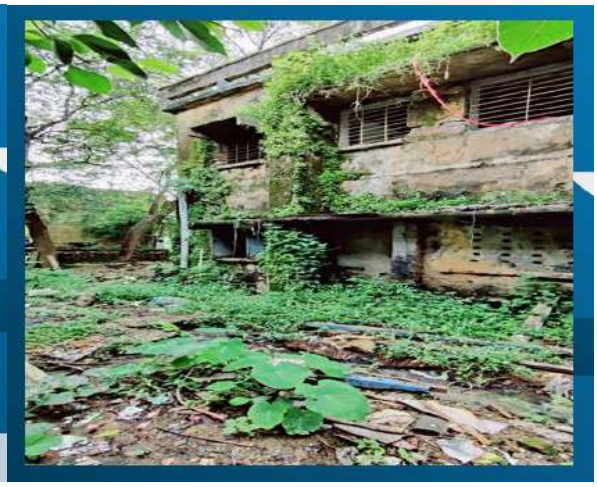
Condition of some Breakers with out protection Photos are as follows:

- **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.

Capex plan for FY 23-24

Condition of some no maintenance building Photos are as follows:



- **Damaged 33KV Tower**

Presently TPWODL network consists of 645 Nos tower. Most of these towers are more than 50 years old and crossing rivers, forest & serving critical load requirement of Rourkela, Sambalpur & other areas. Corporate civil design team were engaged to inspect foundation of these towers. They observed that 30% tower are having poor foundation & structure. In few areas tower leg is being cut (photo attached) and stolen. Considering the above conditions special maintenance activities are planned to repair and strengthen these Towers.

Condition of some damaged Towers Photos are as follows:





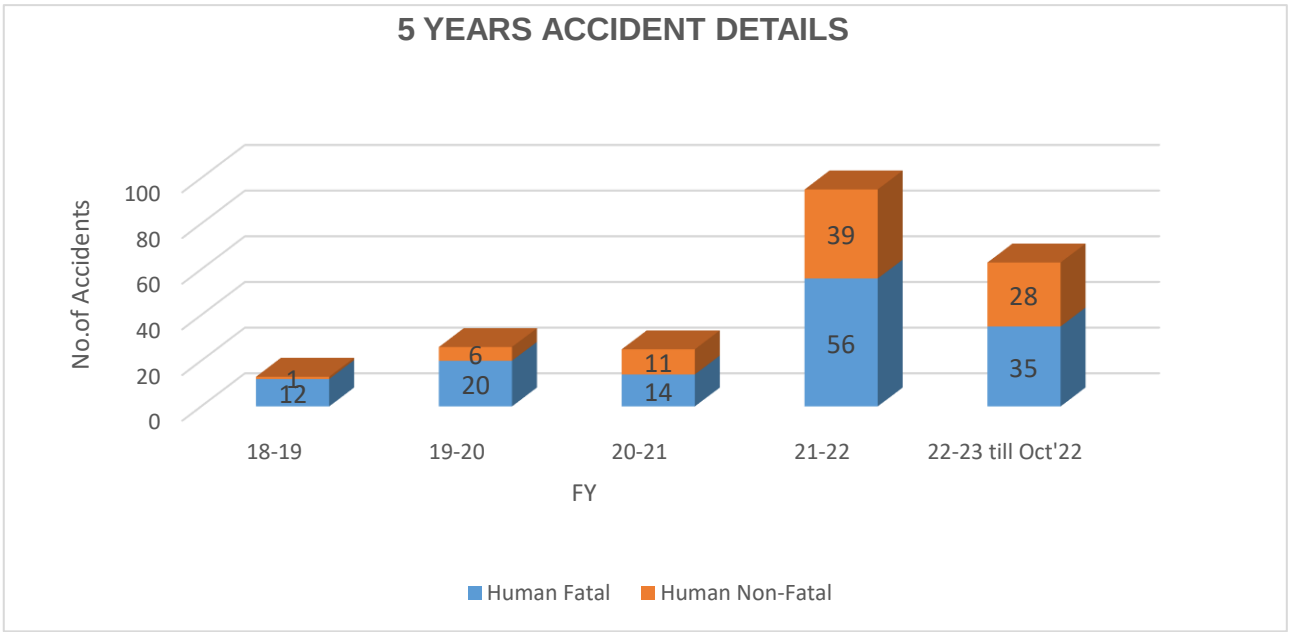

➢ **Unsafe Condition for employees, public and animal**

Last 5 years accident data analysis is done and 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.

Table below shows Year wise details of Fatal / Non-fatal Electrical accidents occurred under TPWODL operational area during Calendar Year 2018-2022.

YEAR WISE FATAL/NON-FATAL ACCIDENT REPORT							
	Human		Total Human	Animal		Total Animal	Total Victim
FY	Human Fatal	Human Non-Fatal		Fatal	Non-Fatal		
18-19	12	1	13	3	0	3	16
19-20	20	6	26	7	8	15	41
20-21	14	11	25	10	2	12	37
21-22	56	39	95	52	0	52	147
22-23 till Oct'22	35	28	63	21	0	21	84
Total	**137**	**85**	**222**	**93**	**10**	**103**	**325**

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.

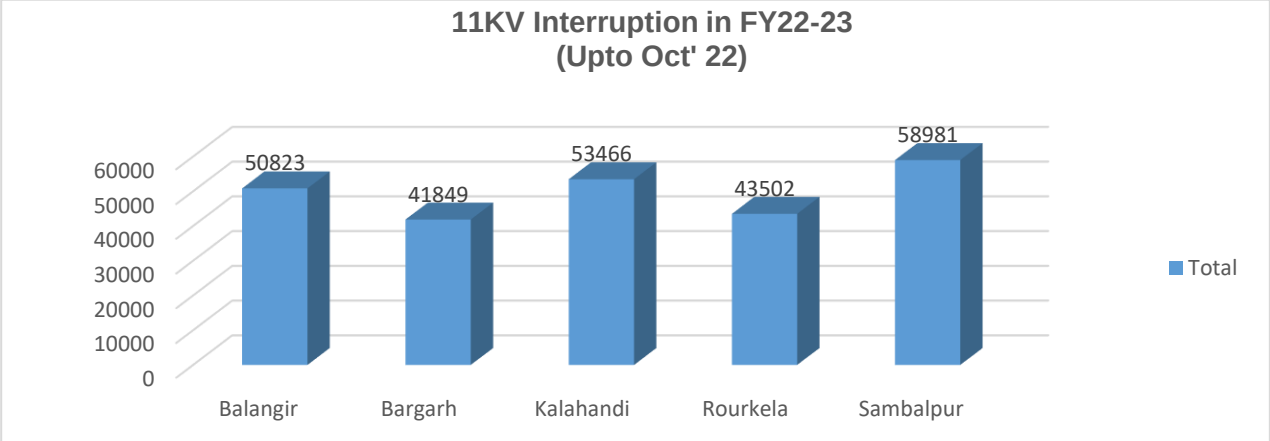


As per present network scenario majority of 11KV & 33KV, networks are overhead in nature.

Many OH feeders are passing through forest area. Most faults that occur on overhead lines are transient faults caused by lightning and tree branches touching the live line conductor.

The table below gives a snapshot of feeder tripping recorded at the 33/11 kV Substations in different circle. Number of tripping of 11KV Feeders for FY 22-23 (Apr'22 to Oct'22) is as under:

Circle Name	Division	Total Trippings
Balangir	BED, Balangir	16,304
	SED, SONEPUR	18,303
	TED, Titlagarh	16,216
Balangir Total		**50,823**
Bargarh	BED, Bargarh	23,169
	BWED, Bargarh	18,680
Bargarh Total		**41,849**
Kalahandi	KEED	20,647
	KWED	19,555
	NED	13,264
Kalahandi Total		**53,466**
Rourkela	RED, Rourkela	4,222
	RGP, Rajgangpur	15,544
	RSED, Rourkela	8,858
	SED, Sundergarh	14,878
Rourkela Total		**43,502**
Sambalpur	BNED, BRAJARAJNAGAR	5,941
	DED, DEOGARH	9,668
	JED, JHARSUGUDA	15,684
	SED, SAMBALPUR	7,902
	SEED, SAMBALPUR	19,786
Sambalpur Total		**58,981**
Grand Total		**2,48,621**



- **No Power Supply Complaints:**

TPWODL has introduced Call Centre, Telephone Operator to register the consumer complaints so that TPWODL can act on various types of problems. List of Various types of No power Complaints received form 1st April-2022 to 31st Oct-2022 in TPWODL area are listed in below table.

Complaint Nature	No of complaints registration	Percentage
VOLTAGE LOW	30037	60.28%
SERVICE WIRE BROKEN	4987	10.01%
SC-WIRE LOOSE CONNECTION	2704	5.43%
LT BREAKDOWN	1961	3.94%
SERVICE CABLE CHANGE	1629	3.27%
SERVICE WIRE DAMAGED	1570	3.15%
TREE FALLEN ON WIRES	803	1.61%
VOLTAGE HIGH	744	1.49%
SPARKING IN SERVICE LINE	714	1.43%
SPARKING IN METER	678	1.36%
SPARKING ON POLE	640	1.28%
DIM SUPPLY	567	1.14%
SPARKING ON TRANSFORMER	459	0.92%
FIRE IN METER/SERVICE CABLE	281	0.56%
FIRE ON POLE/TRANSFORMER	279	0.56%
NEUTRAL NOT COMING	237	0.48%
EARTH LEAKAGE IN PREMISESS	222	0.45%
TRANSFORMER - CABLE/LUGS BURNT	190	0.38%
REVERSE PHASE COMING	166	0.33%
CABLE SPARK	129	0.26%
VOLTAGE VARIATION(HIGH/LOW)	127	0.25%
POLE FELL DOWN	119	0.24%
MCCB TRIP	114	0.23%
LEAKAGE IN POLE	74	0.15%
VF TAP OF TRANSFORMER	73	0.15%
POLE - RUSTED/DAMAGED	60	0.12%
TRANSFORMER LEAKAGE	58	0.12%
POLE BROKEN	54	0.11%
TRANSFORMER - SMOKE/FLAMES	50	0.10%
POLE - CURRENT LEAKAGE	23	0.05%
AB SWITCH REPLACEMENT	18	0.04%
POLE SHIFTING	15	0.03%
LT CABLE SAGGING	11	0.02%
TRANSFORMER FENCING	11	0.02%
REPAIR OF LT SYSTEM	10	0.02%
FIRE IN HOUSE	5	0.01%
REPAIR OF CAPACITOR	3	0.01%
REPAIR OF HT SYSTEM	3	0.01%

From above table it is pertinent to mention here that more than 60% compliants received from consumer is for Low Voltage, which need to be resolved at the earliest.

Major affected sections list is also mentioned in table below.

Analysis shows that 60% of the Complaints fall under 18% of the Sections:

Sl. No.	Division	Voltage Related	Percentage
1	ESO BUDHAPAL	40	6.16%
2	ESO HATIBARI(RAJGNPUR)	33	5.08%
3	ESO KUARMUNDA	22	3.39%
4	ESO BARKOTE	22	3.39%
5	ESO BISRA	22	3.39%
6	ESO NO-II KALUNGA	16	2.47%
7	ESO RAIRAKHOL	15	2.31%
8	ESO TURKELA	15	2.31%
9	ESO REAMAL	14	2.16%
10	ESO RE SECTION	12	1.85%
11	ESO BONAI	11	1.69%
12	ESO NO-I SUNDARGARH	10	1.54%
13	ESO PAIKMAL	10	1.54%
14	ESO JED-1	9	1.39%
15	ESO GAISILAT	9	1.39%
16	ESO JED-2	8	1.23%
17	ESO NO-III RAJGANGPUR	8	1.23%
18	ESO RENGALI	8	1.23%
19	ESO LATHIKATA	8	1.23%
20	ESO BELPAHAR	7	1.08%
21	ESO KUTRA	7	1.08%
22	ESO UJALPUR	7	1.08%
23	ESO - I KUCHINDA	7	1.08%
24	ESO SUBDEGA	6	0.92%

- **No LT Protection:**

Most of DSS protection and control are not operating properly. As a result, fault in any one LT circuit resulting into tripping of DT incoming 11KV feeder. Also, while carrying out maintenance or replacing the LT circuit blown fuses the operator needs to take hand trip of entire 11KV feeder from PSS.

➢ **Higher Distribution Transformers Failure Rate:**

Apart from high number of Accidents, other major problem is high number of DT failure and extremely high number of interruptions at 33 kV and 11 kV level due to poor network conditions. This affects the supply system very badly.

Failure analysis

Total 72679 DTRs are installed in TPWODL System.

a. Below Report shows Total DTs Installed in 3 Category:

Circle	Total installed - 14228	Total installed - 13264	Total installed - 14521	Total installed - 15889	Total installed - 14777
	Rourkela	Sambalpur	Bargarh	Balangir	Kalahandi
Urban	3240	2838	2499	2711	2903
Rural	6882	6465	7618	8444	7568
Agriculture	4106	3961	4404	4734	4306

b. Below Details Shows Capacity Wise DTs installed in TPWODL.

Circle name	Capacity	Total DTs installed in our system
Rourkela	10KVA TO 63KVA	10628
	100 KVA TO 200KVA	3134
	250KVA TO 500 KVA	454
	630 KVA TO 1000KVA	12
Sambalpur	10KVA TO 63KVA	8902
	100 KVA TO 200KVA	3684
	250KVA TO 500 KVA	645
	630 KVA TO 1000KVA	33
Bargarh	10KVA TO 63KVA	9465
	100 KVA TO 200KVA	4745
	250KVA TO 500 KVA	301
	630 KVA TO 1000KVA	10
Balangir	10KVA TO 63KVA	9424
	100 KVA TO 200KVA	6243
	250KVA TO 500 KVA	215
	ABOVE 500 KVA TO 1000KVA	7
Kalahandi	10KVA TO 63KVA	9226
	100 KVA TO 200KVA	5307
	250KVA TO 500 KVA	241
	ABOVE 500 KVA TO 1000KVA	3
Total number of Capacity wise DTs		72679

A. Root cause analysis of DT'S failure:

1) FY'21 DTR failure Analysis – In FY'21 Total 3297Nos. DTRs are mainly failed due to Overloading, Aging & Vijai Electrical make. Failure data is as follows:

DTR Analysis category-wise	Reasons	Fy'21-22(apr - mar)		
		10KVA TO 63KVA BELOW	63KVA TO 200KVA BELOW	ABOVE 200KVA TO 1000 KVA BELOW
Urban	Over loaded	128	73	27
	Vijay electrical	25	22	0
	Ageing (15 yrs. Above)	98	43	22
	Good	114	27	30
Rural	Over loaded	267	98	9
	Vijay electrical	157	43	0
	Ageing (15 yrs. Above)	465	74	12
	Good	199	141	17
Agriculture	Over loaded	458	11	0
	Vijay electrical	67	0	0
	Ageing (15 yrs. Above)	357	21	0
	Good	257	35	0

2) FY'22 DTR failure Analysis – In FY'22 Total 2268Nos. DTRs are mainly failed due to Overloading, Aging & Vijai Electrical make. Failure data is as follows:

DTR. Analysis category-wise	Reasons	Fy'22 -23(apr - oct)		
		10KVA to 63KVA BELOW	63KVA to 200KVA BELOW	ABOVE 200KVA to 1000 KVA BELOW
Urban	Over loaded	108	115	23
	Vijay electrical	24	27	0
	Ageing (15 yrs. Above)	67	69	18
	Good	71	66	13
Rural	Over loaded	297	214	10
	Vijay electrical	75	57	0
	Ageing (15 yrs. Above)	159	135	8

DTR. Analysis category-wise	Reasons	Fy'22 -23(apr - oct)		
		10KVA to 63KVA BELOW	63KVA to 200KVA BELOW	ABOVE 200KVA to 1000 KVA BELOW
	Good	210	132	7
Agriculture	Over loaded	135	10	0
	Vijay electrical	30	6	0
	Ageing (15 yrs. Above)	84	4	0
	Good	88	6	0

B. Reasons for DT's Failure

1) Over loading:

During field verification & system Reliability inspection it has been observed that many DTRs are overloaded above their capacity & which is the main Cause of DTR failure in Summer Season. In SAUBHAGYA/DDUGY/RGGVY Many DTs (16kVa to 25 kVa) are installed with new connections adding load on already installed DTRs. Every Year 20000 new connections are given to our new consumer in various TPWODL area in Existing Distribution Transformer. Circle wise Over Loaded Transformer data is as follows:

Circle name	Capacity	Over loaded
Rourkela	10KVA TO 63KVA	1248
	100 KVA TO 200KVA	365
	250KVA TO 500 KVA	54
	ABOVE 500 KVA TO 1000KVA	2
Sambalpur	10KVA TO 63KVA	1008
	100 KVA TO 200KVA	410
	250KVA TO 500 KVA	71
	ABOVE 500 KVA TO 1000KVA	4
Bargarh	10KVA TO 63KVA	988
	100 KVA TO 200KVA	497
	250KVA TO 500 KVA	34
	ABOVE 500 KVA TO 1000KVA	1
Balangir	10KVA TO 63KVA	988
	100 KVA TO 200KVA	646
	250KVA TO 500 KVA	22

Circle name	Capacity	Over loaded
	ABOVE 500 KVA TO 1000KVA	1
Kalahandi	10KVA TO 63KVA	955
	100 KVA TO 200KVA	539
	250KVA TO 500 KVA	25
	ABOVE 500 KVA TO 1000KVA	1
Total Overloaded DTs		7859

2) Ageing:

In TPWODL System Many Distribution Transformers are Installed in near about 15 to 20 years back. These Transformers are failing because of over age and frequent faults in the system. These Transformers are either not repairable or if repairable but having high No Load losses also the cost of repair of this transformer is comparatively high as compare to new Transformer. Which is also causing reliability of power supply to the Consumers. Hence instead of repairing these old age transformers it is better to replace with new one. Over aging is also impacting the technical losses of the system.

Circle-wise Ageing Transformer data is as follows:

Circle name	Capacity	Ageing
Rourkela	10KVA TO 63KVA	2705
	100 KVA TO 200KVA	793
	250KVA TO 500 KVA	114
	ABOVE 500 KVA TO 1000KVA	2
Sambalpur	10KVA TO 63KVA	2226
	100 KVA TO 200KVA	921
	250KVA TO 500 KVA	161
	ABOVE 500 KVA TO 1000KVA	8
Bargarh	10KVA TO 63KVA	2366
	100 KVA TO 200KVA	1186
	250KVA TO 500 KVA	75
	ABOVE 500 KVA TO 1000KVA	2
Balangir	10KVA TO 63KVA	2158
	100 KVA TO 200KVA	1435
	250KVA TO 500 KVA	51
	ABOVE 500 KVA TO 1000KVA	2
Kalahandi	10KVA TO 63KVA	2307
	100 KVA TO 200KVA	1327
	250KVA TO 500 KVA	60
	ABOVE 500 KVA TO 1000KVA	1
Total Aged DTs		**17898**

3) VIJAI MAKE:

M/s. Vijai make DTRs installed During Wesco time & under govt. initiative of DDUGJY/RGGVY, 12Th plan are frequently failing since installation. These transformers are Also Having High losses and not repairable by Regular Vendors. Hence there is difficulty to repair these transformers due to complicated core arrangement and core design. Circle wise Vijai Make Transformer data is as follows:

Circle name	Capacity	Vijai electrical
Rourkela	10KVA TO 63KVA	531
	100 KVA TO 200KVA	157
	250KVA TO 500 KVA	23
	ABOVE 500 KVA TO 1000KVA	0
Sambalpur	10KVA TO 63KVA	445
	100 KVA TO 200KVA	184
	250KVA TO 500 KVA	32
	ABOVE 500 KVA TO 1000KVA	1
Bargarh	10KVA TO 63KVA	473
	100 KVA TO 200KVA	237
	250KVA TO 500 KVA	15
	ABOVE 500 KVA TO 1000KVA	0
Balangir	10KVA TO 63KVA	471
	100 KVA TO 200KVA	312
	250KVA TO 500 KVA	11
	ABOVE 500 KVA TO 1000KVA	0
Kalahandi	10KVA TO 63KVA	461
	100 KVA TO 200KVA	265
	250KVA TO 500 KVA	12
	ABOVE 500 KVA TO 1000KVA	0
Total Nos of VIJAL make DTRs		3632

4) Other reasons of DTR's Failure

Apart form above mentioned reasons there are some other reasons which affecting failure of DTs.

a. Heavy Lightening: TPWODL is high lightening prone area. Lightening strokes are regularly observed during Kal-baisakhi and normal rainy season also.

b. Oil Level Low- Many Old Transformers are also failing due to low Oil level by several years.

c. Improper Earthing- In several DSS either earthing system in not available or improper earthing has been done earlier.

C) Benefits:

a) Improve power system reliability.

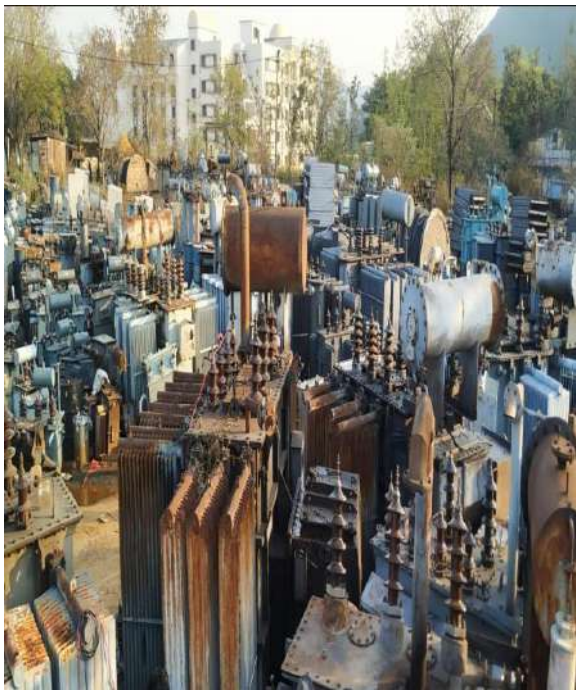
b) Improve revenue.

c) Lower Maintenance cost.

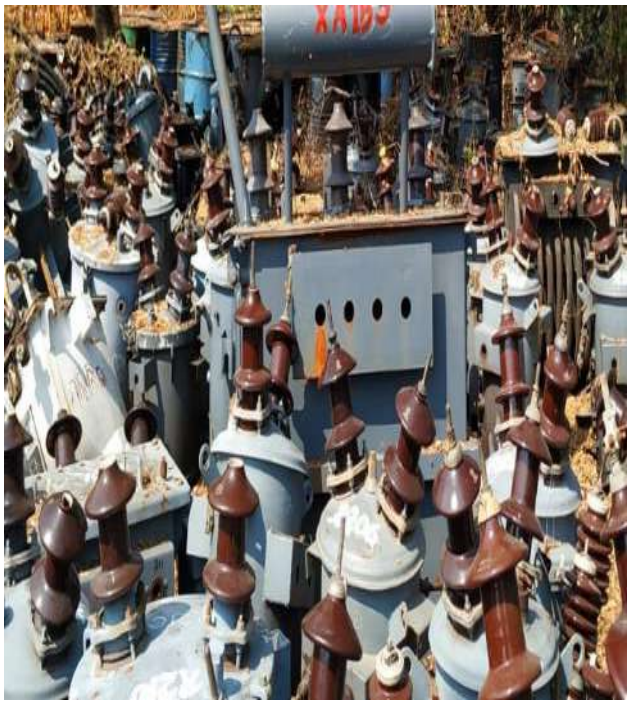
d) Reduce system losses

e) Improve customer satisfaction

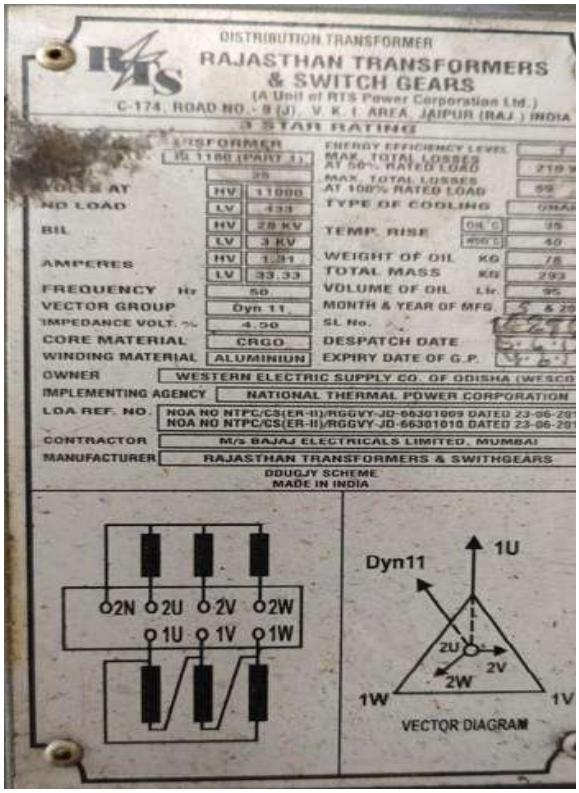
Figures:



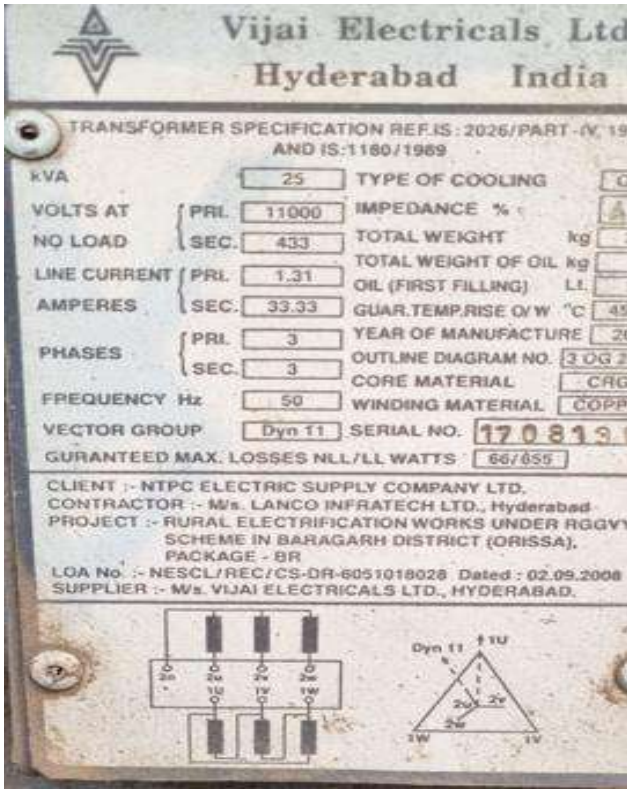
OLD DTRs



OLD DTRs

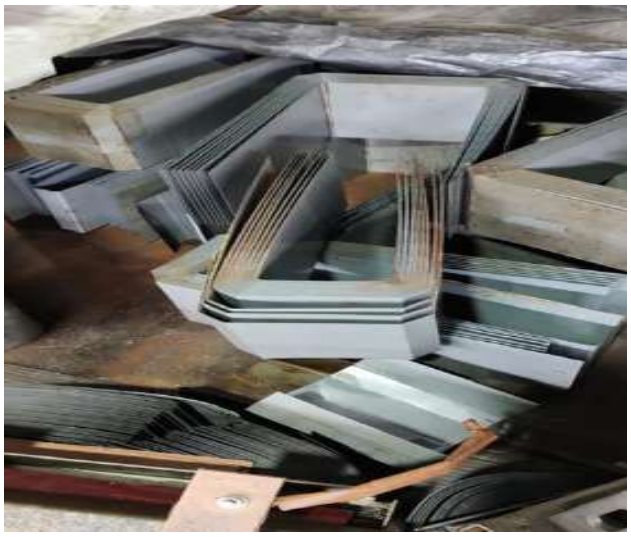


Vijai Make name plate



Vijai Make name plate

Vijai Make core



Vijai Make core

- **Network Ageing Details:**

Network Details	< 10 year	10-20 year	20-30 year	30-40 year	> 40 years	Total
Length of 11 KV lines(km.)	18863	9302	11652	5758	7295	52870
Length of 33 KV lines(km.)	1952	979	606	664	1491	5692
Length of L.T. lines(km.) (AB Cable)	23460	8765	672	794	63	33753
Length of L.T. lines(km.) (Bare Conductor)	4389	5498	6883	6445	5890	29105
No. of 11 KV Feeder Breakers Installed	529	206	32	47	52	866
No. of 11 KV Group Breakers Installed	238	128	24	25	26	441
No. of 33 KV Feeder Breakers Installed	203	65	8	12	26	314
No. of 33 KV Group Breakers Installed	142	108	9	12	20	291
No. of 33/11 kV transformers (PTR)	369	151	81	30	37	668
No. of distribution ransformer (11/0.4 & 33/0.4 kV)	36846	19523	7140	4738	4522	72769

- **Power Transformer:**

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.

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 reason 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 & 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. There are close to >40 stations where the load is catered to by a single PTR. 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.

Photographs of Power Transformers

Load Flow Analysis

Hon'ble OERC has advised TPWODL to submit the Capex investment Plan on the basis of Load flow studies. TPWODL has completed the load flow studies for 33KV & 11KV network after modelling the existing SLDs received from sites in CYMDIST Software and have prioritize the proposals on the basis of load flow studies. Load flow studies Consists of 33KV feeder loading report, PTR Loading Report,11KV feeder loading Report, DT Loading Report, Abnormalities observed in 33KV & 11KV Feeders, sections. Load Flow studies is also used to calculate the technical loss in the 33KV & 11KV network. Load flow studies is done on existing network, Base-2 (Existing network with Approved scheme after considering Load growth).

Objective of Load Flow Study

The main objective of this study is to evaluate the 11kV network in TPWODL area for following objectives:

- Modelling of detailed electrical network of 11KV with all relevant technical details for Base-1 & base-2 Study.
- Identification of abnormal conditions (Under Voltage, Over Voltage, over loading, N-1 redundancy of high revenues) in 11kV network as per loading of year 2021 & future load growth of 2 Yrs.
- Calculation of accurate technical losses with different loading condition on Network (For Lines, Cables and distribution transformers etc.)
- Plan mitigation proposals for identified abnormalities for catering future (next 2 years) load demand.
- Prepare & submit detailed study report after load flow study to mitigate over loading, under voltage and N-1 of High revenue feeder.
- Ensuring adequacy of the Network to serve the objectives of schemes like 24 x 7 Power for all, which mandates uninterrupted power supply to 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.

In order to improve the performance of the network one needs to analyze the existing electrical network and optimize them, such that they can cater the future load with high reliability and decreased losses.

The Pre-requisite for this study is:

- Electrical Network data/SLDs/Diagram for considered voltage levels. (If Geo-reference network data is available, it will be added advantage for future planning of network)
- Interconnections details with (NO & NC) points.
- Actual peak load details of 11kV s and DTRs.
- Accurate load growth estimation for next 2 years.
- Electrical network connectivity of approved proposals with major equipment details.

Salient Points of the Load Flow Study

- The present study report includes the electrical network starting from 33/11KV Substation, Transformers 11KV feeders upto Distribution Transformer.
- TPWODL PSCC team / Circle Team shared network NOC / topography of the network and the related technical data.
- The Study involves usage of technical data of network as currently available with the Power distribution utility (TPWODL) and updating of this technical data to reflect contemporary situation (year 2021).
- The complete details pertaining to the 11KV network were procured from the existing repository, which was already created and maintained over the period till date. This network data was updated after recording the changes in the network since the end of aforesaid period and before being used in CYMDIST Software for system studies.
- The reports of various analysis performed on this network are based on the available technical data from various locations and offices. More detailed analyses can be performed and thorough assessment can be done based on input data.
- The practice of study of power electrical network is meaningful and serves its intended purpose only if it is carried out periodically/regularly for a given area of interest, considering periodic changes in load conditions, which are seldom static.
- This purpose of this Study is largely to evaluate the performance of the power electrical network and verify how healthy network is to face any complex changes in the systems.

Modes of studies:

Under this study it is planned to perform following assessment:

- Model detailed electrical network of existing 11KV s with all relevant technical details.
- Assessment of present network conditions & 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.
- Perform Load Flow Analysis on the existing network and identify the abnormal conditions (Over voltage, Under Voltage, Overloading of equipment's) in the network. Generate study report for loading and technical losses in the system.
- Apply Load Growth on the 11KV Distribution network from Year 2021 to 2023 year. Again, Perform Load Flow Analysis on the network and identify the abnormal conditions. Generate Study Reports.
- Model detailed electrical network of approved (YTS & WIP proposals)11KV s 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's) in the network. Generate study report for loading and technical losses in the system.
- Identify network reinforcement for catering future 2-year load demand.
- Discuss with field team and model the plan network after finalisation of proposals.
- Prepare & submit detailed study report on various System studies.

Following voltage limits are used as 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 (0.6kV to 33 kV), +6% and -9%

For simulating the Power Flow analysis, the following assumptions were considered.

1. Peak demand of year 2021 assigned to the Distribution transformers.
2. Power Factor is considered 87.5%
3. LLF considered is 0.546

The load flow analysis has been simulated using the Newton-Raphson-Unbalanced method

for Power flow for the current network in 2021 and for the network with forecasted load growth for year 2023, Tata Power and Techlabs Proposal on 2023 Year Network.

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 & 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 & Sources (OPTCL/Other Discom)
- Network Inadequacy.

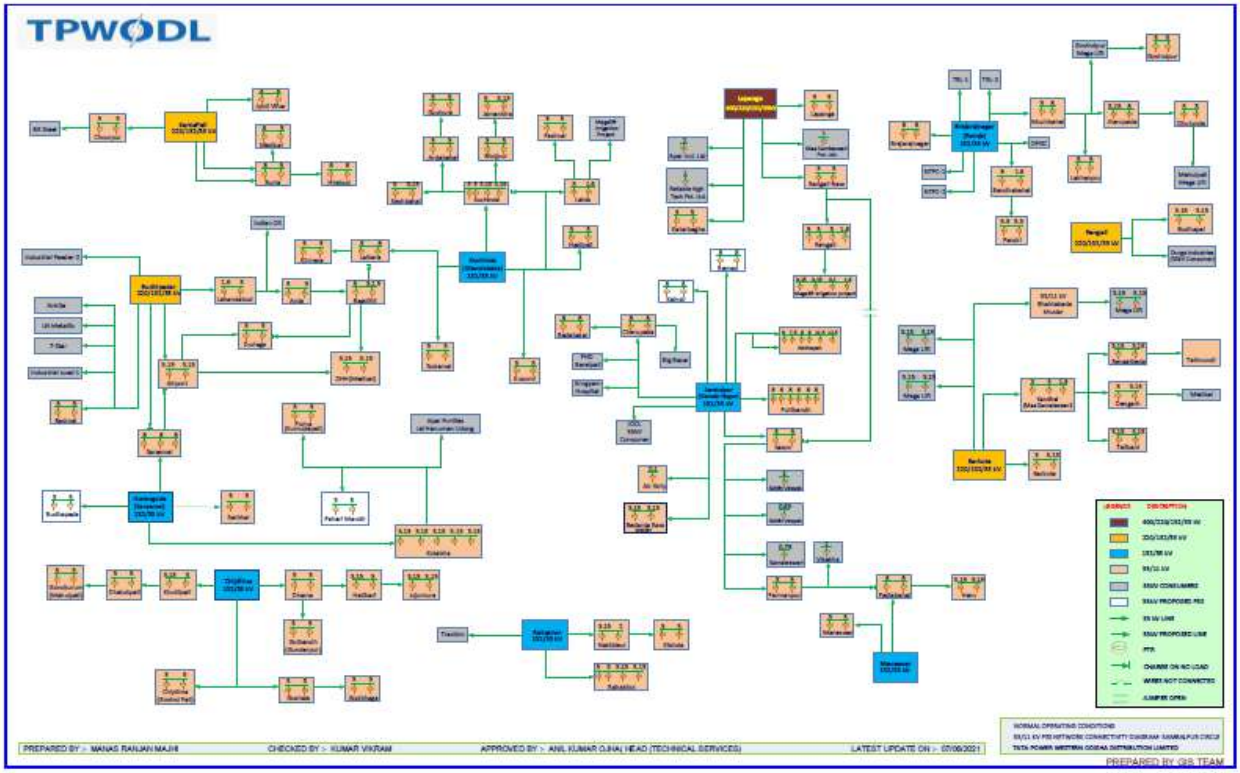
c) Mitigation Plan & Recommendations

d) Planned Network Analysis Report for:

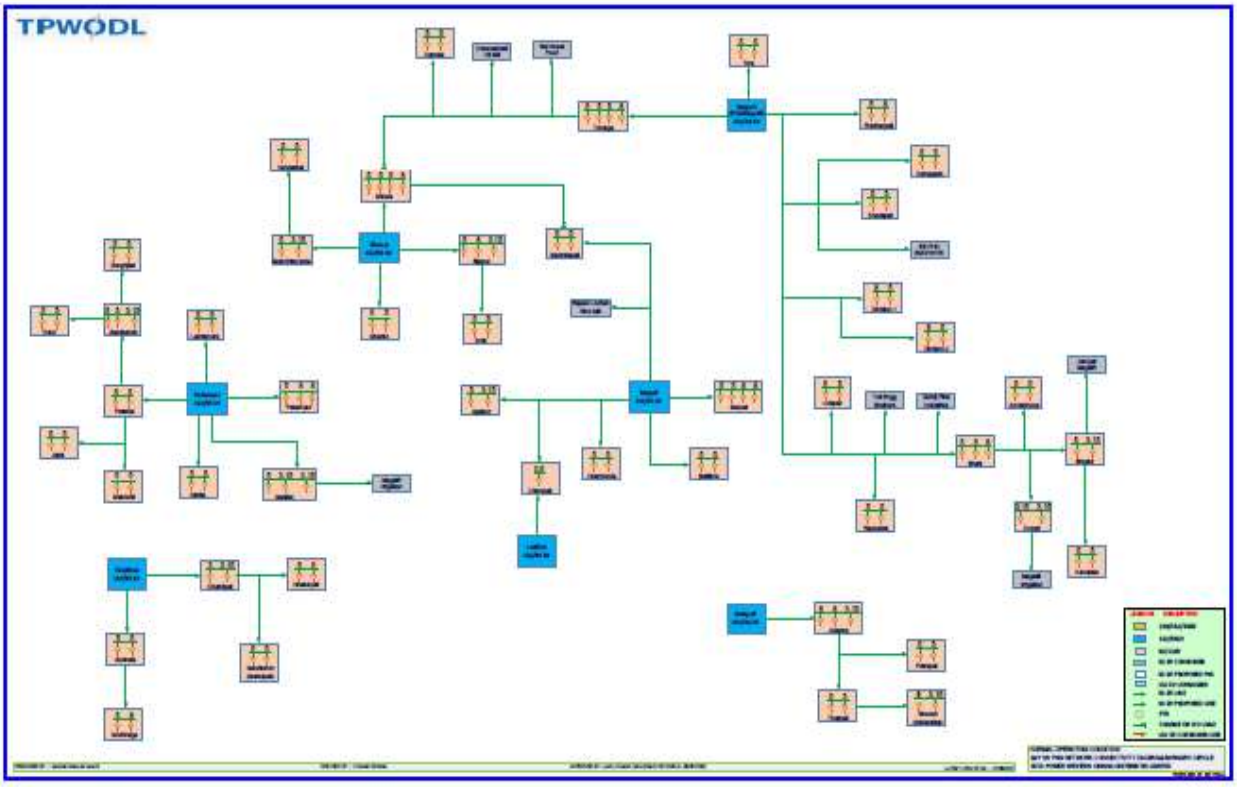
- Voltage Regulation
- Technical Losses
- Overloading both Conductor/ Cable and Power Transformers
- N-1 redundancy at Lines, Power Transformers & Sources (OPTCL/Other Discom)

33 KV Network Topology:

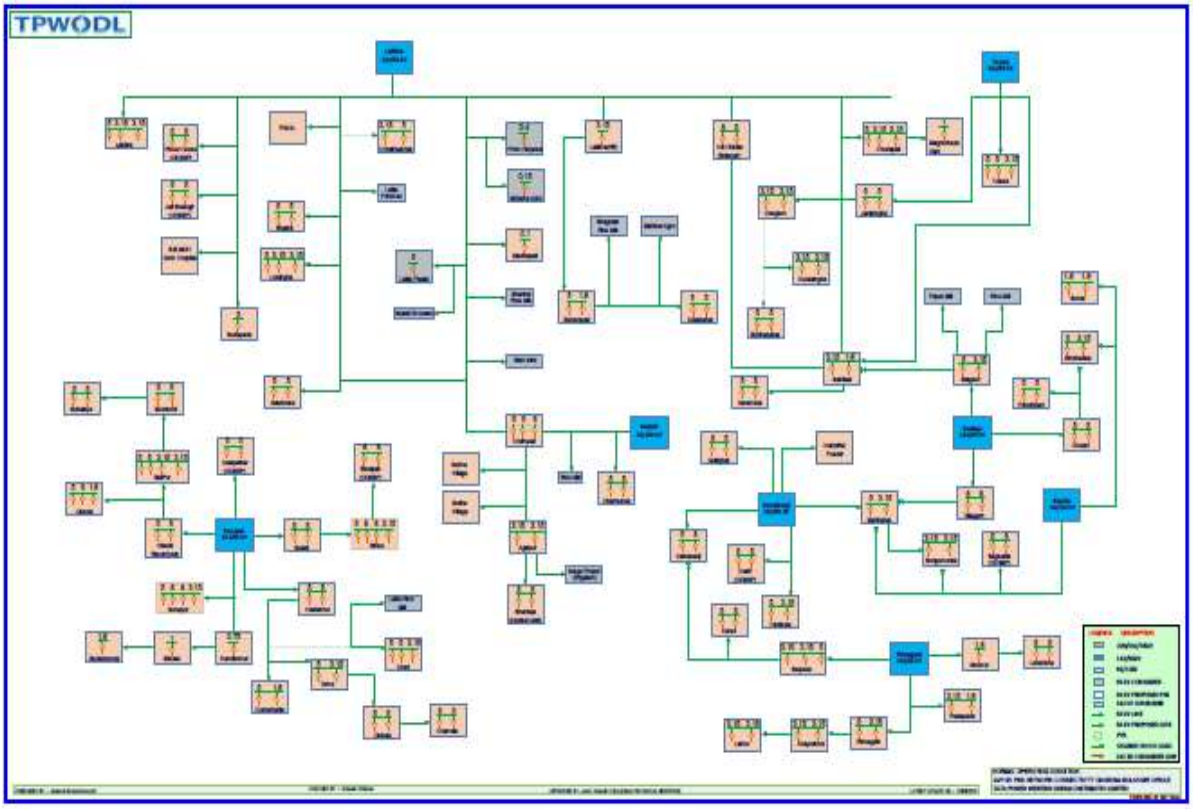
Network Topology of Sambalpur Circle



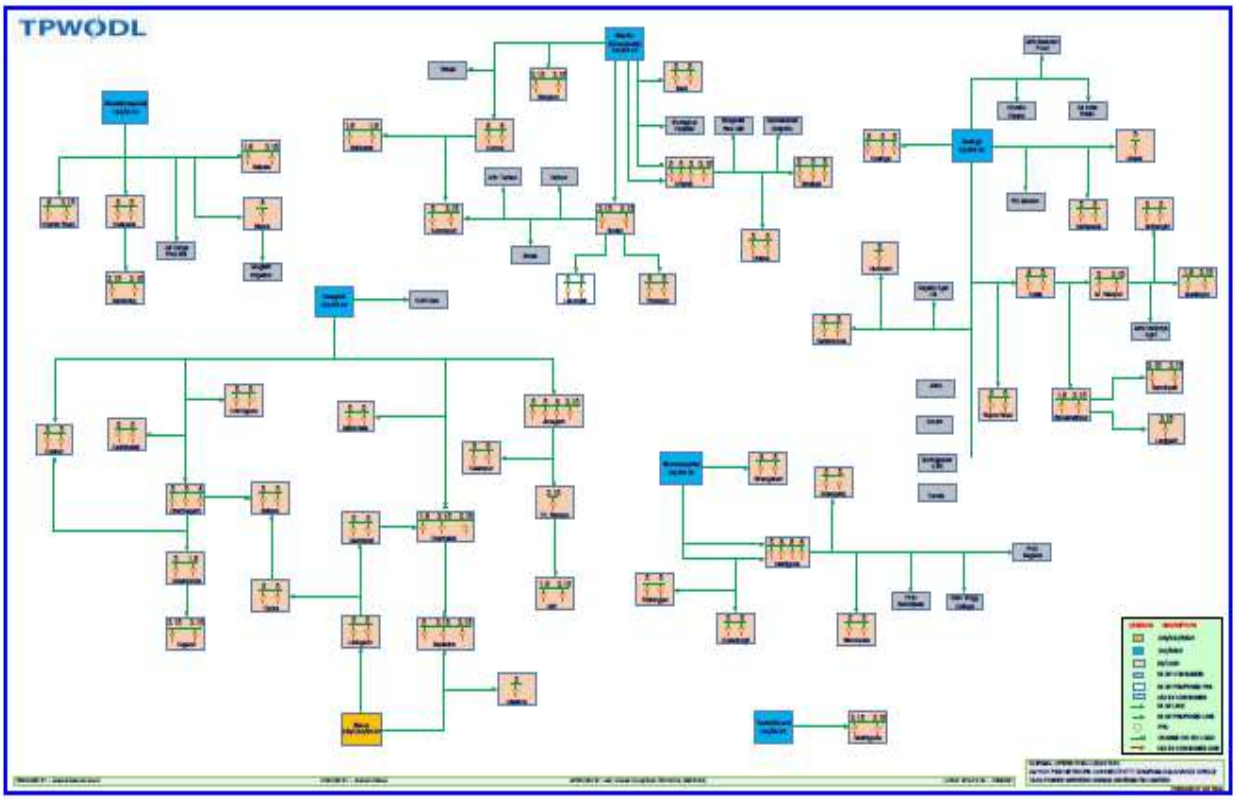
Network Topology of Bargarh Circle



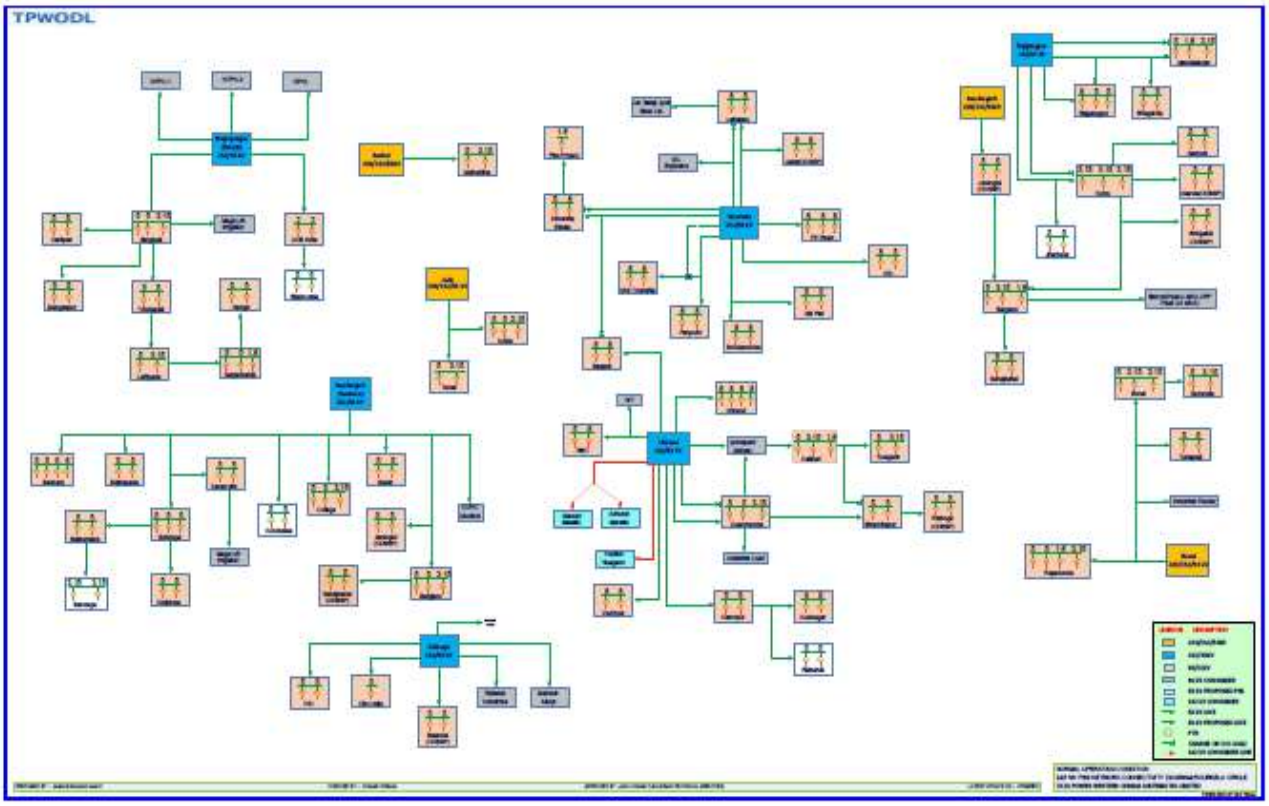
Network Topology of Bolangir Circle



Network Topology of Kalahandi Circle



Network Topology of Rourkela Circle



- **Existing Asset Details:**
  - **Summary of 33KV PSS & PTR:**

Circle	ODSSP/Non-ODSSP	No. Of PSS	No. PTR	PTR Capacity (MVA)	PTR Peak (MVA)	No. of Over Loaded PTRs after 2 Years
Bargarh	Non- ODSSP	21	56	314	254	24
Bargarh	ODSSP	23	45	234	144	15
Bolangir	Non- ODSSP	40	93	425	161	6
Bolangir	ODSSP	27	54	278	63	1
Kalahandi	Non- ODSSP	35	75	317	145	5
Kalahandi	ODSSP	21	42	206	54	1
Rourkela	Non- ODSSP	33	87	444	209	13
Rourkela	ODSSP	28	56	294	72	1
Sambalpur	Non- ODSSP	37	90	475	221	8
Sambalpur	ODSSP	35	70	363	93	1
Total		300	668	3350	1414	75

Note: Details of Existing PSS is mentioned in Annexure-2 and proposals related to New PSS is mentioned in Annexure-3

➢ **33KV Feeders:**

- **Summary of 33KV feeders:**

Circle	No. of GSS	No. of 33KV Feeders	No of 33 kV Fdr. With Low Voltage	No. of section with Low Voltage	No. of overload feeder	No. of Section with over Load
Bargarh	4	19	12	83	10	20
Bolangir	6	35	10	62	7	13
Kalahandi	7	24	7	73	4	7
Rourkela	7	47	9	56	7	11
Sambalpur	12	41	6	67	4	15
Total	36	166	44	341	32	66

- **33KV Loading Feeders Report:**

BARGARH						
Substation: 33KV I/C FROM 132KV BARGARH(PRADHANPALI) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
4 poles	17142	14885	300	992	45250	6.7
Dunguri	31947	27619	559	3264	113685	11.8
Tora	6398	5574	112	85	5540	1.5
Town	16453	14307	288	407	3050	2.8
Turunga	21945	18835	384	2035	48827	10.8
Total	**93881**	**81219**		**6783.4**	**216352.4**	**8.4**
Substation: 33KV I/C FROM 132KV BARPALI:						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
Barpali	17701	15390	310	503	3500	3.27
Bijepur-2	8517	7379	149	332	26100	4.49
Melechamunda	10850	9461	190	1176	56550	12.43
Pandikital	14855	12908	260	1201	42900	9.30
Total	**51922**	**45138**		**3211**	**129050**	**7.11**
Substation: 33KV I/C FROM 132KV CHIPILIMA :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
Dhama-2 (khuntulipali)	7001	6090	122	507	47200	8.32
Goshala	14398	12504	252	410	17200	3.28

Total	**21398**	**18594**		**917**	**64400**	**4.93**
Substation: 33KV I/C FROM 132KV GHENSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
Bijepur	18280	15774	320	1910	29200	12.11
Ghenss	7200	6260	126	51	560	0.81
Melchamunda	6741	5853	118	228	28000	3.89
Sohela	19694	16991	345	2030	23000	11.95
Total	**51914**	**44878**		**4218**	**80760**	**9.40**
Substation: 33KV I/C FROM 132KV KATAPALI :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
Attabira	25939	22497	454	3434	53900	15.26
Total	**25939**	**22497**		**3434**	**53900**	**15.26**
Substation: 33KV I/C FROM 132KV PADAMPUR :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
Network ID	kVA	kW	R	kW	m	
Dahita	1714	1499	30	22	12000	1.50
Gaisilet	6970	6066	122	614	39500	10.12
Lakhmara	2512	2194	44	39	14500	1.78
Padampur	7423	6460	130	106	8000	1.65
Paikmal.	21714	18633	380	7072	105000	37.95
Total	**40329**	**34852**		**7853**	**179000**	**22.53**
Summary						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	%Loss
	kVA	kW	R	kW	m	
Total	**285381**	**247178**		**26417**	**723463**	**10.69**
BOLANGIR						
132/33 kV BARPALI :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Melechhamunda	10859	9470	190	1064	56550	11.2
Pandikital	14855	12889	260	1009	42900	7.8
Total	**25713**	**22360**		**2073**	**99450**	**9**
132/33 kV KANTABANJHI :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Gudighat	3201	2792	56	51	15000	1.8

Industrial	651	573	11	3	5300	0.4
Kantabhanjhi	5874	5116	103	67	4000	1.3
Muribahal	5200	4529	91	265	34000	5.8
Turekela	3598	3143	63	112	25400	3.6
Total	**18524**	**16153**		**497**	**83700**	**3.1**
132/33 kV KESINGA :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Belgaon	11703	10232	205	1496	106730	14.6
Titlagargh(kesinga)	11597	10077	203	428	83200	4.2
Total	**23299**	**20309**		**1923**	**189930**	**9.5**
132/33 kV KHARIAR :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Khariar 2	14290	12513	250	948	68620	7.6
Total	**14290**	**12513**		**948**	**68620**	**7.6**
132/33 kV NEW BOLANGIR(SADEIPALI) :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Bpcl	555	486	10	2	4000	0.3
Khariar(sadeipali)	1503	1316	26	4	7000	0.3
Madhiapali	7375	6438	129	181	37400	2.8
Total	**9433**	**8241**		**186**	**48400**	**2.3**
132/33 kV OLD BOLANGIR :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Barpali(bolangir)	17090	14812	299	2442	56790	16.5
Bolangir	7601	6620	133	40	10	0.6
Boudh	9601	8372	168	171	18050	2.0
Dumerbahal	1658	1445	29	10	3020	0.7
Dungri pali	10000	8687	175	513	36500	5.9
Idco	24	0	0	0	6000	100.0
Patnagarh	6630	5770	116	301	26000	5.2
Titlagarh(bolangir)	8688	7564	152	145	5400	1.9
Total	**61255**	**53269**		**3623**	**151770**	**6.8**
132/33 kV RAMPUR (PATNAGARH) :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Dhumabhata	2282	1995	40	34	24000	1.7

Ghumer	3428	2995	60	84	24000	2.8
Khaparakhol	4571	3994	80	230	42600	5.7
Padampur	1141	1002	20	20	22000	2.0
Patnagarh rampur	10284	8970	180	654	55570	7.3
Tendapadar	1143	1000	20	11	3000	1.1
Total	**22849**	**19956**		**1033**	**171170**	**5.2**
132/33 kV SONEPUR :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Binka	14855	12866	260	848	37000	6.6
Biramaharjpur	17002	14803	297	1436	52350	9.7
Dumberhal(sonepur)	21139	18345	370	1747	87300	9.5
Nandanmal	914	803	16	8	89000	1.1
Sonepur	5714	4989	100	36	1200	0.7
Total	**59624**	**51805**		**4077**	**266850**	**7.9**
132/33 kV TUSURA :						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
Network ID	kVA	kW	R	kW	m	%
Deogaon	11885	10337	208	484	64000	4.7
Mega project irrigation- 3	498	436	9	1	15000	0.3
Mega project irrigation-1	12001	10329	210	3525	65000	34.1
Mega project irrigation-2	1498	1313	26	8	10000	0.6
Tusura	7998	6957	140	69	1500	1.0
Total	**33879**	**29372**		**4088**	**155500**	**13.9**
Summary						
	Total Load		Current (A)	Total Losses	3ph Length	LOSSES
	kVA	kW	R	kW	m	%
Total	**268862**	**233977**		**18449**	**1235390**	**7.9**
KALAHANDI						
Substation: 132 BHAWANIPATNA(BHANGABARI). :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Bhangbari	1257	1099	22	13	160	1.2
Town feeder 1	8687	7594	152	167	35830	2.2
Town feeder 2	9254	8094	162	131	3000	1.6
Total	**19198**	**16788**		**311**	**38990**	**1.9**
Substation: 132KV BHERA(NUAPADA). :						

	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Bisora	7264	6349	127	363	36000	5.7
Khariar road	14404	12589	252	504	33020	4.0
New medical	1428	1249	25	23	9000	1.9
Total	**23096**	**20188**		**891**	**78020**	**4.4**
Substation: 132KV JUNAGARH. :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Bhawanipatna	631	550	11	6	6000	1.0
Charbahal	3597	3144	63	108	36100	3.4
Daspur	2319	2028	41	34	25000	1.7
Dharmagarh	12805	11201	224	1365	104040	12.2
Junagarh	8597	7517	150	317	71800	4.2
Total	**27947**	**24440**		**1831**	**242940**	**7.5**
Substation: 132KV KESINGA:						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Belgaon	11699	10237	205	1431	106730	14.0
Bhawanipatna 1	2598	2273	45	68	28100	3.0
Bhawanipatna-2	2098	1836	37	46	39000	2.5
Kesinga	8190	7159	143	83	1800	1.2
Mega lift 1	6750	5905	118	151	10300	2.5
Mega lift 2	1023	895	18	18	23000	2.0
Narla	11899	10415	208	1964	161500	18.9
Total	**44258**	**38720**		**3760**	**370430**	**9.7**
Substation: 132KV KHARIAR(CHNABEDA). :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Bargoan(old nuapada)	10174	8884	178	1215	99820	13.7
Boden	3430	3000	60	139	38500	4.6
Khariar 1	10514	9194	184	910	43320	9.9
Khariar 2	14289	12504	250	1186	68620	9.5
Total	**38407**	**33582**		**3451**	**250260**	**10.3**
Substation: 132KV TENTULIKHUNTI. :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
Mukhigunda	1850	1620	32	96	65050	5.9
Total	**1850**	**1620**		**96**	**65050**	**5.9**

Substation: 222/132KV BANER. :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	A	kW	m	%
BADKUTRU	4628	4047	81	76	21400	1.9
LADUGAON	9431	8246	165	581	58470	7.0
Total	**14059**	**12293**		**657**	**79870**	**5.3**
Summary						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
	kVA	kW	A	kW	m	%
Total	**168816**	**147630**		**10996**	**1125560**	**7.4**
ROURKELA						
Substation: 33 KV SOURCE FROM 132KV GRID SUNDARGARH(SANKARA) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
ASHOKA SYNTHETICS SPINNING MILLS	600	525	10	0	400	0.0
COLLEGE	6598	5774	115	42	9600	0.7
KOSHAL FERRO(SARGIPALI KFM)	600	525	11	2	15000	0.4
KUNDUKELA	1517	1327	27	25	17000	1.9
MAJHAPADA	1776	1554	31	33	23000	2.1
NTPC MEDICAL	689	603	12	0	400	0.0
SADAR(UJALPUR)	6637	5816	116	91	13000	1.6
SANKARA	8402	7357	147	57	500	0.8
SUBDEGA	8399	7350	147	1414	54200	19.2
SUNDARGARH(BADAGAON)	13198	11413	231	1538	82900	13.5
Total	**48417**	**42243**		**3202**	**216000**	7.6
Substation: 33KV SOURCE FROM 132/33 KV BARKOT GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
MAHULDIHA	2002	1751	35	40	47000	2.3
Total	**2002**	**1751**		**40**	**47000**	2.3
Substation: 33KV SOURCE FROM 132/33 KV BONAI GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
BONAI	10186	8952	178	360	60160	4.0
K BALANG	1145	1001	20	20	25000	2.0
MEGALIFT	1665	1457	29	15	14000	1.0
RAJAMUNDA	4936	4320	86	41	6700	0.9
Total	**17932**	**15731**		**436**	**105860**	2.8

Substation: 33KV SOURCE FROM 132/33 KV BRAJARAJNAGAR GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
ARYAN	4104	3600	72	238	58000	6.6
NTPC-1	1201	1051	21	12	28300	1.1
NTPC-2	84	0	1	0	21000	100.0
OCPL	408	357	7	1	17500	0.3
SARGIPALI	13200	11408	231	2910	103500	25.5
Total	**18998**	**16416**		**3161**	**228300**	19.3
Substation: 33KV SOURCE FROM 132/33 KV CHHEND GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
BASANTI NAGAR	6601	5782	115	58	4200	1.0
BIRAMITRAPUR	14853	12959	260	825	56250	6.4
CHHEND	12120	10629	212	162	4500	1.5
INDUSTRIAL(KUARMUNDA)	12003	10536	210	375	31100	3.6
KOELNAGAR	12000	10589	210	419	16000	4.0
PURUNAPANI	14400	12492	252	1298	50600	10.4
REC	15602	13602	273	1154	62400	8.5
VEDVAYAS	11486	10062	201	255	17400	2.5
Total	**99064**	**86650**		**4547**	**242450**	5.2
Substation: 33KV SOURCE FROM 132/33 KV JODA GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
TENSA 33KV	12000	10375	210	1045	66100	10.1
Total	**12000**	**10375**		**1045**	**66100**	10.1
Substation: 33KV SOURCE FROM 132/33 KV KALUNGA GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
BALANDA	2399	2100	42	28	6738	1.3
IDC KALUNGA	14799	12951	259	79	3904	0.6
INDUSTRIAL FEEDER KALUNGA	12108	10597	212	132	13980	1.2
MAHAVIR	8499	7437	149	94	3500	1.3
OTTO INDIA	15920	13933	279	173	12140	1.2
RELIABLE	14878	13019	260	79	2200	0.6
Total	**68602**	**60036**		**584**	**42462**	1.0
Substation: 33KV SOURCE FROM 132/33 KV RAJGANGPUR GSS						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses

Network ID	kVA	kW	R	kW	m	%
KUTRA	21601	18832	378	1746	67405	9.3
RAJGANGPUR	5862	5131	103	43	2100	0.8
ROURKELA-1	18814	16533	329	789	34655	4.8
ROURKELA-2	20063	17598	351	560	25400	3.2
SUNDARGARH	12772	11193	223	525	58200	4.7
Total	**79113**	**69288**		**3663**	**187760**	5.3
Substation: 33KV SOURCE FROM 132/33 KV ROURKELA GSS :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
Network ID	kVA	kW	R	kW	m	%
BONAI INDUSTRIAL	16800	14632	294	1018	30900	7.0
IDC	10556	9253	185	305	11500	3.3
IND PILOT PROJECT	39	2	1	2	9300	100.0
INDUSTRIAL ESTATE	4763	4168	83	36	10700	0.9
LATHIKATA	8063	7069	141	281	18550	4.0
RK TOWN 1 BONDMUNDA	6000	5251	105	67	11000	1.3
RKL TOWN POWER HOUSE	14136	12383	247	71	300	0.6
Total	**60357**	**52758**		**1780**	**92250**	3.4
Summary						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Losses
	kVA	kW	R	kW	m	%
Total	**406484**	**355248**		**18458**	**1228182**	5.2
SAMBALPUR						
Substation: 33 KV SOURCE FROM 132 KV BARKOTE :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
BARKOTE	894	782	16	10	5500	1.3
BHAKTABADKUDAR	3978	3482	70	66	15540	1.9
DEOGARH	21706	18831	380	3292	75200	17.5
Total	**26577**	**23094**		**3368**	**96240**	**14.6**
Substation: 33 KV SOURCE FROM 132 KV BRAJARAJNAGAR RENJA-1 :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
BRAJRAJNAGAR	8398	7354	147	73	2000	1.0
NTPC-1	600	525	11	2	15000	0.4
NTPC-II	60	0	1	0	15000	100.0
OPGC	4799	4202	84	160	35100	3.8
TRL-1	6857	6005	120	255	14500	4.2
TRL-2	15606	13618	273	2556	118510	18.8
Total	**36231**	**31703**		**3045**	**200110**	**9.6**

Substation: 33 KV SOURCE FROM 132 KV BUDHIPADAR :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
AIRPORT	4720	4136	83	193	29070	4.7
BAGDEHI	4349	3808	76	90	43810	2.4
INDUSTRIAL-I	7090	6211	124	229	47800	3.7
INDUSTRIAL-II	3522	3081	62	27	8000	0.9
Total	**19680**	**17237**		**538**	**128680**	**3.1**
Substation: 33 KV SOURCE FROM 132 KV CHIPILIMA :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
DHAMA_1	10725	9284	188	1703	99000	18.3
GOSHALA.	14401	12657	252	437	17200	3.5
Total	**25123**	**21941**		**2140**	**116200**	**9.8**
Substation: 33 KV SOURCE FROM 132 KV JHARSUGUDA :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
JHARSUGUDA FDR	10575	9256	185	48	19950	0.5
KOLABIRA	9143	8025	160	570	39020	7.1
SARBAHAL	4287	3754	75	40	3400	1.1
Total	**24006**	**21034**		**658**	**62370**	**3.1**
Substation: 33 KV SOURCE FROM 132 KV KANTAPALI :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
BURLA FDR	13753	12097	241	541	18000	4.5
CHAURPUR	4459	3903	78	96	47300	2.5
GM MCL	1560	1365	27	2	3000	0.2
JYOTI VIHAR.	1200	1050	21	17	4589	1.6
MEDICAL	7658	6713	134	117	7000	1.7
Total	**28630**	**25129**		**773**	**79889**	**3.1**
Substation: 33 KV SOURCE FROM 132 KV KUCHINDA(KHANDAKATA) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
KHANDAKATA	5100	4462	89	117	82100	2.6
KUCHINDA	7144	6266	125	463	72550	7.4
LAIKERA	2858	2502	50	131	58060	5.2
MEGALIFT	3680	3220	64	30	7000	0.9
Total	**18783**	**16452**		**741**	**219710**	**4.5**
Substation: 33 KV SOURCE FROM 132 KV LAPANGA GRID :						

	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
KATARBAGA	3399	2974	59.47	66	31600	2.2
LAPANGA	1540	1347	26.94	16	3000	1.2
RENGALI FDR	4800	4201	83.97	84	25500	2.0
Total	**9738**	**8523**		**166**	**60100**	**1.9**
Substation: 33 KV SOURCE FROM 132 KV MANESWAR :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
MANESWAR	41	38	1	11	5100	30.3
PADIABAHAL	5998	5251	105	75	15000	1.4
Total	**6023**	**5289**		**86**	**20100**	**1.6**
Substation: 33 KV SOURCE FROM 132 KV RAIRAKHOL :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
NAKTIDEUL	4438	3874	78	372	72000	9.6
RAIRAKHOL FDR	6376	5585	112	105	3500	1.9
Total	**10814**	**9458**		**477**	**75500**	**5.0**
Substation: 33 KV SOURCE FROM 132 KV RAJGANGPUR :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
KUTRA	21599	18831	378	1717	67405	9.1
Total	**21599**	**18831**		**1717**	**67405**	**9.1**
Substation: 33 KV SOURCE FROM 132 KV SAMBALPUR(GANESH NAGAR) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
AINTHAPALI	14002	12261	245	176	3500	1.4
CHEDUAPADA	10800	9460	189	177	10150	1.9
IOCL.	2100	1838	37	11	15000	0.6
PUTIBANDH	24299	21221	425	966	9000	4.6
SASON	8401	7362	147	178	29400	2.4
VEDANT	5400	4729	94	148	20000	3.1
Total	**65001**	**56870**		**1656**	**87050**	**2.9**
Substation: 33 KV SOURCE FROM 132 KV SUNDARGARH(SANKARA) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
BARGAON FDR	13199	11422	231	1569	82900	13.7

Total	13199	11422		1569	82900	13.7
Substation: 33 KV SOURCE FROM 220 KV RENGALI(DIST. ANUGUL) :						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
Network ID	kVA	kW	R	kW	m	
BUDHAPALI	3999	3518	70	157	25250	4.5
Total	**3999**	**3518**		**157**	**25250**	**4.5**
Summary						
	Total Load	Total Load	Current (A)	Total Losses	3ph Length	Loss%
	kVA	kW	R	kW	m	
Total	**309398**	**270503**		**17092**	**1321504**	**6.3**

Note: 33KV Feeder details of TPWODL area is mentioned in Annexure-4

- **33KV Technical Losses Summary**

Circle	Technical Loss Base-1	Technical Loss Base-2	Technical Loss Planning
Bargarh	5.8	4.6	3.1
BOLANGIR	4.3	3.2	2.7
KALAHANDI	4.1	2.3	1.8
ROURKELA	2.8	2.6	1.8
Sambalpur	3.4	2.1	1.8

Load Flow study Observation on Existing Network:

- **33KV Overloaded Feeder/Sections:**
  - **Summary of Circle wise 33 KV Feeders:**

Circle	No. of GSS	No. of 33KV Feeders	No. of overload feeder	No. of Section with over Load
Bargarh	4	19	10	20
Bolangir	6	35	7	13
Kalahandi	7	24	4	7
Rourkela	7	47	7	11
Sambalpur	12	41	4	15
Total	**36**	**166**	**32**	**66**

  - **List Of Over Load Feeders & Sections:**

Circle	Network id	Equipment Id	V (kVLL)	Length (m)	Total Thru Power (kW)	IBal (A)	Total Loss (kW)	Loading (%)
Bargarh	4 poles	33KV_ACSR_100SQMM_DOG_TRI	32.90	400	14885	300	37	110
Bargarh	Attabira	33KV_AAAC_232SQMM_PANTHER_TRI	26.89	24800	22497	454	2710	98
Bargarh	Attabira	33KV_ACSR_100SQMM_DOG_TRI	26.64	700	19787	455	147	167
Bargarh	Attabira	33KV_AAAC_232SQMM_PANTHER_TRI	26.53	500	19640	455	55	98
Bargarh	Barpali	33KV_AAAC_100SQMM_DOG_TRI	31.98	3500	15390	310	409	114
Bargarh	Bijepur	33KV_AAAC_148SQMM_COYOTE_TRI	28.13	21000	15774	320	1771	91
Bargarh	Dunguri	33KV_AAAC_232SQMM_PANTHER_TRI	31.41	5000	27619	559	827	120
Bargarh	Dunguri	33KV_AAAC_232SQMM_PANTHER_TRI	30.49	3000	26373	551	482	119
Bargarh	Dunguri	33KV_AAAC_232SQMM_PANTHER_TRI	29.88	2000	25891	551	322	119
Bargarh	Dunguri	33KV_AAAC_232SQMM_PANTHER_TRI	28.73	5000	19595	424	477	91
Bargarh	Melechamunda	33KV_AAAC_80SQMM_RACOON_TRI	30.49	12000	9461	190	661	80
Bargarh	Paikmal.	33KV_AAAC_100SQMM_DOG_TRI	27.27	16000	18633	380	2814	140
Bargarh	Paikmal.	33KV_AAAC_173SQMM_WOLF_TRI	25.23	8250	15819	380	845	87

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Capex plan for FY 23-24

Circle	Network id	Equipment Id	V (kVLL)	Length (m)	Total Thru Power (kW)	IBal (A)	Total Loss (kW)	Loading (%)
Bargarh	Paikmal.	33KV_AAAC_100SQMM_DOG_TRI	24.35	2500	14974	381	441	140
Bargarh	Paikmal.	33KV_AAAC_173SQMM_WOLF_TRI	23.33	4250	14533	381	436	87
Bargarh	Paikmal.	33KV_AAAC_100SQMM_DOG_TRI	22.63	2000	14097	381	353	140
Bargarh	Paikmal.	33KV_AAAC_55SQMM_RABBIT_TRI	16.50	20000	7508	210	1966	113
Bargarh	Sohela	33KV_AAAC_173SQMM_WOLF_TRI	27.79	23000	16991	345	1937	79
Bargarh	Town	33KV_ACSR_80SQMM_RACCON_TRI	32.19	2800	14307	288	313	122
Bargarh	Turunga	33KV_AAAC_232SQMM_PANTHER_TRI	28.27	22000	18835	384	1721	83
Bolangir	Barpali(bolangir)	33KV_ACSR_100SQMM_DOG_TRI	31.02	8000	14812	299	727	110
Bolangir	Barpali(bolangir)	33KV_ACSR_80SQMM_RACCON_TRI	28.04	10000	13939	296	1186	125
Bolangir	Belgaon	33KV_AAAC_80SQMM_RACOON_TRI	32.32	3000	10232	205	192	87
Bolangir	Belgaon	33KV_AAAC_80SQMM_RACOON_TRI	28.43	18000	9616	196	1061	83
Bolangir	Biramaharjpur	33KV_AAAC_100SQMM_DOG_TRI	32.72	1000	14803	297	108	109
Bolangir	Biramaharjpur	33KV_AAAC_100SQMM_DOG_TRI	32.45	1000	14308	290	102	107
Bolangir	Biramaharjpur	33KV_AAAC_100SQMM_DOG_TRI	31.68	2900	13816	282	281	104
Bolangir	Biramaharjpur	33KV_AAAC_100SQMM_DOG_TRI	31.65	100	13422	280	10	103
Bolangir	Biramaharjpur	33KV_AAAC_100SQMM_DOG_TRI	30.95	3000	11908	249	226	92
Bolangir	Dumberhal(sonepur)	33KV_AAAC_232SQMM_PANTHER_TRI	30.94	9900	18345	370	718	80
Bolangir	Khariar 2	33KV_AAAC_100SQMM_DOG_TRI	32.72	1200	12513	250	91	92
Bolangir	Melechhamunda	33KV_ACSR_80SQMM_RACCON_TRI	30.70	12000	9470	190	586	80
Bolangir	Patnagarh rampur	33KV_ACSR_55 SQMM_RABBIT_TRI	32.03	4000	8970	180	260	97
Kalahandi	Belgaon	33KV_AAAC_80SQMM_RACOON_TRI	32.39	3000	10237	205	174	87
Kalahandi	Belgaon	33KV_AAAC_80SQMM_RACOON_TRI	28.84	18000	9666	197	970	83

Capex plan for FY 23-24

Circle	Network id	Equipment Id	V (kVLL)	Length (m)	Total Thru Power (kW)	IBal (A)	Total Loss (kW)	Loading (%)
Kalahandi	Dharmagarh	33KV_AAAC_100SQMM_DOG_TRI	32.33	3500	11201	224	194	82
Kalahandi	Dharmagarh	33KV_AAAC_100SQMM_DOG_TRI	31.67	3500	10908	222	191	82
Kalahandi	Khariar 2	33KV_AAAC_100SQMM_DOG_TRI	32.74	1200	12504	250	83	92
Kalahandi	Khariar 2	33KV_ACSR_34SQMM_WEASEL_TRI	28.22	20000	5592	112	780	81
Kalahandi	Khariar road	33KV_AAAC_100SQMM_DOG_TRI	32.46	2500	12589	252	176	93
Rourkela	Biramitrapur	33KV_ACSR_100SQMM_DOG_TRI	31.36	1000	12616	260	69	96
Rourkela	Biramitrapur	33KV_ACSR_100SQMM_DOG_TRI	31.01	2000	10394	216	95	80
Rourkela	Kutra	33KV_AAAC_232SQMM_PANTHER_TRI	32.15	4000	18832	378	303	81
Rourkela	Kutra	33KV_AAAC_232SQMM_PANTHER_TRI	31.13	5000	17711	362	348	78
Rourkela	Purunapani	33KV_ACSR_100SQMM_DOG_TRI	31.32	8000	12492	252	516	93
Rourkela	Purunapani	33KV_ACSR_100SQMM_DOG_TRI	30.52	4000	11442	241	236	89
Rourkela	Purunapani	33KV_ACSR_100SQMM_DOG_TRI	30.33	1000	10506	227	52	83
Rourkela	Rourkela-1	33KV_ACSR_100SQMM_DOG_TRI	30.27	6000	10907	226	311	83
Rourkela	Sargipali	33KV_AAAC_100SQMM_DOG_TRI	25.84	33000	11408	231	2152	85
Rourkela	Subdega	33KV_AAAC_55SQMM_RABBIT_TRI	28.68	20000	7350	147	966	79
Rourkela	Sundargarh	33KV_ACSR_100SQMM_DOG_TRI	32.72	1500	11193	223	76	82
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	31.14	5200	18831	380	913	140
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	30.60	1800	15213	323	229	119

Capex plan for FY 23-24

Circle	Network id	Equipment Id	V (kVLL)	Length (m)	Total Thru Power (kW)	IBal (A)	Total Loss (kW)	Loading (%)
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	27.27	11000	14984	323	1400	119
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	27.20	300	10606	252	23	93
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	27.03	700	10583	252	54	93
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	26.73	1300	10461	251	100	92
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	26.50	1000	10361	251	77	92
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	26.00	2500	8870	216	143	80
Sambalpur	Deogarh	33KV_AAAC_100SQMM_DOG_TRI	25.56	2200	8728	217	126	80
Sambalpur	Kutra	33KV_AAAC_232SQMM_PANTHER_TRI	32.15	4000	18831	378	303	81
Sambalpur	Kutra	33KV_AAAC_232SQMM_PANTHER_TRI	31.13	5000	17707	362	347	78
Sambalpur	Putibandh	33KV_AAAC_232SQMM_PANTHER_TRI	30.86	9000	21221	425	862	92
Sambalpur	Trl-2	33KV_AAAC_100SQMM_DOG_TRI	30.18	11000	13618	274	1003	101
Sambalpur	Trl-2	33KV_AAAC_100SQMM_DOG_TRI	30.05	500	12615	274	46	101
Sambalpur	Trl-2	33KV_AAAC_100SQMM_DOG_TRI	29.66	1500	12569	274	137	101

Note: Network proposals related to Overload and voltage mitigation is mentioned in Annexure-5

➢ **33KV Undervoltage Feeders/Sections:**

- **Summarry of circle wise Under Voltage 33 KV Feeders:**

Circle	No. of GSS	No. of 33KV Feeders	No of 33 kV Fdr. With Low Voltage	No. of section with Low Voltage
Bargarh	4	19	**12**	**83**
Bolangir	6	35	**10**	**62**
Kalahandi	7	24	**7**	**73**
Rourkela	7	47	**9**	**56**
Sambalpur	12	41	**6**	**67**
Total	**36**	**166**	**44**	**341**

- **List Of Under Voltage Feeders & Section:**

Circle	Feeder name	Min of Voltage	No. of Section	Total Length (Mtr) (m)	Current (A)	% Loading of Feeder
Bargarh	4 poles	26.9	6	34000	162	57
Bargarh	Attabira	23.5	9	53900	474	166
Bargarh	Bijepur	26.2	4	29200	321	87
Bargarh	Bijepur-2	29.8	2	14600	146	40
Bargarh	Dhama-2 (khuntulipali)	28.2	4	47200	122	43
Bargarh	Dunguri	22.0	25	113685	561	115
Bargarh	Gaisilet	28.8	2	39500	123	43
Bargarh	Melchamunda	30.0	2	20500	118	26
Bargarh	Melechamunda	27.4	7	19400	189	97
Bargarh	Paikmal.	15.3	12	105000	380	133
Bargarh	Sohela	26.3	1	23000	345	75
Bargarh	Turunga	25.2	9	59827	385	79
Bargarh Total		**15.3**	**83**	**559813**	**561**	**166**
Bolangir	Barpali(bolangir)	25.9	12	48760	296	125
Bolangir	Belgaon	27.1	12	101730	196	83
Bolangir	Binka	29.0	2	19000	185	40
Bolangir	Biramaharjpur	28.1	4	42000	144	53
Bolangir	Dumberhal(sonepur)	25.8	11	77400	267	58
Bolangir	Khariar 2	27.9	5	40300	91	65
Bolangir	Mega project irrigation-1	20.2	1	65000	210	77
Bolangir	Melechhamunda	27.1	9	40250	97	41
Bolangir	Pandikital	28.3	2	30000	185	68

Rejected by Nanda

Circle	Feeder name	Min of Voltage	No. of Section	Total Length (Mtr) (m)	Current (A)	% Loading of Feeder
Bolangir	Patnagarh rampur	29.2	4	34100	56	21
Bolangir Total		**20.2**	**62**	**498540**	**296**	**125**
Kalahandi	Bargoan (old nuapada)	26.5	16	84620	163	60
Kalahandi	Belgaon	27.4	13	97730	197	83
Kalahandi	Dharmagarh	26.1	10	92105	182	67
Kalahandi	Khariar 1	28.5	3	19820	138	51
Kalahandi	Khariar 2	26.8	5	40300	113	81
Kalahandi	Ladugaon	29.5	5	31000	58	16
Kalahandi	Narla	24.7	21	151500	209	77
Kalahandi Total		**24.7**	**73**	**517075**	**209**	**83**
Rourkela	Biramitrapur	29.1	6	34900	143	31
Rourkela	Bonai industrial	29.3	2	12900	268	58
Rourkela	Kutra	27.4	12	54705	353	76
Rourkela	Purunapani	27.5	3	33200	138	51
Rourkela	Rec	27.3	5	39400	166	61
Rourkela	Sargipali	21.9	6	103500	231	85
Rourkela	Subdega	26.4	6	54200	147	79
Rourkela	Sundargarh(badagaon)	26.3	7	82900	231	70
Rourkela	Tensa	27.6	9	66100	210	45
Rourkela Total		**21.9**	**56**	**481805**	**353**	**85**
Sambalpur	Bargaon fdr	26.1	7	82900	231	70
Sambalpur	Deogarh	24.6	20	68200	323	119
Sambalpur	Dhama_1	24.5	6	99000	188	69
Sambalpur	Kutra	27.4	12	54705	352	76
Sambalpur	Naktideul	29.4	3	49000	78	33
Sambalpur	Trl-2	22.1	19	92010	274	101
Sambalpur Total		**22.1**	**67**	**445815**	**352**	**119**
Grand Total		**15.3**	**341**	**2503048**	**561**	**166**

- **33KV Areas identified with Low Voltage**

Circle Name	No of Low Voltage Area	Area affected	Lowest Voltage
Sambalpur	25	BARGAON,BAMRA,SAHAJBAHAL,DEOGARH,MEDICAL,HOSPITAL,TELEIBANI,RENGALLBEDA,TENGALLBEDA.,TELIMUNDA,DHAMA,GUNDERPUR,HATIBADI,JUJUMURA,TISCO COLONY,KUTRA,BIRANGATALI, GARPOSH, NAKTIDEUL,KISINDA,MUCHBAHAL(TRL-2),JHARUAPADA, DHULUNDA, MAHULPALI MEGALIFT,GOVINDPUR,LAKHANPUR	22.1
Bargarh	32	KHEDAPALI,KAMGAON,DUNGARI,UDEYPALI,RAISHOBA,BHATLI,BHUKTA,AMBHABANA,KHANDAPALI,SOHELA,DASMILE,GAISLET,JHARBANDH,PAIKMAL,MANDOSIL,JHITKI,DOVA,DUNGARIPALI,BIJEPUR,ARDA,SOHELA,SARANDAPALI,AGALPUR,KENDUMUNDA,CHARMUNDA,ATTABIRA,BHEDEN,THUAPALI,PATRAPALI,KHUNTULIPALI,DHATUKPALI,MAHULPALI	15.3
Bolangir	31	CHATMAKHNA,SALEBHATATOWN,LOISINGHA,BHADRA,DUNGRIPALI,BINKA,BISHALPALI,ULLUNDA,BMPUR,MURSUNDI,SUBALAYA,KHARI,TARVA,DUBLA,CHARBHATA,DUMERBHAL,KHARI,MEGALIFT,BELGAON,NUNMATH,KARLAMUNDA,SISKHAL,SAINTALA,SINDHEKELA,SUKHAVILLAGE,AGALPUR,KENDUMUNDI,PANDKITAL,BHATBHALI,KHAPRAKHOL,LATHORA,MAHULPALI	20.2
Kalahandi	35	KOMNA,BHATIBAHAL,KURUMPURI,TARBOD,JNV,BHELA,DEODHARA,KARLAMUNDA (BELGAON),BARGAON,PHD_PAPER MILL,LAXMI RICE MILL,SAINTALA,NUNMATH,SISAKHAL(JURADUBRA), KASIBAHAL, DHARMAGARH,PHD.KEBIDI,PHD.CHILPA,BHEHRA, GOLAMUNDA, KEYGAON,GANDABAHALI GRAPHITE,CHALANA, SINAPALI,KHARIAR ,BORDA,SINDEKHELA,TEMRA,NARLA, M.RAMPUR,BANJAMUNDA (MOHANGIRI),MADANPUR,BISWANATHPUR,LANJIGARAH,BHANDAPARI	24.7
Rourkela	42	BIRAMITRAPUR,HATIBARI,BSL COMPANY,RAIBOGA,(BONAI INDUSTRIAL),REXON STRIP(BONAI INDUSTRIAL),TISCO COLONY, KUTRA, BIRANGATALI,BADGAON,SCAN STEEL BAI BAI,SCAN STEEL GANGAJAL.,NUAGAON (PURNAPANI),HATIBARI, NUAGAON, NIT ROURKELA BISRA,BISRA,MEGALIFT,MAA BHAGWATI REROLLING MILL,SARGIPALI,DARLIPALI,MANGASPUR,GULTHA,LEHRIPARA, GARJANBAHAL,KARAMDIHI,(SUBDEGA),KINJIRKELA,BALISHANKARA,KINJIRKELA,KARAMDIHI,JARANGALAI,BADAGAON,_SAHAJBAHAL,SATGURU METAL AND POWER.,KOIRA,TENSA,KOIRA ESSEL MINING,ESSEL MINING MANSA DEV,MAA MANSA DEVI_RUNGTA SON, RUNGTA,MAA MANSA DEVI,ESSEL MINING	21.9

- **33kV Radial Network (Single 33KV Source):**

Most of the 33kV networks are radial and highly unreliable. A major drawback of a radial distribution system is that in case of permanent fault, power supply failure is experienced by all consumers as there is no alternate feeder to feed consumers. It is one of the major concerns for maintaining reliable power supply in the city. In ideal scenario, there must be at least two nos. of 33 kV sources available to each PSS, so that in case if any source fails, other source can restore full or partial load.

Sl. No.	Circle	GSS Name	33 kV Fdr Name	Pss Name	Installed Capacity (MVA)	Loading (MVA)
1	Bargarh	Padampur	Dahita	Dahita	10	1.9
2	Bargarh	Padampur	Gaisilet	Gaisilet	11.3	9.6
3	Bargarh	Ghenss	Ghenss	Ghenss	10	8.8
4	Bargarh	Padampur	Lakhmara	Lakhmara	10	2.8
5	Sambalpur	Barkote	Barkote	Barkote	6.6	1.0
6	Sambalpur	Barkote	Bhaktabadkudar	Bhaktabadku	10	1.4

Sl. No.	Circle	GSS Name	33 kV Fdr Name	Pss Name	Installed Capacity (MVA)	Loading (MVA)
7	Bargarh	Barpali	Barpali	Barpali	29.15	18.3
8	Kalahandi	Bhawanipatna (Bhangbari)	Bhangbari	Bhangbari	13	2.8
9	Kalahandi	Bhera (Nuapada	New medical	New medical	2	1.4
10	Rourkela	Bonai	K balang	K balang	6.3	1.1
11	Rourkela	Bonai	Rajamunda	Rajamunda	14.75	2.8
12	Sambalpur	Brajrajnagar Remja	Brajrajnagar	Brajrajnagar	16	4.9
13	Bargarh	Padampur	Padampur	Padampur	21	8.9
14	Bargarh	Pradhanpali	Tora	Tora	16	7.3
15	Sambalpur	Jharsuguda	Sarbahal	Sarbahal	10	3.9
16	Sambalpur	Katapali	Jyoti vihar.	Jyotivihar	16	1.5
17	Sambalpur	Katapali	Medical	Medical	13	8.8
18	Sambalpur	Lapanga	Katarbaga	Katarbaga	10	1.7
19	Sambalpur	Lapanga	Lapanga	Lapanga	10	1.6
20	Sambalpur	220/ Regali	Budhapali	Budhapali	6.3	3.8
21	Sambalpur	Maneswar	Maneswar	Maneswar	10	Not Charged
22	Sambalpur	Sambalpur (Ganesh Nagar)	Ainthapali	Ainthapali	56.5	24.6
23	Sambalpur	Sambalpur (Ganesh Nagar)	Putibandh	Putibandh	48	29.9
24	Sambalpur	Rairakhol	Rairakhol fdr	Rairakhol	11.3	2.9
25	Rourkela	Rourkela	Rkl town power house	Powerhouse	24	14.4
26	Rourkela	Chhend	Chhend	Chhend	21	13.3
27	Rourkela	Chhend	Vedvayas	Vedvayas	16	4.5
28	Rourkela	Kalunga	Balanda	Balanda	10	2.9
29	Rourkela	Sundargarh (Sankara)	Sadar(ujalpur)	Sadar	10	5.6
30	Rourkela	Sundargarh (Sankara)	Kundukela	Kundukela	10	1.3
31	Rourkela	Sundargarh (Sankara)	Sankara	Sankara	23	7.8
32	Rourkela	Sundargarh (Sankara)	Majhapada	Majhapada	10	1.9
33	Rourkela	Sundargarh (Sankara)	College	College	8.15	4.3
34	Bolangir	Sonepur	Sonepur	Sonepur	21.15	6.7
35	Bolangir	Rampur (Patnagarh)	Dhumabhata	Dhumabhata	10	2.5
36	Bolangir	Rampur (Patnagarh)	Padampur	Juria	10	1.5

Sl. No.	Circle	GSS Name	33 kV Fdr Name	Pss Name	Installed Capacity (MVA)	Loading (MVA)
37	Bolangir	Rampur (Patnagarh)	Tendapadar	Tandapadar	6.3	3.4
38	Bolangir	Kantabanji	Gudighat	Gudighat	10	3.0
39	Bolangir	Tusra	Tusura	Tusura	13.15	9.2
40	Bolangir	Old Bolangir	Patnagarh	Barapudugia	11.3	6.6
41	Kalahandi	Kesinga	Kesinga	Kesinga	18	8.2

- **N-1 issue in 33kV Feeder:**

There are very few 33/11kV primary substations with second 33kV source connectivity.

However, during exigencies, the second source is unable to take entire load of PSS due to overloading. The reason of overloading is mainly attributable to lower conductor size in the feeder, poor circuit configuration, and lower size bus bar used at PSS and interconnecting points.

- **T-OFF NETWORK:**

There are many 33kV feeders feeding 33/11kV PSS along with some 33kV HT consumers. All these PSS and HT consumer power supply are tapped directly from the trunk section of the feeder through either DP / 4Pole / 6pole without any circuit breaker / HT protection arrangement.

In the eventuality of fault in any of the branch, the feeder is tripped at the OPTCL grid end and all the consumers feeding from the feeder experience power supply failure, until such time, the faulty section is identified and isolated. Time duration for identification of fault is very high since it requires physical inspection of complete feeder. Sometimes, for normal changeover operation wherever dual source is available at 4 Pole / 6 Pole structure, shutdown down of both the feeders is required to operate isolators / AB switches and they cannot be operated under load condition. The whole changeover process takes long time even for a small operation.

- **Primary Substation with single power transformer :**

As primary substations are distantly apart, and since there is not much interconnectors available at 11kV system level, outage of this single power transformer due to periodic maintenance or in case of breakdown results in loss of power supply to all consumers connected to the same primary substation. Ideally, each 33/11kV PSS should have at least two power transformers of same rating to provide N-1 redundancy.

The PSS with a Single Power Transformer are as follows:

Circle	Gss Name	Feeder name	Pss name	Installed PTR Capacity
Bolangir	Old Boalngir	Boudh	Sudpada	5
Rourkela	Kalunga	Otto india	Otto india	5
Kalahandi	Behra	Bisora	Bisora	8
Kalahandi	Kesinga	Narla	Lanjigarh	3.15
Kalahandi	Kesinga	Bhawanipatna-I	Utkela	5
Kalahandi	Kesinga	Belgaon	Karlamunda	5
Kalahandi	Junagarh	Junagarh	Th. Rampur	3.15
Kalahandi	Baner	Badkutru	Jaipatna	5

➢ **11KV Feeders:**

- **11KV Summary:**

Circle	Division	NO. of 11KV Feeders	No of 11 kV Fdr. With Low Voltage	No. of section with Low Voltage	No. of overload feeder	No. of Section with over Load
Bargarh	BED	77	22	3146	12	54
Bargarh	BWED	83	42	8326	25	189
Bolangir	BED	76	17	2763	3	25
Bolangir	SED	84	10	1670	0	0
Bolangir	TED	105	12	1061	2	2
Kalahandi	KEED	74	7	1658	1	9
Kalahandi	KWED	74	12	2032	1	2
Kalahandi	NED	57	15	1970	0	0
Rourkela	RED	27	5	277	5	17
Rourkela	RED-RAJGANGPUR	69	6	1601	1	1
Rourkela	RSED	47	7	576	0	0
Rourkela	SED	64	9	1122	0	0
Sambalpur	BNED	23	7	1037	2	2
Sambalpur	DED	34	6	868	0	0
Sambalpur	JED	89	8	1140	1	5
Sambalpur	SED	48	0	0	2	2
Sambalpur	SEED	62	11	2242	3	14
Total	**17**	**1093**	**196**	**31489**	**58**	**322**

- **TPWODL ALL CIRCLE 11KV LINE FEEDER LOADING BASE-1 REPORT**

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1	Sambalpur	BNED	Bandhbahal	Balanda	1005	60	117	102830	11.6	103
2	Sambalpur	BNED	Bandhbahal	Bandhbahal	741	44	34	49140	4.6	49
3	Sambalpur	BNED	Bandhbahal	Ganesh nagar	3651	220	240	10420	6.6	10
4	Sambalpur	BNED	Dhulunda	Charpali feeder	1829	110	132	36980	7.2	37
5	Sambalpur	BNED	Dhulunda	Deheridhipa feeder	986	59	37	31250	3.7	31
6	Sambalpur	BNED	Dhulunda	Kanaktora feeder	1839	110	255	53500	13.9	54
7	Sambalpur	BNED	Dhulunda	Remda feeder	825	50	40	28770	4.8	29
8	Sambalpur	BNED	Govind pur	Line2 kudabaga	82	5	3	9600	4.2	10
9	Sambalpur	BNED	Govind pur	Line3 bhanurkhol	249	15	21	64010	8.6	64
10	Sambalpur	BNED	Jharuapada	Balaji ffeder	245	15	4	500	1.6	1
11	Sambalpur	BNED	Jharuapada	Bhikampali	575	34	22	20200	3.8	20
12	Sambalpur	BNED	Jharuapada	Jamgaon fdr	1242	74	81	76378	6.6	76

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Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
13	Sambalpur	BNED	Jharuapada	Rengali feeder	1323	79	73	42910	5.5	43
14	Sambalpur	BNED	Muchbahal	Jorabaga	1587	95	200	97935	12.6	98
15	Sambalpur	BNED	Muchbahal	Junadihi	1828	110	135	50560	7.4	51
16	Sambalpur	BNED	Muchbahal	Kantatikra	246	15	9	24060	3.6	24
17	Sambalpur	BNED	Muchbahal	Line1 lakhanpur	247	15	16	41410	6.7	41
18	Sambalpur	BNED	Muchbahal	Town	4625	279	653	90665	14.1	91
19	Sambalpur	BNED	Pandiri	Piplikani line1	165	10	10	42680	6.1	43
20	Sambalpur	BNED	Brajarajnagar	Brajarajnagar	2419	146	259	37830	10.7	38
21	Sambalpur	BNED	Brajarajnagar	Gandhi chowk	2840	170	285	136310	10.0	136
22	Sambalpur	BNED	Brajarajnagar	Lamtibahal	2751	165	251	25120	9.1	25
23	Sambalpur	BNED	Brajarajnagar	Telanpalli	987	59	36	12460	3.6	12
24	Sambalpur	DED, DEOGARH	Reamal	Lulang	134	12	15	75000	10.9	75

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
25	Sambalpur	DED, DEOGARH	Reamal	Tinkbir	666	40	125	165730	18.7	166
26	Sambalpur	DED, DEOGARH	Reamal	Kadopada	117	7	19	71720	16.4	72
27	Sambalpur	DED, DEOGARH	Reamal	Reamal	917	55	67	93720	7.4	94
28	Sambalpur	DED, DEOGARH	Rengallbeda	Mirgidiya	246	15	12	33540	5.0	34
29	Sambalpur	DED, DEOGARH	Rengallbeda	Donagaghot	250	15	14	51480	5.6	51
30	Sambalpur	DED, DEOGARH	Rengallbeda	Gohira	250	15	19	101670	7.5	102
31	Sambalpur	DED, DEOGARH	Rengallbeda	Khilei	500	30	30	39040	6.0	39
32	Sambalpur	DED, DEOGARH	Rengallbeda	Reamal(rengallbeda)	167	10	29	8005	17.4	8
33	Sambalpur	DED, DEOGARH	Rengallbeda	Tinkbir old	166	10	5	11500	3.3	12
34	Sambalpur	DED, DEOGARH	Rengallbeda	Rengalbeda	166	10	4	20	2.2	0
35	Sambalpur	DED, DEOGARH	Teleibani	Kansara	334	20	53	253200	15.8	253

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
36	Sambalpur	DED, DEOGARH	Teleibani	Laimura	468	28	68	254000	14.5	254
37	Sambalpur	DED, DEOGARH	Teleibani	Taidisar	367	22	26	43050	7.0	43
38	Sambalpur	DED, DEOGARH	Teleibani	Tileibani	250	15	6	5630	2.3	6
39	Sambalpur	DED, DEOGARH	Teleibani	Prabmasuni	233	14	15	35050	6.5	35
40	Sambalpur	DED, DEOGARH	Barkote	Kadopada(barkote)	2089	124	412	115140	19.7	115
41	Sambalpur	DED, DEOGARH	Barkote	Barkote	399	24	13	12690	3.2	13
42	Sambalpur	DED, DEOGARH	Barkote	Dangasinga	250	15	27	53110	10.9	53
43	Sambalpur	DED, DEOGARH	Bhaktabadkudar	Feeder2 behedaposhi	300	18	38	150420	12.6	150
44	Sambalpur	DED, DEOGARH	Bhaktabadkudar	Feederi thaianala	666	40	45	105750	6.7	106
45	Sambalpur	DED, DEOGARH	Bhaktabadkudar	Kalla	416	25	17	41400	4.1	41
46	Sambalpur	DED, DEOGARH	Bhaktabadkudar	Khajurikhaman	467	28	36	161800	7.8	162

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
47	Sambalpur	DED, DEOGARH	Budhapal	Kundhigola	833	50	41	37300	4.9	37
48	Sambalpur	DED, DEOGARH	Budhapal	Palosoma feeder	1334	80	193	189070	14.5	189
49	Sambalpur	DED, DEOGARH	Budhapal	Budhapal	501	30	49	131300	9.8	131
50	Sambalpur	DED, DEOGARH	Deogarh	Re	1256	75	142	59632	11.3	60
51	Sambalpur	DED, DEOGARH	Deogarh	Town 1	1232	74	37	12520	3.0	13
52	Sambalpur	DED, DEOGARH	Deogarh	Town 2	1332	80	60	16800	4.5	17
53	Sambalpur	DED, DEOGARH	Deogarh	Town 3	915	55	30	11120	3.3	11
54	Sambalpur	DED, DEOGARH	Kandhal	Basadahi	417	25	35	77390	8.3	77
55	Sambalpur	DED, DEOGARH	Kandhal	Kandhal	433	26	21	25310	4.8	25
56	Sambalpur	DED, DEOGARH	Kandhal	Katapali	466	28	44	47450	9.4	47
57	Sambalpur	DED, DEOGARH	Kandhal	Samarkhai	417	25	45	86390	10.9	86
58	Sambalpur	JED	Fasimal	Fasimal	416	25	29	133215	7.0	133

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
59	Sambalpur	JED	Fasimal	Gurjipali	247	15	14	57100	5.8	57
60	Sambalpur	JED	Ardabahal	Ardabahal	328	20	12	14240	3.5	14
61	Sambalpur	JED	Ardabahal	Bauriguda	246	15	10	15640	4.2	16
62	Sambalpur	JED	Ardabahal	Jaypeerdhar	329	20	11	14680	3.5	15
63	Sambalpur	JED	Bamra	Ashirvad	492	30	14	14920	2.9	15
64	Sambalpur	JED	Bamra	Bamra	988	59	39	14090	3.9	14
65	Sambalpur	JED	Bamra	Garposh	824	49	42	90934	5.1	91
66	Sambalpur	JED	Bamra	Ghansara	247	15	12	39185	5.0	39
67	Sambalpur	JED	Bamra	Rangiatikra	167	10	22	106051	13.0	106
68	Sambalpur	JED	Bamra	Solar bamra	83	5	7	10	8.6	0
69	Sambalpur	JED	Bhojpur	Bhojpur	411	24	18	91810	4.3	92
70	Sambalpur	JED	Bhojpur	Badmal	167	10	12	76810	7.0	77
71	Sambalpur	JED	Bhojpur	Dimirimunda	250	15	16	79180	6.2	79

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
72	Sambalpur	JED	Bhojpur	Sirid	247	15	12	37546	5.0	38
73	Sambalpur	JED	Garposh	Garposh_garposh	493	30	15	11060	3.0	11
74	Sambalpur	JED	Garposh	Kinabaga	365	22	38	93290	10.5	93
75	Sambalpur	JED	Garposh	Pinda pather	412	25	17	21350	4.2	21
76	Sambalpur	JED	Garposh	Sagra	247	15	11	41850	4.6	42
77	Sambalpur	JED	Gochara	Ram tilaimal	164	10	4	9250	2.7	9
78	Sambalpur	JED	Gochara	Turai	415	25	36	123000	8.8	123
79	Sambalpur	JED	Gochara	Ullanda	164	10	6	22400	3.9	22
80	Sambalpur	JED	Jamankira	Badrama	250	15	20	95400	8.1	95
81	Sambalpur	JED	Jamankira	Jamankira	247	15	13	22830	5.2	23
82	Sambalpur	JED	Jamankira	Kuagola	167	10	15	118990	8.7	119
83	Sambalpur	JED	Jamankira	Sarda	200	12	9	20270	4.5	20
84	Sambalpur	JED	Jamankira	Tulub	167	10	23	122570	13.8	123

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
85	Sambalpur	JED	Kesaibahal	Bhikapali	746	45	48	73950	6.4	74
86	Sambalpur	JED	Kesaibahal	Jarabaga	895	53	161	424250	18.0	424
87	Sambalpur	JED	Kesaibahal	Kesaibahal	246	15	5	5150	2.2	5
88	Sambalpur	JED	Kesaibahal	Mahula pali	663	40	48	123050	7.2	123
89	Sambalpur	JED	Khandakats(hardipali)	Hadipali	660	39	37	66890	5.6	67
90	Sambalpur	JED	Khandakats(hardipali)	Junani	328	20	9	8100	2.8	8
91	Sambalpur	JED	Khandakats(hardipali)	Khandokata	329	20	14	16900	4.4	17
92	Sambalpur	JED	Kuchinda	Gosha	246	15	7	7150	2.9	7
93	Sambalpur	JED	Kuchinda	Kuchinda town 1	1312	79	39	12460	3.0	12
94	Sambalpur	JED	Kuchinda	Saida	164	10	7	10600	4.4	11
95	Sambalpur	JED	Kuchinda	Town2	656	39	19	11750	2.9	12
96	Sambalpur	JED	Kuchinda	Kusumi	833	50	68	58320	8.2	58

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
97	Sambalpur	JED	Kusumi	Kusumi town	742	44	40	124350	5.5	124
98	Sambalpur	JED	Kusumi	Loidaguna	495	30	34	85200	6.9	85
99	Sambalpur	JED	Kusumi	Bandabahal	167	10	26	141240	15.3	141
100	Sambalpur	JED	Lasa	Lasa	574	34	16	13894	2.8	14
101	Sambalpur	JED	Lasa	Chandanimal	412	25	23	55840	5.6	56
102	Sambalpur	JED	Lasa	Gunduchuan	825	50	37	22300	4.5	22
103	Sambalpur	JED	Arda(jamkani)	Bandhapali	82	5	2	4500	3.0	5
104	Sambalpur	JED	Arda(jamkani)	Dulesara	331	20	25	46230	7.5	46
105	Sambalpur	JED	Arda(jamkani)	Jamkani	164	10	5	11010	3.1	11
106	Sambalpur	JED	Bagdehi	Bagdihi	328	20	8	4950	2.5	5
107	Sambalpur	JED	Bagdehi	Bhajupatra	673	40	78	180860	11.5	181
108	Sambalpur	JED	Bagdehi	Bhimjore	329	20	12	25510	3.8	26

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
109	Sambalpur	JED	Bagdehi	Tumbadihi	328	20	10	18560	3.1	19
110	Sambalpur	JED	Durlaga(cachery)	Collectora	1813	109	72	9745	4.0	10
111	Sambalpur	JED	Durlaga(cachery)	Lic_durlaga(cachery)	743	44	42	50592	5.6	51
112	Sambalpur	JED	Durlaga(cachery)	Talpatia	1904	114	111	38100	5.8	38
113	Sambalpur	JED	Lahandabud	Hkatapali	656	39	22	19630	3.3	20
114	Sambalpur	JED	Lahandabud	Housing board	607	36	18	8320	2.9	8
115	Sambalpur	JED	Lahandabud	Industrial	608	36	21	16140	3.5	16
116	Sambalpur	JED	Medical-dhh	Dhh1	82	5	6	350	7.4	0
117	Sambalpur	JED	Medical-dhh	Medical2	165	10	5	810	3.3	1
118	Sambalpur	JED	Purna(kumudpali)	Debadihi feeder	165	10	8	24435	5.0	24

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
119	Sambalpur	JED	Purna(kumudpali)	Jhadeswer feeder	2163	130	175	19413	8.1	19
120	Sambalpur	JED	Purna(kumudpali)	Kalimandir feeder	4000	241	480	33370	12.0	33
121	Sambalpur	JED	Purna(kumudpali)	Siripali feeder	164	10	7	18217	4.4	18
122	Sambalpur	JED	Sarasmal	Ib	663	40	45	28220	6.8	28
123	Sambalpur	JED	Sarasmal	Jsg iii	1808	109	59	14070	3.3	14
124	Sambalpur	JED	Sarasmal	Jsgi	4698	283	428	10330	9.1	10
125	Sambalpur	JED	Sarasmal	Kachery	2999	181	344	15430	11.5	15
126	Sambalpur	JED	Sarasmal	Lic	2328	140	175	41419	7.5	41
127	Sambalpur	JED	Sarasmal	Omp	1836	110	185	45930	10.1	46
128	Sambalpur	JED	Sarbahal	Durgamandap	2132	128	48	2243	2.3	2
129	Sambalpur	JED	Sarbahal	Sripura	1508	90	154	132200	10.2	132
130	Sambalpur	JED	Sarbahal	Sunarimunda	2790	168	71	5800	2.5	6

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
131	Sambalpur	JED	Sodamal	Beunra	30	2	4	15100	13.6	15
132	Sambalpur	JED	Sodamal	Sodamal	246	15	10	10150	3.9	10
133	Sambalpur	JED	Badmal	Badmal	822	49	33	31750	4.0	32
134	Sambalpur	JED	Badmal	Hirma	914	55	72	111470	7.8	111
135	Sambalpur	JED	Badmal	Singhabada	492	30	16	15455	3.2	15
136	Sambalpur	JED	Kirmira	Line 2 kirimira	246	15	7	9500	2.9	10
137	Sambalpur	JED	Kirmira	Beheramal	164	10	6	27150	3.7	27
138	Sambalpur	JED	Kirmira	Line3naxapali	164	10	5	13300	3.3	13
139	Sambalpur	JED	Kolabira	Jhirlapali	1671	100	177	102760	10.6	103
140	Sambalpur	JED	Kolabira	Kolabira	328	20	8	8090	2.6	8
141	Sambalpur	JED	Kolabira	Raghunathpali	1154	69	54	70485	4.7	70
142	Sambalpur	JED	Kolabira	Samasingha	831	50	66	68945	8.0	69

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
143	Sambalpur	JED	Laiekra	Mundrajore	1001	60	91	189190	9.1	189
144	Sambalpur	JED	Laiekra	Bhatlaida	411	25	19	23460	4.7	23
145	Sambalpur	JED	Laiekra	Laiekra	492	30	11	9950	2.3	10
146	Sambalpur	JED	Laiekra	Sahaspur	503	30	70	179320	13.9	179
147	Sambalpur	SED	Ainthapali	Bhalupali	1112	67	73	34902	6.6	35
148	Sambalpur	SED	Ainthapali	Budharaja school	1395	84	42	7030	3.0	7
149	Sambalpur	SED	Ainthapali	Burla	956	58	36	1703	3.8	2
150	Sambalpur	SED	Ainthapali	College	2813	169	152	8180	5.4	8
151	Sambalpur	SED	Ainthapali	Family planning	1891	113	71	10525	3.7	11
152	Sambalpur	SED	Ainthapali	Fatak	1100	66	36	9390	3.2	9
153	Sambalpur	SED	Ainthapali	Gopalpali	1154	69	56	31775	4.8	32
154	Sambalpur	SED	Ainthapali	Industrial	197	12	7	3024	3.3	3

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
155	Sambalpur	SED	Ainthapali	Khetrajpur	2405	145	155	14560	6.5	15
156	Sambalpur	SED	Ainthapali	Raw water	1781	107	79	7810	4.5	8
157	Sambalpur	SED	Ainthapali	Re kainsir	496	30	37	42960	7.5	43
158	Sambalpur	SED	Ainthapali	Remed	2327	140	174	15880	7.5	16
159	Sambalpur	SED	Burla	Contractorcolony	1644	99	51	7328	3.1	7
160	Sambalpur	SED	Burla	Marketfeeder	409	25	8	1950	2.0	2
161	Sambalpur	SED	Burla	Uce	1564	94	61	14093	3.9	14
162	Sambalpur	SED	Burla	Wesco	2556	154	105	15813	4.1	16
163	Sambalpur	SED	Burla medical	Doctorcolony	574	34	20	12820	3.5	13
164	Sambalpur	SED	Burla medical	Kv hostel	246	15	10	3010	4.1	3
165	Sambalpur	SED	Burla medical	Medical1	1309	79	26	2640	2.0	3
166	Sambalpur	SED	Burla medical	Solar	246	15	6	4600	2.6	5

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
167	Sambalpur	SED	Jyotibihar	Bhundunguripadard	493	30	15	8450	3.0	8
168	Sambalpur	SED	Jyotibihar	Golkunda	656	39	17	6113	2.6	6
169	Sambalpur	SED	Jyotibihar	K tapali	493	29	18	25150	3.7	25
170	Sambalpur	SED	Jyotibihar	Ladieshostel	656	39	23	11490	3.5	11
171	Sambalpur	SED	Chipilima	Basantpur	658	39	25	19970	3.8	20
172	Sambalpur	SED	Chipilima	Tulandi(chipilima)	1075	64	65	49210	6.0	49
173	Sambalpur	SED	Chorpur	Badasinghari	296	18	10	12590	3.4	13
174	Sambalpur	SED	Chorpur	Mundaghat	660	40	28	17490	4.3	17
175	Sambalpur	SED	Chorpur	Senhapali	579	35	33	18220	5.6	18
176	Sambalpur	SED	Goshala	Burla	1236	74	53	15110	4.3	15
177	Sambalpur	SED	Goshala	Godbhaga	1152	69	41	15264	3.6	15
178	Sambalpur	SED	Goshala	Kalamati	411	25	15	14720	3.6	15
179	Sambalpur	SED	Goshala	Mahalaxmi	1407	84	79	16100	5.6	16

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
180	Sambalpur	SED	Goshala	Mundoghat	328	20	10	13810	3.0	14
181	Sambalpur	SED	Goshala	Tulandi(goshala)	411	25	19	9460	4.5	9
182	Sambalpur	SED	Hirakud	Alind re	1325	80	74	34545	5.6	35
183	Sambalpur	SED	Hirakud	Gandhinagar	2385	143	80	10700	3.3	11
184	Sambalpur	SED	Hirakud	Hpcl	98	6	2	8500	2.1	9
185	Sambalpur	SED	Hirakud	Medical1	1231	74	30	5100	2.4	5
186	Sambalpur	SED	Hirakud	Sambalpur1	1067	64	28	12375	2.7	12
187	Sambalpur	SED	Hirakud	Sambalpur2	828	50	49	33875	5.9	34
188	Sambalpur	SED	Badabazar	Badabazar feeder	2711	163	79	4010	2.9	4
189	Sambalpur	SED	Badabazar	Farm road feeder	2458	148	52	6030	2.1	6
190	Sambalpur	SED	Badabazar	Samaleswari feeder	736	44	14	1565	1.9	2
191	Sambalpur	SED	Cheruapada	Railway feeder	532	32	10	2000	2.0	2

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
192	Sambalpur	SED	Cheruapada	Bulibandh	2814	169	156	10560	5.6	11
193	Sambalpur	SED	Cheruapada	Hospital	327	20	7	2190	2.2	2
194	Sambalpur	SED	Cheruapada	Phd	2637	158	110	6965	4.2	7
195	Sambalpur	SEED	Putibandh	Bhutapada	4180	251	448	4560	10.7	5
196	Sambalpur	SEED	Putibandh	Brooks hill	5611	337	1505	38620	26.8	39
197	Sambalpur	SEED	Putibandh	Golebazar	2248	135	106	690	4.7	1
198	Sambalpur	SEED	Putibandh	New cs colony	2299	138	116	9815	5.1	10
199	Sambalpur	SEED	Putibandh	Shikhapara	4496	270	467	18700	10.4	19
200	Sambalpur	SEED	Dhama	Dhama	1033	62	58	43885	5.6	44
201	Sambalpur	SEED	Dhama	Industry	749	45	23	10430	3.1	10
202	Sambalpur	SEED	Dhama	Khinda	1033	62	76	119121	7.4	119
203	Sambalpur	SEED	Dhama	Larasara	600	36	33	67760	5.5	68
204	Sambalpur	SEED	Gunderpur	Gunderpur	649	39	24	42250	3.8	42

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
205	Sambalpur	SEED	Gunderpur	Sahaspur	1501	90	120	96420	8.0	96
206	Sambalpur	SEED	Padiabahal	Bahampur	617	37	51	64799	8.3	65
207	Sambalpur	SEED	Padiabahal	Jayantpur fdr	2234	134	198	84680	8.9	85
208	Sambalpur	SEED	Padiabahal	Padiabahal	1710	102	318	189387	18.6	189
209	Sambalpur	SEED	Putibandh	Dhanupali	5031	302	265	27360	5.3	27
210	Sambalpur	SEED	Putibandh	Maneswar	1933	116	134	37570	6.9	38
211	Sambalpur	SEED	Putibandh	Sindurpankha	1799	108	88	23525	4.9	24
212	Sambalpur	SEED	Hatibari	Basiapada	133	8	6	44760	4.8	45
213	Sambalpur	SEED	Hatibari	Hatibari	133	8	13	76870	10.1	77
214	Sambalpur	SEED	Hatibari	Meghapal	1002	60	164	284190	16.4	284
215	Sambalpur	SEED	Hatibari	Mundhar	333	20	22	77740	6.5	78
216	Sambalpur	SEED	Hero	Barangamal	167	10	43	296080	25.6	296
217	Sambalpur	SEED	Hero	New barangamal	1100	66	75	23910	6.8	24

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
218	Sambalpur	SEED	Jujumara	Jujumura	1196	72	235	294790	19.7	295
219	Sambalpur	SEED	Jujumara	Rambadamal	916	55	84	57150	9.2	57
220	Sambalpur	SEED	Kisinda	Balarama	267	16	13	56870	4.9	57
221	Sambalpur	SEED	Kisinda	Girishchandrapur	333	20	22	65750	6.5	66
222	Sambalpur	SEED	Kisinda	Panimura	534	32	45	155160	8.4	155
223	Sambalpur	SEED	Naktideul	Batgaon	952	57	208	247650	21.9	248
224	Sambalpur	SEED	Naktideul	Daincha	250	15	49	214523	19.4	215
225	Sambalpur	SEED	Naktideul	Jagannathprasad	200	12	5	6660	2.7	7
226	Sambalpur	SEED	Naktideul	Kisinda	417	25	35	94360	8.3	94
227	Sambalpur	SEED	Naktideul	Micro	100	6	11	38100	11.2	38
228	Sambalpur	SEED	Naktideul	Naktideul	583	35	22	1060	3.8	1
229	Sambalpur	SEED	Rairakhol	Barbank	834	50	126	230410	15.1	230
230	Sambalpur	SEED	Rairakhol	Charmal	467	28	38	51600	8.2	52

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
231	Sambalpur	SEED	Rairakhol	College	333	20	8	10650	2.3	11
232	Sambalpur	SEED	Rairakhol	Kadaligarh	917	55	142	210870	15.4	211
233	Sambalpur	SEED	Rairakhol	Luhapank	333	20	22	88360	6.5	88
234	Sambalpur	SEED	Rairakhol	Rairakhol	1249	75	58	19750	4.7	20
235	Sambalpur	SEED	Katarbagha	Katarbag town	1081	65	82	31077	7.5	31
236	Sambalpur	SEED	Katarbagha	Tamperkela	1775	106	211	98155	11.9	98
237	Sambalpur	SEED	Laida	Kantaplai	121	7	9	25000	7.2	25
238	Sambalpur	SEED	Laida	Laida	181	11	13	29360	7.4	29
239	Sambalpur	SEED	Laida	Rangali	677	41	46	38477	6.8	38
240	Sambalpur	SEED	Lapanga	Khinda	832	50	29	25465	3.4	25
241	Sambalpur	SEED	Lapanga	Lapanga	832	50	25	9280	3.0	9
242	Sambalpur	SEED	Lapanga	Thelkoli	1333	80	77	18320	5.8	18
243	Sambalpur	SEED	Parmanpur	Mura	962	58	61	85630	6.4	86

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Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
244	Sambalpur	SEED	Parmanpur	Pandri	736	44	35	41320	4.8	41
245	Sambalpur	SEED	Parmanpur	Parmanpur(parmanpur)	1568	94	177	119602	11.3	120
246	Sambalpur	SEED	Rengali	Khiasahi	625	37	31	28210	4.9	28
247	Sambalpur	SEED	Rengali	Kitarbaga	396	24	20	30190	5.0	30
248	Sambalpur	SEED	Rengali	Lapanga(rangali)	460	28	14	19110	3.1	19
249	Sambalpur	SEED	Rengali	Rengali	1772	106	47	4728	2.6	5
250	Sambalpur	SEED	Rengali	Salad	66	4	2	6400	3.7	6
251	Sambalpur	SEED	Rengali new	Industrial	918	55	31	7310	3.4	7
252	Sambalpur	SEED	Rengali new	Nishabhanga	245	15	9	10455	3.5	10
253	Sambalpur	SEED	Rengali new	Sapne	407	24	13	12140	3.1	12
254	Sambalpur	SEED	Sason	Majhipali	1980	119	83	9504	4.2	10
255	Sambalpur	SEED	Sason	Parmanpur (sason)	1460	87	93	61870	6.4	62

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Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
256	Sambalpur	SEED	Sason	Sason	744	44	61	85090	8.3	85
257	Bolangir	BED	Jail	Beherpalli	919	55	50	16530	5.4	17
258	Bolangir	BED	Jail	Gandhinagar	2415	145	73	6056	3.0	6
259	Bolangir	BED	Lalitkra	Feeder 1	5345	321	538	13460	10.1	13
260	Bolangir	BED	Lalitkra	Feeder 2	1333	80	83	6820	6.2	7
261	Bolangir	BED	Lalitkra	Feeder 3	2330	140	74	31565	3.2	32
262	Bolangir	BED	Lalitkra	Re feeder.	333	20	11	20830	3.2	21
263	Bolangir	BED	Power house	Hatisal	998	60	20	3390	2.0	3
264	Bolangir	BED	Power house	Malpada	2829	170	70	4530	2.5	5
265	Bolangir	BED	Sudpada	Kansaripada	2829	170	74	4336	2.6	4
266	Bolangir	BED	Barapudugia	Chudapali	666	40	24	10800	3.6	11
267	Bolangir	BED	Barapudugia	Garjan	1330	80	238	92020	17.9	92

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Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
268	Bolangir	BED	Barapudugia	Hardatal	1821	109	197	151840	10.8	152
269	Bolangir	BED	Barapudugia	Pipalkani	1243	75	156	127100	12.5	127
270	Bolangir	BED	Barapudugia	Shibatala	2249	135	278	62410	12.4	62
271	Bolangir	BED	Beherapali	Behera pali	166	10	5	1380	2.8	1
272	Bolangir	BED	Beherapali	Bhaler	998	60	34	24490	3.4	24
273	Bolangir	BED	Beherapali	Santpur	666	40	37	27575	5.5	28
274	Bolangir	BED	Beherapali	Umria	1763	106	112	113543	6.4	114
275	Bolangir	BED	Bhadra	Kandajuri	666	40	29	22750	4.4	23
276	Bolangir	BED	Bhadra	Kusunga	1674	100	201	54800	12.0	55
277	Bolangir	BED	Bhadra	Sargada	1586	95	149	72660	9.4	73
278	Bolangir	BED	Chhatmakhana	Chhuibandh	499	30	14	8600	2.8	9
279	Bolangir	BED	Chhatmakhana	Durgapali	2009	121	247	62300	12.3	62

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Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
280	Bolangir	BED	Chhatmakhana	Kharmarmunda	416	25	10	7280	2.5	7
281	Bolangir	BED	Chhatmakhana	Kusumel	2007	120	297	78560	14.8	79
282	Bolangir	BED	Chhatmakhana	Phd	666	40	27	6020	4.0	6
283	Bolangir	BED	Chhatmakhana	Sujia	831	50	43	45710	5.2	46
284	Bolangir	BED	Industrial estate	Industrial est 1	2995	180	139	15770	4.7	16
285	Bolangir	BED	Industrial estate	Industrial est 2	2331	140	117	7230	5.0	7
286	Bolangir	BED	Industrial estate	Industrial est 3	333	20	10	6760	2.9	7
287	Bolangir	BED	Industrial estate	Industrial est 4	1364	82	46	27780	3.4	28
288	Bolangir	BED	Industrial estate	Industrial est 5	1631	98	60	8400	3.7	8
289	Bolangir	BED	Kasabahal	Kurul	832	50	32	37740	3.9	38
290	Bolangir	BED	Kasabahal	Mahimunda	832	50	32	28320	3.8	28
291	Bolangir	BED	Kasabahal	Odiapali	749	45	31	32350	4.1	32

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
292	Bolangir	BED	Madhiapali	Madhiapali industrial	249	15	8	6810	3.1	7
293	Bolangir	BED	Madhiapali	Re madhiapali	54	3	1	510	1.9	1
294	Bolangir	BED	Madhiapali	Sadeipali	1327	80	99	47190	7.5	47
295	Bolangir	BED	Kudasingha	Chikalbahal	366	22	11	10200	3.0	10
296	Bolangir	BED	Kudasingha	Kudasingha	1000	60	112	91800	11.2	92
297	Bolangir	BED	Kudasingha	Sikchhaida	399	24	16	28300	4.1	28
298	Bolangir	BED	Kendumundi	Bharsuja	399	24	13	25150	3.4	25
299	Bolangir	BED	Kendumundi	Bindhapali	416	25	19	28700	4.5	29
300	Bolangir	BED	Kendumundi	Khaliapali	83	5	4	12200	4.4	12
301	Bolangir	BED	Kendumundi	Pandesara	166	10	5	11400	2.8	11
302	Bolangir	BED	Loisingha	Loisingha	1333	80	46	29700	3.5	30
303	Bolangir	BED	Loisingha	Menda	2772	166	708	91633	25.5	92

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
304	Bolangir	BED	Loisingha	Nagaon	2007	120	162	33310	8.1	33
305	Bolangir	BED	Salebhata	Bakti	1566	94	254	117860	16.2	118
306	Bolangir	BED	Salebhata	Duduka	501	30	28	40490	5.7	40
307	Bolangir	BED	Salebhata	Lupursingha	3349	201	762	104635	22.7	105
308	Bolangir	BED	Salebhata	Salebhata	1084	65	50	13670	4.6	14
309	Bolangir	BED	Agalpur	Bharsuja	1339	80	355	1900	26.5	2
310	Bolangir	BED	Agalpur	Nuagaon	167	10	33	90400	19.7	90
311	Bolangir	BED	Agalpur	Rengali	1166	70	54	54400	4.6	54
312	Bolangir	BED	Agalpur	Roth	669	40	51	82800	7.6	83
313	Bolangir	BED	Budhabahal	Tepren	416	25	19	33860	4.4	34
314	Bolangir	BED	Budhabahal	Bhutibahal	583	35	30	74530	5.2	75
315	Bolangir	BED	Budhabahal	Gambharimal	500	30	23	44440	4.6	44
316	Bolangir	BED	Budhabahal	Sarasmal	250	15	7	15650	2.8	16
317	Bolangir	BED	Deagaon	Adarsh 2	50	3	3	9300	6.1	9

Capex plan for FY 23-24

TPWODL

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
318	Bolangir	BED	Deagaon	Deogaon	832	50	19	4730	2.3	5
319	Bolangir	BED	Deagaon	Gaibahal1	1854	111	276	112950	14.9	113
320	Bolangir	BED	Deagaon	Gaibahal2	585	35	32	34580	5.5	35
321	Bolangir	BED	Deagaon	Sagarpali	500	30	16	5870	3.2	6
322	Bolangir	BED	Deagaon	Tusura	1252	75	66	36650	5.2	37
323	Bolangir	BED	Jarasingha	Jarsingha	416	25	11	2370	2.6	2
324	Bolangir	BED	Jarasingha	Salepali	499	30	16	14300	3.2	14
325	Bolangir	BED	Jarasingha	Udar	583	35	25	30080	4.3	30
326	Bolangir	BED	Jarasingha	Chandrapur	499	30	14	11145	2.8	11
327	Bolangir	BED	Tusra	Arjunpur	2260	134	637	122210	28.2	122
328	Bolangir	BED	Tusra	Gudvella	2766	165	1333	171151	48.2	171
329	Bolangir	BED	Tusra	Mahalai	1523	91	482	175890	31.7	176
330	Bolangir	BED	Tusra	Natraj	1000	60	50	37880	5.0	38
331	Bolangir	BED	Tusra	Samara	1089	65	84	56020	7.7	56
332	Bolangir	BED	Tusra	Tusra town	1416	85	53	23740	3.7	24
333	Bolangir	SED	Ullunda	Maraloi	200	12	13	31200	6.5	31
334	Bolangir	SED	Ullunda	Ullnda	333	20	7	1600	2.2	2
335	Bolangir	SED	Ullunda	Gandabahal	333	20	10	10650	3.0	11
336	Bolangir	SED	Ullunda	Goedmara	367	22	23	52275	6.3	52
337	Bolangir	SED	Ullunda	Hikunda	584	35	33	43900	5.6	44
338	Bolangir	SED	Ullunda	Sindhol	1671	100	357	173515	21.4	174

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
339	Bolangir	SED	Ullunda	Hingma	633	38	38	42040	6.0	42
340	Bolangir	SED	Ullunda	Thengo	584	35	75	185440	12.9	185
341	Bolangir	SED	Bm pur	Telipali	836	50	68	54837	8.1	55
342	Bolangir	SED	Bm pur	Bm pur	1166	70	44	33670	3.8	34
343	Bolangir	SED	Bm pur	Champapur	1169	70	79	26810	6.8	27
344	Bolangir	SED	Bm pur	Dharmasala	918	55	74	50620	8.0	51
345	Bolangir	SED	Bm pur	Jaloi	1257	75	119	105930	9.5	106
346	Bolangir	SED	Bm pur	Khandatota	333	20	8	6010	2.5	6
347	Bolangir	SED	Mursundi	Manikpur	751	45	54	51775	7.2	52
348	Bolangir	SED	Mursundi	Buthipadar	500	30	34	79110	6.8	79
349	Bolangir	SED	Mursundi	Khandokata	467	28	30	60420	6.5	60
350	Bolangir	SED	Mursundi	Mursundi	333	20	11	21650	3.4	22
351	Bolangir	SED	Raxa chowk	Hingmaii	583	35	32	53630	5.5	54
352	Bolangir	SED	Raxa chowk	Hikudi chowk	583	35	36	45460	6.2	45
353	Bolangir	SED	Subalaya	Jatesingha	500	30	18	15350	3.5	15
354	Bolangir	SED	Subalaya	Kamira	133	8	4	6300	3.0	6
355	Bolangir	SED	Subalaya	Subalaya	750	45	28	10010	3.7	10
356	Bolangir	SED	Subalaya	Gariamunda	585	35	44	64860	7.5	65
357	Bolangir	SED	Bhatabahali	Julunda	752	45	42	29617	5.5	30
358	Bolangir	SED	Bhatabahali	Kapasira	2134	128	84	36710	3.9	37
359	Bolangir	SED	Bhatabahali	Salepali	670	40	63	71200	9.4	71

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
360	Bolangir	SED	Bhatabahali	Tamamura	1134	68	47	28755	4.2	29
361	Bolangir	SED	Binka	Binka	1766	106	59	15080	3.4	15
362	Bolangir	SED	Binka	Gulunda	617	37	35	34222	5.8	34
363	Bolangir	SED	Binka	Gulunda agriculture	300	18	8	5560	2.7	6
364	Bolangir	SED	Binka	Industrial	417	25	15	16350	3.6	16
365	Bolangir	SED	Binka	Mahadevi	100	6	2	3000	2.0	3
366	Bolangir	SED	Binka	Rampur	1001	60	51	13710	5.1	14
367	Bolangir	SED	Binka	Sankera	501	30	47	54755	9.3	55
368	Bolangir	SED	Bishalpali	Industrial	999	60	22	3610	2.3	4
369	Bolangir	SED	Bishalpali	Bankigindi	1523	91	199	82950	13.1	83
370	Bolangir	SED	Bishalpali	Kadlipali	833	50	47	34980	5.7	35
371	Bolangir	SED	Bishalpali	Sindurpur	1168	70	62	23390	5.3	23
372	Bolangir	SED	Bishalpali	Singhjuba	1333	80	55	27870	4.1	28
373	Bolangir	SED	Cherupalli	Cherupalli	667	40	32	44210	4.7	44
374	Bolangir	SED	Cherupalli	Dungruipalli	1087	65	63	36730	5.8	37
375	Bolangir	SED	Cherupalli	Pandkital	1013	61	112	37215	11.1	37
376	Bolangir	SED	Cherupalli	Sargul	1861	111	242	136700	13.0	137
377	Bolangir	SED	Pankital	Badkerley	2853	171	273	103130	9.6	103
378	Bolangir	SED	Pankital	Mayabarha	749	45	22	22580	3.0	23
379	Bolangir	SED	Pankital	Rampur	866	52	26	16170	3.0	16

Capex plan for FY 23-24

TPWODL

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
380	Bolangir	SED	Saledi	Bhamarpali	1416	85	60	51661	4.3	52
381	Bolangir	SED	Saledi	Irrigation	500	30	18	14902	3.6	15
382	Bolangir	SED	Saledi	Mahadev pali	1133	68	57	37719	5.0	38
383	Bolangir	SED	Charbhata	Balikhamar	922	55	82	48300	8.9	48
384	Bolangir	SED	Charbhata	Charbhata	917	55	41	8300	4.5	8
385	Bolangir	SED	Charbhata	Rengsa	1087	65	68	36450	6.2	36
386	Bolangir	SED	Dumerbahal	Jamgaon	786	47	49	53750	6.2	54
387	Bolangir	SED	Dumerbahal	Jharbalangir	1086	65	82	49580	7.5	50
388	Bolangir	SED	Dumerbahal	Tarva	1512	91	138	96000	9.2	96
389	Bolangir	SED	Hardokhol	Baidyanath	1004	60	67	32400	6.7	32
390	Bolangir	SED	Hardokhol	Bisimunda	1486	89	348	110183	23.4	110
391	Bolangir	SED	Hardokhol	Hardokhol	1168	70	69	26420	5.9	26
392	Bolangir	SED	Hardokhol	Khambeswaripalli	1262	76	151	32380	12.0	32
393	Bolangir	SED	Hardokhol	Majhimunda	668	40	41	9600	6.1	10
394	Bolangir	SED	Headkitikra-kalapathar	Jammura	1502	90	117	21505	7.8	22
395	Bolangir	SED	Headkitikra-kalapathar	Kalapathar	583	35	22	20820	3.8	21

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
396	Bolangir	SED	Sonepur new	Badbazar	1498	90	56	11250	3.7	11
397	Bolangir	SED	Sonepur new	Collectorate	1331	80	33	10340	2.5	10
398	Bolangir	SED	Sonepur new	Medical	500	30	21	1500	4.3	2
399	Bolangir	SED	Sonepur old	Hardokholtown	1498	90	42	10885	2.8	11
400	Bolangir	SED	Sonepur old	Janmuratown	1001	60	57	9170	5.7	9
401	Bolangir	SED	Sonepur old	Majhipada	1332	80	49	6010	3.7	6
402	Bolangir	SED	Sonepur old	Shantinagar	1332	80	45	7205	3.4	7
403	Bolangir	SED	Dubla	Baghia	833	50	31	19370	3.7	19
404	Bolangir	SED	Dubla	Lukapali	838	50	71	82450	8.5	82
405	Bolangir	SED	Dubla	Talpadar	1002	60	57	52510	5.7	53
406	Bolangir	SED	Dubla	Purunapani	1002	60	64	23450	6.4	23
407	Bolangir	SED	Khari	Bijepadar	1424	85	122	65560	8.5	66
408	Bolangir	SED	Khari	Narayanpur	1174	70	119	63960	10.1	64
409	Bolangir	SED	Khari	Pua	1095	65	124	87010	11.3	87
410	Bolangir	SED	Khari	Taraikela	750	45	32	9370	4.3	9
411	Bolangir	SED	Khari	Kendumunda	922	55	77	48920	8.4	49

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
412	Bolangir	SED	Khari	Mahula	834	50	40	45270	4.8	45
413	Bolangir	SED	Tarva	Sargaj	1252	75	60	22100	4.8	22
414	Bolangir	SED	Tarva	Tarva town 2	1335	80	63	9000	4.7	9
415	Bolangir	SED	Tarva	Tarva town1	1249	75	41	17730	3.3	18
416	Bolangir	SED	Tarva	Tantulikhuni	502	30	34	33220	6.7	33
417	Bolangir	TED	Bagabahal	Belpada	416	25	11	3090	2.7	3
418	Bolangir	TED	Bagabahal	Bhalumunda	1338	80	87	33055	6.5	33
419	Bolangir	TED	Bagabahal	Jurabandh	585	35	36	27698	6.2	28
420	Bolangir	TED	Bagabahal	Sorgul	417	25	21	27987	5.1	28
421	Bolangir	TED	Bangomunda	Bhalumunda_12	166	10	6	13915	3.7	14
422	Bolangir	TED	Bangomunda	Bongomunda	832	50	25	8380	3.0	8
423	Bolangir	TED	Bangomunda	Gohirapader	666	40	23	12340	3.4	12
424	Bolangir	TED	Bangomunda	Lukapada	333	20	21	28258	6.4	28
425	Bolangir	TED	Dabri	Dabri	750	45	34	29076	4.5	29
426	Bolangir	TED	Dabri	Dhamandonga	750	45	51	64049	6.8	64

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
427	Bolangir	TED	Dabri	Dumerchuan	584	35	35	56871	5.9	57
428	Bolangir	TED	Gudighat	Chalki	1206	72	126	86312	10.4	86
429	Bolangir	TED	Gudighat	Chanabahal	667	40	37	41477	5.6	41
430	Bolangir	TED	Gudighat	Andaldoro	500	30	19	21152	3.9	21
431	Bolangir	TED	Gudighat	Antarla	583	35	31	35615	5.4	36
432	Bolangir	TED	Kantabanji	Ashram pada	832	50	27	11870	3.3	12
433	Bolangir	TED	Kantabanji	Town1	3005	180	141	17220	4.7	17
434	Bolangir	TED	Kantabanji	Town2	3093	185	183	26911	5.9	27
435	Bolangir	TED	Muribahal	Gudia hat	500	30	19	17300	3.7	17
436	Bolangir	TED	Muribahal	Jamuna	583	35	21	12980	3.6	13
437	Bolangir	TED	Muribahal	Town	416	25	10	4620	2.4	5
438	Bolangir	TED	Muribahal	Dubung	1423	85	112	56650	7.8	57
439	Bolangir	TED	Muribahal	Tupavdhar	1000	60	84	75033	8.4	75
440	Bolangir	TED	Tureikela	Badabanki	760	45	107	67746	14.1	68
441	Bolangir	TED	Tureikela	Ghunesh	418	25	38	54084	9.1	54
442	Bolangir	TED	Tureikela	R. E	585	35	51	74221	8.8	74
443	Bolangir	TED	Tureikela	Tureikela	250	15	8	10580	3.0	11
444	Bolangir	TED	Belpada	Belpada	1166	70	34	20405	2.9	20
445	Bolangir	TED	Belpada	Factory	666	40	17	19500	2.6	20
446	Bolangir	TED	Belpada	Ghagurli	1083	65	62	103028	5.7	103
447	Bolangir	TED	Belpada	Kapani	499	30	21	42400	4.2	42

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
448	Bolangir	TED	Belpada	Mandal	250	15	6	6620	2.4	7
449	Bolangir	TED	Belpada	Navodaya	83	5	2	1820	2.2	2
450	Bolangir	TED	Belpada	Padampur	166	10	5	2960	2.8	3
451	Bolangir	TED	Dhumabhata	Dhumabhata	499	30	15	17090	3.1	17
452	Bolangir	TED	Dhumabhata	Juba	916	55	44	90860	4.7	91
453	Bolangir	TED	Dhumabhata	Radbahal	918	55	44	26980	4.8	27
454	Bolangir	TED	Dhumabhata	Suleikala	500	30	18	86130	3.6	86
455	Bolangir	TED	Ghumer	Dalapali	667	40	31	37730	4.6	38
456	Bolangir	TED	Ghumer	Tamia&thaisom	670	40	65	95995	9.7	96
457	Bolangir	TED	Juria	Damaipali	500	30	30	44810	6.0	45
458	Bolangir	TED	Juria	Ghagrabhatli	166	10	6	14700	3.8	15
459	Bolangir	TED	Juria	Juria	166	10	9	19950	5.6	20
460	Bolangir	TED	Juria	Luhasingha	200	12	9	15850	4.3	16
461	Bolangir	TED	Kanut	Bharuapali	833	50	41	98770	4.9	99
462	Bolangir	TED	Kanut	Nuahad	500	30	38	74539	7.6	75
463	Bolangir	TED	Kanut	Salandi	584	35	37	177090	6.4	177
464	Bolangir	TED	Kanut	Tanla	895	57	81	149840	9.1	150

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
465	Bolangir	TED	Khaprakhol	Bhaldungari	367	22	21	36780	5.8	37
466	Bolangir	TED	Khaprakhol	Dhandamunda	967	58	108	76959	11.2	77
467	Bolangir	TED	Khaprakhol	Harisankar	1347	81	141	64197	10.5	64
468	Bolangir	TED	Khaprakhol	Rengali	1071	64	95	73900	8.9	74
469	Bolangir	TED	Larambha	Bagmunda	586	35	46	69550	7.9	70
470	Bolangir	TED	Larambha	Dangbahal	703	42	51	60330	7.2	60
471	Bolangir	TED	Larambha	Larambha	333	20	13	18175	3.9	18
472	Bolangir	TED	Lathora	Bagdiha	416	25	16	20750	3.9	21
473	Bolangir	TED	Lathora	Bendir	300	18	12	19150	3.9	19
474	Bolangir	TED	Lathora	Busstand	250	15	6	8500	2.6	9
475	Bolangir	TED	Lathora	Colony pada	1002	60	67	25550	6.7	26
476	Bolangir	TED	Lathora	Tankapani	266	16	9	24220	3.6	24
477	Bolangir	TED	Patnagarh	Batharla	1842	110	193	102689	10.5	103
478	Bolangir	TED	Patnagarh	Old ghasian	1403	84	204	98964	14.5	99
479	Bolangir	TED	Patnagarh	Phd	916	55	38	4550	4.2	5
480	Bolangir	TED	Patnagarh	Town1	1322	79	30	200	2.2	0
481	Bolangir	TED	Patnagarh	Town2	2763	166	58	2700	2.1	3

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
482	Bolangir	TED	Tandpadar	Badajhankarpali	584	35	34	25598	5.8	26
483	Bolangir	TED	Tandpadar	Bhaisa	666	40	28	26026	4.3	26
484	Bolangir	TED	Tandpadar	Rampur	582	35	20	17830	3.4	18
485	Bolangir	TED	Thakpada	Banjari	1816	109	338	70237	18.6	70
486	Bolangir	TED	Thakpada	Gmbhari	417	25	23	39282	5.5	39
487	Bolangir	TED	Thakpada	Jogimunda	1090	65	97	71029	8.9	71
488	Bolangir	TED	Thakpada	Matikhai	450	27	27	41000	6.0	41
489	Bolangir	TED	Belgaon	Badipada	1346	80	208	43571	15.5	44
490	Bolangir	TED	Belgaon	Phd feeder	333	20	9	19110	2.7	19
491	Bolangir	TED	Belgaon	Bhadra	1083	65	61	45036	5.7	45
492	Bolangir	TED	Belgaon	Bijepur	1249	75	104	69928	8.3	70
493	Bolangir	TED	Belgaon	Ghunsir	921	55	75	66868	8.1	67
494	Bolangir	TED	Karmatala	Patamara	117	7	5	24100	4.6	24
495	Bolangir	TED	Karmatala	Karamtala	399	24	15	35200	3.9	35
496	Bolangir	TED	Karmatala	Phapsi	867	52	51	48020	5.9	48
497	Bolangir	TED	Saintala	Block	166	10	3	570	1.9	1
498	Bolangir	TED	Saintala	Budhabahal	1167	70	112	78130	9.6	78
499	Bolangir	TED	Saintala	Kumbhari	833	50	34	34700	4.1	35
500	Bolangir	TED	Saintala	Pitambul	416	25	13	27530	3.1	28
501	Bolangir	TED	Saintala	Saintala	666	40	22	7980	3.3	8
502	Bolangir	TED	Kholan	Dam	784	47	42	44829	5.3	45

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
503	Bolangir	TED	Kholan	Kholan	1508	90	120	48681	7.9	49
504	Bolangir	TED	Kholan	Limpada	1335	80	58	20234	4.4	20
505	Bolangir	TED	Kholan	Luthurbandh	1600	96	180	88206	11.2	88
506	Bolangir	TED	Pandripani	Alanda	384	23	21	35790	5.6	36
507	Bolangir	TED	Pandripani	Bagbhal	400	24	24	32160	5.9	32
508	Bolangir	TED	Pandripani	Dedgaon	1502	90	196	89915	13.1	90
509	Bolangir	TED	Pandripani	Jharial	867	52	44	19852	5.1	20
510	Bolangir	TED	Piplapada	Charbhata	333	20	19	36430	5.8	36
511	Bolangir	TED	Piplapada	Manigaon	300	18	26	65672	8.7	66
512	Bolangir	TED	Piplapada	Pipalapadar	166	10	6	6750	3.5	7
513	Bolangir	TED	Sindhekela	Chandotara	1252	75	89	69514	7.1	70
514	Bolangir	TED	Sindhekela	Parasara	1000	60	46	4130	4.6	4
515	Bolangir	TED	Sindhekela	Putupada	200	12	14	200	7.2	0
516	Bolangir	TED	Sindhekela	Townsindhekela	1165	70	35	13475	3.0	13
517	Bolangir	TED	Titilagarh	Bandhupala	2164	130	78	13920	3.6	14
518	Bolangir	TED	Titilagarh	Bhatipada	2166	130	131	27540	6.1	28
519	Bolangir	TED	Titilagarh	Fourpolepolicestation	1081	65	20	1370	1.9	1
520	Bolangir	TED	Titilagarh	Gunchitar	1088	65	78	42641	7.1	43
521	Bolangir	TED	Titilagarh	Lic	1081	65	23	4970	2.1	5

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
522	Rourkela	RED	Basanti dav	Dav	3655	219	138	4641	3.8	5
523	Rourkela	RED	Basanti dav	Phd	3839	230	205	6873	5.3	7
524	Rourkela	RED	Gopabandhupali	Gopabandhupali	2164	130	52	2685	2.4	3
525	Rourkela	RED	Gopabandhupali	Ms pali	999	60	35	7765	3.5	8
526	Rourkela	RED	Gopabandhupali	Timber	1329	80	47	4260	3.5	4
527	Rourkela	RED	Bandamunda	Balabhadra market	332	20	12	10000	3.6	10
528	Rourkela	RED	Bandamunda	Bandhamunda	3509	211	759	44980	21.6	45
529	Rourkela	RED	Bisra	Barsuan	1497	90	71	43827	4.7	44
530	Rourkela	RED	Bisra	Bisra_1	750	45	16	4150	2.1	4
531	Rourkela	RED	Bisra	Bisra_2	749	45	24	12332	3.2	12
532	Rourkela	RED	Bisra	Dhadari	583	35	18	11290	3.1	11
533	Rourkela	RED	Bisra	Jaraikela	1254	75	118	38072	9.4	38
534	Rourkela	RED	Bisra	Sanbabua	837	50	91	64141	10.9	64
535	Rourkela	RED	Dalposh	Bartoli	666	40	18	8350	2.7	8
536	Rourkela	RED	Dalposh	Jamsera	828	50	51	32040	6.2	32
537	Rourkela	RED	Nit	Naya bazar	583	35	22	10350	3.8	10
538	Rourkela	RED	Nit	Osap	2513	151	549	50360	21.8	50
539	Rourkela	RED	Hamirpur	Hamirpur	1332	80	42	10214	3.1	10

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
540	Rourkela	RED	Hamirpur	Ramagada	499	30	15	2030	3.0	2
541	Rourkela	RED	Koelnagar	Adbe	5268	316	366	10480	6.9	10
542	Rourkela	RED	Koelnagar	C block	2993	179	90	2768	3.0	3
543	Rourkela	RED	Koelnagar	Jhirpani	2818	169	124	6960	4.4	7
544	Rourkela	RED	Nit	Jagada	3732	224	164	10282	4.4	10
545	Rourkela	RED	Power house	Plant site	5017	301	278	8215	5.5	8
546	Rourkela	RED	Power house	Udit nagar	4467	268	266	14863	5.9	15
547	Rourkela	RED	Power house	Main road	5038	301	566	8635	11.2	9
548	Rourkela	RED	Power house	Ph road	1333	80	33	2340	2.5	2
549	Rourkela	RED (RAJGANGPUR)	Balanda	Balanda	167	10	14	12975	8.7	13
550	Rourkela	RED (RAJGANGPUR)	Balanda	Garjan	133	8	11	32950	8.6	33
551	Rourkela	RED (RAJGANGPUR)	Balanda	Tynsar	1658	99	293	262375	17.7	262

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
552	Rourkela	RED (RAJGANGPUR)	Kalunga (idc)	Idc	2332	140	133	9568	5.7	10
553	Rourkela	RED (RAJGANGPUR)	Kalunga (idc)	Kalunga basti	833	50	24	7380	2.9	7
554	Rourkela	RED (RAJGANGPUR)	Kalunga (idc)	Third phase	1666	100	61	5350	3.7	5
555	Rourkela	RED (RAJGANGPUR)	Otto india	Birkera	167	10	5	11540	2.7	12
556	Rourkela	RED (RAJGANGPUR)	Otto india	Kalunga town 1	667	40	21	21330	3.1	21
557	Rourkela	RED (RAJGANGPUR)	Vedvyas	Beldihi	1664	100	68	20540	4.1	21
558	Rourkela	RED (RAJGANGPUR)	Vedvyas	Gopapali	1165	70	41	9280	3.5	9
559	Rourkela	RED (RAJGANGPUR)	Vedvyas	Vedvyas	3325	199	131	7520	3.9	8

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
560	Rourkela	RED (RAJGANGPUR)	Biramitrapur	Bijabahal	1337	80	107	153050	8.0	153
561	Rourkela	RED (RAJGANGPUR)	Biramitrapur	Jharbeda	580	35	50	93820	8.5	94
562	Rourkela	RED (RAJGANGPUR)	Biramitrapur	Raiboga	367	22	25	64350	6.7	64
563	Rourkela	RED (RAJGANGPUR)	Biramitrapur	Town1	833	50	21	10330	2.5	10
564	Rourkela	RED (RAJGANGPUR)	Biramitrapur	Town2	1498	90	58	58310	3.9	58
565	Rourkela	RED (RAJGANGPUR)	Hatibari rajgangpur	Baunsjore	500	30	22	30255	4.4	30
566	Rourkela	RED (RAJGANGPUR)	Hatibari rajgangpur	Bemta	750	45	46	76980	6.1	77
567	Rourkela	RED (RAJGANGPUR)	Hatibari rajgangpur	Hatibari/nuagaon	999	60	75	101375	7.5	101

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
568	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Baniguni	500	30	23	33810	4.6	34
569	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Gobera	500	30	23	39660	4.7	40
570	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Kalosaria	664	40	50	74260	7.5	74
571	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Padampur	833	50	33	28660	4.0	29
572	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Sarvesh	666	40	20	10630	2.9	11
573	Rourkela	RED (RAJGANGPUR)	Kuarmunada	Town	833	50	28	10300	3.4	10
574	Rourkela	RED (RAJGANGPUR)	Nuagaon	Lukubeda	250	15	19	28530	7.5	29
575	Rourkela	RED (RAJGANGPUR)	Nuagaon	Nuagaon(kuarmunda)	998	60	42	24875	4.2	25

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
576	Rourkela	RED (RAJGANGPUR)	Nuagaon	Potrapali	919	55	107	135300	11.7	135
577	Rourkela	RED (RAJGANGPUR)	Nuagaon	Sarada	1003	60	111	122380	11.1	122
578	Rourkela	RED (RAJGANGPUR)	Raiboga	Kadobahal	333	20	12	24740	3.6	25
579	Rourkela	RED (RAJGANGPUR)	Raiboga	Salongbahal	580	35	60	108070	10.3	108
580	Rourkela	RED (RAJGANGPUR)	Lindra	Kerketa feeder	250	15	14	23690	5.7	24
581	Rourkela	RED (RAJGANGPUR)	Lindra	Khutgaon	317	19	18	28460	5.7	28
582	Rourkela	RED (RAJGANGPUR)	Lindra	Phuljher feeder	67	4	2	2635	2.4	3
583	Rourkela	RED (RAJGANGPUR)	Alonda	Alonda	416	25	26	47700	6.2	48
584	Rourkela	RED (RAJGANGPUR)	Alonda	Kukumunda	250	15	13	67850	5.2	68
585	Rourkela	RED (RAJGANGPUR)	Alonda	Laxmiposh (alonda structure)	451	27	45	142050	9.9	142
586	Rourkela	RED (RAJGANGPUR)	Bhogotola	Kumarkela	200	12	5	16290	2.7	16
587	Rourkela	RED (RAJGANGPUR)	Bhogotola	Maldahi	283	17	40	157827	14.0	158

Capex plan for FY 23-24

TPWODL

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
588	Rourkela	RED (RAJGANGPUR)	Bhogotola	Town	1184	71	44	24540	3.7	25
589	Rourkela	RED (RAJGANGPUR)	Mandiakundar	Industrial	666	40	19	18000	2.9	18
590	Rourkela	RED (RAJGANGPUR)	Mandiakundar	New vilaigarh	848	51	51	120020	6.0	120
591	Rourkela	RED (RAJGANGPUR)	Mandiakundar	Old bilaigarh	1033	62	72	56505	7.0	57
592	Rourkela	RED (RAJGANGPUR)	Rajgangpur	Esi	904	54	171	100	18.9	0
593	Rourkela	RED (RAJGANGPUR)	Rajgangpur	Hari machine	667	40	34	19242	5.1	19
594	Rourkela	RED (RAJGANGPUR)	Rajgangpur	Mandiakudar	1151	69	73	36940	6.3	37
595	Rourkela	RED (RAJGANGPUR)	Rajgangpur	Mission	966	58	25	9900	2.6	10
596	Rourkela	RED (RAJGANGPUR)	Rajgangpur	New town1	2835	170	110	5120	3.9	5
597	Rourkela	RED (RAJGANGPUR)	Rajgangpur	Town2	2396	144	237	51830	9.9	52
598	Rourkela	RED (RAJGANGPUR)	Bargaon rajgangpur	Bargaon	1083	65	44	50879	4.1	51
599	Rourkela	RED (RAJGANGPUR)	Bargaon rajgangpur	Jaranglai	300	18	18	45600	5.9	46
600	Rourkela	RED (RAJGANGPUR)	Bargaon rajgangpur	Sahajbahal	333	20	27	81770	8.0	82
601	Rourkela	RED (RAJGANGPUR)	Bargaon rajgangpur	Tulalaya/tudalaga	824	49	91	118150	11.0	118
602	Rourkela	RED (RAJGANGPUR)	Birngatali	Birangtali	755	45	67	60100	8.8	60
603	Rourkela	RED (RAJGANGPUR)	Birngatali	Khurapali	667	40	39	44380	5.8	44

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
604	Rourkela	RED (RAJGANGPUR)	Birngatali	Purkhapali	183	11	15	54500	8.0	55
605	Rourkela	RED (RAJGANGPUR)	Jaranglai	Baranga kachhar	1002	60	64	77200	6.4	77
606	Rourkela	RED (RAJGANGPUR)	Jaranglai	Itma	417	25	19	51900	4.5	52
607	Rourkela	RED (RAJGANGPUR)	Jaranglai	Jharmunda	666	40	30	58300	4.6	58
608	Rourkela	RED (RAJGANGPUR)	Jharbeda	Jampali	806	48	74	27570	9.2	28
609	Rourkela	RED (RAJGANGPUR)	Jharbeda	Jharbeda new	283	17	13	9950	4.5	10
610	Rourkela	RED (RAJGANGPUR)	Jharbeda	Sona khan	506	30	71	103550	14.1	104
611	Rourkela	RED (RAJGANGPUR)	Kutura	Garposhi	400	24	35	77539	8.9	78
612	Rourkela	RED (RAJGANGPUR)	Kutura	Jarbeda	251	15	18	91200	7.2	91
613	Rourkela	RED (RAJGANGPUR)	Kutura	Kutura	500	30	18	14650	3.5	15
614	Rourkela	RED (RAJGANGPUR)	Kutura	Lanjiberna	1540	92	462	231880	30.0	232
615	Rourkela	RED (RAJGANGPUR)	Sahjbahal	Ekma	150	9	9	31170	5.8	31
616	Rourkela	RED (RAJGANGPUR)	Sahjbahal	Panchorafdr	83	5	5	21200	6.3	21
617	Rourkela	RED (RAJGANGPUR)	Sahjbahal	Singarmunda	467	28	29	94512	6.3	95
618	Rourkela	RSED	Gurundia	Gurundia	1341	81	122	51650	9.1	52
619	Rourkela	RSED	Gurundia	Gurundia (banekela)	1011	61	127	148000	12.6	148
620	Rourkela	RSED	K. Balang	Jharbeda	499	30	53	134480	10.6	134
621	Rourkela	RSED	K. Balang	K balang	667	40	27	62785	4.1	63

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
622	Rourkela	RSED	K. Balang	Roxy (k. Balang)	494	30	67	178620	13.5	179
623	Rourkela	RSED	Koira	Industry 2	661	40	48	30750	7.2	31
624	Rourkela	RSED	Koira	Industry 1	999	60	48	32450	4.8	32
625	Rourkela	RSED	Koira	Koira (koira)	1681	101	234	50768	13.9	51
626	Rourkela	RSED	Mahuldia	Badagaon	1006	60	110	96240	11.0	96
627	Rourkela	RSED	Mahuldia	Fuljhar	499	30	25	40656	5.0	41
628	Rourkela	RSED	Mahuldia	Kuliposh	1295	83	93	94200	7.2	94
629	Rourkela	RSED	Mahuldia	Mahulpada	250	15	16	40200	6.3	40
630	Rourkela	RSED	Rajamunda	Darjing	996	60	77	100075	7.7	100
631	Rourkela	RSED	Rajamunda	Lahuniapada	1327	80	91	76119	6.9	76
632	Rourkela	RSED	Rajamunda	Lalei	1080	65	62	47485	5.7	47
633	Rourkela	RSED	Rajamunda	Roxy (rajamunda)	498	30	49	88075	9.9	88
634	Rourkela	RSED	Tensa	Koira (tensa)	995	60	55	48800	5.6	49
635	Rourkela	RSED	Tuniapali	Indrapur	1404	84	323	116000	23.0	116
636	Rourkela	RSED	Tuniapali	Sarsara	825	49	76	77950	9.3	78
637	Rourkela	RSED	Bonai	Gogua	990	59	64	30810	6.5	31
638	Rourkela	RSED	Bonai	Gurundia(narendra)	1255	75	138	240336	11.0	240

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
639	Rourkela	RSED	Bonai	Kenaveta	669	40	61	49000	9.1	49
640	Rourkela	RSED	Bonai	Town (bonei)	1413	85	63	27000	4.4	27
641	Rourkela	RSED	Chhend	1st phase	2580	155	81	6018	3.1	6
642	Rourkela	RSED	Chhend	Kalingavihar	2665	160	102	12365	3.8	12
643	Rourkela	RSED	Chhend	Luhakera	749	45	30	19550	4.0	20
644	Rourkela	RSED	Chhend	Panposh	2587	155	233	11915	9.0	12
645	Rourkela	RSED	Chhend	Self finance	1833	110	40	3930	2.2	4
646	Rourkela	RSED	Chhend	Rda	2252	135	95	10010	4.2	10
647	Rourkela	RSED	Civil township	Birsha munda	2001	120	79	3410	3.9	3
648	Rourkela	RSED	Civil township	College	2083	125	46	2760	2.2	3
649	Rourkela	RSED	Civil township	Hanuman vatika	2249	135	50	3325	2.2	3
650	Rourkela	RSED	Civil township	Rgh	500	30	10	1440	2.0	1

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
651	Rourkela	RSED	Industrial estate	Gangadharpali	1166	70	35	4840	3.0	5
652	Rourkela	RSED	Industrial estate	Industrial	2493	149	114	7800	4.6	8
653	Rourkela	RSED	Industrial estate	Town	1249	75	28	1600	2.2	2
654	Rourkela	RSED	Jalda	Industrial	1330	80	65	26180	4.9	26
655	Rourkela	RSED	Jalda	Jalda c block	2662	159	86	4950	3.2	5
656	Rourkela	RSED	Jalda	Town	2430	146	162	16155	6.7	16
657	Rourkela	RSED	Lathikata	Modern india 2	667	40	35	53135	5.2	53
658	Rourkela	RSED	Lathikata	Modern india 1	2017	121	160	38930	7.9	39
659	Rourkela	RSED	Lathikata	Ramjodi	673	40	58	124510	8.6	125
660	Rourkela	RSED	Lathikata	Banki	998	60	86	82700	8.6	83
661	Rourkela	RSED	Panposh	Phd	833	50	13	20	1.5	0
662	Rourkela	RSED	Panposh	Raw water	1669	100	82	2890	4.9	3
663	Rourkela	RSED	Panposh	Balughat	1997	120	55	8990	2.8	9
664	Rourkela	RSED	Panposh	College	1165	70	35	2570	3.0	3
665	Rourkela	SED Sundargarh	Karamdihi	Subalaya	581	35	36	74880	6.2	75

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
666	Rourkela	SED Sundargarh	Karamdihi	Panchmahal	499	30	26	35150	5.3	35
667	Rourkela	SED Sundargarh	Karamdihi	Hamirpur	747	45	36	23750	4.9	24
668	Rourkela	SED Sundargarh	Karamdihi	Karamdihi	583	35	23	43420	3.9	43
669	Rourkela	SED Sundargarh	Balisankara	Balisankara	748	45	47	75880	6.3	76
670	Rourkela	SED Sundargarh	Balisankara	Budabahal	328	20	64	129020	19.5	129
671	Rourkela	SED Sundargarh	Balisankara	Jamuna	583	35	24	40450	4.1	40
672	Rourkela	SED Sundargarh	College	College	3625	217	232	15450	6.4	15
673	Rourkela	SED Sundargarh	College	Hospital	500	30	15	4000	2.9	4

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
674	Rourkela	SED Sundargarh	College	Rrit	583	35	14	5800	2.5	6
675	Rourkela	SED Sundargarh	Kundukela	Kinjirma	583	35	37	88450	6.3	88
676	Rourkela	SED Sundargarh	Kundukela	Bhasma	583	35	35	36870	6.0	37
677	Rourkela	SED Sundargarh	Kundukela	Deuli	250	15	14	31650	5.5	32
678	Rourkela	SED Sundargarh	Majahpada	Dharuadih	550	33	37	64050	6.7	64
679	Rourkela	SED Sundargarh	Majahpada	Kulta	367	22	23	47930	6.2	48
680	Rourkela	SED Sundargarh	Majahpada	Majhapada	665	40	68	85810	10.3	86
681	Rourkela	SED Sundargarh	Majahpada	Salepali/birbira	500	30	34	76030	6.7	76

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
682	Rourkela	SED Sundargarh	Sankara	Bargad	333	20	9	8100	2.7	8
683	Rourkela	SED Sundargarh	Sankara	Kundukela	912	55	64	68150	7.0	68
684	Rourkela	SED Sundargarh	Sankara	Pmu	2660	159	107	6214	4.0	6
685	Rourkela	SED Sundargarh	Sankara	Sankara	1333	80	32	11947	2.4	12
686	Rourkela	SED Sundargarh	Sankara	Town1	2923	174	254	23381	8.7	23
687	Rourkela	SED Sundargarh	Subdega	Balisankra	500	30	36	68220	7.2	68
688	Rourkela	SED Sundargarh	Subdega	Deogaon	496	30	36	55210	7.3	55
689	Rourkela	SED Sundargarh	Subdega	Subdega	1000	60	52	48766	5.2	49

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
690	Rourkela	SED Sundargarh	Subdega	Tangargaon	1134	68	135	244160	11.9	244
691	Rourkela	SED Sundargarh	Subdega	Rouldega	1704	101	312	86190	18.3	86
692	Rourkela	SED Sundargarh	Bileimunda	Badhibahal	583	35	47	72610	8.1	73
693	Rourkela	SED Sundargarh	Bileimunda	Jharpalam	300	18	14	27600	4.6	28
694	Rourkela	SED Sundargarh	Bileimunda	Taparia	499	30	47	60410	9.5	60
695	Rourkela	SED Sundargarh	Darlipali	Darlipali	832	50	32	18350	3.9	18
696	Rourkela	SED Sundargarh	Darlipali	Ghantimal	416	25	17	21480	4.0	21
697	Rourkela	SED Sundargarh	Darlipali	Kanaktura	665	40	28	18760	4.1	19

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
698	Rourkela	SED Sundargarh	Darlipali	Ruhidihi	498	30	25	36760	5.1	37
699	Rourkela	SED Sundargarh	Garjan bahal	Duduka	747	45	63	58918	8.4	59
700	Rourkela	SED Sundargarh	Garjan bahal	Garjanbahal	300	18	15	23910	5.2	24
701	Rourkela	SED Sundargarh	Garjan bahal	Gopalpur	665	40	44	97310	6.6	97
702	Rourkela	SED Sundargarh	Garjan bahal	Hemgiridurubaga	2044	122	585	43050	28.6	43
703	Rourkela	SED Sundargarh	Garjan bahal	Kalmek	333	20	17	22700	5.2	23
704	Rourkela	SED Sundargarh	Hemgiri	Kanika	922	55	110	132850	12.0	133
705	Rourkela	SED Sundargarh	Hemgiri	New hemgiri	500	30	26	54800	5.2	55

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
706	Rourkela	SED Sundargarh	Kinjirkela	Bandhabahal	501	30	51	112160	10.2	112
707	Rourkela	SED Sundargarh	Kinjirkela	Kharuabahal	838	50	96	127800	11.4	128
708	Rourkela	SED Sundargarh	Kinjirkela	Kinjirkela	743	45	87	383910	11.7	384
709	Rourkela	SED Sundargarh	Kinjirkela	Sikajore	1409	84	238	202150	16.9	202
710	Rourkela	SED Sundargarh	Lephripada	Chhetanpali	500	30	28	89800	5.7	90
711	Rourkela	SED Sundargarh	Lephripada	Dumabhala	1654	99	459	272500	27.7	273
712	Rourkela	SED Sundargarh	Lephripada	Gundiadihi	1974	118	453	111000	22.9	111
713	Rourkela	SED Sundargarh	Lephripada	Kulabira	333	20	21	68150	6.4	68

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
714	Rourkela	SED Sundargarh	Lephripada	Lefripada	416	25	19	28923	4.6	29
715	Rourkela	SED Sundargarh	Mangaspur(gultha)	Darlipalibileigarh	333	20	16	24636	4.9	25
716	Rourkela	SED Sundargarh	Mangaspur(gultha)	Mangaspur	417	25	16	18200	3.7	18
717	Rourkela	SED Sundargarh	Mangaspur(gultha)	Remanda	250	15	9	12560	3.7	13
718	Rourkela	SED Sundargarh	Sadar	Bailjori	1851	111	165	97900	8.9	98
719	Rourkela	SED Sundargarh	Sadar	Bandhapali	1157	69	89	81370	7.7	81
720	Rourkela	SED Sundargarh	Sadar	Kalobahal	876	53	70	69050	8.0	69
721	Rourkela	SED Sundargarh	Sadar	Sadar	83	5	2	1670	2.3	2

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
722	Rourkela	SED Sundargarh	Sargipali	Bharatpur	167	10	5	8990	2.8	9
723	Rourkela	SED Sundargarh	Sargipali	Jhargaon	333	20	16	24260	4.7	24
724	Rourkela	SED Sundargarh	Sargipali	Old mangaspur	333	20	20	33320	6.0	33
725	Rourkela	SED Sundargarh	Sargipali	Sargipali	832	50	58	59770	7.0	60
726	Rourkela	SED Sundargarh	Tumapali	Jhariapali	333	20	12	25175	3.7	25
727	Rourkela	SED Sundargarh	Tumapali	Tangarpali	417	25	16	33750	3.8	34
728	Rourkela	SED Sundargarh	Tumapali	Ujjalpur	250	15	7	9170	2.7	9
729	Kalahandhi	KEED	Borda	Artal	416	25	33	42500	7.9	43

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
730	Kalahandhi	KEED	Borda	Mahaling	316	19	39	64340	12.3	64
731	Kalahandhi	KEED	Borda	Seinpur	581	35	50	56520	8.6	57
732	Kalahandhi	KEED	Borda	Town(borda)	500	30	15	12230	3.0	12
733	Kalahandhi	KEED	Kesinga	Boringpadar	1808	109	223	111894	12.3	112
734	Kalahandhi	KEED	Kesinga	Durgalaxmi (rice mill)	333	20	6	1800	1.8	2
735	Kalahandhi	KEED	Kesinga	Kasurpada	763	46	81	139000	10.6	139
736	Kalahandhi	KEED	Kesinga	New jagnathapada	883	53	27	8300	3.1	8
737	Kalahandhi	KEED	Kesinga	Old jaganathpada	897	54	50	14588	5.6	15
738	Kalahandhi	KEED	Kesinga	Phd	167	10	3	50	1.8	0
739	Kalahandhi	KEED	Kesinga	Town	1930	116	76	12283	3.9	12
740	Kalahandhi	KEED	Nunmath	Belkhandi	582	35	34	36800	5.8	37

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
741	Kalahandhi	KEED	Nunmath	Palam	183	11	9	14750	4.9	15
742	Kalahandhi	KEED	Nunmath	Tundla	333	20	18	21000	5.4	21
743	Kalahandhi	KEED	Utkela	Kundabandha	611	37	62	70468	10.1	70
744	Kalahandhi	KEED	Utkela	Pastikuda	816	49	60	169036	7.4	169
745	Kalahandhi	KEED	Utkela	Utkela	367	22	9	2868	2.5	3
746	Kalahandhi	KEED	Karlapada	Chheliamal feeder	283	17	13	20363	4.6	20
747	Kalahandhi	KEED	Karlapada	Mading feeder	200	12	8	16300	4.0	16
748	Kalahandhi	KEED	Karlapada	Chahagon	483	29	28	30000	5.9	30
749	Kalahandhi	KEED	Karlapada	Karlapada	133	8	4	6860	3.2	7
750	Kalahandhi	KEED	Attanguda	Jugsaipatna	152	9	16	32291	10.7	32
751	Kalahandhi	KEED	Attanguda	Kerukunda	93	6	6	16600	6.3	17
752	Kalahandhi	KEED	Attanguda	Sagada	125	8	10	41500	7.6	42
753	Kalahandhi	KEED	Attanguda	Saidham	175	10	5	6360	3.1	6

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
754	Kalahandhi	KEED	Bandhopala (kandabandhapala)	Bandhopala (kandabandhapala	1021	61	129	199070	12.6	199
755	Kalahandhi	KEED	Bhangabari	Kamathana	781	47	59	55055	7.6	55
756	Kalahandhi	KEED	Bhangabari	Omfed	33	2	2	210	6.4	0
757	Kalahandhi	KEED	Naktiguda	Doordarshan	83	5	3	2000	3.6	2
758	Kalahandhi	KEED	Naktiguda	Medical-	4445	266	339	21232	7.6	21
759	Kalahandhi	KEED	Naktiguda	N. Sagada	500	30	21	31850	4.3	32
760	Kalahandhi	KEED	Naktiguda	Town 1	1892	113	87	4940	4.6	5
761	Kalahandhi	KEED	Bandhapari	11kv-bandhapari	167	10	4	2650	2.5	3
762	Kalahandhi	KEED	Bandhapari	11kv-bijepur	883	53	114	139700	12.9	140
763	Kalahandhi	KEED	Bandhapari	11kv-hatisal	580	35	43	86400	7.4	86
764	Kalahandhi	KEED	Bandhapari	11kv-musanal	250	15	9	26635	3.7	27
765	Kalahandhi	KEED	Biswanathpur	Biswanathpur	167	10	5	2800	3.3	3

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
766	Kalahandhi	KEED	Biswanathpur	Dumenmunda	183	11	5	4420	2.8	4
767	Kalahandhi	KEED	Biswanathpur	Old lanjigarh	532	32	44	66905	8.2	67
768	Kalahandhi	KEED	Biswanathpur	Pokharibandh	432	26	19	18700	4.5	19
769	Kalahandhi	KEED	Juradubra	Kusurla	524	31	33	55690	6.3	56
770	Kalahandhi	KEED	Juradubra	Regeda	525	31	42	59960	8.0	60
771	Kalahandhi	KEED	Karlamunda	Karlamunda	367	22	16	26650	4.4	27
772	Kalahandhi	KEED	Karlamunda	Putigaon	583	35	27	43630	4.7	44
773	Kalahandhi	KEED	Karlamunda	Risida	660	40	78	90810	11.8	91
774	Kalahandhi	KEED	Lanjigarh	Lanjigarh	833	50	35	62378	4.2	62
775	Kalahandhi	KEED	M.rampur	Urladani	467	28	44	219030	9.3	219
776	Kalahandhi	KEED	M.rampur	Ambagaon	665	40	53	102097	7.9	102
777	Kalahandhi	KEED	M.rampur	Barabandha	399	24	42	92510	10.4	93

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
778	Kalahandhi	KEED	M.rampur	Block	333	20	10	13810	3.1	14
779	Kalahandhi	KEED	M.rampur	Town	367	22	8	6360	2.3	6
780	Kalahandhi	KEED	Madanpur	Borighat	183	11	20	54715	11.1	55
781	Kalahandhi	KEED	Madanpur	Dangabahal	200	12	17	31650	8.3	32
782	Kalahandhi	KEED	Madanpur	Old regeda	598	36	33	30750	5.6	31
783	Kalahandhi	KEED	Mohangiri banjamunda	D.karlakhunta	250	15	13	21435	5.0	21
784	Kalahandhi	KEED	Mohangiri banjamunda	Mohangiri	497	30	44	65300	8.9	65
785	Kalahandhi	KEED	Narla	Balipada	930	56	190	169298	20.4	169
786	Kalahandhi	KEED	Narla	Chhatikuda	1563	93	309	135089	19.8	135
787	Kalahandhi	KEED	Narla	Kamardha	950	57	107	158660	11.3	159
788	Kalahandhi	KEED	Narla	Nvodaya	851	51	25	10140	3.0	10
789	Kalahandhi	KEED	Rupra road	Balbaspur	659	40	62	51320	9.5	51
790	Kalahandhi	KEED	Rupra road	Mandel	283	17	11	23340	4.0	23

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
791	Kalahandhi	KEED	Rupra road	Rupra	827	50	73	57280	8.9	57
792	Kalahandhi	KEED	Rupra road	Rupra road-	233	14	8	7800	3.3	8
793	Kalahandhi	KEED	Bhangabari	Paramanadapur	50	3	1	6300	2.0	6
794	Kalahandhi	KEED	Kusadangar	Bhatangpadar	333	20	15	36115	4.5	36
795	Kalahandhi	KEED	Kusadangar	College	2592	155	108	15012	4.2	15
796	Kalahandhi	KEED	Kusadangar	Jaleswar	2740	164	149	12065	5.4	12
797	Kalahandhi	KEED	Kusadangar	Medinipur	1339	81	154	101241	11.5	101
798	Kalahandhi	KEED	Naktiguda	Town 2	2063	124	76	14090	3.7	14
799	Kalahandhi	KEED	Naktiguda	Town 3	866	52	24	5450	2.8	5
800	Kalahandhi	KEED	Rasingpur	Dunguripadar	67	4	2	1200	3.0	1

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
801	Kalahandhi	KEED	Rasingpur	Link_3	766	46	33	14217	4.3	14
802	Kalahandhi	KEED	Rasingpur	Raisingpur feeder	300	18	11	20388	3.7	20
803	Kalahandhi	KWED	Badakutru	Baner	889	53	121	97280	13.6	97
804	Kalahandhi	KWED	Badakutru	Dhanpur	1398	84	214	125160	15.3	125
805	Kalahandhi	KWED	Badakutru	Panigaon	383	23	21	39575	5.4	40
806	Kalahandhi	KWED	Charbahal	Charbahal	267	16	9	9500	3.4	10
807	Kalahandhi	KWED	Charbahal	Deundi	904	54	83	74900	9.2	75
808	Kalahandhi	KWED	Charbahal	Moter	483	29	19	26185	3.9	26
809	Kalahandhi	KWED	Charbahal	Ranamal	832	50	40	60310	4.8	60
810	Kalahandhi	KWED	Godramal	Chikili	1659	99	408	259953	24.6	260
811	Kalahandhi	KWED	Godramal	Chiliguda	993	60	72	61790	7.2	62
812	Kalahandhi	KWED	Godramal	Koksara	800	48	33	54028	4.2	54
813	Kalahandhi	KWED	Godramal	Olma	366	22	11	8860	2.9	9

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
814	Kalahandhi	KWED	Jaipatna	11ka-jaipatna	1525	91	83	30650	5.5	31
815	Kalahandhi	KWED	Jaipatna	Banjibahal	554	33	65	82780	11.8	83
816	Kalahandhi	KWED	Jaipatna	Khalibata	333	20	12	29270	3.5	29
817	Kalahandhi	KWED	Jaipatna	New baner	120	7	4	7190	3.2	7
818	Kalahandhi	KWED	Ladugaon	Ampani	892	53	76	98954	8.5	99
819	Kalahandhi	KWED	Ladugaon	Industrial	1144	69	59	22780	5.2	23
820	Kalahandhi	KWED	Ladugaon	Lodugaon	816	49	26	16450	3.1	16
821	Kalahandhi	KWED	Mahichala	Kalopada	864	52	49	58782	5.6	59
822	Kalahandhi	KWED	Mahichala	Mahichala	549	33	25	33650	4.5	34
823	Kalahandhi	KWED	Mahichala	Nandigaon	217	13	9	20910	4.0	21
824	Kalahandhi	KWED	Mukhiguda	Mahulpatna	333	20	19	76850	5.6	77
825	Kalahandhi	KWED	Mukhiguda	Manglapur	670	40	83	92000	12.4	92
826	Kalahandhi	KWED	Mukhiguda	Mukhiguda	167	10	4	3090	2.5	3

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
827	Kalahandhi	KWED	Temra	Kenduguda	367	22	19	69030	5.2	69
828	Kalahandhi	KWED	Temra	Kulerguda	469	28	32	40000	6.8	40
829	Kalahandhi	KWED	Temra	Temra	262	16	10	21330	3.9	21
830	Kalahandhi	KWED	Bhera	Chhanchanbahali	582	35	37	67750	6.3	68
831	Kalahandhi	KWED	Bhera	Behera(dharamgarh)	483	29	19	40005	4.0	40
832	Kalahandhi	KWED	Bhera	Parla	432	26	26	54400	6.1	54
833	Kalahandhi	KWED	Daspur	Brundhamal	466	28	28	49730	6.0	50
834	Kalahandhi	KWED	Daspur	Daspur	248	15	10	29250	4.0	29
835	Kalahandhi	KWED	Daspur	Kumari	416	25	26	35710	6.2	36
836	Kalahandhi	KWED	Dharmagarh	Behera	660	40	58	78630	8.9	79
837	Kalahandhi	KWED	Dharmagarh	Chhendia	1138	68	206	86415	18.1	86
838	Kalahandhi	KWED	Dharmagarh	Chilpa	1156	69	126	110740	10.9	111

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
839	Kalahandhi	KWED	Dharmagarh	Dharamgarh	2444	147	231	35980	9.4	36
840	Kalahandhi	KWED	Golamunda	Chaperia	433	26	26	46879	5.9	47
841	Kalahandhi	KWED	Golamunda	Golamunda	416	25	16	16980	3.9	17
842	Kalahandhi	KWED	Golamunda	Khaliakani	448	27	45	115715	9.9	116
843	Kalahandhi	KWED	Golamunda	Tamra	433	26	12	24680	2.8	25
844	Kalahandhi	KWED	Kasibahal	Basul	217	13	10	19350	4.8	19
845	Kalahandhi	KWED	Kasibahal	Boden	200	12	9	21910	4.5	22
846	Kalahandhi	KWED	Kasibahal	Indravati	150	9	4	7760	2.7	8
847	Kalahandhi	KWED	Kasibahal	Kasibhal	133	8	5	8900	3.6	9
848	Kalahandhi	KWED	Kegaon	Badchergaon	1027	62	136	115738	13.3	116
849	Kalahandhi	KWED	Kegaon	Barack	33	2	1	60	2.1	0
850	Kalahandhi	KWED	Kegaon	Kegaon	275	16	14	23460	5.2	23
851	Kalahandhi	KWED	Kegaon	Lanji	648	39	29	15030	4.4	15

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
852	Kalahandhi	KWED	Daspur	11kv- faraung	703	42	54	50490	7.7	50
853	Kalahandhi	KWED	Adri	11kv_adri	199	12	9	2800	4.5	3
854	Kalahandhi	KWED	Adri	11kv_dalguda	250	15	7	8600	3.0	9
855	Kalahandhi	KWED	Adri	11kv_gopinathpur	250	15	10	20900	4.0	21
856	Kalahandhi	KWED	Adri	11kv_maligaon	416	25	20	41200	4.8	41
857	Kalahandhi	KWED	Chichiguda	11kv-baldhiamal	798	48	38	30035	4.8	30
858	Kalahandhi	KWED	Chichiguda	11kv-chicheiguda	1626	97	140	54650	8.6	55
859	Kalahandhi	KWED	Chichiguda	11kv-s. Kundamal	366	22	23	35290	6.2	35
860	Kalahandhi	KWED	Junagarh	11kv-dasigaon	1625	97	254	195510	15.6	196
861	Kalahandhi	KWED	Junagarh	11kv-kastura	1415	85	48	22710	3.4	23
862	Kalahandhi	KWED	Junagarh	11kv-kuruguda	1098	66	120	125450	10.9	125
863	Kalahandhi	KWED	Junagarh	11kv-town	1830	110	70	18046	3.8	18

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
864	Kalahandhi	KWED	Junagarh	11kv-tulasipali	364	22	46	165300	12.7	165
865	Kalahandhi	KWED	K. Singhpur	11kv-hatimunda	95	6	3	17000	3.1	17
866	Kalahandhi	KWED	Kalampur	11kv-bandhakana	497	30	43	72670	8.7	73
867	Kalahandhi	KWED	Kalampur	11kv-bankapala	333	20	26	43000	7.9	43
868	Kalahandhi	KWED	Kalampur	11kv-kalampur	500	30	13	6900	2.6	7
869	Kalahandhi	KWED	Kalampur	11kv-pandigaon	333	20	14	23200	4.3	23
870	Kalahandhi	KWED	Kashipur(tpsodl)	11kv-sunger	196	12	7	20856	3.4	21
871	Kalahandhi	KWED	T rampur	11kv-badchatrang	432	26	22	40250	5.2	40
872	Kalahandhi	KWED	T rampur	11kv-dumerpadar	498	30	28	37600	5.6	38
873	Kalahandhi	KWED	T rampur	11kv-gopalpur	830	50	141	249910	17.0	250
874	Kalahandhi	KWED	T rampur	11kv-t rampur	416	25	12	17050	2.9	17

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
875	Kalahandhi	KWED	Tetelkunti(tpsodl)	11kv goud -deopali	65	4	2	9250	3.1	9
876	Kalahandhi	KWED	Tetelkunti(tpsodl)	11kv-muran	19	1	1	6100	2.9	6
877	Kalahandhi	NED	Badi	Areda	567	34	30	35600	5.2	36
878	Kalahandhi	NED	Badi	Chheliapada	1866	111	144	11630	7.7	12
879	Kalahandhi	NED	Badi	Sikuan	1621	97	150	82262	9.3	82
880	Kalahandhi	NED	Bargaon	Laxmipur	400	24	18	28760	4.4	29
881	Kalahandhi	NED	Bargaon	New bargaon	217	13	7	17070	3.2	17
882	Kalahandhi	NED	Bargaon	Rajamunda	598	36	39	56950	6.5	57
883	Kalahandhi	NED	Bargaon	Sanmaheswar	183	11	10	31770	5.4	32
884	Kalahandhi	NED	Boden	Boden (khariar)	417	25	13	13020	3.0	13
885	Kalahandhi	NED	Boden	Boirgaon	499	30	27	59210	5.4	59
886	Kalahandhi	NED	Boden	Larka	516	31	46	101230	9.0	101

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
887	Kalahandhi	NED	Boden	Nagapada	416	25	22	34460	5.3	34
888	Kalahandhi	NED	Chalna	Bharmunda	416	25	19	40192	4.6	40
889	Kalahandhi	NED	Chalna	Chalna	599	36	26	24868	4.3	25
890	Kalahandhi	NED	Chalna	Saradhapur	317	19	18	26920	5.7	27
891	Kalahandhi	NED	Khariar	Boden	952	57	105	110920	11.0	111
892	Kalahandhi	NED	Khariar	Duajhar	1369	82	185	111308	13.5	111
893	Kalahandhi	NED	Khariar	Mission	1198	72	43	14797	3.6	15
894	Kalahandhi	NED	Khariar	Old bargaon	1146	69	113	92730	9.9	93
895	Kalahandhi	NED	Khariar	Putupada	1530	92	54	17354	3.5	17
896	Kalahandhi	NED	Khariar	Thana chhak	750	45	16	3843	2.2	4
897	Kalahandhi	NED	Khariar	Tukula	1867	112	284	61134	15.2	61
898	Kalahandhi	NED	Sinapali	Bargaon	1805	109	264	81988	14.6	82
899	Kalahandhi	NED	Sinapali	Hathibandha	1452	87	259	136300	17.9	136

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
900	Kalahandhi	NED	Sinapali	Kendumunda	1283	77	146	110800	11.4	111
901	Kalahandhi	NED	Sinapali	Sinapali	1478	89	52	6273	3.5	6
902	Kalahandhi	NED	Timanpur	Babebir	532	32	34	45059	6.4	45
903	Kalahandhi	NED	Timanpur	Gorla	300	18	17	30464	5.7	30
904	Kalahandhi	NED	Timanpur	Nilji	531	32	31	21557	5.7	22
905	Kalahandhi	NED	Timanpur	Timanpur	583	35	26	30110	4.5	30
906	Kalahandhi	NED	Bisora	11kv-beltukuri	1703	102	237	47350	13.9	47
907	Kalahandhi	NED	Bisora	11kv-bhelashwar	1408	84	99	77790	7.0	78
908	Kalahandhi	NED	Bisora	11kv-bisora	350	21	15	28150	4.4	28
909	Kalahandhi	NED	Bisora	11kv-kuliabandha	1974	119	202	44530	10.2	45
910	Kalahandhi	NED	Khariar road	11kv-banka	717	43	24	26100	3.3	26
911	Kalahandhi	NED	Khariar road	11kv-biromal	2597	155	250	108670	9.6	109

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
912	Kalahandhi	NED	Khariar road	11kv-patel nagar	682	41	30	18810	4.4	19
913	Kalahandhi	NED	Khariar road	11kv-town	1595	96	80	19240	5.0	19
914	Kalahandhi	NED	Saipala	11kv-derlimunda	1302	78	104	102620	8.0	103
915	Kalahandhi	NED	Saipala	11kv-saipala	267	16	10	11030	3.8	11
916	Kalahandhi	NED	Batibahal	Kutribahal	717	43	56	119880	7.9	120
917	Kalahandhi	NED	Batibahal	Sunabeda	228	15	16	106267	6.9	106
918	Kalahandhi	NED	Komna	Budhikomna	1043	63	127	88430	12.2	88
919	Kalahandhi	NED	Komna	Komna town	660	40	23	29350	3.4	29
920	Kalahandhi	NED	Komna	Konabira	569	34	46	58282	8.1	58
921	Kalahandhi	NED	Komna	Malimunda	664	40	46	47080	7.0	47
922	Kalahandhi	NED	Komna	Udyanbandh	751	46	50	101780	6.7	102
923	Kalahandhi	NED	Kurumpuri	Lakhna	1281	78	140	158284	10.9	158
924	Kalahandhi	NED	Kurumpuri	Sialati	1600	97	180	162303	11.3	162

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
925	Kalahandhi	NED	Kurumpuri	Tarbod	523	32	35	67975	6.6	68
926	Kalahandhi	NED	Nuapada	Railway	1036	62	92	83100	8.9	83
927	Kalahandhi	NED	Nuapada	Shakhatora	1317	79	145	47300	11.0	47
928	Kalahandhi	NED	Nuapada	Tanwat	532	32	33	53550	6.3	54
929	Kalahandhi	NED	Nuapada	Town	2398	144	81	31020	3.4	31
930	Kalahandhi	NED	Saipala	Khairanji	433	26	30	58610	7.0	59
931	Kalahandhi	NED	Sarabong	Bhainsmundi	599	36	26	24050	4.4	24
932	Kalahandhi	NED	Sarabong	Dharmabandh	1097	66	76	149850	6.9	150
933	Kalahandhi	NED	Sarabong	Tanwat/sarabong	600	36	35	54130	5.8	54
934	Bargarh	BED	Attabira	Attabira town	1982	119	75	11635	3.8	12
935	Bargarh	BED	Attabira	Kandpali	6976	419	1567	229710	22.5	230
936	Bargarh	BED	Attabira	Saranda	1364	82	155	44830	11.3	45
937	Bargarh	BED	Attabira	Rangali camp	4178	251	729	69470	17.5	69
938	Bargarh	BED	Gudbhanga	Godbhaga	2663	160	292	74400	11.0	74

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
939	Bargarh	BED	Gudbhanga	Larambha	4069	244	616	160630	15.1	161
940	Bargarh	BED	Patrapali	Dunguripali	633	38	19	13210	2.9	13
941	Bargarh	BED	Patrapali	Janhapada/rengali	784	47	37	19950	4.7	20
942	Bargarh	BED	Patrapali	Khirapali	1335	80	86	53750	6.5	54
943	Bargarh	BED	Patrapali	Patrapali	616	37	15	7687	2.4	8
944	Bargarh	BED	Division 2	Govindpali	3504	210	209	10060	6.0	10
945	Bargarh	BED	Division 2	Town-2	3836	230	174	6802	4.5	7
946	Bargarh	BED	Division i	Bandhutikra	2166	130	53	4675	2.5	5
947	Bargarh	BED	Division i	Private bus stand	1665	100	50	7767	3.0	8
948	Bargarh	BED	Division i	Bargarh town-1	5199	312	371	14980	7.1	15
949	Bargarh	BED	Tora	Remunda	2282	137	199	56315	8.7	56
950	Bargarh	BED	Tora	Gaisima	2178	131	227	56210	10.4	56
951	Bargarh	BED	Tora	Sugarmill	1498	90	44	11530	2.9	12
952	Bargarh	BED	Tora	Tora	948	57	29	6880	3.0	7
953	Bargarh	BED	Turunga	Ambapali	1918	115	102	29190	5.3	29
954	Bargarh	BED	Turunga	New industrial	1514	91	43	4905	2.9	5
955	Bargarh	BED	Turunga	Barpali	3089	185	352	4905	11.4	5

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
956	Bargarh	BED	Turunga	Deogaon	2002	120	123	62980	6.2	63
957	Bargarh	BED	Turunga	Old industrial	4114	247	352	34680	8.6	35
958	Bargarh	BED	Turunga	Sohela	2001	120	81	28940	4.1	29
959	Bargarh	BED	Kamgaon	Landijuri	1001	60	49	31400	4.9	31
960	Bargarh	BED	Kamgaon	Kamgaon	2993	180	335	70430	11.2	70
961	Bargarh	BED	Khedapali	Kamagaon old	83	5	2	6670	2.6	7
962	Bargarh	BED	Khedapali	Bardol	2910	174	315	43080	10.8	43
963	Bargarh	BED	Khedapali	Katapali	1415	85	41	9485	2.9	9
964	Bargarh	BED	Pradahanpali	Attabira	2510	151	221	36715	8.8	37
965	Bargarh	BED	Pradahanpali	Industrial_i	4324	259	419	32608	9.7	33
966	Bargarh	BED	Pradahanpali	Industrial_ii	2661	160	102	11060	3.8	11
967	Bargarh	BED	Pradahanpali	Old katapali	832	50	32	14130	3.9	14
968	Bargarh	BED	Ambabhona	Ambabhona	899	54	29	21102	3.2	21
969	Bargarh	BED	Ambabhona	Banjipali	67	4	2	4761	2.5	5
970	Bargarh	BED	Ambabhona	Sambalpuri	233	14	9	32796	4.0	33
971	Bargarh	BED	Bhatli	Bartunda	2087	125	254	39626	12.2	40
972	Bargarh	BED	Bhatli	Kendugudia	3326	200	506	68800	15.2	69

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
973	Bargarh	BED	Bhatli	Sukuda	2198	132	206	47950	9.4	48
974	Bargarh	BED	Bhatli	Badmal	2007	120	164	36320	8.2	36
975	Bargarh	BED	Bhatli	Bhatli town	2054	123	129	17970	6.3	18
976	Bargarh	BED	Bhatli	Temren	667	40	40	17200	6.0	17
977	Bargarh	BED	Bhukta	Darlipali	1624	97	158	5885	9.7	6
978	Bargarh	BED	Bhukta	Kapasira	1753	105	118	74294	6.7	74
979	Bargarh	BED	Bhukta	Bhukta	749	45	20	8414	2.7	8
980	Bargarh	BED	Bhukta	Ruchida	1627	98	109	59959	6.7	60
981	Bargarh	BED	Dungri	Badmal	333	20	10	17582	3.0	18
982	Bargarh	BED	Dungri	Dungri	751	45	31	3821	4.1	4
983	Bargarh	BED	Dungri	Lakhanpur	3845	231	366	141601	9.5	142
984	Bargarh	BED	Kandpala	Kalmi	1472	88	52	30143	3.6	30
985	Bargarh	BED	Kandpala	Kandpala	258	15	6	5990	2.4	6
986	Bargarh	BED	Kandpala	Kumbho	1834	110	66	38269	3.6	38
987	Bargarh	BED	Raisobha	Gopalpur	2541	152	288	43350	11.3	43
988	Bargarh	BED	Raisobha	Jiratora	3163	190	417	60950	13.2	61
989	Bargarh	BED	Raisobha	Tejagola	1770	106	117	33400	6.6	33
990	Bargarh	BED	Udayapali	Hatisar	3361	202	907	97200	27.0	97
991	Bargarh	BED	Udayapali	Niljee	3244	195	316	59020	9.7	59
992	Bargarh	BED	Bheden	Barpadar	1001	60	72	72350	7.2	72
993	Bargarh	BED	Bheden	Bheden	1582	95	151	29800	9.5	30
994	Bargarh	BED	Bheden	Sahara tikra	1551	93	76	41000	4.9	41

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
995	Bargarh	BED	Dhatkupali	Jamtikra	167	10	6	4420	3.3	4
996	Bargarh	BED	Dhatkupali	Kamgaon	833	50	76	2340	9.1	2
997	Bargarh	BED	Dhatkupali	Papanga 2	1001	60	42	26150	4.2	26
998	Bargarh	BED	Dhatkupali	Tilkinda(rusuda)	1201	72	52	22270	4.4	22
999	Bargarh	BED	Kuhuntulipali	Garvana	1001	60	61	37340	6.1	37
1000	Bargarh	BED	Kuhuntulipali	Industrial	417	25	8	5200	1.9	5
1001	Bargarh	BED	Kuhuntulipali	Khuntulipali	1501	90	58	28317	3.8	28
1002	Bargarh	BED	Kuhuntulipali	Sankarda	1168	70	76	44800	6.5	45
1003	Bargarh	BED	Mahulpali(gandturum)	Mahulpali	832	50	35	33387	4.2	33
1004	Bargarh	BED	Mahulpali(gandturum)	Sialchandahat	834	50	41	47920	5.0	48
1005	Bargarh	BED	Mahulpali(gandturum)	Turum	832	50	30	13760	3.7	14
1006	Bargarh	BED	Thuapali	Khutulipali	344	21	11	10810	3.2	11
1007	Bargarh	BED	Thuapali	Papanga new	692	41	108	62170	15.6	62
1008	Bargarh	BED	Thuapali	Papanga old	2579	155	289	58952	11.2	59

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1009	Bargarh	BED	Thuapali	Remmunda	2594	156	168	25830	6.5	26
1010	Bargarh	BED	Thuapali	Thuapali	1036	62	35	4590	3.3	5
1011	Bargarh	BWED	Barpali	Agalpur_b	1429	86	107	8840	7.5	9
1012	Bargarh	BWED	Barpali	Badgaon	3897	235	511	54010	13.1	54
1013	Bargarh	BWED	Barpali	Bandhapali	3162	190	363	36296	11.5	36
1014	Bargarh	BWED	Barpali	Lenda	597	36	22	13940	3.8	14
1015	Bargarh	BWED	Barpali	Phulapali	2509	152	383	66760	15.3	67
1016	Bargarh	BWED	Barpali	Rampur	2534	153	375	94130	14.8	94
1017	Bargarh	BWED	Barpali	Town	4923	296	306	29180	6.2	29
1018	Bargarh	BWED	Balitika	Reasama	2141	129	247	85930	11.6	86
1019	Bargarh	BWED	Balitika	Tulundi	4090	246	560	112005	13.7	112
1020	Bargarh	BWED	Charmunda	Agalpur	599	36	26	20220	4.3	20
1021	Bargarh	BWED	Charmunda	Sujia	2204	132	164	46880	7.4	47
1022	Bargarh	BWED	Charmunda	Tinkani	1167	70	62	22500	5.3	23
1023	Bargarh	BWED	Dahita	Dangachhancha	1082	65	52	63320	4.8	63
1024	Bargarh	BWED	Dahita	Jamartala	366	22	17	33050	4.5	33
1025	Bargarh	BWED	Dahita	Sletpali	748	45	41	54165	5.4	54
1026	Bargarh	BWED	Gaisilet	Buromunda	1035	62	56	18620	5.4	19
1027	Bargarh	BWED	Gaisilet	Fringimal	1035	62	84	86375	8.1	86
1028	Bargarh	BWED	Gaisilet	Gaisilat	1436	86	99	52630	6.9	53
1029	Bargarh	BWED	Gaisilet	Lebedi	1167	70	76	71140	6.5	71
1030	Bargarh	BWED	Gaisilet	Talpali	1036	62	97	45610	9.3	46

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1031	Bargarh	BWED	Kundakhai	Jamudpali	2007	120	180	44060	9.0	44
1032	Bargarh	BWED	Kundakhai	Kundakhai	2218	133	120	48125	5.4	48
1033	Bargarh	BWED	Lakhmara	Badikata	2493	150	521	116605	20.9	117
1034	Bargarh	BWED	Lakhmara	Sambalpuri	833	50	40	76785	4.7	77
1035	Bargarh	BWED	Melchamunda	Belmunda	666	40	25	21766	3.8	22
1036	Bargarh	BWED	Melchamunda	Ghenss	1497	90	165	59090	11.0	59
1037	Bargarh	BWED	Melchamunda	Melchanmunda	2340	140	196	72390	8.4	72
1038	Bargarh	BWED	Melchamunda	Sargibahal	2172	130	307	86560	14.2	87
1039	Bargarh	BWED	Padampur	Barikel	1165	70	133	141960	11.4	142
1040	Bargarh	BWED	Padampur	Buden	200	12	14	4400	7.2	4
1041	Bargarh	BWED	Padampur	Gaisilet	1129	68	68	84632	6.0	85
1042	Bargarh	BWED	Padampur	Lakhmara	1001	60	73	54280	7.3	54
1043	Bargarh	BWED	Padampur	Melchamunda	1332	80	162	101157	12.2	101
1044	Bargarh	BWED	Padampur	Town1	2998	180	93	45640	3.1	46
1045	Bargarh	BWED	Padampur	Town2	833	50	19	11680	2.3	12
1046	Bargarh	BWED	Dova	Dova	4931	295	1440	75800	29.2	76
1047	Bargarh	BWED	Dova	Krulipali	4862	292	1263	141090	26.0	141

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1048	Bargarh	BWED	Dunguripali	Bhaisadhara	2495	150	255	30750	10.2	31
1049	Bargarh	BWED	Dunguripali	Dunguripali	832	50	32	17100	3.9	17
1050	Bargarh	BWED	Dunguripali	Jagdalpur	1025	80	169	30400	16.5	30
1051	Bargarh	BWED	Jharbandh	Jharbandh	500	30	11	1970	2.2	2
1052	Bargarh	BWED	Jharbandh	Old dunguripali	1336	80	175	28950	13.1	29
1053	Bargarh	BWED	Jharbandh	Sargul	2506	150	338	42770	13.5	43
1054	Bargarh	BWED	Jharbandh	Tapen	3158	189	546	104280	17.3	104
1055	Bargarh	BWED	Jhitiki	Barpali	300	18	11	34150	3.8	34
1056	Bargarh	BWED	Jhitiki	Bhubaneswarpur	333	20	15	30250	4.5	30
1057	Bargarh	BWED	Jhitiki	Chhetagaon	283	17	8	18150	2.9	18
1058	Bargarh	BWED	Mandosil	Chhineikela	532	32	36	88920	6.8	89
1059	Bargarh	BWED	Mandosil	Bartunda	416	25	24	47730	5.8	48
1060	Bargarh	BWED	Mandosil	Mandosil	583	35	26	46960	4.4	47
1061	Bargarh	BWED	Paikamal	Paikamal town	667	40	15	13710	2.2	14
1062	Bargarh	BWED	Paikamal	Chuhapali	416	25	19	25080	4.5	25
1063	Bargarh	BWED	Paikamal	Jharmunda	754	45	85	72080	11.2	72
1064	Bargarh	BWED	Paikamal	Jhitiki	1830	110	202	64460	11.0	64

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1065	Bargarh	BWED	Paikamal	Mandosil_paikamal	917	55	42	41600	4.6	42
1066	Bargarh	BWED	Paikamal	Nursinghanath	500	30	16	13520	3.2	14
1067	Bargarh	BWED	Arda	Jokiapali	2526	151	539	76260	21.3	76
1068	Bargarh	BWED	Arda	Laumunda	3908	234	907	70907	23.2	71
1069	Bargarh	BWED	Arda	Saipali	2865	172	381	136520	13.3	137
1070	Bargarh	BWED	Bijepur	Baramunda	4511	271	1097	186540	24.3	187
1071	Bargarh	BWED	Bijepur	Bijepur town	1835	110	98	16050	5.3	16
1072	Bargarh	BWED	Bijepur	Jaring	3511	211	472	68710	13.4	69
1073	Bargarh	BWED	Bijepur	Kharmunda	3491	209	764	52433	21.9	52
1074	Bargarh	BWED	Bijepur	M.gandpali	2162	130	307	68230	14.2	68
1075	Bargarh	BWED	Dasmile	Bishalpali	4313	259	1613	89620	37.4	90
1076	Bargarh	BWED	Dasmile	Dasmile	1552	93	90	14825	5.8	15
1077	Bargarh	BWED	Dasmile	Kendipali	3008	180	376	54100	12.5	54
1078	Bargarh	BWED	Dasmile	Srigida	2923	175	390	55500	13.3	56
1079	Bargarh	BWED	Ghenss	Ghenss	666	40	19	10270	2.8	10
1080	Bargarh	BWED	Ghenss	Jampali	3724	223	523	48560	14.0	49
1081	Bargarh	BWED	Ghenss	Jhar	4540	273	835	79400	18.4	79
1082	Bargarh	BWED	Ghenss	Kuchipali	3651	219	652	73950	17.9	74

Capex plan for FY 23-24

Sl NO	Circle	Division	PSS	Feeder name	Total load (KW)	Current(A)	Total loss (KW)	Feeder length (Mtr)	Loss in %	Feeder length (Km)
1083	Bargarh	BWED	Sarandapali	Banbaspali	3074	184	396	84585	12.9	85
1084	Bargarh	BWED	Sarandapali	Katapali	666	40	21	12924	3.1	13
1085	Bargarh	BWED	Sarandapali	S. Dumerpali	4909	294	1440	109004	29.3	109
1086	Bargarh	BWED	Sarandapali	Sarandapali	2828	170	292	60480	10.3	60
1087	Bargarh	BWED	Sohela	Chhuriapali	3325	199	1132	79088	34.0	79
1088	Bargarh	BWED	Sohela	Grinjel	3820	229	859	68337	22.5	68
1089	Bargarh	BWED	Sohela	Industrial	2002	120	98	26459	4.9	26
1090	Bargarh	BWED	Sohela	Kangaon	1830	110	174	34100	9.5	34
1091	Bargarh	BWED	Sohela	Luhurachati	3759	226	2601	208000	69.2	208
1092	Bargarh	BWED	Sohela	Padampur	7479	449	2333	122495	31.2	122
1093	Bargarh	BWED	Sohela	Sohela town	3165	190	269	28830	8.5	29

➢ **11KV Technical Losses Summary**

Circle	Technical Loss Base-1	Technical Loss Base-2	Technical Loss Planning
Bargarh	7.2	6.7	4.2
Bolangir	4.4	4.2	3.0
Kalahandi	4.4	3.7	3.0
Rourkela	4.0	3.8	2.8
Sambalpur	4.1	4.1	2.7

➢ **11KV Overloaded Feeders:**

- **Summary of 11 kv over load feeders:**

Circle	Division	NO. of 11KV Feeders	No. of overload feeder	No. of Section with over Load
Bargarh	BED	77	12	54
Bargarh	BWED	83	25	189
Bolangir	BED	76	3	25
Bolangir	SED	84	0	0
Bolangir	TED	105	2	2
Kalahandi	KEED	74	1	9
Kalahandi	KWED	74	1	2
Kalahandi	NED	57	0	0
Rourkela	RED	27	5	17
Rourkela	RED-RAJGANGPUR	69	1	1
Rourkela	RSED	47	0	0
Rourkela	SED	64	0	0
Sambalpur	BNED	23	2	2
Sambalpur	DED	34	0	0
Sambalpur	JED	89	1	5
Sambalpur	SED	48	2	2
Sambalpur	SEED	62	3	14
Total	**17**	**1093**	**58**	**322**

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- **List of 11 KV over load feeders:**

Circle	Division	Sub division	Area affected	Pss name	Feeder name	Total Section	Overload Section	Loading (%)
Sambalpur	BNED	Belpahar	Near street light	Bandhbaha	Ganesh nagar	40	1	118
Sambalpur	BNED	Belpahar	Near dtr jkmohanty	Muchbahal	Town	265	1	102
Sambalpur	JED	No. I jharsuguda	Near pss sarasmal	Sarasmal	Jsg-i	59	5	100
Sambalpur	SED	Ainthapali	Near Gopalmal dtr	Ainthapali	College	52	1	130
Sambalpur	SED	Khetrajpur	Bangalipada-2	Badabazar	Badabazar	44	1	118
Sambalpur	SEED	Butapara	Fish market, maternity	Putibandh	Bhutapada	19	3	136
Sambalpur	SEED	Butapara	Phd-5, pipaltal	Putibandh	Brooks hill	116	6	103
Sambalpur	SEED	Dhanupali	Kumbharpada (102.6%)	Putibandh	Dhanupali	98	5	102
Rourkela	RED	Basanti	Macha market	Basanti	Phd	39	1	132
Rourkela	RED	Koel nagar	Feeder head,11kV-abcd-3	Koelnagar	Adbe	52	2	116.3, 114.1
Rourkela	RED	Udit nagar	Feeder head,11kV-plant site-141	Power house	Plant site	39	5	127, 127
Rourkela	RED	Udit nagar	Feeder head	Power house	Udit nagar	132	1	101
Rourkela	RED	Udit nagar	Feeder head, sbi-2, siemens	Power house	Main road	65	7	127.2, 107.1, 105.7
Rourkela	RED-RAJGANGPUR	Kalunga	Feeder head	Kalunga (idc)	Idc	108	1	101
Bolangir	BED	Sdo no 1	Laltikra, kosal nagar	Lalitkra	Feeder 1	87	18	126.9, 112.5
Bolangir	BED	Loisingha	Lipursingha railway gate	Salebhata	Lupursingha	423	1	203

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Capex plan for FY 23-24

Circle	Division	Sub division	Area affected	Pss name	Feeder name	Total Section	Overload Section	Loading (%)
Bolangir	BED	Tusura	Mahipur-1, dunguripali-2	Tusra	Gudvella	524	12	119.6
Bolangir	TED	Kantabanji	XLPE Cable near Kukudahad school	Kantabanji	Town-1	108	1	143.4
Bolangir	TED	Titlagarh	Near dt machiha bazar	Titilagarh	Bhatipada	73	1	129
Kalahandhi	KWED	Dharamgarh	Dharamgarh-169, dharamgarh-21	Dharmagarh	Dharmagarh	149	2	106.3, 105.1
Kalahandhi	KEED	Naktiguda	Medical—164, medical—165, medical—168	Naktiguda	Medical-	141	9	103.6, 103.6, 103.3
Bargarh	BED	Attabira	Tower pvt	Gudbhanga	Godbhaga	244	2	112.30
Bargarh	BED	Attabira	Kandpali	Attabira	Kandpali	586	10	154
Bargarh	BED	Attabira	Reangali camp	Attabira	Rangali camp	215	8	134.70
Bargarh	BED	Bargarh-1	Nippo battery -1	Division i	Bargarh town-1	88	3	114
Bargarh	BED	Bargarh-1	Wesco colony chowk	Division ii	Govindpali	94	4	113
Bargarh	BED	Bargarh-2	Sriharinagar 1	Turunga	Old industrial	189	12	132.70
Bargarh	BED	Bargarh-2	Bangatikra	Pradahanpali	Attabira	138	2	109.10
Bargarh	BED	Bargarh-2	Barpada	Pradahanpali	Industrial_i	123	5	109.40
Bargarh	BED	Bhatli	Crusher hatisar	Udayapali	Hatisar	260	1	108
Bargarh	BED	Bhatli	L.i runipali	Raisobha	Jiratora	224	3	101

Capex plan for FY 23-24

Circle	Division	Sub division	Area affected	Pss name	Feeder name	Total Section	Overload Section	Loading (%)
Bargarh	BED	Bhatli	Rwss	Bhatli	Kendugudia	214	3	107
Bargarh	BED	Bhatli	Uttam rwss	Dungri	Lakhanpur	251	1	124
Bargarh	BWED	Barpali	Bargaon olic	Barpali	Badgaon	275	10	124
Bargarh	BWED	Barpali	Gopeipall	Barpali	Bandhapali	200	2	101
Bargarh	BWED	Barpali	Canal road	Barpali	Town	105	3	109
Bargarh	BWED	Barpali	Balitikra	Balitika	Tulundi	347	9	132
Bargarh	BWED	Paikmal	Olic	Dunguripali	Bhaisadhara	114	1	108
Bargarh	BWED	Paikmal	Pvt l. i	Dova	Dova	114	15	214
Bargarh	BWED	Paikmal	Vill.	Dova	Krulipali	289	7	157
Bargarh	BWED	Paikmal	Olic	Jharbandh	Sargul	205	3	109
Bargarh	BWED	Paikmal	Turla	Jharbandh	Tapen	346	3	10
Bargarh	BWED	Sohela	Near olic	Bijepur	Baramunda	466	4	146
Bargarh	BWED	Sohela	Olic bishipali	Dasmile	Bishalpali	278	17	139
Bargarh	BWED	Sohela	Icchapali	Sohela	Chhuriapali	312	7	107
Bargarh	BWED	Sohela	Personal badipali	Sohela	Grinjel	102	5	123
Bargarh	BWED	Sohela	Chhuriapali	Ghenss	Jampali	287	7	120
Bargarh	BWED	Sohela	Bpl kandhar	Bijepur	Jaring	200	5	133
Bargarh	BWED	Sohela	Tileimal	Ghenss	Jhar	421	12	147
Bargarh	BWED	Sohela	Kalngadera	Arda	Jokiapali	250	3	106
Bargarh	BWED	Sohela	Charpali	Bijepur	Kharmunda	308	13	113
Bargarh	BWED	Sohela	Petrol pump	Ghenss	Kuchipali	232	4	118

Capex plan for FY 23-24

Circle	Division	Sub division	Area affected	Pss name	Feeder name	Total Section	Overload Section	Loading (%)
Bargarh	BWED	Sohela	Gudimuda	Arda	Laumunda	305	15	113
Bargarh	BWED	Sohela	Haldipali	Sohela	Luhurachati	322	4	121
Bargarh	BWED	Sohela	Madavati	Sohela	Padampur	358	18	190
Bargarh	BWED	Sohela	Olic s. dumerpal	Sarandapali	S. dumerpali	349	20	213
Bargarh	BWED	Sohela	Olic	Sarandapali	Sarandapali	183	1	172
Bargarh	BWED	Sohela	Laxmi rice mill	Sohela	Sohela town	102	1	102

- **11 KV under load voltage:**

- **Summary of 11 kv Under load voltage:**

Circle	Division	NO. of 11KV Feeders	No of 11 kV Fdr. With Low Voltage	No. of section with Low Voltage
Bargarh	BED	77	22	3146
Bargarh	BWED	83	42	8326
Bolangir	BED	76	17	2763
Bolangir	SED	84	10	1670
Bolangir	TED	105	12	1061
Kalahandi	KEED	74	7	1658
Kalahandi	KWED	74	12	2032
Kalahandi	NED	57	15	1970
Rourkela	RED	27	5	277
Rourkela	RED-RAJGANGPUR	69	6	1601
Rourkela	RSED	47	7	576
Rourkela	SED	64	9	1122
Sambalpur	BNED	23	7	1037
Sambalpur	DED	34	6	868
Sambalpur	JED	89	8	1140
Sambalpur	SED	48	0	0
Sambalpur	SEED	62	11	2242
Total	17	1093	196	31489

- **11 KV Under load voltage Report**

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
1	Bolangir	BED	Sdo No 1	Jail	Beherpalli	46	0	10.5
2	Bolangir	BED	Sdo No 1	Lalitkra	Feeder 1	87	36	9.6
3	Bolangir	BED	Sdo No 1	Lalitkra	Feeder 2	43	0	10.9
4	Bolangir	BED	Sdo No 1	Lalitkra	Feeder 3	116	0	10.8
5	Bolangir	BED	Sdo No 1	Jail	Gandhinagar	46	0	10.8
6	Bolangir	BED	Sdo No 1	Power house	Hatisal	36	0	11
7	Bolangir	BED	Sdo No 1	Sudpada	Kansaripada	43	0	10.9
8	Bolangir	BED	Sdo No 1	Power house	Malpada	46	0	10.8
9	Bolangir	BED	Sdo No 1	Lalitkra	Re feeder.	22	0	10.8
10	Bolangir	BED	Loisingha	Agalpur	Bharsuja	5	0	10.9
11	Bolangir	BED	Loisingha	Agalpur	Nuagaon	193	0	10.9
12	Bolangir	BED	Loisingha	Agalpur	Rengali	84	0	10.5
13	Bolangir	BED	Loisingha	Agalpur	Roth	127	0	10.4
14	Bolangir	BED	Loisingha	Salebhata	Bakti	174	154	8.7
15	Bolangir	BED	Loisingha	Agalpur	Bharsuja	44	0	10.9
16	Bolangir	BED	Loisingha	Kendumundi	Bindhapali	66	0	10.8
17	Bolangir	BED	Loisingha	Salebhata	Duduka	92	0	10.6
18	Bolangir	BED	Loisingha	Kendumundi	Khaliapali	24	0	11
19	Bolangir	BED	Loisingha	Loisingha	Loisingha	88	0	10.8
20	Bolangir	BED	Loisingha	Salebhata	Lupursingha	423	415	7.6

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S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
21	Bolangir	BED	Loisingha	Loisingha	Menda	260	244	7.7
22	Bolangir	BED	Loisingha	Loisingha	Nagaon	165	0	10.1
23	Bolangir	BED	Loisingha	Kendumundi	Pandesara	15	0	10.9
24	Bolangir	BED	Loisingha	Salebhata	Salebhata	52	0	10.7
25	Bolangir	BED	Sdo No 2	Kudasingha	Chikalbahal	12	0	10.9
26	Bolangir	BED	Sdo No 2	Kudasingha	Kudasingha	27	16	9.4
27	Bolangir	BED	Sdo No 2	Kasabahal	Odiapali	111	0	10.8
28	Bolangir	BED	Sdo No 2	Kudasingha	Sikchhaida	27	0	10.8
29	Bolangir	BED	Sdo No 2	Beherapali	Behera pali	9	0	11
30	Bolangir	BED	Sdo No 2	Beherapali	Bhaler	116	0	10.8
31	Bolangir	BED	Sdo No 2	Chhatmakhana	Chhuibandh	29	0	11
32	Bolangir	BED	Sdo No 2	Barapudugia	Chudapali	23	0	10.8
33	Bolangir	BED	Sdo No 2	Chhatmakhana	Durgapali	190	111	9.3
34	Bolangir	BED	Sdo No 2	Barapudugia	Garjan	47	40	8.4
35	Bolangir	BED	Sdo No 2	Barapudugia	Hardatal	56	25	9.3
36	Bolangir	BED	Sdo No 2	Industrial estate	Industrial est 1	88	0	10.5
37	Bolangir	BED	Sdo No 2	Industrial estate	Industrial est 2	38	0	10.5
38	Bolangir	BED	Sdo No 2	Industrial estate	Industrial est 3	36	0	10.9
39	Bolangir	BED	Sdo No 2	Industrial estate	Industrial est 4	90	0	10.7
40	Bolangir	BED	Sdo No 2	Industrial estate	Industrial est 5	50	0	10.7
41	Bolangir	BED	Sdo No 2	Bhadra	Kandajuri	84	0	10.7
42	Bolangir	BED	Sdo No 2	Chhatmakhana	Kharmarmunda	19	0	10.9
43	Bolangir	BED	Sdo No 2	Kasabahal	Kurul	132	0	10.7
44	Bolangir	BED	Sdo No 2	Chhatmakhana	Kusumel	243	170	9
45	Bolangir	BED	Sdo No 2	Bhadra	Kusunga	198	130	9.5
46	Bolangir	BED	Sdo No 2	Madhiapali	Madhiapali industrial	47	0	11
47	Bolangir	BED	Sdo No 2	Kasabahal	Mahimunda	119	0	10.8
48	Bolangir	BED	Sdo No 2	Chhatmakhana	Phd	19	0	10.8
49	Bolangir	BED	Sdo No 2	Barapudugia	Pipalkani	69	47	9.2
50	Bolangir	BED	Sdo No 2	Madhiapali	Re madhiapali	2	0	11
51	Bolangir	BED	Sdo No 2	Madhiapali	Sadeipali	107	0	10.3
52	Bolangir	BED	Sdo No 2	Beherapali	Santpur	63	0	10.5
53	Bolangir	BED	Sdo No 2	Bhadra	Sargada	224	89	9.9
54	Bolangir	BED	Sdo No 2	Barapudugia	Shibatala	191	141	9.2
55	Bolangir	BED	Sdo No 2	Chhatmakhana	Sujia	178	0	10.6
56	Bolangir	BED	Sdo No 2	Beherapali	Umria	243	0	10.2
57	Bolangir	BED	Tusura	Budhabahal	Tepren	53	0	10.7
58	Bolangir	BED	Tusura	Tusura	arjunpur	244	225	7.1

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
59	Bolangir	BED	Tusura	Tusura	gudvella	524	520	4.2
60	Bolangir	BED	Tusura	Jarasingha	jarsingha	7	0	11
61	Bolangir	BED	Tusura	Tusura	mahalai	221	202	6.7
62	Bolangir	BED	Tusura	Tusura	natraj	95	0	10.5
63	Bolangir	BED	Tusura	Jarasingha	salepali	66	0	10.9
64	Bolangir	BED	Tusura	Jarasingha	udar	82	0	10.7
65	Bolangir	BED	Tusura	Deogaon	Adarsh 2	3	0	11
66	Bolangir	BED	Tusura	Budhabahal	Bhutibahal	106	0	10.6
67	Bolangir	BED	Tusura	Jarasingha	Chandrapur	53	0	10.9
68	Bolangir	BED	Tusura	Deogaon	Deogaon	26	0	11
69	Bolangir	BED	Tusura	Deogaon	Gaibahal-1	225	198	9.2
70	Bolangir	BED	Tusura	Deogaon	Gaibahal-2	73	0	10.6
71	Bolangir	BED	Tusura	Budhabahal	Gambharimal	83	0	10.7
72	Bolangir	BED	Tusura	Budhabahal	Sagarpali	13	0	10.9
73	Bolangir	BED	Tusura	Tusura	Samara	129	0	10.3
74	Bolangir	BED	Tusura	Budhabahal	Sarasmal	26	0	10.9
75	Bolangir	BED	Tusura	Tusura	Tusra town	59	0	10.7
76	Bolangir	BED	Tusura	Deogaon	Tusura	110	0	10.6
77	Bolangir	SED	B M Pur	Ullunda	gandabahal	45	0	11
78	Bolangir	SED	B M Pur	Ullunda	goedmara	102	0	10.7
79	Bolangir	SED	B M Pur	Ullunda	hikunda	119	0	10.6
80	Bolangir	SED	B M Pur	Raxa chowk	hingma-ii	149	0	10.7
81	Bolangir	SED	B M Pur	Ullunda	maraloi	76	0	10.8
82	Bolangir	SED	B M Pur	Ullunda	sindhol	515	506	8.2
83	Bolangir	SED	B M Pur	Bm pur	Bm pur	115	0	10.8
84	Bolangir	SED	B M Pur	Mursundi	Buthipadar	212	0	10.9
85	Bolangir	SED	B M Pur	Bm pur	Champapur	100	0	10.6
86	Bolangir	SED	B M Pur	Bm pur	Dharmasala	132	0	10.2
87	Bolangir	SED	B M Pur	Subalaya	Gariamunda	122	0	10.6
88	Bolangir	SED	B M Pur	Raxa chowk	Hikudi chowk	146	0	10.5
89	Bolangir	SED	B M Pur	Ullunda	Hingma	167	0	10.7
90	Bolangir	SED	B M Pur	Bm pur	Jaloi	217	0	10
91	Bolangir	SED	B M Pur	Subalaya	Jatesingha	51	0	10.8
92	Bolangir	SED	B M Pur	Subalaya	Kamira	12	0	11
93	Bolangir	SED	B M Pur	Bm pur	Khandatota	19	0	11
94	Bolangir	SED	B M Pur	Mursundi	Khandokata	150	0	10.7
95	Bolangir	SED	B M Pur	Mursundi	Manikpur	312	0	10.7
96	Bolangir	SED	B M Pur	Mursundi	Mursundi	73	0	11
97	Bolangir	SED	B M Pur	Subalaya	Subalaya	33	0	10.8
98	Bolangir	SED	B M Pur	Bm pur	Telipali	280	0	10.5
99	Bolangir	SED	B M Pur	Ullunda	Thengo	288	116	9.9
100	Bolangir	SED	B M Pur	Ullunda	Ullnda	7	0	11
101	Bolangir	SED	Binka	Bishalpali	industrial	20	0	11

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
102	Bolangir	SED	Binka	Pankital	Rampur	62	0	10.9
103	Bolangir	SED	Binka	Bishalpali	Singhjuba	81	0	10.7
104	Bolangir	SED	Binka	Pankital	Badkerley	364	123	9.8
105	Bolangir	SED	Binka	Bishalpali	Bankigindi	204	170	9.5
106	Bolangir	SED	Binka	Saledi	Bhamarpali	186	0	10.6
107	Bolangir	SED	Binka	Binka	Binka	96	0	10.8
108	Bolangir	SED	Binka	Cherupalli	Cherupalli	106	0	10.7
109	Bolangir	SED	Binka	Dungruipalli	Dungruipalli	91	0	10.5
110	Bolangir	SED	Binka	Binka	Gulunda	140	0	10.7
111	Bolangir	SED	Binka	Binka	Gulunda agriculture	17	0	11
112	Bolangir	SED	Binka	Bishalpali	Industrial	9	0	10.8
113	Bolangir	SED	Binka	Saledi	Irrigation	48	0	10.8
114	Bolangir	SED	Binka	Bhatabhali	Julunda	108	0	10.7
115	Bolangir	SED	Binka	Bishalpali	Kadlipali	173	0	10.6
116	Bolangir	SED	Binka	Bhatabhali	Kapasira	130	0	10.8
117	Bolangir	SED	Binka	Binka	Mahadev pali	190	0	10.7
118	Bolangir	SED	Binka	Saledi	Mahadevi	1	0	11
119	Bolangir	SED	Binka	Bankidal	Mayabarha	90	0	10.9
120	Bolangir	SED	Binka	Cherupalli	Pandkital	91	13	10
121	Bolangir	SED	Binka	Pankital	Rampur	58	0	10.6
122	Bolangir	SED	Binka	Bhatabhali	Salepali	216	0	10.4
123	Bolangir	SED	Binka	Binka	Sankera	213	0	10.5
124	Bolangir	SED	Binka	Cherupalli	Sargul	411	267	9.5
125	Bolangir	SED	Binka	Bishalpali	Sindurpur	143	0	10.6
126	Bolangir	SED	Binka	Bhatabhali	Tamamura	82	0	10.7
127	Bolangir	SED	Sonepur	Khari	Kendumunda	134	0	10.2
128	Bolangir	SED	Sonepur	Khari	Mahula	138	0	10.7
129	Bolangir	SED	Sonepur	Dubla	Purunapani	56	0	10.3
130	Bolangir	SED	Sonepur	Tarva	Tantulikhuni	87	0	10.5
131	Bolangir	SED	Sonepur	Sonepur new	Badbazar	74	0	10.8
132	Bolangir	SED	Sonepur	Dubla	Baghia	53	0	10.8
133	Bolangir	SED	Sonepur	Hardokhol	Baidyanath	106	0	10.3
134	Bolangir	SED	Sonepur	Charbhata	Balikhamar	112	0	10
135	Bolangir	SED	Sonepur	Khari	Bijepadar	296	0	10
136	Bolangir	SED	Sonepur	Hardokhol	Bisimunda	323	314	8.5
137	Bolangir	SED	Sonepur	Charbhata	Charbhata	28	0	10.8
138	Bolangir	SED	Sonepur	Sonepur new	Collectorate	73	0	10.9
139	Bolangir	SED	Sonepur	Hardokhol	Hardokhol	117	0	10.3
140	Bolangir	SED	Sonepur	Sonepur new	Hardokhol-town	65	0	10.9
141	Bolangir	SED	Sonepur	Dumerbahal	Jamgaon	115	0	10.4
142	Bolangir	SED	Sonepur	Headkitikra-kalapathar	Jammura	82	0	10.2
143	Bolangir	SED	Sonepur	Sonepur old	Janmura-town	41	0	10.7
144	Bolangir	SED	Sonepur	Dumerbahal	Jharbalangir	85	0	10.1

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
145	Bolangir	SED	Sonepur	Headkitikra-kalapathar	Kalapathar	98	0	10.9
146	Bolangir	SED	Sonepur	Hardokhol	Khambeswaripalli	82	55	9.8
147	Bolangir	SED	Sonepur	Dubla	Lukapali	198	0	10.3
148	Bolangir	SED	Sonepur	Hardokhol	Majhi-munda	31	0	10.7
149	Bolangir	SED	Sonepur	Sonepur old	Majhipada	39	0	10.7
150	Bolangir	SED	Sonepur	Sonepur new	Medical	2	0	11
151	Bolangir	SED	Sonepur	Khari	Narayanpur	305	0	10.1
152	Bolangir	SED	Sonepur	Khari	Pua	269	89	9.9
153	Bolangir	SED	Sonepur	Charbhata	Rengsa	114	0	10.4
154	Bolangir	SED	Sonepur	Tarva	Sargaj	103	0	10.6
155	Bolangir	SED	Sonepur	Sonepur old	Shanti-nagar	45	0	10.8
156	Bolangir	SED	Sonepur	Dubla	Talpadar	121	0	10.4
157	Bolangir	SED	Sonepur	Khari	Taraikela	32	0	10.8
158	Bolangir	SED	Sonepur	Dumerbahal	Tarva	91	17	9.9
159	Bolangir	SED	Sonepur	Tarva	Tarva town 2	18	0	10.7
160	Bolangir	SED	Sonepur	Tarva	Tarva town1	80	0	10.8
161	Bolangir	TED	Patnagarh	Tandpadar	Badajhankarpali	51	0	10.6
162	Bolangir	TED	Patnagarh	Lathora	Bagdiha	75	0	10.8
163	Bolangir	TED	Patnagarh	Larambha	Bagmunda	151	0	10.4
164	Bolangir	TED	Patnagarh	Thakpada	Banjari	153	118	8.6
165	Bolangir	TED	Patnagarh	Patnagarh	Batharla	209	53	9.6
166	Bolangir	TED	Patnagarh	Belpada	Belpada	56	0	10.9
167	Bolangir	TED	Patnagarh	Lathora	Bendir	66	0	10.9
168	Bolangir	TED	Patnagarh	Tandpadar	Bhaisa	105	0	10.8
169	Bolangir	TED	Patnagarh	Khaprakhol	Bhaldungari	112	0	10.7
170	Bolangir	TED	Patnagarh	Kanut	Bharuapali	168	0	10.7
171	Bolangir	TED	Patnagarh	Lathora	Busstand	16	0	10.9
172	Bolangir	TED	Patnagarh	Lathora	Colony pada	95	0	10.4
173	Bolangir	TED	Patnagarh	Ghumer	Dalapali	109	0	10.8
174	Bolangir	TED	Patnagarh	Juria	Damaipali	129	0	10.7
175	Bolangir	TED	Patnagarh	Larambha	Dangbahal	142	0	10.4
176	Bolangir	TED	Patnagarh	Khaprakhol	Dhandamunda	180	0	10.2
177	Bolangir	TED	Patnagarh	Dhumabhata	Dhumabhata	50	0	10.9
178	Bolangir	TED	Patnagarh	Belpada	Factory	20	0	10.9
179	Bolangir	TED	Patnagarh	Juria	Ghagra-bhatli	24	0	10.9
180	Bolangir	TED	Patnagarh	Belpada	Ghagurli	136	0	10.5
181	Bolangir	TED	Patnagarh	Thakpada	Gmbhari	60	0	10.7
182	Bolangir	TED	Patnagarh	Khaprakhol	Harisankar	141	83	9.7
183	Bolangir	TED	Patnagarh	Thakpada	Jogimunda	164	0	10.2
184	Bolangir	TED	Patnagarh	Dhumabhata	Juba	151	0	10.6
185	Bolangir	TED	Patnagarh	Juria	Juria	53	0	10.9
186	Bolangir	TED	Patnagarh	Belpada	Kapani	98	0	10.8

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
187	Bolangir	TED	Patnagarh	Larambha	Larambha	38	0	10.8
188	Bolangir	TED	Patnagarh	Juria	Luhasingha	40	0	10.9
189	Bolangir	TED	Patnagarh	Belpada	Mandal	24	0	11
190	Bolangir	TED	Patnagarh	Thakpada	Matikhai	111	0	10.7
191	Bolangir	TED	Patnagarh	Belpada	Navodaya	3	0	11
192	Bolangir	TED	Patnagarh	Kanut	Nuahad	58	0	10.2
193	Bolangir	TED	Patnagarh	Patnagarh	Old ghasian	299	139	9.2
194	Bolangir	TED	Patnagarh	Belpada	Padampur	10	0	11
195	Bolangir	TED	Patnagarh	Patnagarh	Phd	24	0	10.8
196	Bolangir	TED	Patnagarh	Dhumabhata	Radbahal	71	0	10.6
197	Bolangir	TED	Patnagarh	Tandpadar	Rampur	72	0	10.9
198	Bolangir	TED	Patnagarh	Khaprakhol	Rengali	75	0	10
199	Bolangir	TED	Patnagarh	Kanut	Salandi	133	0	10.5
200	Bolangir	TED	Patnagarh	Dhumabhata	Suleikala	53	0	10.8
201	Bolangir	TED	Patnagarh	Ghumer	Tamia & thaisom	240	0	10.2
202	Bolangir	TED	Patnagarh	Lathora	Tankapani	51	0	10.9
203	Bolangir	TED	Patnagarh	Kanut	Tanla	195	0	10.2
204	Bolangir	TED	Patnagarh	Patnagarh	Town-1	1	0	11
205	Bolangir	TED	Patnagarh	Patnagarh	Town-2	16	0	11
206	Bolangir	TED	Saintala	Karmatala	patamara	42	0	11
207	Bolangir	TED	Saintala	Belgaon	Badipada	111	111	9.3
208	Bolangir	TED	Saintala	Belgaon	bhadra	136	0	10.4
209	Bolangir	TED	Saintala	Saintala	block	5	0	11
210	Bolangir	TED	Saintala	Saintala	budhabahal	214	54	10
211	Bolangir	TED	Saintala	Karmatala	karamtala	81	0	10.9
212	Bolangir	TED	Saintala	Saintala	kumbhari	112	0	10.7
213	Bolangir	TED	Saintala	Karmatala	phapsi	142	0	10.5
214	Bolangir	TED	Saintala	Belgaon	Phd feeder	28	0	10.9
215	Bolangir	TED	Saintala	Saintala	pitambul	46	0	10.8
216	Bolangir	TED	Saintala	Belgaon	Bijepur	207	15	10
217	Bolangir	TED	Saintala	Belgaon	Ghunsir	161	0	10.1
218	Bolangir	TED	Saintala	Saintala	Saintala	44	0	10.9
219	Bolangir	TED	Kantabanji	Gudighat	Andaldoro	77	0	10.9
220	Bolangir	TED	Kantabanji	Gudighat	Antarla	174	0	10.9
221	Bolangir	TED	Kantabanji	Muribahal	Dubung	339	0	10.4
222	Bolangir	TED	Kantabanji	Muribahal	Tupavdhar	276	0	10.4
223	Bolangir	TED	Kantabanji	Kantabanji	Ashram pada	56	0	10.8
224	Bolangir	TED	Kantabanji	Tureikela	Badabanki	179	145	9.8
225	Bolangir	TED	Kantabanji	Bagabahal	Belpada	16	0	10.9
226	Bolangir	TED	Kantabanji	Bagabahal	Bhalumunda	82	0	10.4
227	Bolangir	TED	Kantabanji	Bangomunda	Bhalumunda	28	0	10.9
228	Bolangir	TED	Kantabanji	Bangomunda	Bongomunda	36	0	10.9

Capex plan for FY 23-24

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
229	Bolangir	TED	Kantabanji	Gudighat	Chalki	252	83	9.7
230	Bolangir	TED	Kantabanji	Gudighat	Chanabahal	158	0	10.7
231	Bolangir	TED	Kantabanji	Dabri	Dabri	78	0	10.6
232	Bolangir	TED	Kantabanji	Dabri	Dhamandonga	173	0	10.6
233	Bolangir	TED	Kantabanji	Dabri	Dumerchuan	122	0	10.7
234	Bolangir	TED	Kantabanji	Tureikela	Ghunesh	144	0	10.5
235	Bolangir	TED	Kantabanji	Bangomunda	Gohirapader	47	0	10.8
236	Bolangir	TED	Kantabanji	Muribahal	Gudia hat	38	0	10.8
237	Bolangir	TED	Kantabanji	Muribahal	Jamuna	78	0	10.8
238	Bolangir	TED	Kantabanji	Bagabahal	Jurabandh	88	0	10.5
239	Bolangir	TED	Kantabanji	Bangomunda	Lukapada	102	0	10.7
240	Bolangir	TED	Kantabanji	Tureikela	R.e	149	0	10.3
241	Bolangir	TED	Kantabanji	Bagabahal	Sorgul	84	0	10.7
242	Bolangir	TED	Kantabanji	Muribahal	Town	37	0	11
243	Bolangir	TED	Kantabanji	Kantabanji	Town1	108	0	10.6
244	Bolangir	TED	Kantabanji	Kantabanji	Town2	139	0	10.4
245	Bolangir	TED	Kantabanji	Tureikela	Tureikela	30	0	11
246	Bolangir	TED	Titlagarh	Pandripani	Alanda	93	0	10.6
247	Bolangir	TED	Titlagarh	Pandripani	Bagbhal	170	0	10.9
248	Bolangir	TED	Titlagarh	Titilagarh	Bandhupala	81	0	10.7
249	Bolangir	TED	Titlagarh	Titilagarh	Bhatipada	73	0	10.4
250	Bolangir	TED	Titlagarh	Sindhekela	Chandotara	233	0	10.3
251	Bolangir	TED	Titlagarh	Piplapada	Charbhata	110	0	10.8
252	Bolangir	TED	Titlagarh	Kholan	Dam	122	0	10.5
253	Bolangir	TED	Titlagarh	Pandripani	Dedgaon	258	151	9.4
254	Bolangir	TED	Titlagarh	Titilagarh	Four-pole-police-station	15	0	11
255	Bolangir	TED	Titlagarh	Titilagarh	Gunchitar	127	0	10.2
256	Bolangir	TED	Titlagarh	Pandripani	Jharial	103	0	10.6
257	Bolangir	TED	Titlagarh	Kholan	Kholan	173	9	10
258	Bolangir	TED	Titlagarh	Titilagarh	Lic	27	0	10.9
259	Bolangir	TED	Titlagarh	Kholan	Limpada	76	0	10.7
260	Bolangir	TED	Titlagarh	Kholan	Luthurbandh	303	100	9.7
261	Bolangir	TED	Titlagarh	Piplapada	Manigaon	174	0	10.8
262	Bolangir	TED	Titlagarh	Sindhekela	Parasara	18	0	10.9
263	Bolangir	TED	Titlagarh	Piplapada	Pipalapadar	28	0	11
264	Bolangir	TED	Titlagarh	Sindhekela	Putupada	4	0	11
265	Bolangir	TED	Titlagarh	Sindhekela	Town-sindhekela	39	0	10.8
266	Rourkela	RED	Basanti	Basanti	Dav	42	0	10.7
267	Rourkela	RED	Basanti	Gopabandhupali	Gopabandhupali	20	0	10.9

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
268	Rourkela	RED	Basanti	Gopabandhu pali	Ms pali	32	0	10.8
269	Rourkela	RED	Basanti	Basanti	Phd	39	0	10.5
270	Rourkela	RED	Basanti	Gopabandhu pali	Timber	15	0	10.8
271	Rourkela	RED	Bisra	Bandamunda	Balabhadra market	7	0	10.9
272	Rourkela	RED	Bisra	Bandamunda	Bandhamunda	69	58	7.6
273	Rourkela	RED	Bisra	Bisra	Barsuan	118	0	10.7
274	Rourkela	RED	Bisra	Dalposh	Bartoli	29	0	10.9
275	Rourkela	RED	Bisra	Bisra	Bisra_1	14	0	11
276	Rourkela	RED	Bisra	Bisra	Bisra_2	32	0	10.8
277	Rourkela	RED	Bisra	Bisra	Dhadari	32	0	10.9
278	Rourkela	RED	Bisra	Dalposh	Jamsera	40	0	10.4
279	Rourkela	RED	Bisra	Bisra	Jaraikela	98	33	10
280	Rourkela	RED	Bisra	Nit	Naya bazar	44	0	10.9
281	Rourkela	RED	Bisra	Nit	Osap	130	124	8.3
282	Rourkela	RED	Bisra	Bisra	Sanbabua	136	15	10
283	Rourkela	RED	Koel Nagar	Koelnagar	Adbe	52	0	10.1
284	Rourkela	RED	Koel Nagar	Koelnagar	C block	20	0	10.8
285	Rourkela	RED	Koel Nagar	Hamirpur	Hamirpur	45	0	10.8
286	Rourkela	RED	Koel Nagar	Nit	Jagada	61	0	10.6
287	Rourkela	RED	Koel Nagar	Koelnagar	Jhirpani	28	0	10.6
288	Rourkela	RED	Koel Nagar	Hamirpur	Ramagada	7	0	11
289	Rourkela	RED	Udit Nagar	Power house	plant site	39	0	10.4
290	Rourkela	RED	Udit Nagar	Power house	udit nagar	132	0	10.3
291	Rourkela	RED	Udit Nagar	Power house	Main road	65	47	9.7
292	Rourkela	RED	Udit Nagar	Power house	Ph road	21	0	10.9
293	Rourkela	RED-RAJGANGPUR	Kalunga	Balanda	Balanda	59	0	11
294	Rourkela	RED-RAJGANGPUR	Kalunga	Balanda	Garjan	85	0	10.9
295	Rourkela	RED-RAJGANGPUR	Kalunga	Kalunga (idc)	Idc	108	0	10.5
296	Rourkela	RED-RAJGANGPUR	Kalunga	Kalunga (idc)	Kalunga basti	32	0	10.8
297	Rourkela	RED-RAJGANGPUR	Kalunga	Kalunga (idc)	Third phase	38	0	10.7
298	Rourkela	RED-RAJGANGPUR	Kalunga	Balanda	Tynsar	729	686	9.1
299	Rourkela	RED-RAJGANGPUR	Kalunga	Vedvyas	Beldihi	130	0	10.7

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
300	Rourkela	RED-RAJGANGPUR	Kalunga	Ottoindia	Birkera	25	0	11
301	Rourkela	RED-RAJGANGPUR	Kalunga	Vedvyas	Gopapali	59	0	10.8
302	Rourkela	RED-RAJGANGPUR	Kalunga	Ottoindia	Kalunga town 1	90	0	10.9
303	Rourkela	RED-RAJGANGPUR	Kalunga	Vedvyas	Vedvyas	85	0	10.7
304	Rourkela	RED-RAJGANGPUR	Kuarmunda	Lindra	Kerketa feeder	100	0	10.9
305	Rourkela	RED-RAJGANGPUR	Kuarmunda	Lindra	Khutgaon	100	0	10.8
306	Rourkela	RED-RAJGANGPUR	Kuarmunda	Lindra	Phuljher feeder	8	0	11
307	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Baniguni	184	0	10.8
308	Rourkela	RED-RAJGANGPUR	Kuarmunda	Hatibari,rajgangpur	Baunsjore	162	0	10.9
309	Rourkela	RED-RAJGANGPUR	Kuarmunda	Hatibari,rajgangpur	Bemta	319	0	10.7
310	Rourkela	RED-RAJGANGPUR	Kuarmunda	-Biramitrapur	Bijabahal	217	11	10
311	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Gobera	210	0	10.9
312	Rourkela	RED-RAJGANGPUR	Kuarmunda	Nuagaon	Hatibari/nuagaon	348	0	10.5
313	Rourkela	RED-RAJGANGPUR	Kuarmunda	Biramitrapur	Jharbeda	239	0	10.3
314	Rourkela	RED-RAJGANGPUR	Kuarmunda	Raiboga	Kadobahal	65	0	10.9
315	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Kalosaria	226	0	10.5
316	Rourkela	RED-RAJGANGPUR	Kuarmunda	Nuagaon	Lukubeda	162	0	11
317	Rourkela	RED-RAJGANGPUR	Kuarmunda	Nuagaon	Nuagaon(kuarmunda)	121	0	10.7
318	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Padampur	140	0	10.8
319	Rourkela	RED-RAJGANGPUR	Kuarmunda	Nuagaon	Potrapali	414	0	10.2
320	Rourkela	RED-RAJGANGPUR	Kuarmunda	Biramitrapur	Raiboga	105	0	10.6
321	Rourkela	RED-RAJGANGPUR	Kuarmunda	Raiboga	Salongbahal	345	0	10.5
322	Rourkela	RED-RAJGANGPUR	Kuarmunda	Nuagaon	Sarada	403	0	10.1
323	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Sarvesh	37	0	10.9
324	Rourkela	RED-RAJGANGPUR	Kuarmunda	Kuarmunada	Town	59	0	10.8
325	Rourkela	RED-RAJGANGPUR	Kuarmunda	Biramitrapur	Town-1	49	0	10.9

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
326	Rourkela	RED-RAJGANGPUR	Kuarmunda	Biramitrapur	Town-2	153	0	10.7
327	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Alonda	alonda	118	0	10.7
328	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Mandiakundar	industrial	67	0	10.9
329	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	Esi	1	0	11
330	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	Hari machine	29	0	10.7
331	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Alonda	Kukumunda	97	0	10.9
332	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Bhogotola	Kumarkela	26	0	10.9
333	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Alonda	Laxmiposh(alonda structure)	204	0	10.3
334	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Bhogotola	Maldahi	232	0	10.4
335	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	Mandiakudar	149	0	10.5
336	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	Mission	19	0	10.9
337	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	New town1	26	0	10.7
338	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Mandiakundar	New vilaigarh	221	0	10.6
339	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Mandiakundar	Old bilaigarh	147	0	10.3
340	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Bhogotola	Town	48	0	10.7
341	Rourkela	RED-RAJGANGPUR	Rajgangpur-1	Rajgangpur	Town-2	170	86	9.8
342	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jaranglai	Baranga kachhar	134	0	10.2
343	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Bargaon rajgangpur	Bargaon	175	0	10.8
344	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Birngatali	Birangtali	241	0	10.3
345	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Sahjbahal	Ekma	67	0	10.9
346	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Kutura	Garposhi	264	0	10.5
347	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jaranglai	Itma	91	0	10.8
348	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jharbeda	Jampali	141	0	10.2
349	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Bargaon rajgangpur	Jaranglai	125	0	10.9
350	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Kutura	Jarbeda	86	0	10.6

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
351	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jharbeda	Jharbeda new	70	0	10.9
352	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jaranglai	Jharmunda	111	0	10.7
353	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Birngatali	Khurapali	95	0	10.6
354	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Kutura	Kutura	54	0	10.9
355	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Kutura	Lanjiberna	646	605	6.9
356	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Sahjbahal	Panchorafdr	48	0	11
357	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Birngatali	Purkhapali	113	0	10.9
358	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Bargaon rajgangpur	Sahajbahal	170	0	10.8
359	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Sahjbahal	Singarmunda	198	0	10.8
360	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Jharbeda	Sona khan	336	142	9.8
361	Rourkela	RED-RAJGANGPUR	Rajgangpur-2	Bargaon rajgangpur	Tulalaya/tudalaga	258	71	9.9
362	Rourkela	RSED	Bonai	Rajamunda	darjing	371	0	10.3
363	Rourkela	RSED	Bonai	Koira	Industry -2	55	0	10.3
364	Rourkela	RSED	Bonai	Tensa	koira (tensa)	51	0	10.3
365	Rourkela	RSED	Bonai	Rajamunda	lahuniapada	350	0	10.4
366	Rourkela	RSED	Bonai	Rajamunda	lalei	195	0	10.5
367	Rourkela	RSED	Bonai	Bonai	Gogua	60	0	10.3
368	Rourkela	RSED	Bonai	Gurundia	Gurundia	95	13	10
369	Rourkela	RSED	Bonai	Gurundia	Gurundia (banekela)	270	155	9.3
370	Rourkela	RSED	Bonai	Bonai	Gurundia(narendra)	237	66	9.8
371	Rourkela	RSED	Bonai	K.balang	Jharbeda	250	0	10.2
372	Rourkela	RSED	Bonai	K.balang	K balang	184	0	10.9
373	Rourkela	RSED	Bonai	Bonai	Kenaveta	90	22	10
374	Rourkela	RSED	Bonai	K.balang	Roxy(k.balang)	406	0	10.2
375	Rourkela	RSED	Bonai	Bonai	Town (bonei)	78	0	10.7
376	Rourkela	RSED	Bonai	Mahuldia	Badagaon	147	69	9.9
377	Rourkela	RSED	Bonai	Mahuldia	Fuljhar	135	0	10.8
378	Rourkela	RSED	Bonai	Tuniapali	Indrapur	219	204	7.9
379	Rourkela	RSED	Bonai	Koira	Industry -1	93	0	10.7
380	Rourkela	RSED	Bonai	Tensa	Koira (koira)	66	47	9.1
381	Rourkela	RSED	Bonai	Mahuldia	Kuliposh	270	0	10.3
382	Rourkela	RSED	Bonai	Mahuldia	Mahulpada	92	0	10.8
383	Rourkela	RSED	Bonai	Rajamunda	Roxy (rajamunda)	297	0	10.6
384	Rourkela	RSED	Bonai	Tuniapali	Sarsara	337	0	10.2

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
385	Rourkela	RSED	Industrial Estate	Chhend	1st phase	46	0	10.7
386	Rourkela	RSED	Industrial Estate	Civil township	Birsha munda	58	0	10.9
387	Rourkela	RSED	Industrial Estate	Civil township	College	58	0	10.9
388	Rourkela	RSED	Industrial Estate	Industrial estate	Gangadharpali	41	0	11
389	Rourkela	RSED	Industrial Estate	Civil township	Hanuman vatika	36	0	10.9
390	Rourkela	RSED	Industrial Estate	Industrial estate	Industrial	72	0	10.6
391	Rourkela	RSED	Industrial Estate	Chhend	Kalingavihar	66	0	10.6
392	Rourkela	RSED	Industrial Estate	Chhend	Luhakera	27	0	10.7
393	Rourkela	RSED	Industrial Estate	Chhend	Panposh	50	0	10.1
394	Rourkela	RSED	Industrial Estate	Civil township	Rgh	11	0	11
395	Rourkela	RSED	Industrial Estate	Chhend	Self finance	37	0	10.9
396	Rourkela	RSED	Industrial Estate	Industrial estate	Town	24	0	10.9
397	Rourkela	RSED	Industrial Estate	Chhend	Rda	50	0	10.7
398	Rourkela	RSED	Panposh	Lathikata	modern india 2	190	0	10.8
399	Rourkela	RSED	Panposh	Panposh	phd	6	0	11
400	Rourkela	RSED	Panposh	Panposh	raw water	15	0	10.8
401	Rourkela	RSED	Panposh	Lathikata	Banki	213	0	10.2
402	Rourkela	RSED	Panposh	Panposh	Balughat	39	0	10.9
403	Rourkela	RSED	Panposh	Panposh	College	11	0	10.9
404	Rourkela	RSED	Panposh	Jalda	Industrial	93	0	10.6
405	Rourkela	RSED	Panposh	Jalda	Jalda c block	45	0	10.9
406	Rourkela	RSED	Panposh	Lathikata	Modern india 1	128	0	10
407	Rourkela	RSED	Panposh	Lathikata	Ramjodi	364	0	10.6
408	Rourkela	RSED	Panposh	Jalda	Town	70	0	10.3
409	Rourkela	SED	Sundargarh	Kundukela	kinjirma	166	0	10.6
410	Rourkela	SED	Sundargarh	Karamdihi	Subalaya	115	0	10.5
411	Rourkela	SED	Sundargarh	Subdega	balisankra	166	0	10.6
412	Rourkela	SED	Sundargarh	Kundukela	bhasma	102	0	10.6
413	Rourkela	SED	Sundargarh	College	college	109	0	10.3
414	Rourkela	SED	Sundargarh	Subdega	deogaon	64	0	10.3
415	Rourkela	SED	Sundargarh	Kundukela	deuli	83	0	10.9
416	Rourkela	SED	Sundargarh	Karamdihi	panchmahal	149	0	10.8
417	Rourkela	SED	Sundargarh	Subdega	subdega	130	0	10.5
418	Rourkela	SED	Sundargarh	Subdega	tangargaon	276	141	9.4
419	Rourkela	SED	Sundargarh	Balisankara	Balisankara	196	0	10.6
420	Rourkela	SED	Sundargarh	Sankara	Bargad	35	0	11
421	Rourkela	SED	Sundargarh	Balisankara	Budabahal	381	0	10.1
422	Rourkela	SED	Sundargarh	Majahpada	Dharuadih	160	0	10.6

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
423	Rourkela	SED	Sundargarh	Karamdihi	Hamirpur	63	0	10.7
424	Rourkela	SED	Sundargarh	College	Hospital	12	0	10.9
425	Rourkela	SED	Sundargarh	Balisankara	Jamuna	111	0	10.8
426	Rourkela	SED	Sundargarh	Karamdihi	Karamdihi	89	0	10.8
427	Rourkela	SED	Sundargarh	Majahpada	Kulta	123	0	10.7
428	Rourkela	SED	Sundargarh	Sankara	Kundukela	160	0	10.3
429	Rourkela	SED	Sundargarh	Majahpada	Majhapada	275	0	10.2
430	Rourkela	SED	Sundargarh	Sankara	Pmu	100	0	10.6
431	Rourkela	SED	Sundargarh	Subdega	Rouldega	162	139	10.9
432	Rourkela	SED	Sundargarh	College	Rrit	29	0	10.7
433	Rourkela	SED	Sundargarh	Majahpada	Salepali/birbira	228	0	10.9
434	Rourkela	SED	Sundargarh	Sankara	Sankara	75	0	10
435	Rourkela	SED	Sundargarh	Sankara	Town-1	95	0	10
436	Rourkela	SED	Ujalpur	Sadar	Bailjori	288	0	10.1
437	Rourkela	SED	Ujalpur	Kinjirkela	Bandhabahal	136	0	10
438	Rourkela	SED	Ujalpur	Sadar	Bandhapali	251	0	10.3
439	Rourkela	SED	Ujalpur	Lephripada	Chhetanpali	132	0	10.7
440	Rourkela	SED	Ujalpur	Lephripada	Dumabhala	213	196	6.9
441	Rourkela	SED	Ujalpur	Lephripada	Gundiadihi	115	110	8.1
442	Rourkela	SED	Ujalpur	Sadar	Kalobahal	224	0	10.3
443	Rourkela	SED	Ujalpur	Kinjirkela	Kharuabahal	219	125	9.7
444	Rourkela	SED	Ujalpur	Kinjirkela	Kinjirkela	280	129	9.6
445	Rourkela	SED	Ujalpur	Lephripada	Kulabira	98	0	10.7
446	Rourkela	SED	Ujalpur	Lephripada	Lefripada	47	0	10.7
447	Rourkela	SED	Ujalpur	Sadar	Sadar	11	0	11
448	Rourkela	SED	Ujalpur	Kinjirkela	Sikajore	201	179	8.8
449	Rourkela	SED	Ujalpur	Bileimunda	Badhibahal	169	0	10.5
450	Rourkela	SED	Ujalpur	Sargipali	Bharatpur	13	0	11
451	Rourkela	SED	Ujalpur	Darlipali	Darlipali	60	0	10.8
452	Rourkela	SED	Ujalpur	Mangaspur(gultha)	Darlipali-bileigarh	92	0	10.9
453	Rourkela	SED	Ujalpur	Garjan bahal	Duduka	155	0	10.2
454	Rourkela	SED	Ujalpur	Garjan bahal	Garjanbahal	66	0	10.7
455	Rourkela	SED	Ujalpur	Darlipali	Ghantimal	65	0	10.8
456	Rourkela	SED	Ujalpur	Garjan bahal	Gopalpur	179	0	10.6
457	Rourkela	SED	Ujalpur	Garjan bahal	Hemgiri-durubaga	51	50	8.2
458	Rourkela	SED	Ujalpur	Sargipali	Jhargaon	83	0	10.8
459	Rourkela	SED	Ujalpur	Tumapali	Jhariapali	62	0	10.9
460	Rourkela	SED	Ujalpur	Bileimunda	Jharpalam	64	0	10.8
461	Rourkela	SED	Ujalpur	Garjan bahal	Kalmek	81	0	10.8
462	Rourkela	SED	Ujalpur	Darlipali	Kanaktura	54	0	10.7
463	Rourkela	SED	Ujalpur	Hemgiri	Kanika	270	53	9.9

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
464	Rourkela	SED	Ujalpur	Mangaspur(gultha)	Mangaspur	94	0	10.9
465	Rourkela	SED	Ujalpur	Hemgiri	New hemgiri	149	0	10.8
466	Rourkela	SED	Ujalpur	Sargipali	Old mangaspur	77	0	10.8
467	Rourkela	SED	Ujalpur	Mangaspur(gultha)	Remanda	57	0	10.9
468	Rourkela	SED	Ujalpur	Darlipali	Ruhidihi	64	0	10.6
469	Rourkela	SED	Ujalpur	Sargipali	Sargipali	145	0	10.3
470	Rourkela	SED	Ujalpur	Tumapali	Tangarpali	81	0	10.9
471	Rourkela	SED	Ujalpur	Bileimunda	Taparia	161	0	10.4
472	Rourkela	SED	Ujalpur	Tumapali	Ujjalpur	24	0	10.9
473	Sambalpur	BNED	Belpahar	Bandhbaha	Balanda	251	125	9.7
474	Sambalpur	BNED	Belpahar	Bandhbaha	Bandhbahal	111	0	10.7
475	Sambalpur	BNED	Belpahar	Bandhbaha	Ganesh nagar	40	0	10.5
476	Sambalpur	BNED	Belpahar	Dhulunda	Charpali	131	0	10.3
477	Sambalpur	BNED	Belpahar	Dhulunda	Deheridhipa	129	0	10.9
478	Sambalpur	BNED	Belpahar	Dhulunda	Kanaktora	169	161	9.6
479	Sambalpur	BNED	Belpahar	Dhulunda	Remda	99	0	10.7
480	Sambalpur	BNED	Belpahar	Govind pur	Line2 kudabaga	20	0	11
481	Sambalpur	BNED	Belpahar	Govind pur	Line3 bhanurkhol	103	0	10.7
482	Sambalpur	BNED	Belpahar	Jharuapada	balaji ffeder	1	0	11
483	Sambalpur	BNED	Belpahar	Jharuapada	Bhikampali	59	0	10.8
484	Sambalpur	BNED	Belpahar	Jharuapada	Jamgaon	253	0	10.4
485	Sambalpur	BNED	Belpahar	Jharuapada	Rengali	166	0	10.6
486	Sambalpur	BNED	Belpahar	Muchbahal	Jorabaga	210	178	9.2
487	Sambalpur	BNED	Belpahar	Muchbahal	Junadihi	124	0	10.1
488	Sambalpur	BNED	Belpahar	Muchbahal	Kantatikra	46	0	10.9
489	Sambalpur	BNED	Belpahar	Muchbahal	Line1 lakhanpur	111	0	10.9
490	Sambalpur	BNED	Belpahar	Muchbahal	Town	265	244	8.7
491	Sambalpur	BNED	Belpahar	Pandiri	Piplikani line1	72	0	10.9
492	Sambalpur	BNED	Brajarajnagar	Brajarajnagar	Brajarajnagar	97	75	9.6
493	Sambalpur	BNED	Brajarajnagar	Brajarajnagar	Gandhi chowk	397	207	9.7
494	Sambalpur	BNED	Brajarajnagar	Brajarajnagar	Lamtibahal	73	47	9.7
495	Sambalpur	BNED	Brajarajnagar	Brajarajnagar	Telanpalli	30	0	10.7
496	Sambalpur	DED	Deogarh	Rengallbeda	donagaghot	66	0	10.77
497	Sambalpur	DED	Deogarh	Rengallbeda	gohira	70	0	10.74
498	Sambalpur	DED	Deogarh	Teleibani	Kansara	106	34	9.96
499	Sambalpur	DED	Deogarh	Rengallbeda	khilei	44	0	10.5
500	Sambalpur	DED	Deogarh	Teleibani	laimura	105	13	9.97
501	Sambalpur	DED	Deogarh	Reamal	Lulang	100	0	10.67
502	Sambalpur	DED	Deogarh	Rengallbeda	Mirgidiya	33	0	10.73

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
503	Sambalpur	DED	Deogarh	Rengallbeda	reamal(rengallbeda)	3	0	10.99
504	Sambalpur	DED	Deogarh	Reamal	tinkbir	205	181	8.74
505	Sambalpur	DED	Deogarh	Rengallbeda	tinkbir old	11	0	10.91
506	Sambalpur	DED	Deogarh	Barkote	Barkote	45	0	10.94
507	Sambalpur	DED	Deogarh	Budhapal	Budhapal	166	0	10.06
508	Sambalpur	DED	Deogarh	Barkote	Dangasinga	207	0	10.86
509	Sambalpur	DED	Deogarh	Bhaktabadkudar	Feeder-2 behedaposhi	243	0	10.52
510	Sambalpur	DED	Deogarh	Bhaktabadkudar	Feeder-i thaianala	216	0	10.63
511	Sambalpur	DED	Deogarh	Reamal	Kadopada	162	0	10.85
512	Sambalpur	DED	Deogarh	Bhaktabadkudar	Kalla	85	0	10.85
513	Sambalpur	DED	Deogarh	Kandhal	Katapali	328	0	10.8
514	Sambalpur	DED	Deogarh	Bhaktabadkudar	Khajurikhaman	198	0	10.6
515	Sambalpur	DED	Deogarh	Teleibani	Prabmasuni	53	0	10.72
516	Sambalpur	DED	Deogarh	Reamal	Reamal	152	0	10.25
517	Sambalpur	DED	Deogarh	Rengallbeda	Rengalbeda	2	0	11
518	Sambalpur	DED	Deogarh	Kandhal	Samarkhai	254	0	10.57
519	Sambalpur	DED	Deogarh	Deogarh	Town -1	46	0	10.83
520	Sambalpur	DED	Deogarh	Deogarh	Town -2	74	0	10.63
521	Sambalpur	DED	Deogarh	Deogarh	Town -3	30	0	10.77
522	Sambalpur	DED	Deogarh	Kandhal	Basadahi	102	0	10.29
523	Sambalpur	DED	Deogarh	Barkote	Kadopada(barkote)	263	233	7.94
524	Sambalpur	DED	Deogarh	Kandhal	Kandhal	43	0	10.67
525	Sambalpur	DED	Deogarh	Budhapal	Kundhigola	128	0	10.63
526	Sambalpur	DED	Deogarh	Budhapal	Palosoma feeder	386	328	9.37
527	Sambalpur	DED	Deogarh	Deogarh	Re	136	79	9.57
528	Sambalpur	DED	Deogarh	Teleibani	Taidisar	69	0	10.45
529	Sambalpur	DED	Deogarh	Teleibani	Tileibani	15	0	10.96
530	Sambalpur	JED	Kuchinda	Bhojpur	bhojpur	126	0	10.94
531	Sambalpur	JED	Kuchinda	Fasimal	fasimal	198	0	10.82
532	Sambalpur	JED	Kuchinda	Fasimal	gurjipali	98	0	10.85
533	Sambalpur	JED	Kuchinda	Lasa	lasa	55	0	10.9
534	Sambalpur	JED	Kuchinda	Kusumi	Bandabahal	235	0	10.83
535	Sambalpur	JED	Kuchinda	Kuchinda	Kusumi	104	0	10.26
536	Sambalpur	JED	Kuchinda	Ardabahal	Ardabahal	95	0	10.95
537	Sambalpur	JED	Kuchinda	Bamra	Ashirvad	58	0	10.91
538	Sambalpur	JED	Kuchinda	Bhojpur	Badmal	92	0	10.76
539	Sambalpur	JED	Kuchinda	Jamankira	Badrama	122	0	10.78

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
540	Sambalpur	JED	Kuchinda	Bamra	Bamra	91	0	10.76
541	Sambalpur	JED	Kuchinda	Ardabahal	Bauriguda	81	0	10.94
542	Sambalpur	JED	Kuchinda	Kesaibahal	Bhikapali	152	0	10.3
543	Sambalpur	JED	Kuchinda	Lasa	Chandanimal	129	0	10.78
544	Sambalpur	JED	Kuchinda	Bhojpur	Dimirimunda	115	0	10.76
545	Sambalpur	JED	Kuchinda	Bamra	Garposh	267	0	10.76
546	Sambalpur	JED	Kuchinda	Garposh	Garposh_garposh	26	0	10.9
547	Sambalpur	JED	Kuchinda	Bamra	Ghansara	69	0	10.77
548	Sambalpur	JED	Kuchinda	Kuchinda	Gosha	23	0	10.93
549	Sambalpur	JED	Kuchinda	Lasa	Gunduchuan	72	0	10.68
550	Sambalpur	JED	Kuchinda	Khandakats(hardipali)	Hadipali	174	0	10.64
551	Sambalpur	JED	Kuchinda	Jamankira	Jamankira	67	0	10.94
552	Sambalpur	JED	Kuchinda	Kesaibahal	Jarabaga	634	507	9
553	Sambalpur	JED	Kuchinda	Ardabahal	Jaypeerdhar	49	0	10.86
554	Sambalpur	JED	Kuchinda	Khandakats(hardipali)	Junani	39	0	10.97
555	Sambalpur	JED	Kuchinda	Kesaibahal	Kesaibahal	24	0	10.98
556	Sambalpur	JED	Kuchinda	Khandakats(hardipali)	Khandokata	91	0	10.91
557	Sambalpur	JED	Kuchinda	Garposh	Kinabaga	249	0	10.63
558	Sambalpur	JED	Kuchinda	Jamankira	Kuagola	122	0	10.78
559	Sambalpur	JED	Kuchinda	Kuchinda	Kuchinda town 1	93	0	10.9
560	Sambalpur	JED	Kuchinda	Kusumi	Kusumi town	218	0	10.65
561	Sambalpur	JED	Kuchinda	Kusumi	Loidaguna	270	0	10.85
562	Sambalpur	JED	Kuchinda	Kesaibahal	Mahula pali	262	0	10.57
563	Sambalpur	JED	Kuchinda	Garposh	Pinda pather	33	0	10.77
564	Sambalpur	JED	Kuchinda	Gochara	Ram tilaimal	20	0	10.96
565	Sambalpur	JED	Kuchinda	Bamra	Rangiatikra	182	0	10.82
566	Sambalpur	JED	Kuchinda	Garposh	Sagra	76	0	10.91
567	Sambalpur	JED	Kuchinda	Kuchinda	Saida	38	0	10.95
568	Sambalpur	JED	Kuchinda	Jamankira	Sarda	14	0	10.78
569	Sambalpur	JED	Kuchinda	Bhojpur	Sirid	83	0	10.86
570	Sambalpur	JED	Kuchinda	Bamra	Solar bamra	1	0	11
571	Sambalpur	JED	Kuchinda	Kuchinda	Town-2	74	0	10.92
572	Sambalpur	JED	Kuchinda	Jamankira	Tulub	183	0	10.85
573	Sambalpur	JED	Kuchinda	Gochara	Turai	224	0	10.44
574	Sambalpur	JED	Kuchinda	Gochara	Ullanda	50	0	10.96
575	Sambalpur	JED	No.I Jharsuguda	Bagdehi	Bagdihi	19	0	10.95
576	Sambalpur	JED	No.I Jharsuguda	Arda(jamkani)	Bandhapali	13	0	10.98
577	Sambalpur	JED	No.I Jharsuguda	Sodamal	Beunra	28	0	10.99
578	Sambalpur	JED	No.I Jharsuguda	Bagdehi	Bhajupatra	141	83	9.79

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
579	Sambalpur	JED	No.I Jharsuguda	Bagdehi	Bhimjore	64	0	10.88
580	Sambalpur	JED	No.I Jharsuguda	Durlaga(cachery)	Collectora	73	0	10.61
581	Sambalpur	JED	No.I Jharsuguda	Purna(kumudpali) pss	Debadihi feeder	51	0	10.9
582	Sambalpur	JED	No.I Jharsuguda	Medical-dhh	Dhh-1	3	0	11
583	Sambalpur	JED	No.I Jharsuguda	Arda(jamkani)	Dulesara	135	0	10.74
584	Sambalpur	JED	No.I Jharsuguda	Sarbahal	Durgamandap	31	0	10.89
585	Sambalpur	JED	No.I Jharsuguda	Lahandabud	Hkatapali	88	0	10.91
586	Sambalpur	JED	No.I Jharsuguda	Lahandabud	Housing board	61	0	10.9
587	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Ib	69	0	10.42
588	Sambalpur	JED	No.I Jharsuguda	Lahandabud	Industrial	71	0	10.83
589	Sambalpur	JED	No.I Jharsuguda	Arda(jamkani)	Jamkani	22	0	10.95
590	Sambalpur	JED	No.I Jharsuguda	Purna(kumudpali) pss	Jhadeswer feeder	44	0	10.08
591	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Jsg -iii	69	0	10.72
592	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Jsg-i	59	37	9.85
593	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Kachery	73	53	9.58
594	Sambalpur	JED	No.I Jharsuguda	Purna(kumudpali) pss	Kalimandir feeder	147	115	9.45
595	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Lic	130	0	10.09
596	Sambalpur	JED	No.I Jharsuguda	Durlaga(cachery)	Lic_durlaga(cachery)	126	0	10.57
597	Sambalpur	JED	No.I Jharsuguda	Medical-dhh	Medical-2	4	0	11
598	Sambalpur	JED	No.I Jharsuguda	Sarasmal	Omp	136	118	9.82
599	Sambalpur	JED	No.I Jharsuguda	Purna(kumudpali) pss	Siripali feeder	50	0	10.96
600	Sambalpur	JED	No.I Jharsuguda	Sodamal	Sodamal	60	0	10.96
601	Sambalpur	JED	No.I Jharsuguda	Sarbahal	Sripura	97	74	9.51
602	Sambalpur	JED	No.I Jharsuguda	Sarbahal	Sunarimunda	49	0	10.84
603	Sambalpur	JED	No.I Jharsuguda	Durlaga(cachery)	Talpatia	150	0	10.31
604	Sambalpur	JED	No.I Jharsuguda	Bagdehi	Tumbadihi	45	0	10.9

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
605	Sambalpur	JED	No.Ii Jharsuguda	Badmal	badmal	78	0	10.78
606	Sambalpur	JED	No.Ii Jharsuguda	Kirmira	Line 2 kirimira	24	0	10.94
607	Sambalpur	JED	No.Ii Jharsuguda	Laiekra	mundrajore	261	0	10.13
608	Sambalpur	JED	No.Ii Jharsuguda	Kirmira	Beheramal	37	0	10.98
609	Sambalpur	JED	No.Ii Jharsuguda	Laiekra	Bhatlaida	116	0	10.91
610	Sambalpur	JED	No.Ii Jharsuguda	Badmal	Hirma	171	0	10.28
611	Sambalpur	JED	No.Ii Jharsuguda	Kolabira	Jhirlapali	252	153	9.58
612	Sambalpur	JED	No.Ii Jharsuguda	Kolabira	Kolabira	41	0	10.95
613	Sambalpur	JED	No.Ii Jharsuguda	Laiekra	Laiekra	22	0	10.95
614	Sambalpur	JED	No.Ii Jharsuguda	Kirmira	Line-3-naxapali	26	0	10.96
615	Sambalpur	JED	No.Ii Jharsuguda	Kolabira	Raghunath-pali	191	0	10.65
616	Sambalpur	JED	No.Ii Jharsuguda	Laiekra	Sahaspur	380	0	10.16
617	Sambalpur	JED	No.Ii Jharsuguda	Kolabira	Samasingha	219	0	10.38
618	Sambalpur	JED	No.Ii Jharsuguda	Badmal	Singhabada	56	0	10.9
619	Sambalpur	SED	Ainthapali	Ainthapali	BHALUPALI	74	0	10.28
620	Sambalpur	SED	Ainthapali	Ainthapali	BUDHARAJA SCHOOL	43	0	10.84
621	Sambalpur	SED	Ainthapali	Ainthapali	BURLA	15	0	10.95
622	Sambalpur	SED	Ainthapali	Ainthapali	COLLEGE	52	0	10.44
623	Sambalpur	SED	Ainthapali	Ainthapali	FAMILY PLANNING	92	0	10.75
624	Sambalpur	SED	Ainthapali	Ainthapali	FATAK	43	0	10.83
625	Sambalpur	SED	Ainthapali	Ainthapali	GOPALPALI	75	0	10.58
626	Sambalpur	SED	Ainthapali	Ainthapali	INDUSTRIAL	12	0	10.98
627	Sambalpur	SED	Ainthapali	Ainthapali	KHETRAJPUR	61	0	10.23
628	Sambalpur	SED	Ainthapali	Ainthapali	RAW WATER	44	0	10.62
629	Sambalpur	SED	Ainthapali	Ainthapali	RE KAINSIR	183	0	10.7
630	Sambalpur	SED	Ainthapali	Ainthapali	REMED	84	0	10.17
631	Sambalpur	SED	Burla	Jyotibihar	Bhundunguripad ard	24	0	10.89
632	Sambalpur	SED	Burla	Burla	Contractor-colony	32	0	10.75
633	Sambalpur	SED	Burla	Burla medical	Doctor-colony	68	0	10.95
634	Sambalpur	SED	Burla	Jyotibihar	Golkunda	26	0	10.9
635	Sambalpur	SED	Burla	Jyotibihar	K tapali	55	0	10.85
636	Sambalpur	SED	Burla	Burla medical	Kv hostel	21	0	10.98
637	Sambalpur	SED	Burla	Jyotibihar	Ladies-hostel	48	0	10.87
638	Sambalpur	SED	Burla	Burla	Market	13	0	10.98
639	Sambalpur	SED	Burla	Burla medical	Medical-1	21	0	10.94

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
640	Sambalpur	SED	Burla	Burla medical	Solar	3	0	10.94
641	Sambalpur	SED	Burla	Burla	Uce	58	0	10.61
642	Sambalpur	SED	Burla	Burla	Wesco	80	0	10.64
643	Sambalpur	SED	Hirakud	Chipilima	Tulundi	122	0	10.35
644	Sambalpur	SED	Hirakud	Chipilima	Basantpur	51	0	10.68
645	Sambalpur	SED	Hirakud	Chorpur	Mundaghat	29	0	10.73
646	Sambalpur	SED	Hirakud	Chorpur	Snehapali	40	0	10.48
647	Sambalpur	SED	Hirakud	Chorpur	Badsinghari	18	0	10.84
648	Sambalpur	SED	Hirakud	Goshala	Kalamati	37	0	10.79
649	Sambalpur	SED	Hirakud	Goshala	Tulandi	33	0	10.85
650	Sambalpur	SED	Hirakud	Goshala	Mundoghat	36	0	10.92
651	Sambalpur	SED	Hirakud	Goshala	Maha laxmi	58	0	10.4
652	Sambalpur	SED	Hirakud	Goshala	Burla	77	0	10.66
653	Sambalpur	SED	Hirakud	Goshala	Gudbhaga	47	0	10.65
654	Sambalpur	SED	Hirakud	Hirakud	Medical-1	34	0	10.87
655	Sambalpur	SED	Hirakud	Hirakud	Sambalpur-2	70	0	10.5
656	Sambalpur	SED	Hirakud	Hirakud	Sambalpur-1	40	0	10.83
657	Sambalpur	SED	Hirakud	Hirakud	Gandhi nagar	75	0	10.7
658	Sambalpur	SED	Hirakud	Hirakud	Hpcl	9	0	10.98
659	Sambalpur	SED	Hirakud	Hirakud	Alind/re	69	0	10.37
660	Sambalpur	SED	Khetrajpur	Cheruapada	railway	1	0	10.93
661	Sambalpur	SED	Khetrajpur	Cheruapada	Bulibandh	53	0	10.41
662	Sambalpur	SED	Khetrajpur	Cheruapada	Hospital	6	0	10.96
663	Sambalpur	SED	Khetrajpur	Cheruapada	Phd	60	0	10.57
664	Sambalpur	SED	Khetrajpur	Badabazar	Badabazar	44	0	10.81
665	Sambalpur	SED	Khetrajpur	Badabazar	Farm road	50	0	10.91
666	Sambalpur	SED	Khetrajpur	Badabazar	Samaleswari	12	0	10.96
667	Sambalpur	SEED	Butapara	Putibandh	Bhutapada	19	1	10.01
668	Sambalpur	SEED	Butapara	Putibandh	Brooks hill	116	115	7.43
669	Sambalpur	SEED	Butapara	Putibandh	Golebazar	9	0	10.88
670	Sambalpur	SEED	Butapara	Putibandh	New cs colony	50	0	10.5
671	Sambalpur	SEED	Butapara	Putibandh	Shikhapara	103	82	9.58
672	Sambalpur	SEED	Dhanupali	Padiabahal	Bahampur	101	0	10.08
673	Sambalpur	SEED	Dhanupali	Dhama	Dhama	109	0	10.41
674	Sambalpur	SEED	Dhanupali	Putibandh	Dhanupali	98	0	10.41
675	Sambalpur	SEED	Dhanupali	Gunderpur	Gunderpur	83	0	10.77
676	Sambalpur	SEED	Dhanupali	Dhama	Industry	17	0	10.77
677	Sambalpur	SEED	Dhanupali	Padiabahal	Jayantpur	212	0	10.07
678	Sambalpur	SEED	Dhanupali	Dhama	Khinda	261	0	10.44
679	Sambalpur	SEED	Dhanupali	Dhama	Larasara	105	0	10.55
680	Sambalpur	SEED	Dhanupali	Putibandh	Maneswar	155	0	10.37
681	Sambalpur	SEED	Dhanupali	Padiabahal	Padiabahal	354	316	7.94
682	Sambalpur	SEED	Dhanupali	Gunderpur	Sahaspur	172	0	10.14

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
683	Sambalpur	SEED	Dhanupali	Putibandh	Sindurpankha	106	0	10.5
684	Sambalpur	SEED	Rairakhol	Kisinda	Balarama	98	0	10.9
685	Sambalpur	SEED	Rairakhol	Hero	Barangamal	337	0	10.5
686	Sambalpur	SEED	Rairakhol	Rairakhol	Barbank	446	387	9.7
687	Sambalpur	SEED	Rairakhol	Hatibari	Basiapada	38	0	10.9
688	Sambalpur	SEED	Rairakhol	Naktideul	Batgaon	364	325	8.3
689	Sambalpur	SEED	Rairakhol	Rairakhol	Charmal	120	0	10.5
690	Sambalpur	SEED	Rairakhol	Rairakhol	College	16	0	11
691	Sambalpur	SEED	Rairakhol	Rairakhol	Daincha	315	0	10.4
692	Sambalpur	SEED	Rairakhol	Kisinda	Girishchandrapur	116	0	10.6
693	Sambalpur	SEED	Rairakhol	Hatibari	Hatibari	84	0	10.8
694	Sambalpur	SEED	Rairakhol	Naktideul	Jagannathprasad	12	0	10.9
695	Sambalpur	SEED	Rairakhol	Jujumara	Jujumura	398	274	7.5
696	Sambalpur	SEED	Rairakhol	Rairakhol	Kadaligarh	365	227	9.3
697	Sambalpur	SEED	Rairakhol	Naktideul	Kisinda	183	0	10.5
698	Sambalpur	SEED	Rairakhol	Rairakhol	Luhapank	137	0	10.9
699	Sambalpur	SEED	Rairakhol	Hatibari	Meghapal	273	204	8.2
700	Sambalpur	SEED	Rairakhol	Naktideul	Micro	91	0	10.9
701	Sambalpur	SEED	Rairakhol	Hatibari	Mundhar	85	0	10.6
702	Sambalpur	SEED	Rairakhol	Naktideul	Naktideul	7	0	11
703	Sambalpur	SEED	Rairakhol	Hero	New barangamal	33	0	10.5
704	Sambalpur	SEED	Rairakhol	Kisinda	Panimura	237	0	10.3
705	Sambalpur	SEED	Rairakhol	Rairakhol	Rairakhol	60	0	10.7
706	Sambalpur	SEED	Rairakhol	Jujumara	Rambadamal	54	0	10.3
707	Sambalpur	SEED	Rengali	Rengali new	Industrial	40	0	10.8
708	Sambalpur	SEED	Rengali	Laida	Kantaplai	59	0	10.93
709	Sambalpur	SEED	Rengali	Katarbagha	Katarbag town	87	0	10.33
710	Sambalpur	SEED	Rengali	Rengali	Khiasahi	166	0	10.82
711	Sambalpur	SEED	Rengali	Lapanga	Khinda	121	0	10.64
712	Sambalpur	SEED	Rengali	Rengali	Kitarbaga	84	0	10.75
713	Sambalpur	SEED	Rengali	Laida	Laida	71	0	10.97
714	Sambalpur	SEED	Rengali	Lapanga	Lapanga	85	0	10.81
715	Sambalpur	SEED	Rengali	Rengali	Lapanga(rangali)	78	0	10.9
716	Sambalpur	SEED	Rengali	Sason	Majhipali	54	0	10.65
717	Sambalpur	SEED	Rengali	Parmanpur	Mura	314	0	10.59
718	Sambalpur	SEED	Rengali	Rengali new	Nishabhanga	73	0	10.94
719	Sambalpur	SEED	Rengali	Parmanpur	Pandri	136	0	10.71
720	Sambalpur	SEED	Rengali	Sason	Parmanpur (sason)	106	0	10.25
721	Sambalpur	SEED	Rengali	Parmanpur	Parmanpur(parmanpur)	204	126	9.5
722	Sambalpur	SEED	Rengali	Laida	Rangali	198	0	10.71
723	Sambalpur	SEED	Rengali	Rengali	Rengali	85	0	10.85

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
724	Sambalpur	SEED	Rengali	Rengali	Salad	13	0	10.97
725	Sambalpur	SEED	Rengali	Rengali new	Sapne	65	0	10.91
726	Sambalpur	SEED	Rengali	Sason	Sason	247	0	10.71
727	Sambalpur	SEED	Rengali	Katarbagha	Tamperkela	339	185	9.6
728	Sambalpur	SEED	Rengali	Lapanga	Thelkoli	166	0	10.53
729	Kalahandhi	KEED	Kesinga	Utkela	Kundabandha	204	0	10.2
730	Kalahandhi	KEED	Kesinga	Utkela	Pastikuda	293	0	10.6
731	Kalahandhi	KEED	Kesinga	Utkela	Utkela	16	0	11
732	Kalahandhi	KEED	Kesinga	Borda	Artal	162	0	10.8
733	Kalahandhi	KEED	Kesinga	Nunmath	Belkhandi	154	0	10.7
734	Kalahandhi	KEED	Kesinga	Kesinga	Boringpadar	363	196	9.9
735	Kalahandhi	KEED	Kesinga	Kesinga	Durgalaxmi(rice mill)	9	0	11
736	Kalahandhi	KEED	Kesinga	Kesinga	Kasurpada	364	0	10.5
737	Kalahandhi	KEED	Kesinga	Borda	Mahaling	227	0	10.6
738	Kalahandhi	KEED	Kesinga	Kesinga	New jagnathapada	51	0	10.8
739	Kalahandhi	KEED	Kesinga	Kesinga	Old jaganathpada	81	0	10.6
740	Kalahandhi	KEED	Kesinga	Nunmath	Palam	55	0	10.9
741	Kalahandhi	KEED	Kesinga	Kesinga	Phd	2	0	11
742	Kalahandhi	KEED	Kesinga	Borda	Seinpur	212	0	10.5
743	Kalahandhi	KEED	Kesinga	Kesinga	Town	69	0	10.7
744	Kalahandhi	KEED	Kesinga	Borda	Town(borda)	66	0	11
745	Kalahandhi	KEED	Kesinga	Nunmath	Tundla	80	0	10.8
746	Kalahandhi	KEED	Naktiguda	Karlapada-ss	chheliamal feeder	69	0	10.9
747	Kalahandhi	KEED	Naktiguda	Karlapada-ss	mading feeder	44	0	10.9
748	Kalahandhi	KEED	Naktiguda	Karlapada-ss	Chahagon	106	0	10.7
749	Kalahandhi	KEED	Naktiguda	Karlapada-ss	Karlapada	23	0	11
750	Kalahandhi	KEED	Naktiguda	Bandhopala (kandabandhapala	Bandhopala (kandabandhapala	349	203	9.5
751	Kalahandhi	KEED	Naktiguda	Naktiguda	Doordarshan	5	0	11
752	Kalahandhi	KEED	Naktiguda	Attanguda	Jugsaipatna	142	0	10.9
753	Kalahandhi	KEED	Naktiguda	Bhangabari	Kamathana	212	0	10.6
754	Kalahandhi	KEED	Naktiguda	Attanguda	Kerukunda	51	0	10.9
755	Kalahandhi	KEED	Naktiguda	Naktiguda	Medical-	141	0	10.1
756	Kalahandhi	KEED	Naktiguda	Naktiguda	N.sagada	86	0	10.8
757	Kalahandhi	KEED	Naktiguda	Bhangabari	Omfed	5	0	11
758	Kalahandhi	KEED	Naktiguda	Attanguda	Sagada	92	0	11
759	Kalahandhi	KEED	Naktiguda	Attanguda	Saidham	28	0	11
760	Kalahandhi	KEED	Naktiguda	Naktiguda	Town 1	48	0	10.6
761	Kalahandhi	KEED	Powerhouse	Rasingpurss	link_3	84	0	10.8
762	Kalahandhi	KEED	Powerhouse	Naktiguda	town 2	85	0	10.7

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
763	Kalahandhi	KEED	Powerhouse	Rasingpur ss	Raisingpur feeder	71	0	11
764	Kalahandhi	KEED	Powerhouse	Naktiguda	Town 3	32	0	10.9
765	Kalahandhi	KEED	Powerhouse	Kusadangar	Bhatangpadar	93	0	10.9
766	Kalahandhi	KEED	Powerhouse	Kusadangar	College	106	0	10.6
767	Kalahandhi	KEED	Powerhouse	Rasingpur ss	Dunguripadar	4	0	11
768	Kalahandhi	KEED	Powerhouse	Kusadangar	Jaleswar	55	0	10.5
769	Kalahandhi	KEED	Powerhouse	Kusadangar	Medinipur	173	87	9.2
770	Kalahandhi	KEED	Powerhouse	Bhangabari	Paramanadapur	9	0	11
771	Kalahandhi	KEED	Narla	Bandhapari	Bandhapari	12	0	11
772	Kalahandhi	KEED	Narla	Bandhapari	Bijepur	295	203	9.7
773	Kalahandhi	KEED	Narla	Bandhapari	Hatisal	133	0	10.3
774	Kalahandhi	KEED	Narla	Bandhapari	Musanal	61	0	10.9
775	Kalahandhi	KEED	Narla	Biswanathpur	Biswanathpur	22	0	11
776	Kalahandhi	KEED	Narla	Biswanathpur	Dumenmunda	21	0	11
777	Kalahandhi	KEED	Narla	Biswanathpur	Old lanjigarh	284	0	10.6
778	Kalahandhi	KEED	Narla	Biswanathpur	Pokharibandh	79	0	10.8
779	Kalahandhi	KEED	Narla	Juradubra	Kusurla	163	0	10.7
780	Kalahandhi	KEED	Narla	Juradubra	Regeda	202	0	10.7
781	Kalahandhi	KEED	Narla	Karlamunda	Karlamunda	114	0	10.9
782	Kalahandhi	KEED	Narla	Karlamunda	Putigaon	99	0	10.7
783	Kalahandhi	KEED	Narla	Karlamunda	Risida	338	0	10.3
784	Kalahandhi	KEED	Narla	Lanjigarh	Lanjigarh	141	0	10.8
785	Kalahandhi	KEED	Narla	M.rampur	Ambagaon	223	0	10.5
786	Kalahandhi	KEED	Narla	M.rampur	Barabandha	219	0	10.6
787	Kalahandhi	KEED	Narla	M.rampur	Block	42	0	11
788	Kalahandhi	KEED	Narla	M.rampur	Town	22	0	11
789	Kalahandhi	KEED	Narla	M.rampur	Urladani	238	0	10.5
790	Kalahandhi	KEED	Narla	Madanpur	Borighat	130	0	10.8
791	Kalahandhi	KEED	Narla	Madanpur	Dangabahal	114	0	10.9
792	Kalahandhi	KEED	Narla	Madanpur	Old regeda	85	0	10.5
793	Kalahandhi	KEED	Narla	Mohangiri banjamunda	D.karlakhunta	80	0	10.9
794	Kalahandhi	KEED	Narla	Mohangiri banjamunda	Mohangiri	212	0	10.4
795	Kalahandhi	KEED	Narla	Narla	Balipada	453	364	8.7
796	Kalahandhi	KEED	Narla	Narla	Chhatikuda	484	451	8.9
797	Kalahandhi	KEED	Narla	Narla	Kamardha	289	154	9.8
798	Kalahandhi	KEED	Narla	Narla	Nvodaya	40	0	10.9
799	Kalahandhi	KEED	Narla	Rupra road	Balbaspur	192	0	10.3

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
800	Kalahandhi	KEED	Narla	Rupra road	Mandel	65	0	11
801	Kalahandhi	KEED	Narla	Rupra road	Rupra	221	0	10.5
802	Kalahandhi	KEED	Narla	Rupra road	Rupra road-	19	0	11
803	Kalahandhi	NED	Khariar Road	Khariar road	Banka	72	0	10.9
804	Kalahandhi	NED	Khariar Road	Bisora	Beltukuri	198	169	9.6
805	Kalahandhi	NED	Khariar Road	Bisora	Bhelashwar	299	0	10.4
806	Kalahandhi	NED	Khariar Road	Khariar road	Biromal	377	164	9.8
807	Kalahandhi	NED	Khariar Road	Bisora	Bisora	79	0	10.8
808	Kalahandhi	NED	Khariar Road	Saipala	Derlimunda	249	0	10.2
809	Kalahandhi	NED	Khariar Road	Bisora	Kuliabandha	103	38	9.9
810	Kalahandhi	NED	Khariar Road	Khariar road	Patel nagar	44	0	10.7
811	Kalahandhi	NED	Khariar Road	Saipala	Saipala	62	0	10.9
812	Kalahandhi	NED	Khariar Road	Khariar road	Town	77	0	10.6
813	Kalahandhi	NED	Khariar	Badi	Areda	117	0	10.7
814	Kalahandhi	NED	Khariar	Timanpur	Babebir	175	0	10.7
815	Kalahandhi	NED	Khariar	Sinapali	Bargaon	361	292	9.3
816	Kalahandhi	NED	Khariar	Chalna	Bharmunda	95	0	10.7
817	Kalahandhi	NED	Khariar	Khariar	Boden	363	33	10
818	Kalahandhi	NED	Khariar	Boden	Boden (khariar)	49	0	10.9
819	Kalahandhi	NED	Khariar	Boden	Boirgaon	150	0	10.7
820	Kalahandhi	NED	Khariar	Chalna	Chalna	101	0	10.8
821	Kalahandhi	NED	Khariar	Badi	Chheliapada	29	0	10.2
822	Kalahandhi	NED	Khariar	Khariar	Duajhar	169	144	9.6
823	Kalahandhi	NED	Khariar	Timanpur	Gorla	104	0	10.8
824	Kalahandhi	NED	Khariar	Sinapali	Hathibandha	308	235	9
825	Kalahandhi	NED	Khariar	Sinapali	Kendumunda	395	90	9.9
826	Kalahandhi	NED	Khariar	Boden	Larka	332	0	10.7
827	Kalahandhi	NED	Khariar	Bargaon	Laxmipur	77	0	10.8
828	Kalahandhi	NED	Khariar	Khariar	Mission	69	0	10.8
829	Kalahandhi	NED	Khariar	Boden	Nagapada	71	0	10.6
830	Kalahandhi	NED	Khariar	Bargaon	New bargaon	27	0	10.9
831	Kalahandhi	NED	Khariar	Timanpur	Nilji	66	0	10.6
832	Kalahandhi	NED	Khariar	Khariar	Old bargaon	175	51	9.9
833	Kalahandhi	NED	Khariar	Khariar	Putupada	56	0	10.7
834	Kalahandhi	NED	Khariar	Bargaon	Rajamunda	145	0	10.6
835	Kalahandhi	NED	Khariar	Bargaon	Sanmaheswar	67	0	10.9
836	Kalahandhi	NED	Khariar	Chalna	Saradhapur	118	0	10.9
837	Kalahandhi	NED	Khariar	Badi	Sikuan	203	6	10
838	Kalahandhi	NED	Khariar	Sinapali	Sinapali	54	0	10.8
839	Kalahandhi	NED	Khariar	Khariar	Thana chhak	21	0	10.9
840	Kalahandhi	NED	Khariar	Timanpur	Timanpur	119	0	10.8
841	Kalahandhi	NED	Khariar	Khariar	Tukula	232	206	9.2
842	Kalahandhi	NED	Nuapada	Sarabong	Bhainsmundi	70	0	10.7

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
843	Kalahandhi	NED	Nuapada	Komna	Budhikomna	167	94	9.6
844	Kalahandhi	NED	Nuapada	Sarabong	Dharmabandh	314	0	10.4
845	Kalahandhi	NED	Nuapada	Saipala	Khairanji	181	0	10.7
846	Kalahandhi	NED	Nuapada	Komna	Komna town	82	0	10.9
847	Kalahandhi	NED	Nuapada	Komna	Konabira	131	0	10.2
848	Kalahandhi	NED	Nuapada	Batibahal	Kutribahal	247	0	10.3
849	Kalahandhi	NED	Nuapada	Kurumpuri	Lakhna	483	161	9.8
850	Kalahandhi	NED	Nuapada	Komna	Malimunda	112	0	10.3
851	Kalahandhi	NED	Nuapada	Nuapada	Railway	211	0	10
852	Kalahandhi	NED	Nuapada	Nuapada	Shakhatora	121	73	9.8
853	Kalahandhi	NED	Nuapada	Kurumpuri	Sialati	637	214	9.8
854	Kalahandhi	NED	Nuapada	Batibahal	Sunabeda	52	0	10.6
855	Kalahandhi	NED	Nuapada	Nuapada	Tanwat	142	0	10.6
856	Kalahandhi	NED	Nuapada	Sarabong	Tanwat/sarabong	228	0	10.8
857	Kalahandhi	NED	Nuapada	Kurumpuri	Tarbod	265	0	10.8
858	Kalahandhi	NED	Nuapada	Nuapada	Town	174	0	10.8
859	Kalahandhi	NED	Nuapada	Komna	Udyanbandh	263	0	10.6
860	Kalahandhi	KWED	Charbahal	Jaipatna	Jaipatna	103	0	10.5
861	Kalahandhi	KWED	Charbahal	Ladugaon	Ampani	232	0	10.2
862	Kalahandhi	KWED	Charbahal	Charbahal structure	Charbahal	41	0	10.9
863	Kalahandhi	KWED	Charbahal	Godramal structure	Chikili	390	363	7.5
864	Kalahandhi	KWED	Charbahal	Godramal structure	Chiliguda	194	0	10.3
865	Kalahandhi	KWED	Charbahal	Charbahal structure	Deundi	183	0	10.1
866	Kalahandhi	KWED	Charbahal	Ladugaon	Industrial	38	0	10.3
867	Kalahandhi	KWED	Charbahal	Godramal structure	Koksara	130	0	10.8
868	Kalahandhi	KWED	Charbahal	Ladugaon	Lodugaon	43	0	10.8
869	Kalahandhi	KWED	Charbahal	Mukhiguda	Mahulpatna	71	0	10.6
870	Kalahandhi	KWED	Charbahal	Mukhiguda	Manglapur	112	64	9.9
871	Kalahandhi	KWED	Charbahal	Charbahal structure	Moter	70	0	10.8
872	Kalahandhi	KWED	Charbahal	Mukhiguda	Mukhiguda	13	0	11
873	Kalahandhi	KWED	Charbahal	Godramal structure	Olma	18	0	10.9
874	Kalahandhi	KWED	Charbahal	Charbahal structure	Ranamal	155	0	10.7
875	Kalahandhi	KWED	Charbahal	Badakutru	Baner	176	128	9.6
876	Kalahandhi	KWED	Charbahal	Jaipatna	Banjibahal	140	71	9.9
877	Kalahandhi	KWED	Charbahal	Badakutru	Dhanpur	288	194	9.2
878	Kalahandhi	KWED	Charbahal	Mahichala	Kalopada	173	0	10.6
879	Kalahandhi	KWED	Charbahal	Temra	Kenduguda	103	0	10.8
880	Kalahandhi	KWED	Charbahal	Jaipatna	Khalibata	46	0	10.8
881	Kalahandhi	KWED	Charbahal	Temra	Kulerguda	54	0	10.5
882	Kalahandhi	KWED	Charbahal	Mahichala	Mahichala	89	0	10.8

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
883	Kalahandhi	KWED	Charbahal	Mahichala	Nandigaon	39	0	10.9
884	Kalahandhi	KWED	Charbahal	Jaipatna	New baner	14	0	10.9
885	Kalahandhi	KWED	Charbahal	Badakutru	Panigaon	80	0	10.7
886	Kalahandhi	KWED	Charbahal	Temra	Temra	49	0	10.9
887	Kalahandhi	KWED	Dharamgarh	Bhera structure	Chhanchanbahali	147	0	10.7
888	Kalahandhi	KWED	Dharamgarh	Kegaon structure	Badchergaon	327	207	9.4
889	Kalahandhi	KWED	Dharamgarh	Kegaon structure	Barack	1	0	11
890	Kalahandhi	KWED	Dharamgarh	Kasibahal structure	Basul	68	0	10.9
891	Kalahandhi	KWED	Dharamgarh	Kasibahal structure	Boden	53	0	10.9
892	Kalahandhi	KWED	Dharamgarh	Kasibahal structure	Indravati	18	0	11
893	Kalahandhi	KWED	Dharamgarh	Kasibahal structure	Kasibhal	31	0	11
894	Kalahandhi	KWED	Dharamgarh	Kegaon structure	Kegaon	66	0	10.8
895	Kalahandhi	KWED	Dharamgarh	Kegaon structure	Lanji	67	0	10.7
896	Kalahandhi	KWED	Dharamgarh	Dharmagarh	Behera	152	0	10.1
897	Kalahandhi	KWED	Dharamgarh	Bhera structure	Behera(dharamgarh)	69	0	10.8
898	Kalahandhi	KWED	Dharamgarh	Daspur	Brundhamal	145	0	10.8
899	Kalahandhi	KWED	Dharamgarh	Golamunda	Chaperia	164	0	10.7
900	Kalahandhi	KWED	Dharamgarh	Dharmagarh	Chhendia	184	169	9
901	Kalahandhi	KWED	Dharamgarh	Dharmagarh	Chilpa	288	89	9.7
902	Kalahandhi	KWED	Dharamgarh	Daspur	Daspur	41	0	10.9
903	Kalahandhi	KWED	Dharamgarh	Dharmagarh	Dharamgarh	149	0	10
904	Kalahandhi	KWED	Dharamgarh	Golamunda	Golamunda	45	0	10.8
905	Kalahandhi	KWED	Dharamgarh	Golamunda	Khaliakani	204	0	10.3
906	Kalahandhi	KWED	Dharamgarh	Daspur	Kumari	82	0	10.6
907	Kalahandhi	KWED	Dharamgarh	Bhera structure	Parla	96	0	10.6
908	Kalahandhi	KWED	Dharamgarh	Golamunda	Tamra	34	0	10.9
909	Kalahandhi	KWED	Junagarh	Daspur structure	faraung	169	0	10.4
910	Kalahandhi	KWED	Junagarh	Tetelkunti(tpsodl)	Goud -deopali	9	0	11
911	Kalahandhi	KWED	Junagarh	Adri structure	Adri	5	0	11
912	Kalahandhi	KWED	Junagarh	Adri structure	Dalguda	28	0	10.9
913	Kalahandhi	KWED	Junagarh	Adri structure	Gopinathpur	31	0	10.8
914	Kalahandhi	KWED	Junagarh	Adri structure	Maligaon	50	0	10.6
915	Kalahandhi	KWED	Junagarh	T rampur	Badchatrang	58	0	10.7
916	Kalahandhi	KWED	Junagarh	Chichiguda	Baldhiamal	101	0	10.6
917	Kalahandhi	KWED	Junagarh	Kalampur	Bandhakana	153	0	10.3
918	Kalahandhi	KWED	Junagarh	Kalampur	Bankapala	142	0	10.7

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
919	Kalahandhi	KWED	Junagarh	Chichiguda	Chicheiguda	211	13	10
920	Kalahandhi	KWED	Junagarh	Junagarh	Dasigaon	471	345	9.1
921	Kalahandhi	KWED	Junagarh	T rampur	Dumerpadar	60	0	10.6
922	Kalahandhi	KWED	Junagarh	T rampur	Gopalpur	314	253	9
923	Kalahandhi	KWED	Junagarh	K.singhpur(tpsodl)	Hatimunda	12	0	10.9
924	Kalahandhi	KWED	Junagarh	Kalampur	Kalampur	42	0	10.9
925	Kalahandhi	KWED	Junagarh	Junagarh	Kastura	106	0	10.8
926	Kalahandhi	KWED	Junagarh	Junagarh	Kuruguda	385	136	9.9
927	Kalahandhi	KWED	Junagarh	Tetelkunti(tpsodl)	Muran	3	0	11
928	Kalahandhi	KWED	Junagarh	Kalampur	Pandigaon	93	0	10.9
929	Kalahandhi	KWED	Junagarh	Chichiguda	S.kundamal	100	0	10.8
930	Kalahandhi	KWED	Junagarh	Kashipur(tpsodl)	Sunger	30	0	10.9
931	Kalahandhi	KWED	Junagarh	T rampur	T rampur	41	0	10.9
932	Kalahandhi	KWED	Junagarh	Junagarh	Town	101	0	10.7
933	Kalahandhi	KWED	Junagarh	Junagarh	Tulasipali	264	0	10.1
934	Bargarh	BED	Attabira	Attabira	Attabira town	89	0	10.7
935	Bargarh	BED	Attabira	Patrapali	Dunguripali	45	0	10.9
936	Bargarh	BED	Attabira	Gudbhanga	Godbhaga	244	166	9.6
937	Bargarh	BED	Attabira	Patrapali	Janhapada/rengali	47	0	10.7
938	Bargarh	BED	Attabira	Attabira	Kandpali	586	565	6.7
939	Bargarh	BED	Attabira	Patrapali	Khirapali	72	0	10.3
940	Bargarh	BED	Attabira	Gudbhanga	Larambha	259	240	8.4
941	Bargarh	BED	Attabira	Patrapali	Patrapali	26	0	10.9
942	Bargarh	BED	Attabira	Attabira	Saranda	108	40	9.8
943	Bargarh	BED	Attabira	Attabira	Rangali camp	215	186	8
944	Bargarh	BED	Bargarh-1	Division i	bandhutikra	52	0	10.8
945	Bargarh	BED	Bargarh-1	Division i	Private bus stand	58	0	10.8
946	Bargarh	BED	Bargarh-1	Division i	Bargarh town-1	88	0	10.1
947	Bargarh	BED	Bargarh-1	Division ii	Govindpali	94	0	10.3
948	Bargarh	BED	Bargarh-1	Division ii	Town-2	69	0	10.6
949	Bargarh	BED	Bargarh-2	Turunga	ambapali	139	0	10.5
950	Bargarh	BED	Bargarh-2	Turunga	new industrial	17	0	10.8
951	Bargarh	BED	Bargarh-2	Tora	remunda	162	0	10
952	Bargarh	BED	Bargarh-2	Turunga	barpali	212	133	9.4
953	Bargarh	BED	Bargarh-2	Turunga	deogaon	171	0	10.3
954	Bargarh	BED	Bargarh-2	Tora	Gaisima	152	107	9.7
955	Bargarh	BED	Bargarh-2	Turunga	old industrial	189	96	9.8
956	Bargarh	BED	Bargarh-2	Turunga	sohela	142	0	10.7
957	Bargarh	BED	Bargarh-2	Tora	sugarmill	69	0	10.8

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
958	Bargarh	BED	Bargarh-2	Tora	tora	44	0	10.9
959	Bargarh	BED	Bargarh-2	Pradahanpali	Attabira	138	0	10.1
960	Bargarh	BED	Bargarh-2	Khedapali	Bardol	203	108	9.5
961	Bargarh	BED	Bargarh-2	Pradahanpali	Industrial_i	123	55	9.7
962	Bargarh	BED	Bargarh-2	Pradahanpali	Industrial_ii	55	0	10.6
963	Bargarh	BED	Bargarh-2	Kamgaon	Kamgaon	295	144	9.6
964	Bargarh	BED	Bargarh-2	Khedapali	Katapali	55	0	10.8
965	Bargarh	BED	Bargarh-2	Pradahanpali	Old katapali	51	0	10.7
966	Bargarh	BED	Bargarh-2	Khedapali	Kamagaon old	11	0	11
967	Bargarh	BED	Bargarh-2	Kamgaon	Landijuri	82	0	10.6
968	Bargarh	BED	Bhatli	Ambabhona	ambabhona	59	0	10.9
969	Bargarh	BED	Bhatli	Bhatli	badmal	27	0	10.9
970	Bargarh	BED	Bhatli	Ambabhona	banjipali	6	0	11
971	Bargarh	BED	Bhatli	Bhatli	bartunda	143	118	9.6
972	Bargarh	BED	Bhatli	Bhukta	darlipali	23	0	10.7
973	Bargarh	BED	Bhatli	Raisobha	gopalpur	187	115	9.6
974	Bargarh	BED	Bhatli	Udayapali	hatisar	260	258	6.7
975	Bargarh	BED	Bhatli	Raisobha	jiratora	224	171	9.4
976	Bargarh	BED	Bhatli	Bhukta	kapasira	115	0	10.2
977	Bargarh	BED	Bhatli	Bhatli	kendugudia	214	187	9
978	Bargarh	BED	Bhatli	Ambabhona	sambalpuri	31	0	10.8
979	Bargarh	BED	Bhatli	Bhatli	sukuda	170	48	9.9
980	Bargarh	BED	Bhatli	Raisobha	tejagola	131	0	10.4
981	Bargarh	BED	Bhatli	Dungri	Badmal	143	0	10.1
982	Bargarh	BED	Bhatli	Bhatli	Bhatli town	66	0	10.4
983	Bargarh	BED	Bhatli	Bhukta	Bhukta	33	0	10.9
984	Bargarh	BED	Bhatli	Dungri	Dungri	18	0	11
985	Bargarh	BED	Bhatli	Kandpala	Kalmi	72	0	10.7
986	Bargarh	BED	Bhatli	Kandpala	Kandpala	27	0	11
987	Bargarh	BED	Bhatli	Kandpala	Kumbho	122	0	10.8
988	Bargarh	BED	Bhatli	Dungri	Lakhanpur	251	79	9.5
989	Bargarh	BED	Bhatli	Udayapali	Niljee	202	69	9.8
990	Bargarh	BED	Bhatli	Bhukta	Ruchida	152	0	10.3
991	Bargarh	BED	Bhatli	Bhatli	Temren	58	0	10.5
992	Bargarh	BED	Bheden	Bheden	Barpadar	115	0	10.3
993	Bargarh	BED	Bheden	Bheden	Bheden	69	19	10
994	Bargarh	BED	Bheden	Kuhuntulipali	Garvana	102	0	10.4
995	Bargarh	BED	Bheden	Kuhuntulipali	Industrial	11	0	10.9
996	Bargarh	BED	Bheden	Dhatkupali	Jamtikra	16	0	11
997	Bargarh	BED	Bheden	Dhatkupali	Kamgaon	14	0	11
998	Bargarh	BED	Bheden	Kuhuntulipali	Khuntulipali	96	0	10.7
999	Bargarh	BED	Bheden	Thuapali	Khutulipali	26	0	10.9
1000	Bargarh	BED	Bheden	Mahulpali(gandturum)	Mahulpali	96	0	10.7

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
1001	Bargarh	BED	Bheden	Dhatkupali	Papanga 2	70	0	10.7
1002	Bargarh	BED	Bheden	Thuapali	Papanga new	178	160	9.7
1003	Bargarh	BED	Bheden	Thuapali	Papanga old	165	82	9.8
1004	Bargarh	BED	Bheden	Thuapali	Remmunda	76	0	10.5
1005	Bargarh	BED	Bheden	Bheden	Sahara tikra	129	0	10.6
1006	Bargarh	BED	Bheden	Kuhuntulipali	Sankarda	103	0	10.3
1007	Bargarh	BED	Bheden	Mahulpali(gandturum)	Sialchandahat	135	0	10.6
1008	Bargarh	BED	Bheden	Thuapali	Thuapali	25	0	10.9
1009	Bargarh	BED	Bheden	Dhatkupali	Tilkinda(rusuda)	59	0	10.7
1010	Bargarh	BED	Bheden	Mahulpali(gandturum)	Turum	70	0	10.8
1011	Bargarh	BWED	Barpali	Charmunda	Agalpur	125	0	10.8
1012	Bargarh	BWED	Barpali	Barpali	Agalpur_b	23	0	10.8
1013	Bargarh	BWED	Barpali	Barpali	Badgaon	275	199	9.2
1014	Bargarh	BWED	Barpali	Barpali	Bandhapali	200	125	9.5
1015	Bargarh	BWED	Barpali	Barpali	Lenda	61	0	10.8
1016	Bargarh	BWED	Barpali	Barpali	Phulapali	189	167	9
1017	Bargarh	BWED	Barpali	Barpali	Rampur	269	261	9.2
1018	Bargarh	BWED	Barpali	Balitika	Reasama	292	153	9.4
1019	Bargarh	BWED	Barpali	Charmunda	Sujia	225	0	10.2
1020	Bargarh	BWED	Barpali	Charmunda	Tinkani	109	0	10.5
1021	Bargarh	BWED	Barpali	Barpali	Town	105	0	10.3
1022	Bargarh	BWED	Barpali	Balitika	Tulundi	347	273	9.2
1023	Bargarh	BWED	Padampur	Lakhmara	Badikata	477	453	8
1024	Bargarh	BWED	Padampur	Padampur	Barikel	307	178	9.7
1025	Bargarh	BWED	Padampur	Melchamunda	Belmunda	69	0	10.8
1026	Bargarh	BWED	Padampur	Padampur	Buden	8	0	11
1027	Bargarh	BWED	Padampur	Gaisilet	Buromunda	41	0	10.6
1028	Bargarh	BWED	Padampur	Dahita	Dangachhancha	264	0	10.7
1029	Bargarh	BWED	Padampur	Gaisilet	Fringimal	239	0	10.2
1030	Bargarh	BWED	Padampur	Gaisilet	Gaisilat	164	0	10.1
1031	Bargarh	BWED	Padampur	Padampur	Gaisilet	204	0	10.6
1032	Bargarh	BWED	Padampur	Melchamunda	Ghenss	195	95	9.6
1033	Bargarh	BWED	Padampur	Dahita	Jamartala	90	0	10.8
1034	Bargarh	BWED	Padampur	Kundakhai	Jamudpali	275	0	10.1
1035	Bargarh	BWED	Padampur	Kundakhai	Kundakhai	266	0	10.4
1036	Bargarh	BWED	Padampur	Padampur	Lakhmara	215	0	10.4
1037	Bargarh	BWED	Padampur	Gaisilet	Lebedi	282	0	10.5
1038	Bargarh	BWED	Padampur	Padampur	Melchamunda	431	222	9.8
1039	Bargarh	BWED	Padampur	Melchamunda	Melchanmunda	310	71	9.9
1040	Bargarh	BWED	Padampur	Lakhmara	Sambalpuri	251	0	10.8
1041	Bargarh	BWED	Padampur	Melchamunda	Sargibahal	366	341	9.4

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
1042	Bargarh	BWED	Padampur	Dahita	Sletpali	163	0	10.6
1043	Bargarh	BWED	Padampur	Gaisilet	Talpali	283	0	10.3
1044	Bargarh	BWED	Padampur	Padampur	Town-1	158	0	10.8
1045	Bargarh	BWED	Padampur	Padampur	Town-2	54	0	10.9
1046	Bargarh	BWED	Paikmal	Dunguripali	bhaisadhara	114	22	9.8
1047	Bargarh	BWED	Paikmal	Mandosil	chhineikela	150	0	10.5
1048	Bargarh	BWED	Paikmal	Paikmal	paikamal town	44	0	11
1049	Bargarh	BWED	Paikmal	Jhitiki	Barpali	60	0	10.9
1050	Bargarh	BWED	Paikmal	Mandosil	Bartunda	112	0	10.7
1051	Bargarh	BWED	Paikmal	Jhitiki	Bhubaneswarpur	53	0	10.8
1052	Bargarh	BWED	Paikmal	Jhitiki	Chhetagaon	30	0	10.9
1053	Bargarh	BWED	Paikmal	Paikmal	Chuhapali	59	0	10.7
1054	Bargarh	BWED	Paikmal	Dova	Dova	114	112	7.1
1055	Bargarh	BWED	Paikmal	Dunguripali	Dunguripali	61	0	10.7
1056	Bargarh	BWED	Paikmal	Dunguripali	Jagdalpur	114	78	9.9
1057	Bargarh	BWED	Paikmal	Jharbandh	Jharbandh	21	0	11
1058	Bargarh	BWED	Paikmal	Paikmal	Jharmunda	163	96	9.9
1059	Bargarh	BWED	Paikmal	Paikmal	Jhitiki	180	66	9.9
1060	Bargarh	BWED	Paikmal	Dova	Krulipali	289	277	7.4
1061	Bargarh	BWED	Paikmal	Mandosil	Mandosil	103	0	10.7
1062	Bargarh	BWED	Paikmal	Paikmal	Mandosil_paikamal	88	0	10.6
1063	Bargarh	BWED	Paikmal	Paikmal	Nursinghanath	36	0	10.8
1064	Bargarh	BWED	Paikmal	Jharbandh	Old dunguripali	80	52	9.7
1065	Bargarh	BWED	Paikmal	Jharbandh	Sargul	205	154	9.6
1066	Bargarh	BWED	Paikmal	Jharbandh	Tapen	346	322	8.7
1067	Bargarh	BWED	Sohela	Sarandapali	Banbaspali	263	182	9.21
1068	Bargarh	BWED	Sohela	Bijepur	Baramunda	466	401	6.94
1069	Bargarh	BWED	Sohela	Bijepur	Bijepur town	50	0	10.58
1070	Bargarh	BWED	Sohela	Dasmile	Bishalpali	278	264	6.03
1071	Bargarh	BWED	Sohela	Sohela	Chhuriapali	312	312	6.94
1072	Bargarh	BWED	Sohela	Dasmile	Dasmile	76	0	10.5
1073	Bargarh	BWED	Sohela	Ghenss	Ghenss	39	0	10.9
1074	Bargarh	BWED	Sohela	Sohela	Grinjel	102	94	7.91
1075	Bargarh	BWED	Sohela	Sohela	Industrial	73	0	10.57
1076	Bargarh	BWED	Sohela	Ghenss	Jampali	287	207	9.26
1077	Bargarh	BWED	Sohela	Bijepur	Jaring	200	112	9.36
1078	Bargarh	BWED	Sohela	Ghenss	Jhar	421	321	8.33
1079	Bargarh	BWED	Sohela	Arda	Jokiapali	250	191	7.82
1080	Bargarh	BWED	Sohela	Sohela	Kangaon	95	0	10.03
1081	Bargarh	BWED	Sohela	Sarandapali	Katapali	56	0	10.87
1082	Bargarh	BWED	Sohela	Dasmile	Kendipali	265	208	9.43
1083	Bargarh	BWED	Sohela	Bijepur	Kharmunda	308	299	8.53

S. No	Cricle	Division	Sub Division	Pss name	Feeder name	Total Section	Under Voltage Section	Minimum Voltage
1084	Bargarh	BWED	Sohela	Ghenss	Kuchipali	232	201	8.75
1085	Bargarh	BWED	Sohela	Arda	Laumunda	305	281	8.11
1086	Bargarh	BWED	Sohela	Sohela	Luhurachati	322	316	0.37
1087	Bargarh	BWED	Sohela	Bijepur	M.gandpali	144	88	8.96
1088	Bargarh	BWED	Sohela	Sohela	Padampur	358	337	6.59
1089	Bargarh	BWED	Sohela	Sarandapali	S.dumerpali	349	338	6.55
1090	Bargarh	BWED	Sohela	Arda	Saipali	311	206	8.94
1091	Bargarh	BWED	Sohela	Sarandapali	Sarandapali	183	88	9.76
1092	Bargarh	BWED	Sohela	Sohela	Sohela town	102	12	9.96
1093	Bargarh	BWED	Sohela	Dasmile	Srigida	193	151	9.57

Improvement in Network conditions

TPWODL has proposed capital expenditure of Rs. 1044.60 Cr in FY 21-22 & FY 22-23 and Hon'ble OERC has approved the Capital expenditure of Rs 810.85 Cr, details are mentioned in table-1 and table-2 shows the FY21-22 & FY22-23 expenditure details and present execution status. After completion of various projects under Capex Scheme and other govt. funded scheme, improvement observed in the existing network condition glimpse of which is shown in various photos.

Capex Expenditure Status for FY21-22:

Sl. No	Particulars	Capex Approved by OERC (Rs. Cr.)	Capitalized till Mar'22	Capitalized during FY 22-23 (till 14.11.22)	Expected Capitalisation for FY 22-23 (Must be full and final)
A	**Statutory, Safety and Security**				
1	Life enhancement of feeder network in respect of maintaining safe horizontal /vertical clearances	20.54	3.42	2.21	14.91
2	Provision of Safety Equipment & PPEs to workforce	12.05	2.07	5.03	4.95
3	Earthing, Fencing and Boundary Wall	55.54	16.76	10.59	28.19
4	Meter Testing Lab	10.35	5.92	0.00	4.43
Sub-Total		**98.48**	**28.17**	**17.83**	**52.48**
B	**Loss Reduction**				
1	Energy Meter Replacement	4.08	0.91	0.00	3.17
2	Technical Intervention-Installation of Smart meters	0.00	0.00	0	0
3	Refurbishment /augmentation of 33 kV/ 11 kV/ 0.415 kV network to reduce Losses	38.40	9.10	2.36	26.94
Sub-Total		**42.48**	**10.01**	**2.36**	**30.11**
C	**Network Reliability**				
1	Refurbishment/Life enhancement of 33/11 kV Primary Substation /Additional New Substations	20.16	0.02	1.24	18.90
2	Pilot Project for Installation of Fault Passage Indicator (FPI)	2.00	0.00	0	2

Capex plan for FY 23-24

Sl. No	Particulars	Capex Approved by OERC (Rs. Cr.)	Capitalized till Mar'22	Capitalized during FY 22-23 (till 14.11.22)	Expected Capitalisation for FY 22-23 (Must be full and final)
3	Augmentation of LV side protection System along with DT LA	12.45	0.00	0	12.45
4	Installation of AB switches/ Isolators/Insulators on 33 kV and 11 kV Network	14.30	2.54	1.81	9.95
Sub-Total		**48.91**	**2.56**	**3.04**	**43.31**
D	**Load Growth**				
1	Network enhancement / Unforeseen emergency Capex requirement	39.71	3.65	4.77	31.28
Sub-Total		**39.71**	**3.65**	**4.77**	**31.28**
E	**Technology and Civil Infrastructure**				
1	Infrastructure for Customer Care, Call Centre, Payment Centre, and Section Offices	2.04	0	0	2.04
2	IT & Technology for process efficiency	42.02	44.22	2.66	0
3	GIS Implementation	5.00	2.43	1.20	1.37
4	SCADA Implementation	15.30	10.84	1.37	3.10
5	GSAS Implementation	9.52	0.29	0.18	9.05
6	Security system in Central stores	1.05	0.23	0.10	0.72
7	Improvement of Civil Infrastructure	23.62	14.23	3.16	6.23
8	Ready to Use assets for Offices	5.00	0.76	0.00	4.24
Sub Total		**103.55**	**72.99**	**8.68**	**24.08**
Total		**333.13**	**117.39**	**36.68**	**179.06**

Capex Expenditure Status for FY22-23:

Sl. No.	Particulars	Capex Approved by OERC (Rs. Cr.)	Capitalized during FY 22-23 (till Oct-22)	Expected Capitalisation for FY 22-23	Proposed Capitalisation for FY 23-24
A	**Statutory, Safety and Security**				

Capex plan for FY 23-24

Sl. No.	Particulars	Capex Approved by OERC (Rs. Cr.)	Capitalized during FY 22-23 (till Oct-22)	Expected Capitalisation for FY 22-23	Proposed Capitalisation for FY 23-24
1	Life enhancement of network and maintaining safe horizontal / vertical clearances	15.09	0	9.05	6.04
2	Provision of Testing Equipment & PPEs to workforce	4.31	0	3.02	1.29
3	Earthing, Fencing	15.50	1.05	8.25	6.20
4	Boundary Wall and infrastructure works at Primary sub-station	17.50	4.29	6.21	7.00
Sub-Total		**52.40**	**5.34**	**26.53**	**20.53**
B	**Loss Reduction**				
1	Energy Audit & Meter related activity	13.52	0	9.46	4.06
2	Spot Billing	3.20	0	2.24	0.96
3	Replacement of LT Bare conductor with AB cable	30.08	0.51	20.55	9.02
Sub-Total		**46.80**	**0.51**	**32.25**	**14.04**
C	**Network Reliability**				
1	Replacement/Addition of network component in 33/11 kV PSS	51.74	0.17	33.46	18.11
2	Replacement/Addition of network component in 33/11 kV Line	52.00	0	33.80	18.20
3	Replacement/Addition of network component in Distribution Substation	14.60	0.15	9.34	5.11
Sub-Total		**118.34**	**0.32**	**76.60**	**41.42**
D	**Load Growth**				
1	Network enhancement / Unforeseen emergency	145.57	2.58	92.04	50.95
Sub-Total		**145.57**	**2.58**	**92.04**	**50.95**
E	**Technology and Civil Infrastructure**				
1	Infrastructure to meet Customer needs	2.78	0	1.95	0.83
2	Technology Intervention-IT & Technology	48.19	4.64	29.09	14.46
3	Technology Intervention-GIS, SCADA & Others Implementation	40.1	0.05	28.02	12.03

Capex plan for FY 23-24

Sl. No.	Particulars	Capex Approved by OERC (Rs. Cr.)	Capitalized during FY 22-23 (till Oct-22)	Expected Capitalisation for FY 22-23	Proposed Capitalisation for FY 23-24
4	Improvement of Civil Infrastructure	18	1.71	10.89	5.40
5	Store infrastructure	4.04	0	2.83	1.21
6	Ready to Use assets for Offices	1.5	0	1.05	0.45
7	EV Charging in TPWODL Area	0	0	0.00	0.00
Sub Total		**114.61**	**6.4**	**73.827**	**34.383**
Total		**477.72**	**15.15**	**301.25**	**161.32**

Improvement in Civil infrastructure:

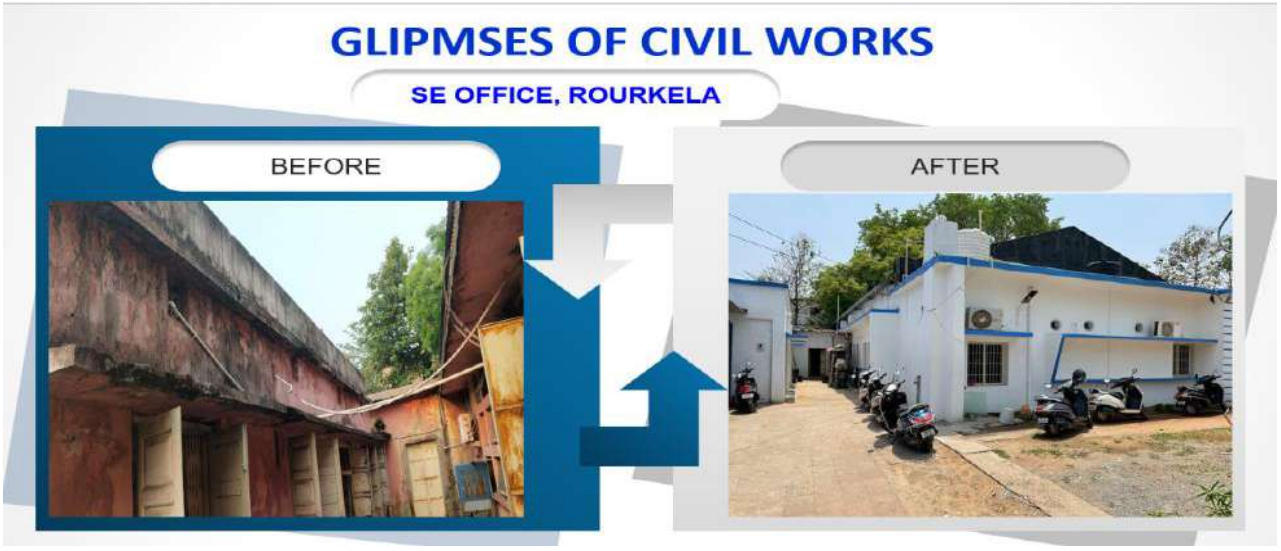
During the initial phase, Civil infrastructures were in very deteriorated condition and to improve the existing facilities and infrastructure by necessary civil jobs and IT facilities to provide a better consumer experience and a modern, rich, and conducive work environment to all employees for better performance. Here are some glimpses of Civil work of our Offices located in different circles after enfusing capex for last 2 years.


GLIPMSES OF CIVIL WORKS
SE OFFICE, SAMBALPUR
BEFORE
AFTER


GLIPMSES OF CIVIL WORKS
WEST OFFICE, BURLA
BEFORE
AFTER


GLIPMSES OF CIVIL WORKS
Dispensary, Sambalpur
BEFORE
AFTER


GLIPMSES OF CIVIL WORKS
Kalaibadi CRC, Sambalpur
BEFORE
AFTER


GLIPMSES OF CIVIL WORKS
SE OFFICE, ROURKELA
BEFORE
AFTER


GLIPMSES OF CIVIL WORKS
SE OFFICE, BALANGIR
BEFORE
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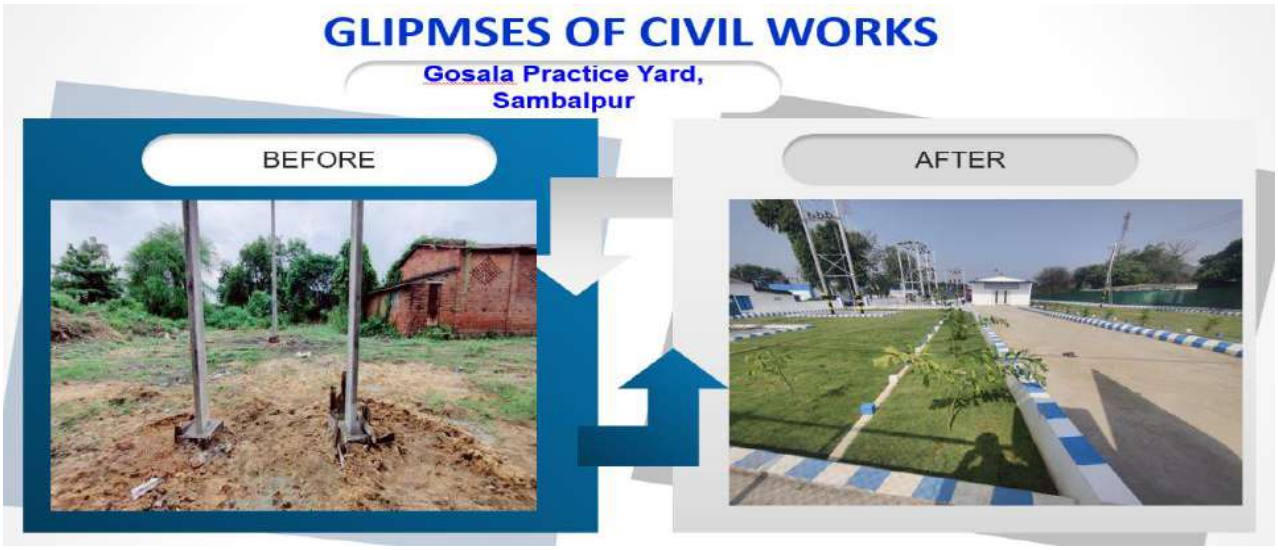

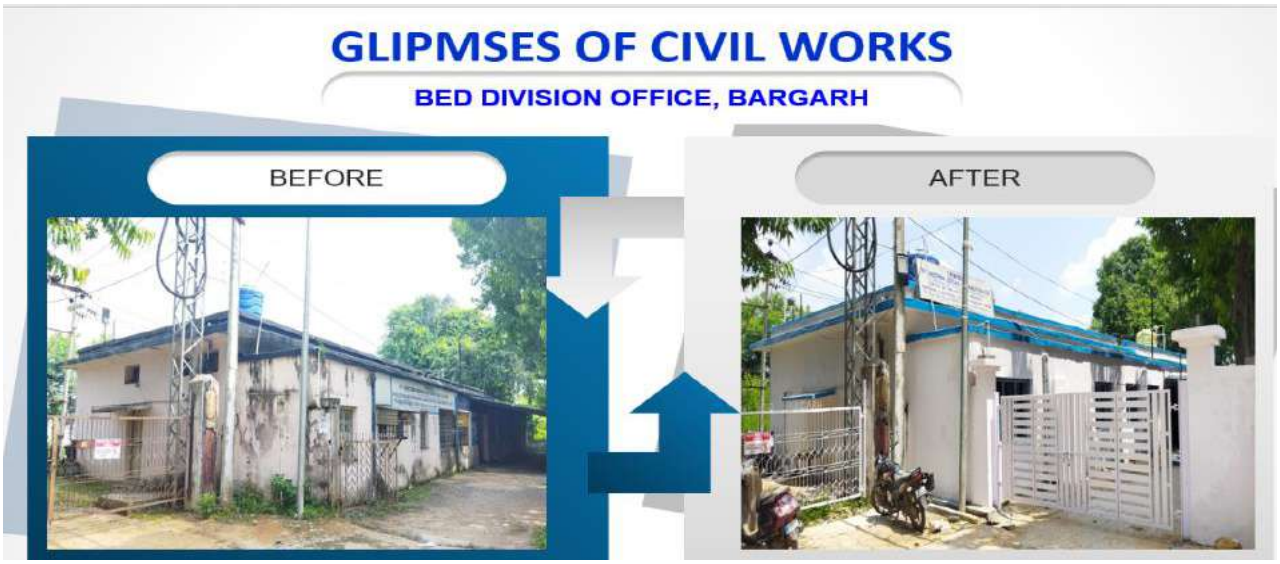

Before & After

11/0.415 kV Distribution Substations (DSS) boundary fencing at most of the places were observed either damaged or not available, posing major safety threat to public and animals.

Also, at many 33/11 KV primary substations (Structures or PSS), boundary walls are observed broken and there is no fencing between the substation premises and 33KV outdoor switchyard. This makes the PSS highly unsafe, as there were chances of entry of unauthorized persons and animals into the live switchyard and undue accident / incident. glimpses of Before & After of fencing at various locations.

Most of the AB switches and DD fuse were bypassed/damaged. There was no effective LT feeder protection system in place at the secondary side of most Distribution Substations. In place of LT Fuse box/MCCB box/ feeder Pillar, aluminum wire was used as fuse wire on the secondary side of the distribution substations at all substations. These fuse units were installed at very low height and with no fencings at DSS making it potential safety threat to general public and animals. Earthing system was also in bad condition in almost all feeders and substations. All of the above deficiencies make the distribution substations highly unsafe and unreliable, which may lead to potential accidents.


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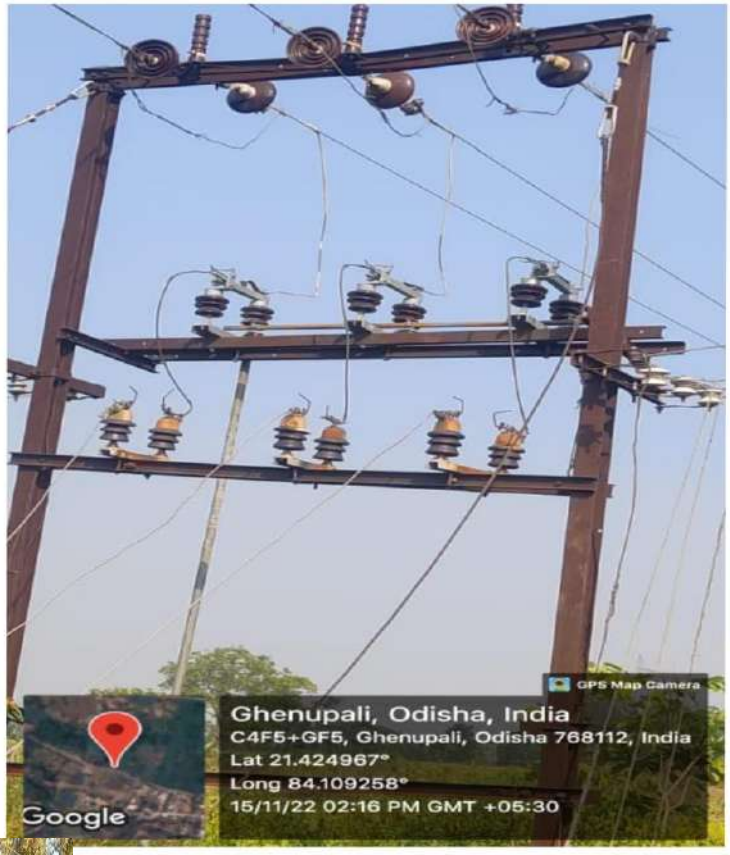
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Unnamed Road, Pudapada, Odisha 768112, India
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5 Year CAPEX Plan and left out infrastructure requirement

Since the geography is vast and huge investment is required to make the network fully compliant to safety and statutory standards, reliable and to meet the load growth in the system, huge investment is required which is not possible in a single year, TPWODL shall address network deficiencies at critical locations. TPWODL has identified the proposals which needs to be executed in order to maintain the reliable power supply to the consumer. One of the most important reason for failure of PTR, DTR, 33KV lines, 11KV Lines and various equipment inside PSS is due to the natural ageing. Many of the Lines, PSS and PTRs in TPWODL system have been in service for more than 25 years and have served their useful life.

These network equipment and lines 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 and DTRs. Over the years this would lead to gradual degradation of the winding insulation causing PTR and DTR failures. Repairs to these transformers, lines and equipment 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 networks, it becomes worthwhile to replace the aged asset. Considering the age factor and load growth requirement of the system. Overall expenditure requirement to meet the load growth and replacement of aged PTRs, DTRs, lines and network equipment is proposed. In addition to network Civil infrastructure also required huge investement to maintain the existing buildings and construct new building, offices, customer service centre to serve the customer and increasing employee demands.

➢ Operations Five Years Capex Plan:

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
											19134		83469		76570		68555		250683
1	NEW 33KV LINE	33KV LINE	232 sqmm	CKM	792.20	27.31	21633	70	115	24	655	265.7	7256	190.3	5197	127.2	3474	0	0
		33KV LINE	3X400SQMM XLPE	KM	5.30	77.30		0	0	3	232	0	0	2.3	178	0	0	0	0
2	33KV AUG.	33KV LINE	232 sqmm	CKM	2272	18.26	41476	42	42	33	602	200	3651	200	3651	200	3651	155	28387
3	NEW 11KV LINE	11KV LINE	100sqmm	CKM	835	17.13	14302	60	100	65	1113	290.4	4973	132.5	2270	56.3	964	20	343
4		11KV LINE	148sqmm			18.86	0	43	40	0	0	38.8	732	10	189	0	0	0	0
		11KV LINE	3X300SQMM XLPE	KM	8	67.43	539	0	0	3	202	5	337	0	0	0	0	0	0
5	11KV AUG. LINE	11KV LINE	100sqmm	CKM	13203	10.99	145139	100	200	182	2001	400	4397	500	5496	500	5496	10000	109929
6		11KV LINE	148sqmm			19.28	0	65	100		0	100	1928	100	1928	100	1928	856	16504
7	NEW LT LINE	LT LINE	95sqmm	KM	857	10.37	8889	0	50	73	757	100	1037	100	1037	100	1037	100	1037
8		LT LINE	120sqmm			14.20	0	0	36	10	142	100	1420	100	1420	40	568	48	682
9	CONVERSION OF LT BARE TO AB CABLE	LT LINE	95sqmm	KM	12335	8.51	104971	250	200	420	3574	2000	17020	2000	17020	2000	17020	4000	34040
10		LT LINE	120sqmm			12.44	0	0	100	50	622	150	1866	150	1866	215	2675	800	9952

Kshirod Ch Nanda

Capex plan for FY 23-24

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
11	CONVERSION OF OPEN CONDUCTOR TO COVERED CONDUCTOR	Covered conductor	100sqmm	KM	300	20.94	6281	50	102	24	503	32	670	32	670	60	1256	0	0
12	National Highway, SH & River Crossing crossing with Guarding on 16 Mtr Pole	ROAD CROSSING	16MTR POLE	NOS	300	3.83	1149	0	0	52	199	50	192	50	192	50	192	98	375
13	Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new CR PANLE (O/D CT-) (including civil &control cable)	VCB	11KV	NOS	206	11.45	2359	50(only VCB)	60	35	401	35	401	26	298	0	0	0	0
14	Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new CR PANLE (O/D CT-) (including civil &control cable)	VCB	33KV	NOS	200	14.71	2942	20(only VCB)	40	15	221	25	368	25	368	25	368	50	735
19	Replacement of station Transformer - 33/0.4KV 100KVA Trf.	PTR 33/0.4	33KV	NOS	120	9.75	1170	15	15	5	49	15	146	15	146	15	146	40	390
20	Replacement of Battery 24V	BATTERY & CHARGER		NOS	200	0.54	3	45	35	30	16	30	16	30	16	30	16	0	0
21	Battery Charger 24V	BATTERY & CHARGER		NOS	200	2.81	3	45	35	30	84	30	84	30	84	30	84	0	0

Capex plan for FY 23-24

TPWODL

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
22	Replacement of Battery 48V	BATTERY & CHARGER		NOS	50	1.14	3	15	5	5	6	10	11	15	17	0	0	0	0
23	Battery Charger 48 V	BATTERY & CHARGER		NOS	50	2.93	3	15	5	5	15	10	29	15	44	0	0	0	0
24	INSTALLATION OF 33KV FPI	FPI	33KV	NOS	300	1.05	315	45	35	12	13	50	53	50	53	50	53	58	61
25	INSTALLATION OF 11KV FPI	FPI	11KV	NOS	300	0.84	251	45	80	102	85	30	25	30	25	13	11	0	0
26	INSTALLATION OF 33KV AB SWITCHES	AB SWITCHES	33KV	NOS	2000	0.65	1300	300	800	0	0	200	130	200	130	200	130	300	195
27	INSTALLATION OF 11KV AB SWITCHES	AB SWITCHES	11KV	NOS	10000	0.5	5000	1200	1100	200	100	1500	750	1500	750	1500	750	3000	1500
28	INSTALLATION OF 33KV ISOLATORS	ISOLATORS	33KV	NOS	796	2.26	1799	50	100	73	165	150	339	150	339	150	339	123	278
29	INSTALLATION OF 11KV ISOLATORS	ISOLATORS	11KV	NOS	300	1.5	450	0	100	20	30	40	60	40	60	50	75	50	75
30	INSTALLATION 33KV 4 way RMU	RMU	33KV	NOS	70	48.60	3402	0	0	2	97	20	972	10	486	10	486	28	1361
31	INSTALLATION 33KV 3way RMU	RMU	33KV	NOS	30	37.40	1122	0	6	0	0	6	224	6	224	6	224	6	224
32	INSTALLATION 11KV 3 way RMU	RMU	11KV	NOS	100	15.46	1546	0	20	7	108	20	309	10	155	10	155	33	510
33	INSTALLATION 11KV 4 way RMU	RMU	11KV	NOS	56	19.11	1070	0	10	0	0	10	191	10	191	10	191	16	306
34	INSTALLATION 11 KV Auto Reclosure	AUTORECLOSER &	11KV	NOS	154	7.72	1189	0	34	7	54	30	232	30	232	30	232	23	178

Capex plan for FY 23-24

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
		SECTIONALISER																	
35	INSTALLATION 11 KV Sectionaliser	AUTORECLOSER & SECTIONALISER	11KV	NOS	462	7.24	3345	0	102	21	152	90	652	90	652	90	652	69	500
36	INSTALLATION 33 KV Auto Reclosure	AUTORECLOSER & SECTIONALISER	33KV	NOS	37	20.10	744	0	7	0	0	10	201	10	201	10	201	0	0
37	INSTALLATION 33 KV Sectionaliser	AUTORECLOSER & SECTIONALISER	33KV	NOS	111	11.47	1273	0	21	0	0	30	344	30	344	30	344	0	0
38	NEW 25KVA DTR	DTR 11/0.4 KV	NEW	NOS	450	6.63	2982	0	100	0	0	100	663	100	663	150	994	0	0
39	AUG. 25KVA DTR	DTR 11/0.4 KV	AUG FROM 1 PH TO 3 PH	NOS	2200	4.94	10868	0	400	50	247	500	2470	500	2470	500	2470	250	1235
40	NEW 63KVA DTR	DTR 11/0.4 KV	NEW	NOS	450	6.91	3110	0	0	10	69	100	691	100	691	100	691	140	967
41	AUG 63KVA DTR	DTR 11/0.4 KV	AUG	NOS	900	4.39	3951	0	50	30	132	200	878	200	878	200	878	220	966
42	AUG 63KVA DTR	DTR 11/0.4 KV	AUG FROM 1 PH TO 3 PH	NOS	1150	6.21	7142	0	100	160	994	200	1242	200	1242	200	1242	290	1801
43	NEW 100 KVA DTR	DTR 11/0.4 KV	NEW	NOS	200	7.55	1510	0	0	0	0	50	377.5	50	378	50	378	50	378

Capex plan for FY 23-24

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
44	AUG 100 KVA DTR	DTR 11/0.4 KV	AUG	NOS	600	4.97	2982	0	0	0	0	100	497	100	497	100	497	300	1491
45	NEW 250 KVA DTR	DTR 11/0.4 KV	NEW	NOS	100	11.41	1141	0	0	0	0	20	228.2	20	228	20	228	40	456
46	AUG 250 KVA DTR	DTR 11/0.4 KV	AUG	NOS	500	9.05	4525	0	50	21	190	100	905	100	905	100	905	129	1167
47	NEW 315 KVA DTR	DTR 11/0.4 KV	NEW	NOS	200	15.84	3168	0	0	0	0	20	316.8	20	317	10	158	150	2376
48	AUG 315 KVA DTR	DTR 11/0.4 KV	AUG	NOS	300	12.58	3774	0	0	0	0	50	629	50	629	50	629	150	1887
49	NEW 500KVA DTR	DTR 11/0.4 KV	NEW	NOS	100	18.81	1881	0	0	0	0	25	470	25	470	25	470	25	470
50	AUG 500 KVA DTR	DTR 11/0.4 KV	AUG	NOS	500	15.29	7645	0	0	20	306	75	1147	75	1147	75	1147	255	3899
51	NEW 750 KVA DTR	DTR 11/0.4 KV	NEW	NOS	60	28.09	1685	0	0	0	0	20	562	20	562	10	281	10	281
52	AUG 750 KVA DTR	DTR 11/0.4 KV	AUG	NOS	100	23.20	2320	0	0	20	464	20	464	20	464	10	232	30	696
53	NEW 1MVA DTR	DTR 11/0.4 KV	NEW	NOS	10	36.22	362	0	0	0	0	2	72	2	72	2	72	4	145
54	AUG 1MVA DTR	DTR 11/0.4 KV	AUG	NOS	40	30.67	1227	0	4	3	92	6	184	6	184	2	61	19	583
55	AUG 5MVA PTR	PTR 33/11 KV	AUG	NOS	44	83.30	3665	0	0	2	167	10	833	10	833	5	417	17	1416
56	NEW 5MVA PTR	PTR 33/11 KV	NEW	NOS	15	142.22	2133	0	0	0	0	5	711	5	711	5	711	0	0
57	AUG 8MVA PTR	PTR 33/11 KV	AUG	NOS	54	109.96	5938	4	10	2	220	10	1100	10	1100	5	550	13	1429
58	NEW 8MVA PTR	PTR 33/11 KV	NEW	NOS	15	171.13	2567	0	0	0	0	5	856	5	856	5	856	0	0
59	NEW 12.5 MVA PTR	PTR 33/11 KV	NEW	NOS	4	260.90	1044	0	0	0	0	2	522	2	522		0	0	0

Capex plan for FY 23-24

TPWODL

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
60	AUG 12.5MVA PTR	PTR 33/11 KV	AUG	NOS	12	188.33	2260	0	2	0	0	2	377	2	377	2	377	4	753
61	Refurbishment of above 100 KVA DTR along with LT Protection, Earthing etc.(Other than Augmentation)	LT	100KVA	ALL MAT INCLUDED ACB,MCCB,AB SWITCH	15000	2.40	36000	1400	1400	140	336	2000	4800	2000	4800	2000	4800	6060	14544
62			250KVA		1000	2.74	2740	200	300	70	192	100	274	100	274	100	274	130	356
63			315KVA		300	3.84	1152	100	50	60	230	20	77	20	77	50	192	0	0
64			500KVA		450	3.91	1760	200	150	50	196	10	39	10	39	30	117	0	0
65			750KVA		30	4.75	143	10	10	5	24	5	24	0	0	0	0	0	0
66			1000KVA		20	5.19	104	0	5	5	26	10	52	0	0	0	0	0	0
67	Addition of New 11KV/ 33 KV Bay			NOS	50	10	500	0	5	0	0	10	100	10	100	10	100	15	150
68	Construction of new Container Type PSS along with line in urban area			NOS	3	1250	3750	2	0	0	0	1	1250	0	0	0	0	0	0
69	Construction of new Conventional Type PSS along with line in urban area			NOS	6	900	5400	0	0	2	1800	2	1800	2	1800	0	0	0	0
70	DSS EARTHING	EARTHING		NOS	5000	1.21	6060	300	500	0	0	1000	1212	1000	1212	1000	1212	1200	1455
71	PSS EARTHING	EARTHING		NOS	200	0.39	78	50	100	0	0	10	4	10	4	10	4	20	8
72	REPLACEMENT OF 11KV POLYMER INSULATORS	INSULATORS		NOS	150000	0.01	1500	5000	10000	0	0	40000	400	40000	400	40000	400	15000	150
73	REPLACEMENT OF 33KV POLYMER INSULATORS	INSULATORS		NOS	100000	0.01	1000	4000	4000	0	0	20000	200	20000	200	20000	200	32000	320

Capex plan for FY 23-24

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
74	TOWER REPLACEMENT	TOWER		NOS	120	33	3960	0	0	6	198	30	990	30	990	30	990	24	792
75	Refurbishment work in PSS (Structure Replacement / Yard Refurbishment)	PSS		NOS	200	4.9	980	40	40	40	196	20	98	20	98	20	98	20	98
76	Intermediate Pole Increase of height for 11 kV and 33 kV sagging line.	LT	9MTR POLE	NOS	35000	0.12	4200	200	200	50	6	10000	1200	10000	1200	10000	1200	4550	546
77		11KV	11MTR RS JOIST POLE	NOS	8000	0.51	4080	50	50	50	26	2000	1020	2000	1020	2000	1020	1850	944
78		11KV	9MTR PSC	NOS	30000	0.14	4200	350	350	500	70	10000	1400	10000	1400	3000	420	5800	812
79		33KV LINE	13MTR JOIST POLE	NOS	1000	0.63	630	50	100	0	0	500	315	350	221	0	0	0	0
80		33KV LINE	11MTR RS JOIST POLE	NOS	1006	0.52	523	150	100	190	99	556	289	0	0	0	0	10	5
81	HIGH MAST LIGHT	LIGHT		NOS	100	4.56	456	15	15	11	50	10	46	10	46	10	46	29	132
82	RAILWAY CROSSING	33KV LINE	XLPE 3X 400	PER CROSSING	20	11.07	221	0	0	5	55	5	55	5	55	5	55	0	0
83		11KV LINE	XLPE 3X 400	PER CROSSING	40	9.6	384	0	0	5	48	10	96	10	96	5	48	10	96

Capex plan for FY 23-24

S. No	Description	Avtivity		UOM	TOTAL QTY	Unit Cost Including Service Lakh	Total Cost In lakh	FY'21-22	FY'22-23	FY23'-24		FY'24-25		FY'25-26		FY'26-27		Balance	
								Qty	Qty	Proposed Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)	Qty	Amount (Lakhs)
84	Replacement of Indoor switchgear Protection Panel along with associated equipment	no of pss			15	100	1500	0	1	2	200	3	300	3	300	3	300	3	300
85	Replacement of Defective relays	Lumpsum			5	100	500	0	1	1	100	1	100	1	100	1	100	0	0
86	Testing Equipment	Lumpsum			10	100	1000	7	1	1	100	1	100	0	0	0	0	0	0
87	Neon Tester	Nos	Safety		2000	0.09	180	600	300	300	27	200	18	200	18	200	18	200	18
88	Discharge Rod	Nos	Safety		4000	0.13	520	300	300	300	39	400	52	400	52	400	52	1900	247
89	Porta Cabin	Nos	Safety		5	7.6	38	0	0	5	38		0		0		0	0	0

- **Capex Plan for Civil Work for Five Years:**

Description of Structure	Unit	Rate (Lacs)	Quantity								Amount							
			FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total
New Office for Seating Arrangement	Nos	100	6	2	1	1	1			11	600	200	100	100	100	0	0	1100
Renivation Office for Seating Arrangement	Nos	30	4							4	120							120
Circle Office - New	Nos	80	0	2						2	0	160	0	0	0	0	0	160
Circle Office - Renovation	Nos	50	3							3	150							150

Capex plan for FY 23-24

Description of Structure	Unit	Rate (Lacs)	Quantity								Amount							
			FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Division Office - New	Nos	80	0	3	7					10	0	240	560	0	0	0	0	800
Division Office - Renovation	Nos	50	2	5						7	100	250	0	0	0	0	0	350
Sub Division Office - New	Nos	33	1	10	10	9				30	33	330	330	297	0	0	0	990
Sub Division Office - Renovation	Nos	18	1	10	10	6				27	18	180	180	108	0	0	0	486
Section Office - New	Nos	33	5	20	20	18				63	165	660	660	594	0	0	0	2079
Section Office - Renovation	Nos	18	2	20	35	56	25			138	36	360	630	1008	450	0	0	2484
Customer Care - New	Nos	24	0	12	3	3				18	0	288	72	72	0	0	0	432
Customer Care - Renovation	Nos	12	0	3	2	2				7	0	36	24	24	0	0	0	84
New Store	Nos	50	2	6	2	1				11	100	300	100	50	0	0	0	550
Store Development	Sq m	0.03	4000	6000	6000	10000	10000	8000		44000	120	180	180	300	300	240	0	1320
DTR Fencing	Nos	1.2	490	700	700	800	800	800	700	4990	588	840	840	960	960	960	840	5988
PSS / Area Boundary Wall - New	RM	0.14	3000	4000	4000	4000	4000	4000	3000	26000	420	560	560	560	560	560	420	3640
PSS / Area Boundary Wall - Renovation	RM	0.1	250	2000	1500	1500	2000	1500	1500	10250	25	200	150	150	200	150	150	1025
PSS Control Room New	Nos	30	0	0	8	8				16	0	0	240	240	0	0	0	480

Capex plan for FY 23-24

Description of Structure	Unit	Rate (Lacs)	Quantity								Amount							
			FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total
PSS Control Room Renovaion	Nos	20	0	15	25	30	30	30	20	150	0	300	500	600	600	600	400	3000
Switchyard development & Gravelling	Sqm	0.01	0	15000	15000	25000	25000	20000		100000	0	150	150	250	250	200	0	1000
Switchyard / Other Area Road & Drain	RM	0.13	500	1500	2000	2000	2000	1500	1000	10500	65	195	260	260	260	195	130	1365
Conference Room Cum Training Center	Nos	50	2	2	2	2				8	100	100	100	100	0	0	0	400
Guest House	Nos	100	0		1	1	2	2		6	0	0	100	100	200	200	0	600
Fuse Call Centre - New	Nos	6	0	20	30	30				80	0	120	180	180	0	0	0	480
Fuse Call Centre - Renovation	Nos	3	0	30	45	45				120	0	90	135	135	0	0	0	360
DTR Plinth	Nos	0.5	25	75	100	100	100	100	100	600	12.5	37.5	50	50	50	50	50	300
Circuit Breaker / Other Foundation - New	Nos	0.5	10	50	50	50	50	50	50	310	5	25	25	25	25	25	25	155
Wash Room - New	Nos	3	90	160	140	100				490	270	480	420	300	0	0	0	1470
Wash Room - Renovation	Nos	1	10	20	20	20				70	10	20	20	20	0	0	0	70
Practice Yard	Nos	15	6							6	90				0	0	0	90
Total Amount (Rs. Cr)											**30.28**	**63.02**	**65.66**	**64.83**	**39.55**	**31.8**	**20.15**	**315.3**

- **Capex Plan for MMG For Five Years:**

Sl. No	Project Name	UoM	FY 24	FY 25	FY 26	FY 27	FY 28	Total
1	Installation of 1Ph Smart Meter	Nos. Lakh	1.5	1.5	2	2	2	9
		Rs Cr	52.5	52.5	70	70	70	315
2	Metering of LI connections with smart meter	Nos. Lakh	0.25	0.25	0.25	0.25	0.3	1.3
		Rs Cr	19.9	19.9	19.9	19.9	23.88	103.48
3	Installation of LT Distribution boxes on poles	Nos. Lakh	0.5	1	1.5	1	1	5
		Rs Cr	14.54	29.1	43.6	29.1	29.1	145.35
4	Replacement of 1 Phase Defective/faulty meters	Nos. Lakh	1.5	1.5	1.5	1.5	1.5	7.5
		Rs Cr	24.15	24.15	24.15	24.15	24.15	120.75
	TOTAL CAPEX		**111.09**	**125.62**	**157.66**	**143.12**	**147.10**	**684.58**

Kshirod Ch Nanda

Capex plan for FY 23-24

- **Capex Plan for IT For Five Years:**

Department	Financial Years				
	FY 23	FY 24	FY 25	FY 26	FY 27
Information Technology	OCR/AI based meter reading E-Office Implementation Implementation of integrated contact center Strengthening of DC infrastructure 100% e-waste management Achieving digitalization index of 75%	Commissioning Disaster Recovery Center for TPWODL at Bhubaneswar Commissioning facilities including common infrastructure for Disaster Recovery Center at Sambalpur for other 3 Odisha DISCOMs Digitization of documents Achieving digitalization index of 90% ISO 27001 certification	Achieving digitalization index of >95% Implement predictive analysis CMMi-3 certification	Home automation Blockchain technology in accounting	Demand Response (DR) Covering 50% consumer base through e-bills only CMMi-5 certification

Capex plan for FY 23-24

➢ Capex Plan for OT For Five Year:

CAPEX								
Sl. No.	Description	FY 21-22 Amount (Rourkela)	FY 22-23 Amount (Bargarh & Rourkela)	FY 23-24 Amount (Sambalpur, Bolangir & Bhawanipatna)	FY 24-25 Amount (Bhawanipatna)	FY 25-26 Amount	FY 26-27 Amount	Total
1	Software Licenses	₹ 2,85,02,921.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 2,85,02,921.00
2	Installation, Commissioning of GIS System and other work as per scope of work	₹ 0.00	₹ 3,34,47,286.80	₹ 18,58,182.60	₹ 18,58,182.60	₹ 0.00	₹ 0.00	₹ 3,71,63,652.00
3	Network Component for Development	₹ 80,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 80,00,000.00
4	Highend PC,Printer,Plotter,& Mobile Devices	₹ 0.00	₹ 27,00,000.00	₹ 20,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 47,00,000.00
5	Production HW	₹ 25,00,000.00	₹ 25,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 50,00,000.00
6	Network Component for production	₹ 0.00	₹ 20,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 20,00,000.00
7	Image procurement (As per Annexure-6: Imagery requirement and considerations)	₹ 0.00	₹ 1,06,20,000.00	₹ 1,94,70,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 3,00,90,000.00
8	Base Map creation, Data survey, digitization, QC for pilot area (As per Annexure-6)	₹ 1,17,68,446.90	₹ 14,86,03,955.10	₹ 31,73,68,520.00	₹ 6,30,64,217.00	₹ 0.00	₹ 0.00	₹ 54,08,05,139.00
9	Asset Sequence generation and painting	₹ 0.00	₹ 1,76,06,718.20	₹ 3,80,78,232.00	₹ 2,52,31,292.00	₹ 0.00	₹ 0.00	₹ 8,09,16,242.20
10	Auto Cad Licesnse & SLD digitization	₹ 10,76,160.00	₹ 5,21,256.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 15,97,416.00
11	Analysis and Map publishing tool	₹ 0.00	₹ 34,30,057.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 34,30,057.00
12	Staggered license (lot of 5 for Data editing and lot of 50 for concurrent web user) **(Optional)**	₹ 0.00	₹ 0.00	₹ 72,47,769.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 72,47,769.00
TOTAL		**₹ 5,18,47,527.90**	**₹ 22,14,29,273.10**	**₹ 38,60,22,703.60**	**₹ 9,01,53,691.60**	**₹ 0.00**	**₹ 0.00**	**₹ 74,94,53,196.20**

Capex Proposal-FY 24

Capital investments are proposed under the following broad cost centers 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 facilities and infrastructure by necessary civil jobs 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:

1. Statutory, Safety and Security:

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

1.2 Provision of Testing & Safety Equipment to workforce

1.3 Fencing, Boundary Wall and infrastructure works at Primary & Distribution substation

2. Loss Reduction

2.1 Energy Audit & Meter related activity

2.2 Replacement of LT Bare conductor with AB cable

3. Reliability

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

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

3.3 Replacement/Addition of network component in Distribution Substation

4. Load Growth

4.1 Network enhancement / unforeseen emergency

5. Technology & Infrastructure

5.1 Technology Intervention- IT & Technology

5.2 Technology Intervention- GIS, Communication & Others Implementation

5.3 Improvement of Civil Infrastructure

5.4 Store Infrastructure

5.5 Ready to Use assets for Offices

1. Safety, Statutory and Security:

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

Proper upkeep of the feeders is important for ensuring safety and reliability of power supply. Most of the 33kV / 11kV / LT feeders are in deteriorated condition and poses safety threat to the human beings and animals. Most of the feeders have binding wire / multiple joints. As a result, there are chances of snapping of conductors and subsequent electrocution of human beings / animals since cradle guards are not provided. Moreover, over sagged wires in 33kV or 11kV feeders are posing major threat to the lives of human beings and animals. At some places, due to re-construction / widening of roads, vertical/horizontal clearances of the feeders have been reduced.

To ensure safety and reliable power supply to end consumers TPWODL proposes

1. Intermediate Pole to increase of height for 11 kV and 33 kV sagging line.

2. National Highway, SH & River Crossing crossing with Guarding on 16 Mtr Pole.

3. Replacement of Open Conductor with Covered Conductor inside forest, city and high-density public area.

1.2 Provision of Safety Equipment & Testing PPEs to workforce:

TPWODL has purchased and supplied urgent and necessary PPE to all its field employees, the cost of which was either covered in the Capex or Opex (for BA supplied PPEs). There are several incidents occurred while carrying out the operation and maintenance activities on network. Now the most challenging task for TPWODL is awareness among work force for proper utilization of existing PPE. Similarly, the desired testing tools are not available resulting sever incidences. The various assets which are covered under the area of operations needs to have adequate and reliable protection equipment. Electrical protection is accorded to the various systems through the action of protective relays which senses the fault and ensures operation of the circuit breakers which in turn help in preventing untoward failures.

Protection philosophy has improved over the years with technological advancements. In this area, utilities are moving ahead from electromechanical relays and static relays to the

new state of the art numerical relays. These numerical relays provide all the requisite protection and help in timely isolation of faults.

The asset life can be enhanced by having prudent maintenance practices including condition-based monitoring of the electrical equipment. One of the critical aspects involve carrying out both on-line and off-line testing of the equipment. To ensure that these tests are carried out in the pre-defined intervals, availability of suitable testing instruments is of utmost importance. With an ageing asset base and addition of new ones to the operational portfolio, it has become challenging to comply to the testing schedule with the existing testing infrastructure. To augment the same, it is proposed to procure an additional set of testing instruments, which can cater to faster adherence to the testing schedule and prevent pre-mature failures.

Kit Name	Unit Price (Each with GST)
Single phase variac	₹ 54,280.00
Three phase variac	₹ 1,38,296.00
IR Tester	₹ 1,52,220.00
CRM Kit- breaker test	₹ 1,77,708.00
Timing kit. -breaker test	₹ 1,27,440.00
Relay Test Kit (1 Phase) sverkar – relay test	₹ 9,73,500.00
Leakage mA meter (clamp meter)- for CT sec current checking	₹ 16,985.76
WRM (Winding resistance meter)	₹ 2,63,923.50
Contingency (5%)	₹ 95,646.74
Total requirement for one circle	₹ 20,00,000.00
Proposed amount for five circles	₹ 1,00,00,000.00

1.3 Fencing, Boundary Wall and infrastructure works at Primary & Distribution substation:

Fencing at most of the places were observed either damaged or not available, posing major safety threat to public and animals. Also, at many 33/11 KV primary substations (Structures or PSS), boundary walls are observed broken and there is no fencing between the substation premises and 33KV outdoor switchyard. This makes the PSS highly unsafe, as there were chances of entry of unauthorized persons and animals into the live switchyard and undue accident / incident. The existing earthing system is in very bad condition and

ineffective. Below are some glimpses of Before & After of fencing at various locations.

Capex requirement for Statutory & Safety:

For FY 2023-24, TPWODL proposes capital expenditure of INR 34.12 Cr to ensure Safety and Statutory compliant network. Table below suggest the activities to be performed along with funds required under Statutory and Safety Head.

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
1	Statutory, Safety and Security	i) Life enhancement of network and maintaining safe horizontal / vertical clearances	Intermediate Pole Increase of height for 11 kV and 33 kV sagging line.	2.00
			National Highway, SH & River Crossing with Guarding	1.99
			Replacement of Open Conductor with Covered Conductor inside forest city and high-density public area	5.03
		ii) Provision of Testing Equipment & PPEs to workforce	Testing equipment	1
			Safety Equipment (Discharge Rod, Man lifter, Neon Tester etc.)	2.79
		iii) Fencing,Boundary Wall and infrastructure works at Primary and Distribution sub-station	Fencing of Distribution Substation	4.80
			Boundary wall of Primary Substation	10.00
			Gravel filling for Primary substation	1.61
			Access road for inside and outside PSS.	1.65
			Civil work for control room/other building in PSS- Repair	2.75
			provision for water supply for PSS/Offices (Watering for Earth pit)	0.50
	Sub Total- Statutory, Safety and Security			**34.12**

2. Loss Reduction:

During limited site inspections, energy meters were observed missing at consumer's premises. There were many non- functional energy meters comprising of obsolete technology-based energy meters, burnt, rusted and faulty energy meters. The above issues are resulting into reduction in billing efficiency, high AT&C losses. This also caused increase in making provisional billing, defective bills and substantial consumer complaints leading to customer dissatisfaction. Errors in bills leads to non-payment of bills and thus hampers the collection efficiency.

Further, it is also observed that, meters are not installed on all Distribution Transformers leading to no energy accounting at DT level. As a result, it is not possible to determine the level of energy input and hence unable to measure AT&C losses at DT level. Energy accounting provides the means to identify areas of leakages, wastage and inefficient energy usage.

The present AT&C Loss of existing system is 28.56%. To reduce the techno-commercial losses the following key activities are planned for execution:

- Energy Audit & Meter related activity
- Replacement of LT Bare conductor with AB cable.

2.1 Energy Audit & Meter related activity:

Meter Replacement against Burnt / Faulty / Obsolete Technology Meters:

There are around 1,50,000 nos of meters are reported defective/ burnt meter present in TPWODL. Many consumers have not been provided energy meters though connection is energized in books and energy is being consumed by the consumers. Count of meters under various fault category have been captured and an estimate is prepared for replacement of these defective meters Polycarbonate seals and Modems. For installation of Meters, Meter box will also be installed to protect the meters from energy theft. As per current site report, 3.5 Lakh 1-PH Meters are Faulty. All these Meters are 7-10 Years old. As we know that consumer pays the meter rent for only 5 Years and every meter has certain life. So, we request you to takes the cost of Meter, Meter Box and Installation under CAPEX head.

2. Govt. Of India is aggresively working on Smart Meters and all the Distribution utilities are getting support under RDSS scheme. TPWODL being a private utility is not getting any benefit under RDSS scheme which is hitting our finances. We request you to allow us to captue these Smart Meters cost under CAPEX Head.

Providing LT Distribution Boxes on LT Poles for shifting of service lines from conductor to LTDB

Existing Scenario:

The service lines are currently connected on pole, directly to conductor/AB Cable which leads to excessive wear & tear/damage of conductor/cable due to lose connection and increased No Current Complaints. Also, it leads to load unbalance as more service lines are connected to lower conductor. There is clustering of multiple service lines as many as 15 to 20 on a pole which also pose safety concern to Line Man attending complaints and

public as well.

Advantages of Installing LT Distribution Boxes:

1. Enhance safety to public as well as operation crew/Lineman
2. Balanced Load Distribution
3. Anti-theft feature at source end
4. Reduction in No Current Complaint due to elimination of Loose Connections.
5. Ease in working on Live network thus reducing no. of shut downs.
6. Network Aging/Life: By Avoiding frequent operation on Network
7. Preventing AB cable damage
8. Consumer Sanitization.

Distribution Substation (DSS) comprises of various equipment, which perform specific task to ensure delivering the power supply at appropriate voltage to the end consumers. Main components are 11kV AB Switch, 11kV HG Fuse, Transformer, LV Protection, Earthing, Fencing and LT Distribution Box.The most expensive equipment in the DSS is Transformer and its life depends upon healthy condition of all other components be it LV Protection, HV Protection, Earthing or fencing. It has observed at many locations the LT side & HT Side protection is bypassed through GI Wires.Due to this bypassed scenario, for any maintenance or corrective work at LT level, due to nonavailability of switching equipment, outage / Hand trip is taken from the 33/11kV PSS resulting into interruption to all the consumers connected on that 11KV feeder even though for a short duration. Similarly, for any fault on LV Side lead to tripping of 11KV Feeder breaker at DSS.

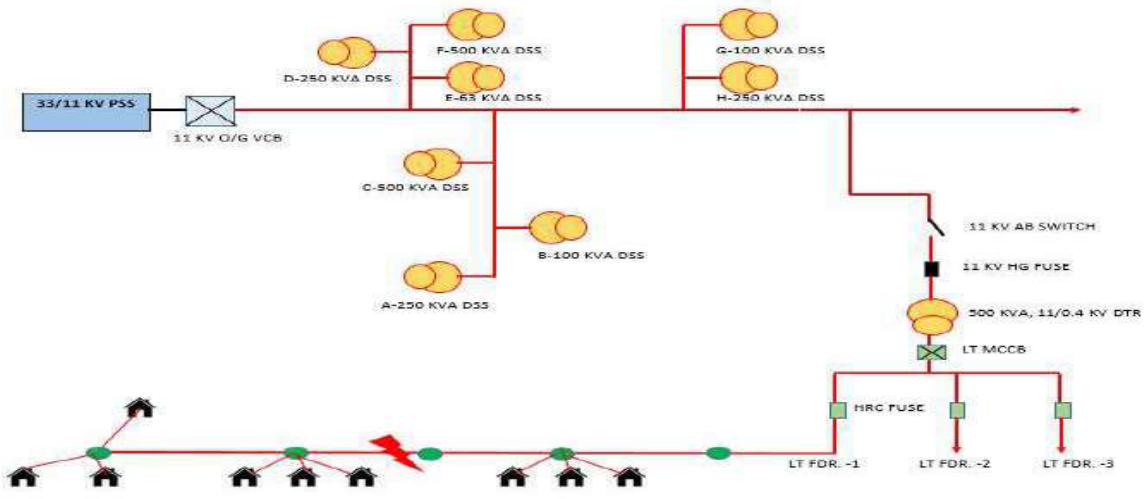

Figure: Illustration of impact of Fault on the LV side

In addition to the meter replacement, various types of energy meters need to be installed at various level for energy audit.

2.2 Replacement of LT Bare conductor with AB cable:

Most of the LT feeders are connected radially and have long length by typical standards. The number of joints in the feeder are also on higher side. The long length of the feeders and joints are the potential source of technical losses and causing poor voltage regulation in the network. In addition to that, bare LT line is prone to connect the electricity supply in unauthorized manner, which increases the commercial losses. Conversion of bare conductor with LT ABC will help reduce the commercial losses. Therefore, it is proposed to replace LT bare with LT ABC in theft prone area

- **Benefits:**

By executing the proposals as made in this head, 415V network can be strengthened and we would be able to serve our consumers in much better way. Following benefits are envisaged from this investment:

a. Reliable Power supply to the Consumers since bare conductor will get converted into
b. insulated cable.
c. Comparatively safer than the LT Bare conductor and eliminate the element of risk if
d. comes in close proximity.
e. Simpler installation, as crossbars and insulators are not required.
f. Suitable for congested lanes as well.
g. Electricity theft is becoming hard as hooking would not be possible.
h. Less required maintenance and necessary inspections of lines.

To improve the safety factor, minimize the safety accident risk, reduce the chances of fault & strengthen existing 415V network, it is suggested for replacement of overhead bare conductors with new aerial bundled cables. This in turn will help in providing reliable power supply for all consumers & stakeholders.

To summarize, TPWODL proposes capital expenditure of INR **60 Cr** for Distribution Loss reduction schemes in FY 23-24 to sustain and further reduce the existing AT&C loss level.

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
2	Loss Reduction	i) Energy Audit & Meter related activity	LT DB installation on Existing Pole	14.54
			Installation of Metering Unit, Meters and Modems at PSS Boundary Points	2.50
			DTR Smart Metering above 100 KVA above up to 250 kVA	10.00
			Installation of CT, PT, Meters & Modems for High value Industrial Consumers	1.00
		ii) Replacement of LT Bare conductor with AB cable	Replacement of LT Bare conductor with AB cable	31.96
	Sub Total-Loss Reduction			**60.00**

** The Board has not considered CAPEX on account of meter replacement & smart meter installation as the same is not considered under CAPEX by the Hon'ble Commission.*

3. Network Reliability:

TPWODL have a large number of long overhead feeders with an average length of 30 KMs in urban and 110 KMs in rural areas. The present power distribution network is in extremely dilapidated condition resulting into frequent trippings and as a result, consumers are not getting reliable and quality power supply. Out of 300 numbers of 33/11KV Primary Substations, 259 substations are connected with more than one source of supply and remaining 41 Primary Substations are connected in radial mode. There are 398 PSS, which are old and 264 Nos of PSS are recently commissioned vide ODSSP scheme.

As of today, a total of 662 PTRs of various capacities are installed in the TPWODL system. These installations were covered under the older conventional PSS as well as the various ODSSP phases which have come over the years.

Below table brings out the count of PTRs installed under the ODSSP and Non ODSSP schemes under all the five circles.

CIRCLE	TOTAL INSTALLED 146	TOTAL INSTALLED 157	TOTAL INSTALLED 100	TOTAL INSTALLED 145	TOTAL INSTALLED 114
	ROURKELA	SAMBALPUR	BARGARH	BALANGIR	KALAHANDI
ODSSP	56	70	45	54	42
NON ODSSP	87	90	56	93	75

Following key issues observed in old type PSS:

a. Absence of incoming line breakers.

b. Absence of L.A, CT, PT and AB Switches.

c. Absence of primary and secondary breakers of Power Transformer.

d. Absence of protection relays.

e. Non- functional Battery and Battery charger.

Because of above shortage of equipment and necessary protection co-ordination, we observed multiple trippings resulting into frequent power failure to the end consumer.

To ensure highest reliability, few 33/11KV substations should have more than one source of power supply along with desired protection and equipment. TPWODL intends to implement the following actions to improve the reliability of power supply

- Identification and replacement of faulty equipment causing frequent tripping's.
- Identification and commissioning of new equipment which are required as per industry standard
- Introduction of technology to ensure faster restoration of supply in case of any tripping.

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

PSS being the vital part of entire distribution network. Generally, the primary voltage to PSS is 33KV and secondary at 11KV. In TPWODL, there are 662 numbers of 33/11KV power transformers with an installed capacity of 3335 MVA.1093 numbers of 11KV feeders emanates from the 33/11KV primary substations having cumulative length of approximately 53969 KMs.

PSS being a vital installation between customer and utility, it is proposed to refurbish bay equipment's to improve the reliability.

The following activities are planned:

1. Refurbishment work in PSS (Structure Replacement / Yard Refurbishment).

2. Replacement/ Segregation of Old 11 kV breaker/ Group Breaker with new (O/D CT-) (including civil &control cable).

3. Replacement/ Segregation of Old 33 kV breaker/ Group Breaker with new (O/D CT-) (including civil &control cable).

4. Replacement of Defective Relay
5. Replacement of Indoor switchgear Protection panel along with associated equipment
6. Replacement of Substation Transformer -33/0.4KV 100KVA Trf.
7. Replacement of Battery & Battery Charger
8. Implementation of Automation /Scada
9. High Mast/Lighting arrangement for PSS/Store

Replacement of Defective Protection Relays:

Necessity and Proposal:

The various assets which are covered under the area of operations needs to have adequate and reliable protection equipment. Electrical protection is accorded to the various systems through the action of protective relays which senses the fault and ensures operation of the circuit breakers which in turn help in preventing untoward failures.

Protection philosophy has improved over the years with technological advancements. In this area, utilities are moving ahead from electromechanical relays and static relays to the new state of the art numerical relays. These numerical relays provide all the requisite protection and help in timely isolation of faults.

TPWODL has been upgrading the protection system by replacing the erstwhile electromechanical relays and static relays with the numerical relays. The replacement has and will have the following advantages:

Efficient Protection:

The numerical relays encompass multiple protection into a single relay. These relays can be easily programmed to ensure that all the requisite protection can be achieved with the minimal number. Additionally, since these relays do not have any moving parts, drifting of settings also do not arise. Hence regular checks and balances can be avoided, and reliability of the system can be improved.

Increased Reliability:

The new relays provide enough scope to ensure that relay coordination can be achieved across the power system. The use of these relays will help in reducing the interruptions caused due to uncoordinated tripping thereby helping in improving the reliability indices of the organisation.

Fault Analysis:

As compared to erstwhile relays, the numerical relays have an inbuilt function of having

Fault Disturbance Recorders (FDRs) which help in capturing, storing and retrieving of critical data during fault conditions. These data help the utility to carry out root cause analysis and take preventive actions as and when required.

SCADA/Automation:

The numerical relays play a crucial role in the automation front. Presence of signals in the form of DI/DO/AI/AO helps in plugging the same and communicating with the automation plan. This helps in the easier integration of the system for remote operation and monitoring

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

As per present network scenario majority of 11KV & 33KV, networks are overhead in nature. Also, average feeder length is more than 80 KMs. Many O/H feeders are passing through forest area. Most faults that occur on overhead lines are transient faults caused by lightning and tree branches touching the live line conductor.

The following activities are planned to strengthen the 33KV & 11KV Line:

1. Refurbishment/Augmentation of old 11KV line
2. Refurbishment/Augmentation of old 33KV line
3. Installation of 11KV & 33 KV FPI
4. Installation of 11KV & 33 KV 400A/200A AB switches & Isolator
5. Installation of 33KV & 11 KV RMU
6. 33KV & 11kV Auto Recloser & Sectionaliser
7. Installation of AVR /Capacitor Bank/ Voltage Improvement Equipment

TPWODL would like to introduce communicable type Fault Passage Indicator, Auto-recloser & Sectionaliser, Installation of AVR /Capacitor Bank/ Voltage Improvement Equipment.

With auto-reclosers and sectionalizers in 11KV feeders, field engineers would have flexibility to isolate the section locally instead of switching off entire feeder. In case of any tripping,maintenance engineer can isolate the faulty section and restore the supply of remaining consumers thereby improving the reliability. Consumer will experience less power cut and thus, reduction in consumer complaint.

Moreover, it is observed that multiple 11KV feeders are controlled through single 11KV breaker or AB switch in some primary substation. This year, we propose to install AB

switches and isolators identified high tripping feeders. Similarly, in rural section, AB switches are proposed at lengthy 33KV & 11KV Feeders to have provision of isolation of section during any outages. This will help in improving the reliability.

We propose to replace damaged or deteriorated 11KV & 33KV insulators on above identified feeders to enhance reliability of power supply.

3.3: Replacement/Addition of network component in Distribution Substation:

The LT feeders emanating from 11/0.415KV distribution substations are connected up to consumer premises. DSS has been commissioned at load center. Which are mostly located in public area.

Most of DSS protection and control are not operating properly. As a result, fault in any one LT circuit resulting into tripping of DT incoming 11KV feeder. Also, while carrying out maintenance or replacing the LT circuit blown fuses the operator needs to take hand trip of entire 11KV feeder from PSS. Thus, in above both circumstances affecting the supply of all customers connected on the same grid. In addition to that, various equipments associated in the DSS is not either not maintained or obsolete technology, which needs to be replaced at the earliest.

To overcome this situation, TPWODL is planning to strength the control and protection system at LT side at DSS level. Various initiatives proposed this year to improve the reliability of power supply in 11KV and downstream network are given below,

Refurbishment of above 100 KVA DTR along with LT Protection, earthing etc (other than Augmentation) Work Includes Folowing Activities.

1. Refurbishment of above 100 KVA DTR along with LT Protection
2. Installation of New DD Fuse Unit/LA/AB Switch/Earthing at DSS
3. DTR plinth Addition or Repair

The above initiative will not only ensure availability of LV protection system at DSS but will also ensure positive isolation to maintain safe working condition.

For FY 2023-24, TPWODL proposes Capital expenditure of **Rs 74.49 Cr** to strengthen the network, introduce technologies to enhance customer satisfaction in terms of safe and reliable power supply.

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
3	Reliability	i) Replacement/Addition of network component in 33/11KV Primary Substation.	Refurbishment work in PSS (Structure Replacement / Yard Refurbishment)	1.96
			Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new (O/D CT-) (including civil & control cable)	4.01
			Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new (O/D CT-) (including civil & control cable)	2.21
			Replacement of Defective Relay	1
			Replacement of Indoor switchgear Protection Panel along with associated equipment	2
			Replacement of Sub station Transformer -33/0.4KV 100KVA Trf.	0.49
			Replacement of Battery & Battery Charger	1.21
			Implementation of Automation/Scada	13.5
			Roof top for Office/ Building lighting	1.5
			High Mast/Lighting arrangement for PSS/Store	0.5
		ii) Replacement/Addition of network component in 33KV & 11KV Line.	Refurbishment/Augmentation of old 11KV line along	17.01
			Refurbishment/Augmentation of old 33KV line	6.02
			Installation of 11KV & 33 KV FPI	0.98
			Installation of 11KV & 33 KV AB switches, Isolator & RMU	5
			New Tower Addition/Replacement	0.98
			Railway X-ing using U/G Cable	1.03
			33KV & 11kV Auto Recloser & Sectionaliser/ AVR/Capacitor Bank/ Voltage Improvement Equipment	5.06

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
		iii) Replacement/ Addition of network component in Distribution Substation.	Refurbishment of above 100 KVA DTR along with LT Protection, Earthing etc. (Other than Augmentation)	10.03
	Sub Total-Reliability			**74.49**

4. Load Growth:

Considering the 5.14% load growth trend, it is expected that approximately 90K-100K new Connections would be applied in FY 2023-24. In order to meet this load growth appropriate network infrastructure needs to be strengthened.

4.1 Network enhancement / unforeseen emergency:

During site survey, it was observed that most of 33/11KV Primary Sub-Stations are having single incoming 33KV source. With failure of single existing 33KV source entire 33/11KV PSS gets shutdown thereby causing shutdown to all the downstream 11KV & LT network consumers.

It is also observed that HT consumers on 33KV and 11KV are being fed through tapping point instead of a dedicated feeder. Multiple HT consumers are fed through incoming source of 33/11KV PSS. In case of technical fault at one of the HT consumers leads to tripping of incoming source and other connected HT consumer.

To overcome this issue, it is proposed to establish link line from alternative available source.

At present 11KV feeders are radial and do not have ring connectivity with another 11KV feeder. As per N-1 philosophy, it is proposed to establish ring connectivity between nearest 11KV feeder in the vicinity and adjacent PSS 11KV feeder. Few such link lines will be established in first phase for some important feeders like Hospitals, town, commercial and key government establishments.

It is also observed that actual load demand has been increased substantially more than the assessed one due to various government approved electrification schemes. To cater the load enhancement cases and natural load growth it is essential to augment the existing

infrastructure as per the need.

In addition to above after establishing the link line it is essential to have adequate capacity DT's and PTs in event of transfer of load from one grid to other. With said addition, there shall be improvement in voltage profile.

To support this phenomenon, we need to add/augment DT's, PTR's, Bay, Lines and PSS considering the following criteria's,

1. Existing load of both adjacent connected grids.
2. Individual incoming line capacities.
3. Rating of PTR at each PSS.
4. Existing load at each PSS & DSS.
5. New sanctioned load at each PSS & DSS.
6. Future load growth.

Based on the above criteria TPWODL is planning an expenditure of Rs. **67.82** Crores for Network enhancement / Unforeseen emergency Capex requirement as per below table:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
4	Load Growth	i) Network enhancement / Unforeseen emergency.	Construction of 33 KV New/Link Line	8.87
			Construction of 11KV New/ Link Line	8.16
			Construction of new PSS.	18.00
			Addition/Augmentation of PTR of various ratings	3.87
			Addition/Augmentation of DTR of various ratings	19.93
			Addition of New LT ABC Network	8.99
	Sub Total- Load Growth			**67.82**

5. Technology & Infrastructure:

In this head, all expenditure related to technology adoption and strengthening of various offices and establishment of Call center, data center etc. have been considered. Presently, customers are interacting through very few available mediums for resolution of their issues and queries.

5.1 Technology Intervention-IT & Technology:

Information Technology commenced its journey in FY 22, the very first year of TPWODL, by initiating large scale computerization & digitalization efforts in the Company. For year 2021-2022, Information Technology was given Rs 42.02 Cr towards CAPEX by honorable Commission against seven schemes namely DC Hardware, Primary Data Centre, Call Centre & Customer Care Centre, DC Software & Licenses (ERP, MBC, DB, OS), Locational Network, Communication Network, Front -End Devices & End User Licenses. Information Technology vertical implemented all the schemes successfully and achieved 100% capitalization in FY 22.

In FY 23, honorable commission has approved Rs. 48.19 Crores to Information Technology for implementation of schemes namely Data Centre at Sambalpur, Front end Devices and SW, DC Hardware, DC Software & Licenses, Locational Network, Optical Fiber Cabling which included hardware and software and IT Infrastructure for expansion and modernization of call center. TPWODL Information Technology has already initiated concrete steps towards 100% implementation of the approved schemes in FY 23.

Summary of Proposal by Technology:

IT Capex Plan: Summary		
S. No.	**Description**	**Total Rs. In Cr**
1	Disaster Recovery Center - HW & SW	20.15
2	DC Hardware	11.04
2	DC Software & Licences	4.75
3	Front End Devices and End user	12.18
5	Locational Network	5.02
6	DR Setup for Other DISCOMs	18.35
7	Digitization of legacy documents	6.21
	Total	**77.70**

5.2 Technology Intervention- GIS, SCADA & Others Implementation:

Operation Technology:

In order to improve the reliability and reduce the losses and to improve the overall performance, effective implementation of technologies is required. TPWODL is in the midst of technology transformation to provide quality customer services and to deliver highly reliable and improved quality supply in safe manner to its consumers by meeting various standards of operation. To bring the various latest technology, systematic investment is planned by TPWODL as given below in Operation Technology.

Total OT Capital Expenditure FY 22-23

SL. No	Communication	GIS	Smart Meter Backend infra	Drone
1	11 Cr	38.6 Cr	11.81Cr	0.8 Cr
Total - 62.21 Cr				

5.3 Improvement of Civil Infrastructure:

TPWODL currently have offices in all the five circles and subdivisions. Some of them are owned and about 40% 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.

To ensure above it is proposed to carry out civil infrastructure of designated offices in phase manner.

Up gradation of Road and Offices:

It is observed that various Grid Sub Stations, access road needs repair and strengthening along-with drainage system. In addition, it is required to complete structural rehabilitation and refurbishment of existing Offices/ Control Rooms. The area grading/ leveling, repairs to existing cable trenches and trench covers needs to be done for maintaining safety during operation. During rainy season road condition further, worsen.

Following activities are planned to improve the civil infrastructure:

1. Repair/ New wash room construction for substation.
2. Additional Material Storage area

3. New Store building
4. New Building for Division/ Subdivision Section/Commercial Office
5. Refurbishment of old building for office at various location

5.4 Store Infrastructure:

TPWODL operates his distribution business inventory management through four designated central stores located at Burla, Rajgangpur, Bolangir and Kesinga.

The store offices are observed in dilapidated condition and do not have adequate lighting, access and internal road, storage platforms and fire protection system thereby compromising with the safety & Security of the material and personal.The internal and access roads are needs to be constructed.

5.5 Ready to Use assets for Offices :

In TPWODL, the office space is currently crowded and haphazardly planned for seating arrangements, moreover, most of the circulation area has been occupied with files, documents etc.

In order to provide best in class services to consumers, earn consumer delight and improve satisfaction among other stakeholders and maintaining a clean & safe working environment, following infrastructures are required.

- **Office air conditioning systems** are required to provide a comfortable working environment to bring and control Energy Efficiency, Humidity, Air Quality, and Reduction in Noise & Keeping Business Critical Equipment at the Right Temperature.
- **Water cooler & Purifiers** are required for proper hydration employees and to ensure good health and improve overall efficiency. An employee should drink at least eight glasses of water a day to be properly hydrated as Water increases the amount of blood flow and oxygen to the brain and other body parts which in turn increases brain activity and attentiveness
- **Ergonomic office chairs** for sitting long periods with ease. This naturally helps employees work more efficiently and productively. Another benefit is reduction in healthcare expenses related to poor posture from unsuitable office chairs.
- **Photocopier machines** to offer a fast and easy way of getting single or multiple copies of documents & Improves Functionality of businesses.
- **Vehicles** to provide car pool facility to the company staff as well as car facility to the sr. management team.

- **File cabinets** are basic requirements to keep office space organized and tip-top. It helps store important papers, documents, photographs, magazines and training materials in one single place for easy and immediate access besides offering secure storage, it offers instant access to files of thousands of customers and employees.
- **Canteen facilities are the necessity of satisfying employees with a better range of foods and healthy options."**

"Workplace canteens need to provide with options to cater for lunch with meals or light breakfast items and fruit or snacks for mid-afternoon along with tea/ cold drinks/ coffee in order to promote healthy eating & refreshments for employees and stakeholders.

To summarize, total 162.41 Cr. capital expenditure is proposed for Technology and Infrastructure section

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
5A	IT Infrastructure	i) Technology Intervention-IT & Technology.	Disaster Recovery Center - HW & SW	20.15
			DC Hardware	11.04
			DC Software & Licences	4.75
			Front End Devices and End user	12.18
			Locational Network	5.02
			DR Setup for Other DISCOMs	18.35
			Digitization of legacy documents	6.21
	SubTotal- IT Infrastructure			**77.70**
5B	OT Infrastructure	ii) Technology Intervention- GIS, Communication & Others Implementation.	Implementation of GIS	38.60
			Communication Infrastructure	11.00
			Smart meter Backend Infra	11.81
			Procurement of Drones	0.80
	SubTotal- OT Infrastructure			**62.21**
5C	Civil, Admin and Other Infrastructure	iii) Improvement of Civil Infrastructure	New wash room	2.00
			Additional Material Storage area	2.00
			New store building	0.60
			New Scrap Yard, Pole Storage location	0.30

			New Building for Division/ Subdivision Section/Commercial Office.	7.00
			Refurbishment of old building for office at various location	3.00
			Infrastructure for fuse call center	0.75
		iv) store infrastructure	store infrastructure, Secutity System and fire Hydrant System in Store	4.35
		v) Ready to Use assets for Offices	Purchase of EV vehicles & other vehicles for employees	1.00
			Ready to Use assets for Offices	1.50
	Sub Total- Civil & Admin Infrastructure			**22.50**
	Sub Total-Technology & Infrastructure			**162.41**

Summary

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY-24 (Rs. Cr)	Annexure No.
1	Statutory, Safety and Security	i) Life enhancement of network and maintaining safe horizontal / vertical clearances	Intermediate Pole Increase of height for 11 kV and 33 kV sagging line.	2.00	Annexure-6
			National Highway, SH & River Crossing with Guarding	1.99	
			Replacement of Open Conductor with Covered Conductor inside forest city and high-density public area	5.03	
		ii) Provision of Testing Equipment & PPEs to workforce	Testing equipment	1	Annexure-7
			Safety Equipment (Discharge Rod,Man lifter, Neon Tester etc.)	2.79	
		iii) Fencing, Boundary Wall and infrastructure works at Primary and Distribution sub-station	Fencing of Distribution Substation	4.80	Annexure-8
			Boundary wall of Primary Substation	10.00	
			Gravel filling for Primary substation	1.61	
			Access road for inside and outside PSS.	1.65	
			Civil work for control room/other building in PSS- Repair	2.75	
			provision for water supply for PSS/Offices (Watering for Earth pit)	0.50	
	Sub Total- Statutory, Safety and Security			**34.12**	
2	Loss Reduction	i) Energy Audit & Meter related activity	LT DB installation on Existing Pole	14.54	Annexure-9
			Installation of Metering Unit, Meters and Modems at PSS Boundary Points	2.50	
			DTR Smart Metering above 100 KVA above up to 250 kVA	10.00	

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY-24 (Rs. Cr)	Annexure No.
			Installation of CT,PT, Meters & Modems for High value Industrial Consumers	1.00	
		ii) Replacement of LT Bare conductor with AB cable	Replacement of LT Bare conductor with AB cable	31.96	Annexure-10
	Sub Total-Loss Reduction			**60.00**	
3	Reliability	i) Replacement/ Addition of network component in 33/11KV Primary Substation.	Refurbishment work in PSS (Structure Replacement / Yard Refurbishment)	1.96	Annexure-11
			Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new (O/D CT-) (including civil &control cable)	4.01	
			Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new (O/D CT-) (including civil &control cable)	2.21	
			Replacement of Defective Relay	1	
			Replacement of Indoor switchgear Protection Panel along with associated equipment	2.00	
			Replacement of Sub station Transformer - 33/0.4KV 100KVA Trf.	0.49	
			Replacement of Battery & Battery Charger	1.21	
			Implementation of Automation/Scada	13.50	
			Roof top for Office/ Building lighting	1.50	
			High Mast/Lighting arrangement for PSS/Store	0.50	
		ii) Replacement/ Addition of network	Refurbishment/Augmentation of old 11KV line along	17.01	Annexure-12
			Refurbishment/Augmentation of old 33KV line	6.02	

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY-24 (Rs. Cr)	Annexure No.
		component in 33KV & 11KV Line.	Installation of 11KV & 33 KV FPI	0.98	
			Installation of 11KV & 33 KV AB switches, Isolator & RMU	5.00	
			Tower Replacement	0.98	
			Railway X-ing using U/G Cable	1.03	
			33KV & 11kV Auto Recloser & Sectionaliser/AVR/Capacitor Bank/ Voltage Improvement Equipment	5.06	
		iii) Replacement/ Addition of network component in Distribution Substation.	Refurbishment of above 100 KVA DTR along with LT Protection, Earthing etc.(Other than Augmentation)	10.03	Annexure-13
	Sub Total-Reliability			**74.49**	
4	Load Growth	i) Network enhancement / Unforeseen emergency.	Construction of 33 KV New/Link Line	8.87	Annexure-14
			Construction of 11KV New/ Link Line	8.16	
			Construction of new PSS.	18.00	
			Addition/Augmentation of PTR of various ratings	3.87	
			Addition/Augmentation of DTR of various ratings	19.93	
			Addition of New LT ABC Network	8.99	
	Sub Total- Load Growth			**67.82**	
5A	IT Infrastructure	i) Technology Intervention-IT & Technology.	Disaster Recovery Center - HW & SW	20.15	Annexure-15
			DC Hardware	11.04	
			DC Software & Licences	4.75	
			Front End Devices and End user	12.18	
			Locational Network	5.02	
			DR Setup For Other DISCOMs	18.35	
			Digitization of legacy documents	6.21	
	SubTotal- IT Infrastructure			**77.70**	

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY-24 (Rs. Cr)	Annexure No.
5B	OT Infrastructure	ii) Technology Intervention- GIS, Communication & Others Implementation.	Implementation of GIS	38.60	Annexure-16
			Communication Infrastructure	11.00	
			Smart meter Backend Infra	11.81	
			Procurement of Drones	0.80	
	SubTotal- OT Infrastructure			**62.21**	
5C	Civil, Admin and Other Infrastructure	iii) Improvement of Civil Infrastructure	New wash room	2.00	Annexure-17
			Additional Material Storage area	2.00	
			New store building	0.60	
			New Scrap Yard , Pole Storage location	0.30	
			New Building for Division/ Subdivision Section/Commercial Office.	7.00	
			Refurbishment of old building for office at various location	3.00	
			Infrastructure for fuse call center	0.75	
		iv) store infrastructure	store infrastructure, Secutity System and fire Hydrant System in Store	4.35	
		v) Ready to Use assets for Offices	Purchase of EV vehicles & other vehicles for employees	1.00	
			Ready to Use assets for Offices	1.50	
	Sub Total- Civil & Admin Infrastructure			**22.50**	
	Sub Total-Technology & Infrastructure			**162.41**	
	Grand Total			**398.84**	

*The Grand Total cost is exclusive of Project Employee Cost and calculated Interest during Construction (IDC). The IDC would be approximately Rs.23.24 Cr.

Benefits of Proposal

Refurbishment of substations and feeders will benefit TPWODL through

i. Improvement of voltage profile.

ii. Reduction in number of outages

iii. Increase in vertical clearances

iv. Reduction in equipment downtime

v. Reduction in unserved energy

vi. Enhanced reliability of power supply

vii. Reduction in number of accidents.

viii. Ease of Operation and Operational flexibility

Benefits of SCADA:

Centralized operation would ensure optimum resource utilization of the hardware and software and functionalities used in the SCADA System. Other benefits include:

i. This will ensure efficient operation & monitoring under steady state, dynamic & transient condition of the system.

ii. To achieve improvement in operations considering complex Load- Demand cycle changes to bring in better and holistic visibility while making critical decisions.

iii. Optimize on unscheduled power interchange, maximize utilization of the assets

iv. Better Inventory management, low maintenance cost

v. Multi-skilling of operational and maintenance personals

vi. Enhanced operational safety

vii. Using the latest Operating systems, with enhanced functionalities, enabling Analysis and Power System studies/event analysis including Integrated Graphical User Interface (GUI) for SCADA, ADMS and other applications, which would be uniform across all substations and would be cyber security compliant for IT/OT integration requirements of the future.

viii. With common system interfaces, it brings in optimized resource management, common training platform for systems, and maintenance of assets. Avoidance of multiple systems in OS and software is also affected.

ix. Data exchange with redundancy to any external system

x. Better Control on Cyber Security Management, optimization of cyber security measures implementation

xi. Better Data Synchronization between MCC, APSCC, ensuring data accuracy, availability and reliability

xii. N-2 Communication redundancy will be provided at critical location for communication by using advanced MPLS Technology

xiii. Improved reliability of service

xiv. Better Integration and coordination with enterprise system to provide relevant information to those internal & external users that rely on accurate information in a timely manner

Benefits to Customer:

a. Reduction in restoration time of outage

b. Improved reliability of service

c. Better control of power quality and enhanced use of reactive power sources

d. Useful feedback information to the customer in terms of expected outage duration time etc.

e. Monitoring the potential quality problems and the reliability problems due to supply interruptions.

Annexure-1 Division wise details of various network parameters FY 22-23

(Suitably amended the prescribed format basing upon available information & field condition)

Key Performance Indicator (KPI)	RED	RSED	RGP	SNG	SED	SEED	JSG	BRJN	DED	BGH	BWED	BGR	SNP	TED	KEED	KWED	NPD	TPWODL
Consumer (As on 31.03.2022) (in nos.)	70703	105337	130814	110734	60353	119347	122667	50406	73065	121839	165623	145208	129100	222494	160013	168380	132742	**2088825**
New Connection (in nos.)	2178	3034	4275	4077	2882	2622	3347	1651	1144	11480	13434	10242	3214	15759	13667	11501	8868	**113375**
New connection to Consumer ratio (in %)	3%	**3%**	**3%**	**4%**	**5%**	**2%**	**3%**	**3%**	**2%**	**9%**	**8%**	**7%**	**2%**	**7%**	**9%**	**7%**	**7%**	**5%**
Total HT length in circuit KM. (As on 31.03.2022)	575	2600	4978	4806	706	2334	2795	1394	2877	2865	4275	3485	4595	5155	3134	4102	2799	**53476**
Total LT length in circuit KM. (As on 31.03.2022)	1350	2754	5451	5013	879	2163	2363	2050	2301	2547	7403	5562	4622	6423	5333	3481	3164	**62858**
HT to LT length ratio (in %)	**43%**	**94%**	**91%**	**96%**	**80%**	**108%**	**118%**	**68%**	**125%**	**112%**	**58%**	**63%**	**99%**	**80%**	**59%**	**118%**	**88%**	**85%**
Total LT length in circuit KM. (As on 31.03.2022)	**1350**	2754	5451	5013	879	2163	2363	2050	2301	2547	7403	5562	4622	6423	5333	3481	3164	**62858**
Total length of AB Cable in circuit KM. (As on 31.03.2022)	**936**	1930	3274	2854	704	1559	785	926	1919	1066	3238	3428	1436	3301	2579	2512	1308	**33753**

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Capex plan for FY 23-24

TPWODL

Key Performance Indicator (KPI)	RED	RSED	RGP	SNG	SED	SEED	JSG	BRJN	DED	BGH	BWED	BGR	SNP	TED	KEED	KWED	NPD	TPWODL
AB cable to LT length ratio (in %)	**69%**	**70%**	**60%**	**57%**	**80%**	**72%**	**33%**	**45%**	**83%**	**42%**	**44%**	**62%**	**31%**	**51%**	**48%**	**72%**	**41%**	**54%**
Total no of 11 kV feeder (As on 31.03.2022)	31	51	74	66	54	62	97	29	29	47	116	77	86	109	81	69	56	**1134**
Total no of 33 kV feeder (As on 31.03.2022)	6	13	15	15	10	7	18	5	6	8	13	16	8	12	9	6	5	**172**
Total no. Of DTR (As on 31.03.2022)	1191	4151	4099	4671	1423	3559	3940	1362	2913	5170	9227	4938	4717	6006	4695	4687	4653	**71402**
Total no. Of rural consumer	28573	71355	111680	91378	13832	97444	92334	34484	66195	101217	153871	114372	116904	195981	129625	156021	120190	**1695456**
Total no. Of Urban consumer	42130	33982	19134	19355	46520	21903	30334	15922	6870	20622	11752	30836	12196	26513	30388	12359	12553	**393369**
Urban Consumer to Total Consumer ratio (in %)	**60%**	**32%**	**15%**	**17%**	**77%**	**18%**	**25%**	**32%**	**9%**	**17%**	**7%**	**21%**	**9%**	**12%**	**19%**	**7%**	**9%**	**19%**
Working meter(As on 31.03.2022)	66789	92392	118515	97223	55218	96579	106699	45406	61078	101255	122277	108734	106607	169794	135074	154268	112290	**1750198**
Defective meter (As on31.03.2022)	2622	9403	11678	10952	4754	19089	11907	4592	10570	15990	29790	28908	19349	40722	19042	12764	17461	**269593**
Consumer without meter (As on 31.03.2022)	1292	3542	621	2559	381	3679	4061	408	1417	4594	13556	7566	3144	11978	5897	1348	2991	**69034**
Consumer metering in % (OK	**94%**	**88%**	**91%**	**88%**	**91%**	**81%**	**87%**	**90%**	**84%**	**83%**	**74%**	**75%**	**83%**	**76%**	**84%**	**92%**	**85%**	**84%**

Capex plan for FY 23-24

Key Performance Indicator (KPI)	RED	RSED	RGP	SNG	SED	SEED	JSG	BRJN	DED	BGH	BWED	BGR	SNP	TED	KEED	KWED	NPD	TPWODL
meter/Total consumer)																		
11 kV feeder with working meter (in nos.)	23	46	67	56	48	52	91	18	25	37	96	65	58	71	35	49	38	**875**
11 kV feeder with defective meter (in nos.)	8	5	7	10	6	10	6	11	4	10	20	12	28	38	46	20	18	**259**
11 kV feeder without meter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11 kV feeder metering in % (OK meter/Total 11 kV feeder)	**74%**	**90%**	**91%**	**85%**	**89%**	**84%**	**94%**	**62%**	**86%**	**79%**	**83%**	**84%**	**67%**	**65%**	**43%**	**71%**	**68%**	**77%**
33 kV feeder with working meter (in nos.)	6	13	15	15	10	7	18	5	6	8	13	16	8	12	9	6	5	**172**
33 kV feeder with defective meter (in nos.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
33 kV feeder without meter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
33 kV feeder metering in %(OK meter/Total 33 kV feeder)	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
DTR with working meter (in nos.)	130	163	646	222	390	259	262	122	956	1300	139	163	136	169	1170	679	117	**7023**
DTR with defective meter (in nos.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DTR without meter	1061	3988	3453	4449	1033	3300	3678	1240	1957	3870	9088	4775	4581	5837	3525	4008	4536	**64379**
Total DTR burnt (in nos.)	78	166	225	254	230	79	353	106	220	294	264	229	127	174	187	120	191	**3297**

Capex plan for FY 23-24

Key Performance Indicator (KPI)	RED	RSED	RGP	SNG	SED	SEED	JSG	BRJN	DED	BGH	BWED	BGR	SNP	TED	KEED	KWED	NPD	TPWODL
DTR burnt/ Total no. Of DTR	**7%**	**4%**	**5%**	**5%**	**16%**	**2%**	**9%**	**8%**	**8%**	**6%**	**3%**	**5%**	**3%**	**3%**	**4%**	**3%**	**4%**	**4.6%**
Total Capacity of all DTR (in MVA)	117	190	167	174	204	141	188	86	110	315	386	315	242	266	194	201	192	**3487**
Total capacity of burnt DTR (in MVA)	8.0	12.5	8.8	11.9	11.1	10.2	15.6	5.0	7.0	22.3	13.3	13.0	6.4	10.8	9.3	5.7	9.0	**179.8**
Capacity of DTR burnt to Capacity of Total DTR (in %)	**7%**	**7%**	**5%**	**7%**	**5%**	**7%**	**8%**	**6%**	**6%**	**7%**	**3%**	**4%**	**3%**	**4%**	**5%**	**3%**	**5%**	**5.2%**

Annexure -2 Basic information of existing Sub-stations

Basic information of existing Sub-stations (the SLD & Power map to be enclosed covering 33 kV & 11 kV system upto 11/0.4 kV Transformers)

Sl. No.	Name of Circle	Name of Division	Name of District	Name of Sub- station	PTR Capacity	33/11 kV or 11/0.4 kV or 33/0.4 kV	Pres e nt load (MV A)	No. Of Bays [line bays & transformer bays (33 kV & 11 kV), etc.]	N-1 contingency for 33 kV incommer available or not (Y/N)	Transformation capacity (MVA) with voltage ratio (e.g. 33/11 kV, 2x5 MVA + 11/0.4 kV, 2x100 KVA)	Transforme r pole mounted/plinth mounted (for 11/0.4 kV transformer)	N-1 contingency for Power Transforme r (33/11 kV) available or not (Y/N)	Augmentation of Transformation capacity required or not (Y/N) (Based on load flow study/base d on operation feed back)	Status of implementati on of SCADA/ Automatic in substation (Existing/to be implemented)
1	Bargarh	BED,Bargarh	Bargarh	Ambabhona	10	33/11 kV	1.2		N	2*5	Plinth	Y	N	Existing
2	Bargarh	BED,Bargarh	Bargarh	Attabira	19.2	33/11 kV	14.1		N	2*8+1*3.15	Plinth	N	N	To be implemented
3	Bargarh	BED,Bargarh	Bargarh	Bhatli	18	33/11 kV	18.7		N	2*5+1*8	Plinth	N	Y	To be implemented
4	Bargarh	BED,Bargarh	Bargarh	Bheden	8.15	33/11 kV	4.5		N	1*3.15+1*5	Plinth	N	N	To be implemented
5	Bargarh	BED,Bargarh	Bargarh	Bhukta	8.15	33/11 kV	6.4		N	1*3.15+1*5	Plinth	N	N	To be implemented
6	Bargarh	BED,Bargarh	Bargarh	Dhatukpali	10	33/11 kV	3.4		N	2*5	Plinth	Y	N	Existing
7	Bargarh	BED,Bargarh	Bargarh	Division-1	13	33/11 kV	10.7		N	1*5+1*8	Plinth	N	Y	To be implemented
8	Bargarh	BED,Bargarh	Bargarh	Division-2	16	33/11 kV	14.9		N	2*8	Plinth	N	Y	To be implemented
9	Bargarh	BED,Bargarh	Bargarh	Dungri	8.15	33/11 kV	5.8		N	1*3.15+1*5	Plinth	N	N	To be implemented
10	Bargarh	BED,Bargarh	Bargarh	Godbhaga	13	33/11 kV	7.2		N	1*5+1*8	Plinth	N	N	To be implemented
11	Bargarh	BED,Bargarh	Bargarh	Gondturum	10	33/11 kV	2.0		N	2*5	Plinth	Y	N	To be implemented
12	Bargarh	BED,Bargarh	Bargarh	Kamgaon	10	33/11 kV	6.8		N	2*5	Plinth	N	N	To be implemented

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13	Bargarh	BED,Bargarh	Bargarh	Kandpala	10	33/11 kV	3.7		N	2*5	Plinth	Y	N	To be implemented
14	Bargarh	BED,Bargarh	Bargarh	Khedapali	10	33/11 kV	5.6		N	2*5	Plinth	N	N	To be implemented
15	Bargarh	BED,Bargarh	Bargarh	Khutlipali	6.3	33/11 kV	2.9		N	2*3.15	Plinth	Y	N	To be implemented
16	Bargarh	BED,Bargarh	Bargarh	Patrapali	10	33/11 kV	6.2		N	2*5	Plinth	N	N	Existing
17	Bargarh	BED,Bargarh	Bargarh	Pradhanpali	13	33/11 kV	11.1		N	1*5+1*8	Plinth	N	Y	To be implemented
18	Bargarh	BED,Bargarh	Bargarh	Raisobha	10	33/11 kV	7.0		N	2*5	Plinth	N	N	Existing
19	Bargarh	BED,Bargarh	Bargarh	Tangerpali	5	33/11 kV	2.2		Y	1*5	Plinth	N	N	To be implemented
20	Bargarh	BED,Bargarh	Bargarh	Thuapali	18	33/11 kV	6.2		N	2*5+1*8	Plinth	Y	N	To be implemented
21	Bargarh	BED,Bargarh	Bargarh	Tora	16	33/11 kV	7.6		N	2*8	Plinth	Y	N	Existing
22	Bargarh	BED,Bargarh	Bargarh	Turunga	23	33/11 kV	16.8		Y	3*5+1*8	Plinth	N	N	To be implemented
23	Bargarh	BED,Bargarh	Bargarh	Udayapali	10	33/11 kV	7.6		N	2*5	Plinth	N	N	To be implemented
24	Bargarh	BWED,Bargarh	Bargarh	Arda	10	33/11 kV	8.0		Y	2*5	Plinth	N	Y	To be implemented
25	Bargarh	BWED,Bargarh	Bargarh	Balitikra	10	33/11 kV	7.2		N	2*5	Plinth	N	N	To be implemented
26	Bargarh	BWED,Bargarh	Bargarh	Barpali	29.2	33/11 kV	21.9		N	1*3.15+2*5+2*8	Plinth	N	N	To be implemented
27	Bargarh	BWED,Bargarh	Bargarh	Bijepur	16.2	33/11 kV	18.3		Y	1*3.15+1*5+1*8	Plinth	N	Y	To be implemented
28	Bargarh	BWED,Bargarh	Bargarh	Charmunda	10	33/11 kV	5.5		N	2*5	Plinth	N	N	To be implemented
29	Bargarh	BWED,Bargarh	Bargarh	Dahita	10	33/11 kV	2.5		N	2*5	Plinth	Y	N	Existing

30	Bargarh	BWED,Bargarh	Bargarh	Dasmile	13	33/11 kV	10.7		Y	1*5+1*8	Plinth	N	Y	To be implemented
31	Bargarh	BWED,Bargarh	Bargarh	Dova	10	33/11 kV	7.8		N	2*5	Plinth	N	N	To be implemented
32	Bargarh	BWED,Bargarh	Bargarh	Dunguripali	10	33/11 kV	5.0		N	2*5	Plinth	Y	N	Existing
33	Bargarh	BWED,Bargarh	Bargarh	Gaisilet	11.3	33/11 kV	7.1		N	2*3.15+1*5	Plinth	N	N	To be implemented
34	Bargarh	BWED,Bargarh	Bargarh	Ghenss	10	33/11 kV	10.2		N	2*5	Plinth	N	Y	To be implemented
35	Bargarh	BWED,Bargarh	Bargarh	Jharbandh	13.2	33/11 kV	7.3		N	1*3.15+2*5	Plinth	Y	N	To be implemented
36	Bargarh	BWED,Bargarh	Bargarh	Jhitiki	10	33/11 kV	2.6		N	2*5	Plinth	Y	N	Existing
37	Bargarh	BWED,Bargarh	Bargarh	Kundakhai	10	33/11 kV	4.7		N	2*5	Plinth	Y	N	Existing
38	Bargarh	BWED,Bargarh	Bargarh	Lakhamara	10	33/11 kV	3.2		N	2*5	Plinth	Y	N	Existing
39	Bargarh	BWED,Bargarh	Bargarh	Mandosil	10	33/11 kV	5.4		N	2*5	Plinth	N	N	Existing
40	Bargarh	BWED,Bargarh	Bargarh	Melchhamunda	10	33/11 kV	8.2		N	2*5	Plinth	N	Y	To be implemented
41	Bargarh	BWED,Bargarh	Bargarh	Padampur	21	33/11 kV	10.9		N	1*5+2*8	Plinth	Y	N	To be implemented
42	Bargarh	BWED,Bargarh	Bargarh	Paikmal	10	33/11 kV	7.2		N	2*5	Plinth	N	N	To be implemented
43	Bargarh	BWED,Bargarh	Bargarh	Sarandapali	10	33/11 kV	11.1		Y	2*5	Plinth	N	N	To be implemented
44	Bargarh	BWED,Bargarh	Bargarh	Sohella	29	33/11 kV	22.2		Y	1*5+3*8	Plinth	N	N	To be implemented
45	BOLANGIR	BED,BOLANGIR	Bolangir	AGALPUR	8.15	33/11 kV	3.0		Y	1*3.15+1*5	Plinth	Y	N	To be implemented
46	BOLANGIR	BED,BOLANGIR	Bolangir	BHADRA(KANDAJURI)	10	33/11 kV	1.7		Y	2*5	Plinth	Y	N	To be implemented
47	BOLANGIR	BED,BOLANGIR	Bolangir	BHARSUJA	10	33/11 kV	0.5		Y	2*5	Plinth	Y	N	Existing

48	BOLANGIR	BED,BOLANGIR	Bolangir	BUDABAHAL	10	33/11 kV	0.5		Y	2*5	Plinth	Y	N	To be implemented
49	BOLANGIR	BED,BOLANGIR	Bolangir	CHHATAMAKHANA	13	33/11 kV	4.1		Y	1*5+1*8	Plinth	Y	N	To be implemented
50	BOLANGIR	BED,BOLANGIR	Bolangir	CHUDAPALI(BARPUDIGIA)	11.3	33/11 kV	3.4		N	2*3.15+1*5	Plinth	Y	N	To be implemented
51	BOLANGIR	BED,BOLANGIR	Bolangir	DEOGAON	8.15	33/11 kV	1.8		Y	1*3.15+1*5	Plinth	Y	N	To be implemented
52	BOLANGIR	BED,BOLANGIR	Bolangir	INDUSTRIAL ESTATE BALANGIR	16	33/11 kV	6.8		N	2*8	Plinth	Y	N	To be implemented
53	BOLANGIR	BED,BOLANGIR	Bolangir	JAIL(ODSSP) BOLANGIR	10	33/11 kV	2.5		Y	2*5	Plinth	Y	N	Existing
54	BOLANGIR	BED,BOLANGIR	Bolangir	JARASINGHA	10	33/11 kV	0.5		Y	2*5	Plinth	Y	N	Existing
55	BOLANGIR	BED,BOLANGIR	Bolangir	KASABAHAL	10	33/11 kV	1.4		Y	2*5	Plinth	Y	N	Existing
56	BOLANGIR	BED,BOLANGIR	Bolangir	KUDASINGHA	6.3	33/11 kV	0.2		Y	2*3.15	Plinth	Y	N	To be implemented
57	BOLANGIR	BED,BOLANGIR	Bolangir	LALTIKIRA	17.5	33/11 kV	4.8		Y	3*3.15+1*8	Plinth	Y	N	To be implemented
58	BOLANGIR	BED,BOLANGIR	Bolangir	LOISINGHA	11.3	33/11 kV	3.1		Y	2*3.15+1*5	Plinth	Y	N	To be implemented
59	BOLANGIR	BED,BOLANGIR	Bolangir	MADHIAPALI	10	33/11 kV	0.9		Y	2*5	Plinth	Y	N	To be implemented
60	BOLANGIR	BED,BOLANGIR	Bolangir	POWER HOUSE BALANGIR	16	33/11 kV	6.9		Y	2*8	Plinth	Y	N	Existing
61	BOLANGIR	BED,BOLANGIR	Bolangir	PUINTALA(REC)	10	33/11 kV	2.7		Y	2*5	Plinth	Y	N	To be implemented
62	BOLANGIR	BED,BOLANGIR	Bolangir	SALEBHATA	10	33/11 kV	6.3		Y	2*5	Plinth	N	N	To be implemented
63	BOLANGIR	BED,BOLANGIR	Bolangir	SUDPADA	5	33/11 kV	3.2		Y	1*5	Plinth	N	N	To be implemented
64	BOLANGIR	BED,BOLANGIR	Bolangir	TUSURA	13.2	33/11 kV	12.6		N	1*3.15+2*5	Plinth	N	Y	To be implemented

65	BOLANGIR	SED,SONEPUR	Sonepur	Ainlachat	10	33/11 kV	1.5		Y	2*5	Plinth	Y	N	To be implemented
66	BOLANGIR	SED,SONEPUR	Sonepur	BHATABAHALI(RLTAP)	10	33/11 kV	2.3		N	2*5	Plinth	Y	N	To be implemented
67	BOLANGIR	SED,SONEPUR	Sonepur	BINKA	21.2	33/11 kV	3.0		N	1*3.15+2*5+1*8	Plinth	Y	N	To be implemented
68	BOLANGIR	SED,SONEPUR	Sonepur	BISALPALLI	16	33/11 kV	7.6		N	2*8	Plinth	Y	N	To be implemented
69	BOLANGIR	SED,SONEPUR	Sonepur	BMPUR	16.3	33/11 kV	7.1		N	2*3.15+2*5	Plinth	Y	N	To be implemented
70	BOLANGIR	SED,SONEPUR	Sonepur	CHARVATA	10	33/11 kV	0.6		N	2*5	Plinth	Y	N	To be implemented
71	BOLANGIR	SED,SONEPUR	Sonepur	CHERUPALI	18	33/11 kV	5.3		Y	2*5+1*8	Plinth	Y	N	To be implemented
72	BOLANGIR	SED,SONEPUR	Sonepur	DUBLA	10	33/11 kV	0.8		N	2*5	Plinth	Y	N	Existing
73	BOLANGIR	SED,SONEPUR	Sonepur	DUMERBAHAL	6.6	33/11 kV	2.7		N	1*1.6+1*5	Plinth	N	N	To be implemented
74	BOLANGIR	SED,SONEPUR	Sonepur	HARDAKHOL	10	33/11 kV	2.9		N	2*5	Plinth	Y	N	To be implemented
75	BOLANGIR	SED,SONEPUR	Sonepur	HEADKITIKIRA(KALAPATHAR)	10	33/11 kV	0.7		N	2*5	Plinth	Y	N	Existing
76	BOLANGIR	SED,SONEPUR	Sonepur	HIKUDI(RAXA CHOWK)	10	33/11 kV	1.3		N	2*5	Plinth	Y	N	To be implemented
77	BOLANGIR	SED,SONEPUR	Sonepur	KHARI	13.2	33/11 kV	5.4		N	1*3.15+2*5	Plinth	Y	N	To be implemented
78	BOLANGIR	SED,SONEPUR	Sonepur	MURSHUNDHI	10	33/11 kV	1.6		N	2*5	Plinth	Y	N	Existing
79	BOLANGIR	SED,SONEPUR	Sonepur	PANDKITAL	11.3	33/11 kV	3.9		N	2*3.15+1*5	Plinth	Y	N	To be implemented
80	BOLANGIR	SED,SONEPUR	Sonepur	SALEDI	10	33/11 kV	2.5		N	2*5	Plinth	Y	N	To be implemented

81	BOLANGIR	SED,SONEPUR	Sonepur	SONEPUR(NEW)	10	33/11 kV	1.8		N	2*5	Plinth	Y	N	To be implemented
82	BOLANGIR	SED,SONEPUR	Sonepur	SONEPUR(OLD)	11.2	33/11 kV	2.5		N	1*3.15+1*8	Plinth	Y	N	To be implemented
83	BOLANGIR	SED,SONEPUR	Sonepur	SUBALAYA	10	33/11 kV	2.2		N	2*5	Plinth	Y	N	To be implemented
84	BOLANGIR	SED,SONEPUR	Sonepur	TARVA	8.15	33/11 kV	3.7		N	1*3.15+1*5	Plinth	N	N	To be implemented
85	BOLANGIR	SED,SONEPUR	Sonepur	ULLUNDA	11.6	33/11 kV	3.8		N	1*1.6+2*5	Plinth	Y	N	To be implemented
86	BOLANGIR	TED, TITILAGARH	Bolangir	BAGABAHAL(ODSSP)	10	33/11 kV	2.0		Y	2*5	Plinth	Y	N	To be implemented
87	BOLANGIR	TED, TITILAGARH	Bolangir	BANGOMUNDA	6.3	33/11 kV	2.7		Y	2*3.15	Plinth	Y	N	To be implemented
88	BOLANGIR	TED, TITILAGARH	Bolangir	BELGAON	8.15	33/11 kV	3.0		Y	1*3.15+1*5	Plinth	Y	N	To be implemented
89	BOLANGIR	TED, TITILAGARH	Bolangir	BELPADA	11.3	33/11 kV	3.5		Y	2*3.15+1*5	Plinth	Y	N	To be implemented
90	BOLANGIR	TED, TITILAGARH	Bolangir	DABRI	10	33/11 kV	1.6		N	2*5	Plinth	Y	N	To be implemented
91	BOLANGIR	TED, TITILAGARH	Bolangir	DHUMABHATA	10	33/11 kV	2.6		N	2*5	Plinth	Y	N	To be implemented
92	BOLANGIR	TED, TITILAGARH	Bolangir	GHUMER	8.15	33/11 kV	2.4		N	1*3.15+1*5	Plinth	Y	N	To be implemented
93	BOLANGIR	TED, TITILAGARH	Bolangir	GUDIGHAT	10	33/11 kV	1.7		N	2*5	Plinth	Y	N	To be implemented
94	BOLANGIR	TED, TITILAGARH	Bolangir	JURIA	10	33/11 kV	1.2		N	2*5	Plinth	Y	N	To be implemented
95	BOLANGIR	TED, TITILAGARH	Bolangir	KANTABANJI	13	33/11 kV	3.9		Y	1*5+1*8	Plinth	Y	N	To be implemented
96	BOLANGIR	TED, TITILAGARH	Bolangir	KANUT(ODSSP)	10	33/11 kV	2.3		Y	2*5	Plinth	Y	N	Existing

97	BOLANGIR	TED, TITILAGARH	Bolangir	KARAMTULA	10	33/11 kV	2.0		Y	2*5	Plinth	Y	N	To be implemented
98	BOLANGIR	TED, TITILAGARH	Bolangir	KHAPRAKHOL	8.15	33/11 kV	2.9		N	1*3.15+1*5	Plinth	Y	N	To be implemented
99	BOLANGIR	TED, TITILAGARH	Bolangir	KHOLAN	8.15	33/11 kV	3.1		Y	1*3.15+1*5	Plinth	Y	N	To be implemented
100	BOLANGIR	TED, TITILAGARH	Bolangir	LARAMBHA	10	33/11 kV	1.7		N	2*5	Plinth	Y	N	To be implemented
101	BOLANGIR	TED, TITILAGARH	Bolangir	LATHORE	10	33/11 kV	1.6		N	2*5	Plinth	Y	N	To be implemented
102	BOLANGIR	TED, TITILAGARH	Bolangir	MURIBAHAL	8.15	33/11 kV	3.5		Y	1*3.15+1*5	Plinth	N	N	To be implemented
103	BOLANGIR	TED, TITILAGARH	Bolangir	PANDRIPANI	10	33/11 kV	2.2		Y	2*5	Plinth	Y	N	To be implemented
104	BOLANGIR	TED, TITILAGARH	Bolangir	PATNAGARH	13	33/11 kV	6.9		N	1*5+1*8	Plinth	N	N	To be implemented
105	BOLANGIR	TED, TITILAGARH	Bolangir	PIPALPADA	10	33/11 kV	0.6		Y	2*5	Plinth	Y	N	To be implemented
106	BOLANGIR	TED, TITILAGARH	Bolangir	SAINTALA	6.3	33/11 kV	3.3		Y	2*3.15	Plinth	N	N	To be implemented
107	BOLANGIR	TED, TITILAGARH	Bolangir	SINDHEKELA	8.15	33/11 kV	2.9		Y	1*3.15+1*5	Plinth	Y	N	To be implemented
108	BOLANGIR	TED, TITILAGARH	Bolangir	TENDAPADAR	6.3	33/11 kV	1.7		N	2*3.15	Plinth	Y	N	To be implemented
109	BOLANGIR	TED, TITILAGARH	Bolangir	THAKPADA	6.3	33/11 kV	3.4		N	2*3.15	Plinth	N	N	To be implemented
110	BOLANGIR	TED, TITILAGARH	Bolangir	TITLAGARH	16	33/11 kV	6.7		Y	2*8	Plinth	Y	N	To be implemented
111	BOLANGIR	TED, TITILAGARH	Bolangir	TUREIKELA	6.6	33/11 kV	3.1		N	1*1.6+1*5	Plinth	N	N	To be implemented
112	KALAHANDI	KEED	Kalahandi	ATTANGUDA	10	33/11 kV	0.6		Y	2*5	Plinth	Y	N	To be implemented

113	KALAHANDI	KEED	Kalahandi	BANDHAPARI	6.3	33/11 kV	1.5		N	2*3.15	Plinth	Y	N	To be implemented
114	KALAHANDI	KEED	Kalahandi	BANDOPALA	10	33/11 kV	2.7		Y	2*5	Plinth	Y	N	To be implemented
115	KALAHANDI	KEED	Kalahandi	BHANGABARI	13	33/11 kV	1.0		N	1*5+1*8	Plinth	Y	N	To be implemented
116	KALAHANDI	KEED	Kalahandi	BISWANATHPUR	4.75	33/11 kV	1.6		N	1*3.15+1*1.6	Plinth	Y	N	To be implemented
117	KALAHANDI	KEED	Kalahandi	BORDA	4.75	33/11 kV	2.2		Y	1*3.15+1*1.6	Plinth	N	N	To be implemented
118	KALAHANDI	KEED	Kalahandi	KARLAMUNDA	5	33/11 kV	2.9		N	1*5	Plinth	N	N	To be implemented
119	KALAHANDI	KEED	Kalahandi	KARLAPADA	10	33/11 kV	1.1		N	2*5	Plinth	Y	N	Existing
120	KALAHANDI	KEED	Kalahandi	KESINGA	18	33/11 kV	10.9		N	2*5+1*8	Plinth	N	N	To be implemented
121	KALAHANDI	KEED	Kalahandi	KUSADUNGRI	10	33/11 kV	7.7		Y	2*5	Plinth	N	N	To be implemented
122	KALAHANDI	KEED	Kalahandi	LANJIGARH	3.15	33/11 kV	1.7		N	1*3.15	Plinth	Y	N	To be implemented
123	KALAHANDI	KEED	Kalahandi	M.RAMPUR	8.15	33/11 kV	2.6		N	1*3.15+1*5	Plinth	Y	N	To be implemented
124	KALAHANDI	KEED	Kalahandi	MADANPUR	4.75	33/11 kV	1.3		N	1*3.15+1*1.6	Plinth	Y	N	To be implemented
125	KALAHANDI	KEED	Kalahandi	MOHANGIRI BANJAMUNDA	6.3	33/11 kV	1.0		N	2*3.15	Plinth	Y	N	To be implemented
126	KALAHANDI	KEED	Kalahandi	NAKTIGUDA	29	33/11 kV	11.1		Y	1*5+3*8	Plinth	Y	N	To be implemented
127	KALAHANDI	KEED	Kalahandi	NARLA	13	33/11 kV	4.1		N	1*5+1*8	Plinth	Y	N	To be implemented
128	KALAHANDI	KEED	Kalahandi	NUNMATH	10	33/11 kV	1.4		N	2*5	Plinth	Y	N	To be implemented

129	KALAHANDI	KEED	Kalahandi	RAISINGPUR	10	33/11 kV	2.4		Y	2*5	Plinth	Y	N	To be implemented
130	KALAHANDI	KEED	Kalahandi	RUPRA ROAD	10	33/11 kV	2.4		N	2*5	Plinth	Y	N	To be implemented
131	KALAHANDI	KEED	Kalahandi	SISAKHAL	10	33/11 kV	3.3		N	2*5	Plinth	Y	N	To be implemented
132	KALAHANDI	KEED	Kalahandi	UTKELA	5	33/11 kV	2.1		N	1*5	Plinth	N	N	To be implemented
133	KALAHANDI	KWED	Kalahandi	ADRI	4.75	33/11 kV	1.0		N	1*3.15+1*1.6	Plinth	Y	N	To be implemented
134	KALAHANDI	KWED	Kalahandi	BADAKUTRU	11.3	33/11 kV	3.0		Y	2*3.15+1*5	Plinth	Y	N	To be implemented
135	KALAHANDI	KWED	Kalahandi	BEHERA	10	33/11 kV	1.6		Y	2*5	Plinth	Y	N	To be implemented
136	KALAHANDI	KWED	Kalahandi	CHARBAHAL	7.9	33/11 kV	3.4		Y	2*3.15+1*1.6	Plinth	Y	N	To be implemented
137	KALAHANDI	KWED	Kalahandi	CHICHIGUDA	10	33/11 kV	3.5		Y	2*5	Plinth	Y	N	To be implemented
138	KALAHANDI	KWED	Kalahandi	DASPUR	10	33/11 kV	2.0		Y	2*5	Plinth	Y	N	To be implemented
139	KALAHANDI	KWED	Kalahandi	DHARMAGARH	18	33/11 kV	6.9		Y	2*5+1*8	Plinth	Y	N	To be implemented
140	KALAHANDI	KWED	Kalahandi	GADRAMAL	10	33/11 kV	4.2		Y	2*5	Plinth	Y	N	To be implemented
141	KALAHANDI	KWED	Kalahandi	GOLAMUNDA	6.6	33/11 kV	2.4		Y	1*1.6+1*5	Plinth	N	N	To be implemented
142	KALAHANDI	KWED	Kalahandi	JAIPATNA	5	33/11 kV	2.6		Y	1*5	Plinth	N	N	To be implemented
143	KALAHANDI	KWED	Kalahandi	JUNAGARH	16.3	33/11 kV	7.0		N	2*3.15+2*5	Plinth	Y	N	To be implemented
144	KALAHANDI	KWED	Kalahandi	KALAMPUR	10	33/11 kV	0.0		N	2*5	Plinth	Y	N	To be implemented

145	KALAHANDI	KWED	Kalahandi	KASIBAHAL	10	33/11 kV	1.0		Y	2*5	Plinth	Y	N	Existing
146	KALAHANDI	KWED	Kalahandi	KEGAON	6.3	33/11 kV	2.5		Y	2*3.15	Plinth	Y	N	To be implemented
147	KALAHANDI	KWED	Kalahandi	LADUGAON	10	33/11 kV	3.5		Y	2*5	Plinth	Y	N	To be implemented
148	KALAHANDI	KWED	Kalahandi	MAHICHALA	10	33/11 kV	2.0		Y	2*5	Plinth	Y	N	To be implemented
149	KALAHANDI	KWED	Kalahandi	MUKHIGUDA	6.3	33/11 kV	1.9		N	2*3.15	Plinth	Y	N	To be implemented
150	KALAHANDI	KWED	Kalahandi	T RAMPUR	3.15	33/11 kV	2.3		N	1*3.15	Plinth	Y	N	To be implemented
151	KALAHANDI	KWED	Kalahandi	TEMRA	10	33/11 kV	1.3		Y	2*5	Plinth	Y	N	Existing
152	KALAHANDI	NED	Nuapada	BADI	10	33/11 kV	4.6		Y	2*5	Plinth	Y	N	Existing
153	KALAHANDI	NED	Nuapada	Bargaon	6.3	33/11 kV	3.0		Y	2*3.15	Plinth	Y	N	To be implemented
154	KALAHANDI	NED	Nuapada	BATIBAHAL	3.2	33/11 kV	0.6		Y	2*1.6	Plinth	Y	N	To be implemented
155	KALAHANDI	NED	Nuapada	BISORA	8	33/11 kV	4.0		Y	1*8	Plinth	N	N	To be implemented
156	KALAHANDI	NED	Nuapada	BODEN	6.3	33/11 kV	2.4		N	2*3.15	Plinth	Y	N	To be implemented
157	KALAHANDI	NED	Nuapada	CHALNA	10	33/11 kV	1.7		Y	2*5	Plinth	Y	N	To be implemented
158	KALAHANDI	NED	Nuapada	KHARIAR	21.2	33/11 kV	10.6		Y	1*3.15+2*5+1*8	Plinth	Y	N	To be implemented
159	KALAHANDI	NED	Nuapada	KHARIAR ROAD	11.2	33/11 kV	6.7		Y	1*3.15+1*8	Plinth	N	N	To be implemented
160	KALAHANDI	NED	Nuapada	KOMNA	10	33/11 kV	3.1		Y	2*5	Plinth	Y	N	To be implemented
161	KALAHANDI	NED	Nuapada	KURUMPURI	8.15	33/11 kV	4.3		Y	1*3.15+1*5	Plinth	N	N	To be implemented

162	KALAHANDI	NED	Nuapada	LESUNPALI	10	33/11 kV	1.4		Y	2*5	Plinth	Y	N	To be implemented
163	KALAHANDI	NED	Nuapada	NUAPADA	10	33/11 kV	6.4		Y	2*5	Plinth	N	N	To be implemented
164	KALAHANDI	NED	Nuapada	SAIPALA	4.75	33/11 kV	2.4		Y	1*3.15+1*1.6	Plinth	N	N	To be implemented
165	KALAHANDI	NED	Nuapada	SARABONG	6.3	33/11 kV	2.8		Y	2*3.15	Plinth	Y	N	To be implemented
166	KALAHANDI	NED	Nuapada	SINAPALI	11.3	33/11 kV	6.3		Y	2*3.15+1*5	Plinth	Y	N	To be implemented
167	KALAHANDI	NED	Nuapada	TIMARPUR	10	33/11 kV	2.5		N	2*5	Plinth	Y	N	To be implemented
168	ROURKELA	RED,RAJGANGPUR	Sundargarh	Alanda	10	33/11 kV	1.9	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	To be implemented
169	ROURKELA	RED,RAJGANGPUR	Sundargarh	Balanda	10	33/11 kV	2.8	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	Existing
170	ROURKELA	RED,RAJGANGPUR	Sundargarh	Bargaon	9.75	33/11 kV	1.4	33 kV: line bay-5 T/F bay -3	Y	1*1.6+1*3.15+1*5	Plinth	Y	N	To be implemented
171	ROURKELA	RED,RAJGANGPUR	Sundargarh	Jharbeda	10	33/11 kV	2.0	33 kV: line bay-2 T/F bay -2	Y	2*5	Plinth	N	N	Existing
172	ROURKELA	RED,RAJGANGPUR	Sundargarh	Biringatoli	10	33/11 kV	1.6	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	Existing
173	ROURKELA	RED,RAJGANGPUR	Sundargarh	Birmitrapur	10	33/11 kV	5.9	33 kV: line bay-4 T/F bay -2	Y	2*5	Plinth	N	N	To be implemented
174	ROURKELA	RED,RAJGANGPUR	Sundargarh	Hatibari	9.75	33/11 kV	2.0	33 kV: line bay-1 T/F bay -3	Y	1*1.6+1*3.15+1*5	Plinth	Y	N	To be implemented
175	ROURKELA	RED,RAJGANGPUR	Sundargarh	IDC	13	33/11 kV	5.7	33 kV: line bay-2 T/F bay -2	Y	1*5+1*8	Plinth	N	N	To be implemented
176	ROURKELA	RED,RAJGANGPUR	Sundargarh	Jarangloi	10	33/11 kV	1.7	33 kV: line bay-2 T/F bay -2	Y	2*5	Plinth	Y	N	Existing
177	ROURKELA	RED,RAJGANGPUR	Sundargarh	Kuarmunda	13.2	33/11 kV	4.5	33 kV: line bay-4 T/F bay -3	Y	1*3.15+2*5	Plinth	Y	N	To be implemented

178	ROURKELA	RED,RAJGANGPUR	Sundargarh	Kutra	9.45	33/11 kV	4.1	33 kV: line bay-5 T/F bay -3	Y	3*3.15	Plinth	Y	N	To be implemented
179	ROURKELA	RED,RAJGANGPUR	Sundargarh	LINDRA	10	33/11 kV	0.6	33 33 kV: line bay-2 T/F bay -2	Y	2*5	Plinth	Y	N	To be implemented
180	ROURKELA	RED,RAJGANGPUR	Sundargarh	Mandiakudar	7.9	33/11 kV	3.0	33 kV: line bay-3 T/F bay -3	Y	2*3.15+1*1.6	Plinth	Y	N	To be implemented
181	ROURKELA	RED,RAJGANGPUR	Sundargarh	Nuagaon	8.15	33/11 kV	5.9	33 kV: line bay-2 T/F bay -2	Y	1*3.15+1*5	Plinth	N	N	To be implemented
182	ROURKELA	RED,RAJGANGPUR	Sundargarh	Otto India	5	33/11 kV	1.3	33 kV: line bay-1 T/F bay -1	Y	1*5	Plinth	N	N	To be implemented
183	ROURKELA	RED,RAJGANGPUR	Sundargarh	Raiboga	10	33/11 kV	1.6	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	To be implemented
184	ROURKELA	RED,RAJGANGPUR	Sundargarh	Rajgangpur	18	33/11 kV	9.7	33 kV: line bay-2 T/F bay -3	Y	2*5+1*8	Plinth	Y	N	To be implemented
185	ROURKELA	RED,RAJGANGPUR	Sundargarh	Sahajbahal	10	33/11 kV	0.3	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	Existing
186	ROURKELA	RED,RAJGANGPUR	Sundargarh	Singhapada (Bhagatola)	10	33/11 kV	1.7	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	Existing
187	ROURKELA	RED,RAJGANGPUR	Sundargarh	Vedvyas	16	33/11 kV	7.0	33 kV: line bay-3 T/F bay -2	N	2*8	Plinth	Y	N	To be implemented
188	ROURKELA	RED,RKL	Sundargarh	BASANTI	16	33/11 kV	8.2	33 kV: line bay-2 T/F bay -2	Y	2*8	Plinth	N	N	To be implemented
189	ROURKELA	RED,RKL	Sundargarh	BISRA	16.2	33/11 kV	6.3	33 kV: line bay-2 T/F bay -3	N	1*3.15+1*5+1*8	Plinth	Y	N	To be implemented
190	ROURKELA	RED,RKL	Sundargarh	BONDAMUNDA	16	33/11 kV	4.0	33 kV: line bay-1 T/F bay -2	N	2*8	Plinth	Y	N	Existing
191	ROURKELA	RED,RKL	Sundargarh	DALPOSH	10	33/11 kV	1.4	33 kV: line bay-1 T/F bay -2	N	2*5	Plinth	Y	N	Existing
192	ROURKELA	RED,RKL	Sundargarh	GOPABANDHUPALI (MS Pally)	10	33/11 kV	3.1	33 kV: line bay-1,T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
193	ROURKELA	RED,RKL	Sundargarh	HAMIRPUR	10	33/11 kV	2.3	33 kV: line bay-2,T/F bay -2	N	2*5	Plinth	Y	N	To be implemented

194	ROURKELA	RED,RKL	Sundargarh	JAREIKELA	10	33/11 kV	0.5	33 kV: line bay-2 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
195	ROURKELA	RED,RKL	Sundargarh	KOELNAGAR	16	33/11 kV	9.6	33 kV: line bay-2 T/F bay -2	N	2*8	Plinth	N	N	To be implemented
196	ROURKELA	RED,RKL	Sundargarh	NIT(REC)	18	33/11 kV	8.3	33 kV: line bay-5 T/F bay -3	N	2*5+1*8	Plinth	Y	N	To be implemented
197	ROURKELA	RED,RKL	Sundargarh	POWER HOUSE RKL	24	33/11 kV	22.1	33 kV: line bay-3 T/F bay -3	N	3*8	Plinth	N	Y	To be implemented
198	ROURKELA	RSED,RKL	Sundargarh	GURUNDIA	10	33/11 kV	3.0	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	To be implemented
199	ROURKELA	RSED,RKL	Sundargarh	BONAI	16.3	33/11 kV	5.2	33 kV: line bay-2 T/F bay -4	Y	2*3.15+2*5	Plinth	Y	N	To be implemented
200	ROURKELA	RSED,RKL	Sundargarh	CHHEND	21	33/11 kV	13.6	33 kV: line bay-1 T/F bay -3	N	1*5+2*8	Plinth	N	N	To be implemented
201	ROURKELA	RSED,RKL	Sundargarh	CIVIL TOWNSHIP	16	33/11 kV	7.9	33 kV: line bay-1 T/F bay -2	Y	2*8	Plinth	Y	N	Existing
202	ROURKELA	RSED,RKL	Sundargarh	INDUSTRIAL ESTATE RKL	13	33/11 kV	4.4	33 kV: line bay-2 T/F bay -2	Y	1*5+1*8	Plinth	Y	N	To be implemented
203	ROURKELA	RSED,RKL	Sundargarh	JALDA	16	33/11 kV	7.3	33 kV: line bay-1 T/F bay -2	Y	2*8	Plinth	Y	N	Existing
204	ROURKELA	RSED,RKL	Sundargarh	K BALANGA	6.3	33/11 kV	2.0	33 kV: line bay-1 T/F bay -2	N	2*3.15	Plinth	Y	N	To be implemented
205	ROURKELA	RSED,RKL	Sundargarh	KOIRA	13.2	33/11 kV	4.0	33 kV: line bay-2 T/F bay -3	N	1*3.15+2*5	Plinth	Y	N	To be implemented
206	ROURKELA	RSED,RKL	Sundargarh	LATHIKATA	13	33/11 kV	5.3	33 kV: line bay-3 T/F bay -2	Y	1*5+1*8	Plinth	N	N	To be implemented
207	ROURKELA	RSED,RKL	Sundargarh	MAHULDIHA	8.15	33/11 kV	4.4	33 kV: line bay-3 T/F bay -2	Y	1*3.15+1*5	Plinth	N	N	To be implemented
208	ROURKELA	RSED,RKL	Sundargarh	PANPOSH	16	33/11 kV	6.4	33 kV: line bay-1 T/F bay -2	Y	2*8	Plinth	Y	N	To be implemented
209	ROURKELA	RSED,RKL	Sundargarh	RAJAMUNDA	14.8	33/11 kV	5.1	33 kV: line bay-2 T/F bay -4	N	1*1.6+1*3.15+2*5	Plinth	Y	N	To be implemented

210	ROURKELA	RSED,RKL	Sundargarh	TENSA	8.15	33/11 kV	1.3	33 kV: line bay-1 T/F bay -2	N	1*3.15+1*5	Plinth	Y	N	To be implemented
211	ROURKELA	RSED,RKL	Sundargarh	TUNIAPALLI	10	33/11 kV	2.3	33 kV: line bay-1 T/F bay -2	Y	2*5	Plinth	Y	N	To be implemented
212	ROURKELA	SED,SUNDARGARH	Sundargarh	Balisankara	10	33/11 kV	2.2	33 kV: line bay-2 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
213	ROURKELA	SED,SUNDARGARH	Sundargarh	Bileimunda	10	33/11 kV	1.6	33 kV: line bay- 1,T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
214	ROURKELA	SED,SUNDARGARH	Sundargarh	College	13	33/11 kV	5.3	33 kV: line bay-1 T/F bay -2	N	1*5+1*8	Plinth	N	N	To be implemented
215	ROURKELA	SED,SUNDARGARH	Sundargarh	Darlipali	10	33/11 kV	1.4	33 kV: line bay-1 T/F bay -2	N	2*5	Plinth	Y	N	Existing
216	ROURKELA	SED,SUNDARGARH	Sundargarh	Garjanbahal	16.6	33/11 kV	2.8	33 kV: line bay-1 T/F bay -4	N	1*1.6+3*5	Plinth	Y	N	To be implemented
217	ROURKELA	SED,SUNDARGARH	Sundargarh	Karamdihi	10	33/11 kV	2.1	33 kV: line bay-2 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
218	ROURKELA	SED,SUNDARGARH	Sundargarh	Kinjirkela	10	33/11 kV	2.0	33 kV: line bay- 1T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
219	ROURKELA	SED,SUNDARGARH	Sundargarh	Kundukela	10	33/11 kV	1.9	33 kV: line bay-1 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
220	ROURKELA	SED,SUNDARGARH	Sundargarh	Lefripada	9.75	33/11 kV	4.1	33 kV: line bay-2 T/F bay -3	N	1*1.6+1*3.15+1*5	Plinth	Y	N	To be implemented
221	ROURKELA	SED,SUNDARGARH	Sundargarh	Majhapada	10	33/11 kV	4.2	33 kV: line bay-2 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
222	ROURKELA	SED,SUNDARGARH	Sundargarh	Mangaspur	10	33/11 kV	0.8	33 kV: line bay-1 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
223	ROURKELA	SED,SUNDARGARH	Sundargarh	Sadar	10	33/11 kV	2.2	33 kV: line bay-1 T/F bay 2	N	2*5	Plinth	Y	N	To be implemented
224	ROURKELA	SED,SUNDARGARH	Sundargarh	Sankara	23	33/11 kV	12.7	33 kV: line bay-4 T/F bay -4	N	3*5+1*8	Plinth	Y	N	To be implemented
225	ROURKELA	SED,SUNDARGARH	Sundargarh	Sargipali	13.2	33/11 kV	1.7	33 kV: line bay-5 T/F bay -3	N	1*3.15+2*5	Plinth	Y	N	To be implemented

226	ROURKELA	SED,SUNDARGARH	Sundargarh	Hemgiri	10	33/11 kV	2.2	33 kV: line bay-2 T/F bay -2		2*5	Plinth	Y	N	To be implemented
227	ROURKELA	SED,SUNDARGARH	Sundargarh	Subdega	15	33/11 kV	3.3	33 kV: line bay-3 T/F bay -3	N	3*5	Plinth	Y	N	To be implemented
228	ROURKELA	SED,SUNDARGARH	Sundargarh	Tumbapali	10	33/11 kV	1.1	33 kV: line bay-2 T/F bay -2	N	2*5	Plinth	Y	N	To be implemented
229	SAMBALPUR	BNED	Jharsuguda	BANDHBAHAL	9.6	33/11 kV	5.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	1*1.6+1*8	Plinth	N	N	To be implemented
230	SAMBALPUR	BNED	Jharsuguda	BRAJARAJNAGAR	16	33/11 kV	9.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*8	Plinth	N	N	To be implemented
231	SAMBALPUR	BNED	Jharsuguda	DHULUNDA	10	33/11 kV	6.7	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	N	N	Existing
232	SAMBALPUR	BNED	Jharsuguda	GOVINDPUR	10	33/11 kV	1.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	To be implemented
233	SAMBALPUR	BNED	Jharsuguda	JHARUPADA	8.15	33/11 kV	4.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	1*3.15+1*5	Plinth	N	N	To be implemented
234	SAMBALPUR	BNED	Jharsuguda	LAKHANPUR	10	33/11 kV	0.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	To be implemented
235	SAMBALPUR	BNED	Jharsuguda	MUCHBAHAL	13	33/11 kV	7.7	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	1*5+1*8	Plinth	N	N	To be implemented
236	SAMBALPUR	BNED	Jharsuguda	PANDRI	10	33/11 kV	0.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	Y	N	To be implemented
237	SAMBALPUR	DED	Deogarh	BARKOTE	6.6	33/11 kV	2.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	1*1.6+1*5	Plinth	N	N	To be implemented

238	SAMBALPUR	DED	Deogarh	BHAKATABA DAKUDAR	10	33/11 kV	1.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*5	Plinth	Y	N	To be implemented
239	SAMBALPUR	DED	Deogarh	BUDHAPAL	6.3	33/11 kV	3.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*3.15	Plinth	N	N	To be implemented
240	SAMBALPUR	DED	Deogarh	DEOGARH	8.15	33/11 kV	4.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	1*3.15+1*5	Plinth	Y	N	To be implemented
241	SAMBALPUR	DED	Deogarh	KANDHAL	6.3	33/11 kV	1.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*3.15	Plinth	Y	N	To be implemented
242	SAMBALPUR	DED	Deogarh	RENGALBEDA	6.3	33/11 kV	1.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-7	N	2*3.15	Plinth	Y	N	To be implemented
243	SAMBALPUR	DED	Deogarh	TELIMUNDA	10	33/11 kV	3.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*5	Plinth	Y	N	To be implemented
244	SAMBALPUR	DED	Deogarh	TILEIBANI	6.3	33/11 kV	1.4	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*3.15	Plinth	Y	N	To be implemented
245	SAMBALPUR	JED	Jharsuguda	AIRPORT	6.3	33/11 kV	0.5	33 Kv Line bay-2 T/F bay -2 11 kV line bay-4	Y	2*3.15	Plinth	Y	N	To be implemented
246	SAMBALPUR	JED	Jharsuguda	ARDA	10	33/11 kV	0.9	33 Kv Line bay-2 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
247	SAMBALPUR	JED	Jharsuguda	ARDABAHAL	10	33/11 kV	3.2	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
248	SAMBALPUR	JED	Jharsuguda	BADMAL	8.15	33/11 kV	2.7	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	1*3.15+1*5	Plinth	Y	N	To be implemented

249	SAMBALPUR	JED	Jharsuguda	BAGDIHI	8.15	33/11 kV	1.9	33 Kv Line bay-2 T/F bay -2 11 kV line bay-4	Y	1*3.15+1*5	Plinth	Y	N	To be implemented
250	SAMBALPUR	JED	Jharsuguda	BAMARA	8.15	33/11 kV	2.9	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	1*3.15+1*5	Plinth	Y	N	To be implemented
251	SAMBALPUR	JED	Jharsuguda	BHOJPUR	10	33/11 kV	1.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	To be implemented
252	SAMBALPUR	JED	Jharsuguda	BURDA	10	33/11 kV	0.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-2	N	2*5	Plinth	Y	N	To be implemented
253	SAMBALPUR	JED	Jharsuguda	DHH-MEDICAL	6.3	33/11 kV	0.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*3.15	Plinth	Y	N	To be implemented
254	SAMBALPUR	JED	Jharsuguda	DURLAGA	10	33/11 kV	3.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	To be implemented
255	SAMBALPUR	JED	Jharsuguda	FASIMAL	10	33/11 kV	0.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	To be implemented
256	SAMBALPUR	JED	Jharsuguda	GARPOSH	10	33/11 kV	3.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	Y	N	To be implemented
257	SAMBALPUR	JED	Jharsuguda	GOCHARA	10	33/11 kV	0.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
258	SAMBALPUR	JED	Jharsuguda	HADIPALI(KHANDOKATA)	10	33/11 kV	1.2	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	Existing
259	SAMBALPUR	JED	Jharsuguda	JAMANKIRA	8.15	33/11 kV	1.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-5	Y	1*3.15+1*5	Plinth	Y	N	To be implemented

260	SAMBALPUR	JED	Jharsuguda	JHARIABAHAL	10	33/11 kV	1.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	Existing
261	SAMBALPUR	JED	Jharsuguda	KESEIBAHAL	8.15	33/11 kV	1.9	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	1*3.15+1*5	Plinth	Y	N	To be implemented
262	SAMBALPUR	JED	Jharsuguda	KIRMIRA	10	33/11 kV	2.4	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
263	SAMBALPUR	JED	Jharsuguda	KOLABIRA	8.15	33/11 kV	3.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	1*3.15+1*5	Plinth	N	N	To be implemented
264	SAMBALPUR	JED	Jharsuguda	KUCHINDA	16.3	33/11 kV	1.9	33 Kv Line bay-1 T/F bay -4 11 kV line bay-5	Y	2*3.15+2*5	Plinth	Y	N	To be implemented
265	SAMBALPUR	JED	Jharsuguda	KUSUMI	10	33/11 kV	1.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	To be implemented
266	SAMBALPUR	JED	Jharsuguda	LAHANDABUD	6.6	33/11 kV	2.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	1*1.6+1*5	Plinth	N	N	To be implemented
267	SAMBALPUR	JED	Jharsuguda	LAIKERA	13	33/11 kV	2.6	33 Kv Line bay-3 T/F bay -2 11 kV line bay-4	Y	1*5+1*8	Plinth	Y	N	To be implemented
268	SAMBALPUR	JED	Jharsuguda	LASHA	10	33/11 kV	1.1	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
269	SAMBALPUR	JED	Jharsuguda	PURNA	10	33/11 kV	6.4	33 Kv Line bay-2 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	N	N	To be implemented
270	SAMBALPUR	JED	Jharsuguda	SARASMAL	24	33/11 kV	16.3	33 Kv Line bay-1 T/F bay -3 11 kV line bay-6	Y	3*8	Plinth	N	N	To be implemented

271	SAMBALPUR	JED	Jharsuguda	SARBAHAL	10	33/11 kV	5.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	N	N	To be implemented
272	SAMBALPUR	JED	Jharsuguda	SODAMAL	10	33/11 kV	0.4	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
273	SAMBALPUR	SED	Sambalpur	Ainthapali	56.5	33/11 kV	27.5	33 Kv Line bay-1 T/F bay -6 11 kV line bay-11	N	1*7.5+3*8+2*12.5	Plinth	Y	N	To be implemented
274	SAMBALPUR	SED	Sambalpur	Badabazar	16	33/11 kV	6.4	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*8	Plinth	Y	N	Existing
275	SAMBALPUR	SED	Sambalpur	Chaurpur	10	33/11 kV	3.9	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	To be implemented
276	SAMBALPUR	SED	Sambalpur	Cheruapada	16	33/11 kV	7.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*8	Plinth	Y	N	To be implemented
277	SAMBALPUR	SED	Sambalpur	Chiplima	10	33/11 kV	1.9	33 Kv Line bay-1 T/F bay -2 11 kV line bay-2	N	2*5	Plinth	Y	N	To be implemented
278	SAMBALPUR	SED	Sambalpur	Gosala	10	33/11 kV	6.2	33 Kv Line bay-1 T/F bay -2 11 kV line bay-6	N	2*5	Plinth	N	N	To be implemented
279	SAMBALPUR	SED	Sambalpur	Hirakud	16	33/11 kV	9.8	33 Kv Line bay-2 T/F bay -2 11 kV line bay-6	N	2*8	Plinth	N	N	To be implemented
280	SAMBALPUR	SED	Sambalpur	Jyotibihar	16	33/11 kV	2.5	33 Kv Line bay-2 T/F bay -2 11 kV line bay-4	N	2*8	Plinth	Y	N	Existing
281	SAMBALPUR	SED	Sambalpur	Kainsir	10	33/11 kV	1.3	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	2*5	Plinth	Y	N	To be implemented

282	SAMBALPUR	SED	Sambalpur	Medical	13	33/11 kV	8.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	1*5+1*8	Plinth	N	N	To be implemented
283	SAMBALPUR	SED	Sambalpur	MSTC Burla	16	33/11 kV	8.8	33 Kv Line bay-3 T/F bay -2 11 kV line bay-5	N	2*8	Plinth	N	N	To be implemented
284	SAMBALPUR	SEED	Sambalpur	DHAMA	10	33/11 kV	4.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	2*5	Plinth	Y	N	To be implemented
285	SAMBALPUR	SEED	Sambalpur	GUNDERPUR	10	33/11 kV	2.5	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	Y	N	Existing
286	SAMBALPUR	SEED	Sambalpur	Hatibari	8.15	33/11 kV	1.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	N	1*3.15+1*5	Plinth	Y	N	To be implemented
287	SAMBALPUR	SEED	Sambalpur	Hero	6.3	33/11 kV	1.7	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*3.15	Plinth	Y	N	Existing
288	SAMBALPUR	SEED	Sambalpur	Jujomura	6.3	33/11 kV	2.0	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*3.15	Plinth	Y	N	Existing
289	SAMBALPUR	SEED	Sambalpur	KATARBAGA	10	33/11 kV	2.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-2	N	2*5	Plinth	Y	N	Existing
290	SAMBALPUR	SEED	Sambalpur	KISINDA	10	33/11 kV	0.7	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	Y	N	To be implemented
291	SAMBALPUR	SEED	Sambalpur	LAIDA	6.6	33/11 kV	1.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-4	Y	1*1.6+1*5	Plinth	N	N	To be implemented
292	SAMBALPUR	SEED	Sambalpur	LAPANGA	10	33/11 kV	2.2	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*5	Plinth	Y	N	Existing

293	SAMBALPUR	SEED	Sambalpur	Naktiduel	8.15	33/11 kV	2.6	33 Kv Line bay-1 T/F bay -2 11 kV line bay-6	N	1*3.15+1*5	Plinth	Y	N	To be implemented
294	SAMBALPUR	SEED	Sambalpur	PADIABAHAL	16	33/11 kV	4.8	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	N	2*8	Plinth	Y	N	Existing
295	SAMBALPUR	SEED	Sambalpur	PARMANPUR	10	33/11 kV	3.2	33 Kv Line bay-1 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	Existing
296	SAMBALPUR	SEED	Sambalpur	PUTIBANDH	56	33/11 kV	26.4	33 Kv Line bay-1 T/F bay -6 11 kV line bay-7	N	7*8	Plinth	Y	N	To be implemented
297	SAMBALPUR	SEED	Sambalpur	Rairakhol	16.3	33/11 kV	5.4	33 Kv Line bay-1 T/F bay -4 11 kV line bay-6	N	2*3.15+2*5	Plinth	Y	N	To be implemented
298	SAMBALPUR	SEED	Sambalpur	RENGALI	16.6	33/11 kV	3.7	33 Kv Line bay-2 T/F bay -4 11 kV line bay-6	Y	1*1.6+3*5	Plinth	Y	N	To be implemented
299	SAMBALPUR	SEED	Sambalpur	RENGALI NEW	10	33/11 kV	1.4	33 Kv Line bay-2 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	Y	N	To be implemented
300	SAMBALPUR	SEED	Sambalpur	SASON	10	33/11 kV	6.5	33 Kv Line bay-2 T/F bay -2 11 kV line bay-3	Y	2*5	Plinth	N	N	To be implemented

Annexure -3 Proposed new substation (based on load flow study of Distribution network)

Sl.No.	Name of Circle/ District, Division & Sub-station	Name of Sub-station	PTR Capacity	33/11 kV or 11/0.4 kV or 33/0.4 kV	Expected load (MVA)	No. Of Bays [line bays & transformer bays	Transformation capacity (MVA) with voltage ration	N-1 contingency provided or not for incommer and Power Transformer (Y/N)	Protection provided for lines, transformers (on HV & LV side) in line with CEA Reg.	Adequate switchgear Rating	Required Battery Capacity (AH) and associated charger provided with standby battery (Y/N)	Required lightning protection for Transformer (PT/DT), fire fighting system, earthing system, AC/DC system, lighting system provided or not (Y/N)	Target for completion				
													2022-23	2023-24	2024-25	2025-26	2026-27
1	Bargarh	BAGBADI	10	33/11 kV	5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
2	Bargarh	Barihapali	10	33/11 kV	4.3	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
3	Bargarh	Hirapali	10	33/11 kV	4.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
4	Bargarh	LARAMBHA	10	33/11 kV	5.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			

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5	Bargarh	Nuapali	10	33/11 kV	4.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
6	Bargarh	Panchayat college	10	33/11 kV	6	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
7	Bargarh	PUNJIPATHAR	10	33/11 kV	6	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	N	Y	Y	Y	Y			Y		
8	Bargarh	Tenteltikira	10	33/11 kV	3.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
9	BOLANGIR	Arjunpur	10	33/11 kV	4.2	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
10	BOLANGIR	BELEISARDA	10	33/11 kV	4.4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
11	BOLANGIR	CHANDANBHATI	10	33/11 kV	4.6	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
12	BOLANGIR	Janmura	10	33/11 kV	5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		

13	BOLANGIR	Kutasingha	10	33/11 kV	4.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
14	KALAHANDI	Badchergaon	10	33/11 kV	1.25	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
15	KALAHANDI	Balipada	10	33/11 kV	2.25	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
16	KALAHANDI	BANIJHARA	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
17	KALAHANDI	Duajhar	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
18	KALAHANDI	Gandamer	10	33/11 kV	1.4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
19	KALAHANDI	Gunupur	10	33/11 kV	2	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
20	KALAHANDI	Junagarh	10	33/11 kV	2	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			

21	KALAHANDI	KARCHALA	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
22	KALAHANDI	Kendumunda	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
23	KALAHANDI	Rengalpali	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
24	KALAHANDI	Risigaon	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
25	KALAHANDI	Tarboard	10	33/11 kV	2.75	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
26	ROURKELA	BARGAHT	10	33/11 kV	1.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
27	ROURKELA	Baurimunda	10	33/11 kV	3	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
28	ROURKELA	Dandiapali	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			

29	ROURKELA	GOBIRA	10	33/11 kV	3	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
30	ROURKELA	Gundiadihi	10	33/11 kV	3.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
31	ROURKELA	Jouramunda	10	33/11 kV	3.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
32	ROURKELA	Kalta	10	33/11 kV	2.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
33	ROURKELA	Lalei	10	33/11 kV	3	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
34	ROURKELA	Nakhakhandi	10	33/11 kV	3.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
35	ROURKELA	Uditnagar	10	33/11 kV	6	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
36	SAMBALPUR	Charmal	10	33/11 kV	4.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			

37	SAMBALPUR	Junadihi	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
38	SAMBALPUR	Kalibari(Jail Chowk)	10	33/11 kV	7	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
39	SAMBALPUR	KANAKTURA	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
40	SAMBALPUR	KHARIPALI	10	33/11 kV	3	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
41	SAMBALPUR	MUNDRAJORE	10	33/11 kV	3.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y		Y			
42	SAMBALPUR	POKHARASALE	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y			Y		
43	Bargarh	Pradhanpali	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
44	Sambalpur	Meghpal	10	33/11 kV	4	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	

45	Bargarh	Bhatli road	10	33/11 kV	5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
46	Bolangir	Dhumamara	10	33/11 kV	4.5	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y					Y
47	Kalahandi	Lanjigarh Road	10	33/11 kV	2.75	33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y					Y
48	Rourkela	Kalunga				33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y				Y	
49	Sambalpur	VSSUT Burla				33 kV: Line bays-1 T/F bays-2 11 kV: Line bays-4 T/F bays-2	2X5 MVA	Y	Y	Y	Y	Y					Y

Annexure -4 Basic information of existing overhead lines (33 kV & 11 kV)

Sl.No.	Name of Circle/ District & Division	From	To	Voltage level (kV)	Single circuit or Double circuit or more no. of circuit & Length of line (KM)	Type & size (dia & area) of conductor	Line Load in (Amp)	Line over loaded or not (based on load flow study/based on operation feedback)	Design span (m)	Type of support structure (Pole/ Joist/ Lattice/PCC/Steel pole/ other type)	Status of mapping of line Asset [completed/in progress(% of progress)/to be taken up]
1	Bargarh	132/33 KV PRADHAN PALI GSS	4 POLES	33	45	100 sq.mm-34 Ckm148 sq.mm-18 Ckm	300	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
2	Bargarh	132/33 KV PRADHAN PALI GSS	DUNGURI	33	114	100 sq.mm-2 Ckm148 sq.mm-12 Ckm173 Sq.mm-16 Ckm232 sq.mm-136 Ckm55 sq.mm-2 Ckm80 sq.mm-7 Ckm	559	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
3	Bargarh	132/33 KV PRADHAN PALI GSS	TORA	33	6	148 sq.mm-11 Ckm	112		80-120	MS Joist/PCC Poles	To be taken up
4	Bargarh	132/33 KV PRADHAN PALI GSS	TOWN	33	3	232 sq.mm-6 Ckm80 sq.mm-22 Ckm	288		80-120	MS Joist/PCC Poles	To be taken up
5	Bargarh	132/33 KV PRADHAN PALI GSS	TURUNGA	33	49	148 sq.mm-6 Ckm232 sq.mm-43 Ckm	384		80-120	MS Joist/PCC Poles	To be taken up
6	Bargarh	132/33 KV BARPALI GSS	BARPALI	33	4	100 sq.mm-15 Ckm	310	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
7	Bargarh	132/33 KV BARPALI GSS	BIJEPUR-2	33	26	100 sq.mm-0 Ckm148 sq.mm-7 Ckm173 Sq.mm-15 Ckm	149		80-120	MS Joist/PCC Poles	To be taken up
8	Bargarh	132/33 KV BARPALI GSS	PANDIKITAL	33	43	100 sq.mm-14 Ckm148 sq.mm-4 Ckm232 sq.mm-13 Ckm	260		80-120	MS Joist/PCC Poles	To be taken up

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9	Bargarh	132/33 KV CHIPILIMA GSS	DHAMA-2 (KHUNTULI PALI)	33	47	100 sq.mm-6 Ckm148 sq.mm-7 Ckm	122		80-120	MS Joist/PCC Poles	To be taken up
10	Bargarh	132/33 KV GHENSS GSS	BIJEPUR	33	29	148 sq.mm-19 Ckm	320		80-120	MS Joist/PCC Poles	To be taken up
11	Bargarh	132/33 KV GHENSS GSS	GHENSS	33	1	173 Sq.mm-6 Ckm	126		80-120	MS Joist/PCC Poles	To be taken up
12	Bargarh	132/33 KV GHENSS GSS	MELCHAMUNDA	33	28	148 sq.mm-2 Ckm173 Sq.mm-6 Ckm	118		80-120	MS Joist/PCC Poles	To be taken up
13	Bargarh	132/33 KV GHENSS GSS	SOHELA	33	23	173 Sq.mm-17 Ckm	345		80-120	MS Joist/PCC Poles	To be taken up
14	Bargarh	132/33 KV KATAPALI GSS	ATTABIRA	33	54	100 sq.mm-22 Ckm148 sq.mm-3 Ckm173 Sq.mm-15 Ckm232 sq.mm-42 Ckm55 sq.mm-6 Ckm	454	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
15	Bargarh	132/33 KV PADAMPUR GSS	DAHITA	33	12	1 Ckm-148 sq.mm-1 Ckm	30		80-120	MS Joist/PCC Poles	To be taken up
16	Bargarh	132/33 KV PADAMPUR GSS	GAISILET	33	40	100 sq.mm-6 Ckm	122		80-120	MS Joist/PCC Poles	To be taken up
17	Bargarh	132/33 KV PADAMPUR GSS	LAKHMARA	33	15	148 sq.mm-2 Ckm	44		80-120	MS Joist/PCC Poles	To be taken up
18	Bargarh	132/33 KV PADAMPUR GSS	PADAMPUR	33	8	232 sq.mm-6 Ckm	130		80-120	MS Joist/PCC Poles	To be taken up
19	Bargarh	132/33 KV PADAMPUR GSS	PAIKMAL	33	105	100 sq.mm-48 Ckm148 sq.mm-8 Ckm173 Sq.mm-30 Ckm55 sq.mm-8 Ckm	380	Overloaded	80-120	MS Joist/PCC Poles	To be taken up

20	Sambalpur	132/33 KV BARKOTE GSS	BARKOTE	33	6	100 sq.mm-6 Ckm	16		80-120	MS Joist/PCC Poles	To be taken up
21	Sambalpur	132/33 KV BARKOTE GSS	BHAKTABA DKUDAR	33	16	100 sq.mm-6 Ckm148 sq.mm-10 Ckm	70		80-120	MS Joist/PCC Poles	To be taken up
22	Sambalpur	132/33 KV BARKOTE GSS	DEOGARH	33	75	100 sq.mm-60 Ckm148 sq.mm-15 Ckm	380	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
23	Sambalpur	132/33 KV BRAJARAJNAGAR RENJA-1 GSS	BRAJRAJN AGAR	33	2	148 sq.mm-2 Ckm	147		80-120	MS Joist/PCC Poles	To be taken up
24	Sambalpur	132/33 KV BRAJARAJNAGAR RENJA-1 GSS	NTPC-1	33	15	100 sq.mm-21 Ckm232 sq.mm-8 Ckm	11		80-120	MS Joist/PCC Poles	To be taken up
25	Sambalpur	132/33 KV BRAJARAJNAGAR REMJA	NTPC-II	33	15	100 sq.mm-15 Ckm	1		80-120	MS Joist/PCC Poles	To be taken up
26	Sambalpur	132/33 KV BRAJARAJNAGAR RENJA-1 GSS	OPGC	33	35	100 sq.mm-35 Ckm	84		80-120	MS Joist/PCC Poles	To be taken up
27	Sambalpur	132/33 KV BRAJARAJNAGAR RENJA-1 GSS	TRL-1	33	15	100 sq.mm-15 Ckm	120		80-120	MS Joist/PCC Poles	To be taken up
28	Sambalpur	132/33 KV BRAJARAJNAGAR RENJA-1 GSS	TRL-2	33	119	100 sq.mm-116 Ckm80 sq.mm-3 Ckm	273	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
29	Sambalpur	132/33 KV BUDHIPADAR GSS	AIRPORT	33	29	100 sq.mm-19 Ckm232 sq.mm-10 Ckm3CX400 sq.mm-U/G-1 Ckm	83		80-120	MS Joist/PCC Poles	To be taken up
30	Sambalpur	132/33 KV BUDHIPADAR GSS	BAGDEHI	33	44	232 sq.mm-44 Ckm	76		80-120	MS Joist/PCC Poles	To be taken up

31	Sambalpur	132/33 KV BUDHIPADAR GSS	INDUSTRIAL-I	33	48	100 sq.mm-40 Ckm232 sq.mm-7 Ckm	124		80-120	MS Joist/PCC Poles	To be taken up
32	Sambalpur	132/33 KV BUDHIPADAR GSS	INDUSTRIAL-II	33	8	100 sq.mm-4 Ckm232 sq.mm-4 Ckm	62		80-120	MS Joist/PCC Poles	To be taken up
33	Sambalpur	132/33 KV CHIPILIMA GSS	DHAMA_1	33	99	100 sq.mm-30 Ckm148 sq.mm-12 Ckm232 sq.mm-19 Ckm80 sq.mm-38 Ckm	188		80-120	MS Joist/PCC Poles	To be taken up
34	Sambalpur	132/33 KV CHIPILIMA GSS	GOSHALA	33	17	148 sq.mm-1 Ckm232 sq.mm-29 Ckm	252		80-120	MS Joist/PCC Poles	To be taken up
35	Sambalpur	132/33 KV JHARSUGUDA GSS	JHARSUGUDA FDR	33	20	100 sq.mm-20 Ckm	185		80-120	MS Joist/PCC Poles	To be taken up
36	Sambalpur	132/33 KV JHARSUGUDA GSS	KOLABIRA	33	39	148 sq.mm-12 Ckm80 sq.mm-27 Ckm	160		80-120	MS Joist/PCC Poles	To be taken up
37	Sambalpur	132/33 KV JHARSUGUDA GSS	SARBAHAL	33	3	148 sq.mm-3 Ckm	75		80-120	MS Joist/PCC Poles	To be taken up
38	Sambalpur	132/33 KV KANTAPALI GSS	BURLA FDR	33	18	100 sq.mm-12 Ckm232 sq.mm-6 Ckm	241		80-120	MS Joist/PCC Poles	To be taken up
39	Sambalpur	132/33 KV KANTAPALI GSS	CHAURPUR	33	47	232 sq.mm-47 Ckm	78		80-120	MS Joist/PCC Poles	To be taken up
40	Sambalpur	132/33 KV KANTAPALI GSS	GM MCL	33	3	100 sq.mm-3 Ckm	27		80-120	MS Joist/PCC Poles	To be taken up
41	Sambalpur	132/33 KV KANTAPALI GSS	JYOTI VIHAR.	33	5	148 sq.mm-5 Ckm	21		80-120	MS Joist/PCC Poles	To be taken up

42	Sambalpur	132/33 KV KANTAPALI GSS	MEDICAL	33	7	100 sq.mm-1 Ckm232 sq.mm-6 Ckm	134		80-120	MS Joist/PCC Poles	To be taken up
43	Sambalpur	132/33 KV KUCHINDA(KHANDAKATA) GSS	KHANDAKATA	33	82	100 sq.mm-50 Ckm148 sq.mm-32 Ckm	89		80-120	MS Joist/PCC Poles	To be taken up
44	Sambalpur	132/33 KV KUCHINDA(KHANDAKATA) GSS	KUCHINDA	33	73	100 sq.mm-45 Ckm148 sq.mm-8 Ckm55 sq.mm-20 Ckm	125		80-120	MS Joist/PCC Poles	To be taken up
45	Sambalpur	132/33 KV KUCHINDA(KHANDAKATA) GSS	LAIKERA	33	58	100 sq.mm-43 Ckm148 sq.mm-15 Ckm	50		80-120	MS Joist/PCC Poles	To be taken up
46	Sambalpur	132/33 KV KUCHINDA(KHANDAKATA) GSS	MEGALIFT	33	7	100 sq.mm-14 Ckm	64		80-120	MS Joist/PCC Poles	To be taken up
47	Sambalpur	132/33 KV LAPANGA GRID GSS	KATARBAGA	33	32	100 sq.mm-32 Ckm	59		80-120	MS Joist/PCC Poles	To be taken up
48	Sambalpur	132/33 KV LAPANGA GRID GSS	LAPANGA	33	3	100 sq.mm-3 Ckm	27		80-120	MS Joist/PCC Poles	To be taken up
49	Sambalpur	132/33 KV LAPANGA GRID GSS	RENGALI FDR	33	26	232 sq.mm-26 Ckm	84		80-120	MS Joist/PCC Poles	To be taken up
50	Sambalpur	132/33 KV MANESWAR GSS	MANESWAR	33	5	232 sq.mm-5 Ckm	1		80-120	MS Joist/PCC Poles	To be taken up
51	Sambalpur	132/33 KV MANESWAR GSS	PADIABAHAL	33	15	232 sq.mm-15 Ckm	105		80-120	MS Joist/PCC Poles	To be taken up
52	Sambalpur	132/33 KV RAIRAKHOL GSS	NAKTIDEUL	33	72	148 sq.mm-37 Ckm80 sq.mm-35 Ckm	78		80-120	MS Joist/PCC Poles	To be taken up

53	Sambalpur	132/33 KV RAIRAKHOL GSS	RAIRAKHOL FDR	33	4	80 sq.mm-4 Ckm	112		80-120	MS Joist/PCC Poles	To be taken up
54	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	AINTHAPALI	33	4	232 sq.mm-4 Ckm	245		80-120	MS Joist/PCC Poles	To be taken up
55	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	CHEDUAPADA	33	10	100 sq.mm-1 Ckm148 sq.mm-1 Ckm232 sq.mm-8 Ckm3CX95 sq.mm-U/G-1 Ckm	189		80-120	MS Joist/PCC Poles	To be taken up
56	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	IOCL.	33	15	232 sq.mm-15 Ckm	37		80-120	MS Joist/PCC Poles	To be taken up
57	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	PUTIBANDH	33	9	232 sq.mm-9 Ckm	425		80-120	MS Joist/PCC Poles	To be taken up
58	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	SASON	33	29	232 sq.mm-29 Ckm	147		80-120	MS Joist/PCC Poles	To be taken up
59	Sambalpur	132/33 KV SAMBALPUR(GANESH NAGAR) GSS	VEDANT	33	20	148 sq.mm-20 Ckm	94		80-120	MS Joist/PCC Poles	To be taken up
60	Sambalpur	220/132/33 KV RENGALI(DIST. ANUGUL) GSS	BUDHAPALI	33	25	100 sq.mm-25 Ckm	70		80-120	MS Joist/PCC Poles	To be taken up
61	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	ASHOKA SYNTHETICS SPINNING MILLS	33	0.4	100 sq.mm-0.5 Ckm	10		80-120	MS Joist/PCC Poles	To be taken up
62	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	COLLEGE	33	10	148 sq.mm-5 Ckm232 sq.mm-5 Ckm	115		80-120	MS Joist/PCC Poles	To be taken up
63	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	KOSHAL FERRO(SARGIPALI KFM)	33	15	100 sq.mm-15 Ckm	11		80-120	MS Joist/PCC Poles	To be taken up

64	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	KUNDUKELA	33	17	148 sq.mm-17 Ckm	27		80-120	MS Joist/PCC Poles	To be taken up
65	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	MAJHAPADA	33	23	148 sq.mm-23 Ckm	31		80-120	MS Joist/PCC Poles	To be taken up
66	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	NTPC MEDICAL	33	0.4	100 sq.mm-0.3 Ckm	12		80-120	MS Joist/PCC Poles	To be taken up
67	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	SADAR(UJALPUR)	33	13	100 sq.mm-5 Ckm232 sq.mm-8 Ckm	116		80-120	MS Joist/PCC Poles	To be taken up
68	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	SANKARA	33	1	232 sq.mm-1 Ckm	147		80-120	MS Joist/PCC Poles	To be taken up
69	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	SUBDEGA	33	54	100 sq.mm-26 Ckm232 sq.mm-1 Ckm55 sq.mm-27 Ckm	147	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
70	ROURKELA	132/33 KV SUNDARGARH(SANKARA) GSS	BARGAON FDR	33	83	100 sq.mm-17 Ckm148 sq.mm-15 Ckm173 Sq.mm-51 Ckm	231		80-120	MS Joist/PCC Poles	To be taken up
71	ROURKELA	132/33 KV BARKOT GSS	MAHULDIHA	33	47	100 sq.mm-12 Ckm232 sq.mm-35 Ckm	35		80-120	MS Joist/PCC Poles	To be taken up
72	ROURKELA	132/33 KV BONAI GSS	BONAI	33	60	100 sq.mm-32 Ckm232 sq.mm-28 Ckm	178		80-120	MS Joist/PCC Poles	To be taken up
73	ROURKELA	132/33 KV BONAI GSS	K BALANG	33	25	148 sq.mm-25 Ckm	20		80-120	MS Joist/PCC Poles	To be taken up
74	ROURKELA	132/33 KV BONAI GSS	MEGALIFT	33	14	100 sq.mm-14 Ckm	29		80-120	MS Joist/PCC Poles	To be taken up

75	ROURKELA	132/33 KV BONAI GSS	RAJAMUNDA	33	7	100 sq.mm-5 Ckm232 sq.mm-2 Ckm	86		80-120	MS Joist/PCC Poles	To be taken up
76	ROURKELA	132/33 KV CHHEND GSS	BASANTI NAGAR	33	4	232 sq.mm-4 Ckm	115		80-120	MS Joist/PCC Poles	To be taken up
77	ROURKELA	132/33 KV CHHEND GSS	BIRAMITRAPUR	33	54	100 sq.mm-28 Ckm232 sq.mm-28 Ckm	260	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
78	ROURKELA	132/33 KV CHHEND GSS	CHHEND	33	5	232 sq.mm-5 Ckm	212		80-120	MS Joist/PCC Poles	To be taken up
79	ROURKELA	132/33 KV CHHEND GSS	INDUSTRIAL(KUARMUNDA)	33	33	100 sq.mm-1 Ckm148 sq.mm-2 Ckm232 sq.mm-28 Ckm	210		80-120	MS Joist/PCC Poles	To be taken up
80	ROURKELA	132/33 KV CHHEND GSS	KOELNAGAR	33	16	232 sq.mm-16 Ckm	210		80-120	MS Joist/PCC Poles	To be taken up
81	ROURKELA	132/33 KV CHHEND GSS	PURUNAPANI	33	51	100 sq.mm-51 Ckm	252	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
82	ROURKELA	132/33 KV CHHEND GSS	REC	33	62	100 sq.mm-29 Ckm148 sq.mm-19 Ckm232 sq.mm-13 Ckm80 sq.mm-2 Ckm	273		80-120	MS Joist/PCC Poles	To be taken up
83	ROURKELA	132/33 KV CHHEND GSS	VEDVAYAS	33	18	100 sq.mm-8 Ckm232 sq.mm-9 Ckm3CX95 sq.mm-U/G-1 Ckm	201		80-120	MS Joist/PCC Poles	To be taken up
84	ROURKELA	132/33 KV JODA GSS	TENSA 33KV	33	66	100 sq.mm-21 Ckm232 sq.mm-46 Ckm	210		80-120	MS Joist/PCC Poles	To be taken up
85	ROURKELA	132/33 KV KALUNGA GSS	BALANDA	33	7	148 sq.mm-7 Ckm	42		80-120	MS Joist/PCC Poles	To be taken up

86	ROURKELA	132/33 KV KALUNGA GSS	IDC KALUNGA	33	4	232 sq.mm-4 Ckm3CX95 sq.mm-U/G-0 Ckm	259		80-120	MS Joist/PCC Poles	To be taken up
87	ROURKELA	132/33 KV KALUNGA GSS	INDUSTRIAL FEEDER KALUNGA	33	14	232 sq.mm-13 Ckm3CX95 sq.mm-U/G-1 Ckm	212		80-120	MS Joist/PCC Poles	To be taken up
88	ROURKELA	132/33 KV KALUNGA GSS	MAHAVIR	33	4	100 sq.mm-4 Ckm	149		80-120	MS Joist/PCC Poles	To be taken up
89	ROURKELA	132/33 KV KALUNGA GSS	OTTO INDIA	33	12	232 sq.mm-10 Ckm3CX95 sq.mm-U/G-2 Ckm	279		80-120	MS Joist/PCC Poles	To be taken up
90	ROURKELA	132/33 KV KALUNGA GSS	RELIABLE	33	2	232 sq.mm-2 Ckm	260		80-120	MS Joist/PCC Poles	To be taken up
91	ROURKELA	132/33 KV RAJGANGPUR GSS	KUTRA	33	67	100 sq.mm-1 Ckm148 sq.mm-21 Ckm232 sq.mm-45 Ckm	378	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
92	ROURKELA	132/33 KV RAJGANGPUR GSS	RAJGANGPUR	33	2	100 sq.mm-0.6 Ckm232 sq.mm-2 Ckm	103		80-120	MS Joist/PCC Poles	To be taken up
93	ROURKELA	132/33 KV RAJGANGPUR GSS	ROURKELA-1	33	35	100 sq.mm-18 Ckm232 sq.mm-15 Ckm80 sq.mm-2 Ckm	329	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
94	ROURKELA	132/33 KV RAJGANGPUR GSS	ROURKELA-2	33	25	100 sq.mm-9 Ckm232 sq.mm-13 Ckm80 sq.mm-3 Ckm	351		80-120	MS Joist/PCC Poles	To be taken up
95	ROURKELA	132/33 KV RAJGANGPUR GSS	SUNDARGARH	33	58	100 sq.mm-11 Ckm148 sq.mm-21 Ckm173 Sq.mm-10 Ckm232 sq.mm-8 Ckm55 sq.mm-8 Ckm	223	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
96	ROURKELA	132/33 KV ROURKELA GSS	BONAI INDUSTRIAL	33	31	100 sq.mm-8 Ckm232 sq.mm-23 Ckm	294		80-120	MS Joist/PCC Poles	To be taken up

97	ROURKELA	132/33 KV ROURKELA GSS	IDC	33	12	100 sq.mm-11 Ckm148 sq.mm-1 Ckm	185		80-120	MS Joist/PCC Poles	To be taken up
98	ROURKELA	132/33 KV ROURKELA GSS	IND PILOT PROJECT	33	9	232 sq.mm-6 Ckm80 sq.mm-4 Ckm	1		80-120	MS Joist/PCC Poles	To be taken up
99	ROURKELA	132/33 KV ROURKELA GSS	INDUSTRIAL ESTATE	33	11	100 sq.mm-1 Ckm232 sq.mm-10 Ckm	83		80-120	MS Joist/PCC Poles	To be taken up
100	ROURKELA	132/33 KV ROURKELA GSS	LATHIKATA	33	19	100 sq.mm-18 Ckm148 sq.mm-1 Ckm	141		80-120	MS Joist/PCC Poles	To be taken up
101	ROURKELA	132/33 KV ROURKELA GSS	RK TOWN 1 BONDMUNDA	33	11	148 sq.mm-1 Ckm232 sq.mm-9 Ckm3CX400 sq.mm-U/G-1 Ckm	105		80-120	MS Joist/PCC Poles	To be taken up
102	ROURKELA	132/33 KV ROURKELA GSS	RKL TOWN POWER HOUSE	33	0.3	232 sq.mm-0.4 Ckm	247		80-120	MS Joist/PCC Poles	To be taken up
103	ROURKELA	132/33 KV BRAJARAJNAGAR GSS	ARYAN	33	58	100 sq.mm-31 Ckm148 sq.mm-27 Ckm	72		80-120	MS Joist/PCC Poles	To be taken up
104	ROURKELA	132/33 KV BRAJARAJNAGAR GSS	NTPC-1	33	29	100 sq.mm-21 Ckm232 sq.mm-8 Ckm	21		80-120	MS Joist/PCC Poles	To be taken up
105	ROURKELA	132/33 KV BRAJARAJNAGAR GSS	NTPC-2	33	21	100 sq.mm-21 Ckm	1		80-120	MS Joist/PCC Poles	To be taken up
106	ROURKELA	132/33 KV BRAJARAJNAGAR GSS	OCPL	33	18	100 sq.mm-1 Ckm232 sq.mm-4 Ckm80 sq.mm-13 Ckm	7		80-120	MS Joist/PCC Poles	To be taken up
107	ROURKELA	132/33 KV BRAJARAJNAGAR GSS	SARGIPALI	33	104	100 sq.mm-33 Ckm148 sq.mm-33 Ckm80 sq.mm-38 Ckm	231	Overloaded	80-120	MS Joist/PCC Poles	To be taken up

108	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	BARPALI(BOLANGIR)	33	57	100 sq.mm-29 Ckm148 sq.mm-18 Ckm80 sq.mm-10 Ckm	299	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
109	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	BOLANGIR	33	2.0	80 sq.mm-0.5Ckm	133		80-120	MS Joist/PCC Poles	To be taken up
110	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	BOUDH	33	18	148 sq.mm-8 Ckm232 sq.mm-2 Ckm80 sq.mm-8 Ckm	168		80-120	MS Joist/PCC Poles	To be taken up
111	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	DUMERBAHAL	33	3	80 sq.mm-3 Ckm	29		80-120	MS Joist/PCC Poles	To be taken up
112	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	DUNGRI PALI	33	37	100 sq.mm-18 Ckm232 sq.mm-15 Ckm55 sq.mm-3 Ckm	175		80-120	MS Joist/PCC Poles	To be taken up
113	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	IDCO	33	6	100 sq.mm-6 Ckm	0		80-120	MS Joist/PCC Poles	To be taken up
114	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	PATNAGARH	33	26	100 sq.mm-26 Ckm	116		80-120	MS Joist/PCC Poles	To be taken up
115	BOLANGIR	132/33 KV OLD BOLANGIR(LALTIKRA) GSS	TITLAGARH (BOLANGIR)	33	5	100 sq.mm-5 Ckm	152		80-120	MS Joist/PCC Poles	To be taken up
116	BOLANGIR	132/33 KV NEW BOLANGIR(SADEIPALI) GSS	BPCL	33	4	100 sq.mm-4 Ckm	10		80-120	MS Joist/PCC Poles	To be taken up
117	BOLANGIR	132/33 KV NEW BOLANGIR(SADEIPALI) GSS	KHARIAR(SADEIPALI)	33	7	148 sq.mm-7 Ckm	26		80-120	MS Joist/PCC Poles	To be taken up
118	BOLANGIR	132/33 KV NEW BOLANGIR(SADEIPALI) GSS	MADHIAPALI	33	37	100 sq.mm-23 Ckm148 sq.mm-14 Ckm	129		80-120	MS Joist/PCC Poles	To be taken up

119	BOLANGIR	132/33 KV SONEPUR GSS	BINKA	33	37	148 sq.mm-11 Ckm232 sq.mm-26 Ckm	260		80-120	MS Joist/PCC Poles	To be taken up
120	BOLANGIR	132/33 KV SONEPUR GSS	BIRAMAHARJPUR	33	52	100 sq.mm-52 Ckm	297	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
121	BOLANGIR	132/33 KV SONEPUR GSS	NANDANMAL	33	89	100 sq.mm-89 Ckm	16		80-120	MS Joist/PCC Poles	To be taken up
122	BOLANGIR	132/33 KV SONEPUR GSS	DUMBERHAL(SONEPUR)	33	87	100 sq.mm-49 Ckm232 sq.mm-38 Ckm	370		80-120	MS Joist/PCC Poles	To be taken up
123	BOLANGIR	132/33 KV SONEPUR GSS	SONEPUR	33	1	55 sq.mm-4 Ckm	100		80-120	MS Joist/PCC Poles	To be taken up
124	BOLANGIR	132/33 KV TUSURA GSS	DEOGAON	33	64	100 sq.mm-11 Ckm148 sq.mm-41 Ckm173 Sq.mm-12 Ckm	208		80-120	MS Joist/PCC Poles	To be taken up
125	BOLANGIR	132/33 KV TUSURA GSS	MEGA PROJECT IRRIGATION- 3	33	15	100 sq.mm-15 Ckm	9		80-120	MS Joist/PCC Poles	To be taken up
126	BOLANGIR	132/33 KV TUSURA GSS	MEGA PROJECT IRRIGATION-1	33	65	100 sq.mm-65 Ckm	210		80-120	MS Joist/PCC Poles	To be taken up
127	BOLANGIR	132/33 KV TUSURA GSS	MEGA PROJECT IRRIGATION-2	33	10	100 sq.mm-10 Ckm	26		80-120	MS Joist/PCC Poles	To be taken up
128	BOLANGIR	132/33 KV TUSURA GSS	TUSURA	33	2	173 Sq.mm-2 Ckm	140		80-120	MS Joist/PCC Poles	To be taken up
129	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	DHUMABHATA	33	24	232 sq.mm-24 Ckm	40		80-120	MS Joist/PCC Poles	To be taken up

130	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	GHUMER	33	24	100 sq.mm-24 Ckm	60		80-120	MS Joist/PCC Poles	To be taken up
131	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	KHAPARAKHOL	33	43	100 sq.mm-19 Ckm80 sq.mm-24 Ckm	80		80-120	MS Joist/PCC Poles	To be taken up
132	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	PADAMPUR	33	22	232 sq.mm-6 Ckm	20		80-120	MS Joist/PCC Poles	To be taken up
133	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	PATNAGARH R	33	56	100 sq.mm-51 Ckm55 sq.mm-4 Ckm	180		80-120	MS Joist/PCC Poles	To be taken up
134	BOLANGIR	132/33 KV PATNAGARH(RAMPUR) GSS	TENDAPADAR	33	3	80 sq.mm-3 Ckm	20		80-120	MS Joist/PCC Poles	To be taken up
135	BOLANGIR	132/33 KV KANTABANJHI GSS	GUDIGHAT	33	15	173 Sq.mm-15 Ckm	56		80-120	MS Joist/PCC Poles	To be taken up
136	BOLANGIR	132/33 KV KANTABANJHI GSS	INDUSTRIAL	33	5	100 sq.mm-5 Ckm3CX120 sq.mm-U/G-1 Ckm	11		80-120	MS Joist/PCC Poles	To be taken up
137	BOLANGIR	132/33 KV KANTABANJHI GSS	KANTABHANJHI	33	4	100 sq.mm-2 Ckm232 sq.mm-2 Ckm	103		80-120	MS Joist/PCC Poles	To be taken up
138	BOLANGIR	132/33 KV KANTABANJHI GSS	MURIBAHAL	33	34	100 sq.mm-34 Ckm	91		80-120	MS Joist/PCC Poles	To be taken up
139	BOLANGIR	132/33 KV KANTABANJHI GSS	TUREKELA	33	25	100 sq.mm-7 Ckm80 sq.mm-18 Ckm	63		80-120	MS Joist/PCC Poles	To be taken up
140	BOLANGIR	132/33 KV KESINGA GSS	BELGAON	33	107	100 sq.mm-48 Ckm55 sq.mm-17 Ckm80 sq.mm-42 Ckm	205	Overloaded	80-120	MS Joist/PCC Poles	To be taken up

141	BOLANGIR	132/33 KV KESINGA GSS	TITLAGARGH(KESINGA)	33	83	100 sq.mm-58 Ckm148 sq.mm-1 Ckm173 Sq.mm-11 Ckm232 sq.mm-14 Ckm	203		80-120	MS Joist/PCC Poles	To be taken up
142	BOLANGIR	132/33 KV BARPALI GSS	MELECHAMUNDA	33	57	100 sq.mm-9 Ckm148 sq.mm-5 Ckm3CX120 sq.mm-U/G-0 Ckm80 sq.mm-27 Ckm	190		80-120	MS Joist/PCC Poles	To be taken up
143	KALAHANDI	132/33 KV BHAWANIPATNA(BHANGABARI) GSS	BHANGBARI	33	0.2	100 sq.mm-0.2 Ckm	22		80-120	MS Joist/PCC Poles	To be taken up
144	KALAHANDI	132/33 KV BHAWANIPATNA(BHANGABARI) GSS	TOWN FEEDER 1	33	36	100 sq.mm-20 Ckm148 sq.mm-10 Ckm55 sq.mm-6 Ckm	152		80-120	MS Joist/PCC Poles	To be taken up
145	KALAHANDI	132/33 KV BHAWANIPATNA(BHANGABARI) GSS	TOWN FEEDER 2	33	3	100 sq.mm-3 Ckm	162		80-120	MS Joist/PCC Poles	To be taken up
146	KALAHANDI	132/33 KV BEHRA(NUAPADA) GSS	BISORA	33	36	100 sq.mm-24 Ckm55 sq.mm-12 Ckm	127		80-120	MS Joist/PCC Poles	To be taken up
147	KALAHANDI	132/33 KV BEHRA(NUAPADA) GSS	KHARIAR ROAD	33	33	100 sq.mm-33 Ckm	252	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
148	KALAHANDI	132/33 KV BEHRA(NUAPADA) GSS	NEW MEDICAL	33	9	100 sq.mm-9 Ckm	25		80-120	MS Joist/PCC Poles	To be taken up
149	KALAHANDI	132/33 KV JUNAGARH GSS	BHAWANIPATNA	33	6	55 sq.mm-6 Ckm	11		80-120	MS Joist/PCC Poles	To be taken up
150	KALAHANDI	132/33 KV JUNAGARH GSS	CHARBAHAL	33	36	100 sq.mm-36 Ckm	63		80-120	MS Joist/PCC Poles	To be taken up
151	KALAHANDI	132/33 KV JUNAGARH GSS	DASPUR	33	25	100 sq.mm-8 Ckm148 sq.mm-17 Ckm	41		80-120	MS Joist/PCC Poles	To be taken up

152	KALAHANDI	132/33 KV JUNAGARH GSS	DHARMAGARH	33	104	100 sq.mm-72 Ckm148 sq.mm-31 Ckm	224	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
153	KALAHANDI	132/33 KV JUNAGARH GSS	JUNAGARH	33	72	100 sq.mm-70 Ckm148 sq.mm-2 Ckm	150		80-120	MS Joist/PCC Poles	To be taken up
154	KALAHANDI	132/33 KV KESINGA GSS	BHAWANIPATNA 1	33	28	148 sq.mm-8 Ckm55 sq.mm-5 Ckm80 sq.mm-15 Ckm	45		80-120	MS Joist/PCC Poles	To be taken up
155	KALAHANDI	132/33 KV KESINGA GSS	BHAWANIPATNA-2	33	39	100 sq.mm-39 Ckm	37		80-120	MS Joist/PCC Poles	To be taken up
156	KALAHANDI	132/33 KV KESINGA GSS	KESINGA	33	2	80 sq.mm-2 Ckm	143		80-120	MS Joist/PCC Poles	To be taken up
157	KALAHANDI	132/33 KV KESINGA GSS	MEGA LIFT 1	33	10	100 sq.mm-10 Ckm	118		80-120	MS Joist/PCC Poles	To be taken up
158	KALAHANDI	132/33 KV KESINGA GSS	MEGA LIFT 2	33	23	100 sq.mm-23 Ckm	18		80-120	MS Joist/PCC Poles	To be taken up
159	KALAHANDI	132/33 KV KESINGA GSS	NARLA	33	162	100 sq.mm-94 Ckm148 sq.mm-3 Ckm55 sq.mm-65 Ckm	208		80-120	MS Joist/PCC Poles	To be taken up
160	KALAHANDI	132/33 KV KHARIAR GSS	BARGOAN(OLD NUAPADA)	33	100	100 sq.mm-84 Ckm148 sq.mm-16 Ckm	178		80-120	MS Joist/PCC Poles	To be taken up
161	KALAHANDI	132/33 KV KHARIAR GSS	BODEN	33	39	100 sq.mm-27 Ckm148 sq.mm-12 Ckm	60		80-120	MS Joist/PCC Poles	To be taken up
162	KALAHANDI	132/33 KV KHARIAR GSS	KHARIAR 1	33	43	100 sq.mm-36 Ckm148 sq.mm-6 Ckm80 sq.mm-1 Ckm	184		80-120	MS Joist/PCC Poles	To be taken up

163	KALAHANDI	132/33 KV KHARIAR GSS	KHARIAR 2	33	69	100 sq.mm-29 Ckm34 sq.mm-20 Ckm55 sq.mm-17 Ckm80 sq.mm-3 Ckm	250	Overloaded	80-120	MS Joist/PCC Poles	To be taken up
164	KALAHANDI	132/33 KV TENTULIKHUNTI GSS	MUKHIGUNDA	33	65	100 sq.mm-9 Ckm80 sq.mm-56 Ckm	32		80-120	MS Joist/PCC Poles	To be taken up
165	KALAHANDI	220/132/33 KV BANER GSS	BADKUTRU	33	21	100 sq.mm-21 Ckm	81		80-120	MS Joist/PCC Poles	To be taken up
166	KALAHANDI	220/132/33 KV BANER GSS	LADUGAON	33	58	148 sq.mm-38 Ckm173 Sq.mm-20 Ckm	165		80-120	MS Joist/PCC Poles	To be taken up
167	Kalahandi	33/11KV-BORDA	11KV-ARTAL	11	42	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
168	Kalahandi	33/11KV-BORDA	11KV-MAHALING	11	64	34sqmm to 100sqmm AAAC/ACSR	19		80-100	MS Joist/PCC Poles	To be taken up
169	Kalahandi	33/11KV-BORDA	11KV-SEINPUR	11	57	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
170	Kalahandi	33/11KV-BORDA	11KV-TOWN(BORDA)	11	12	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
171	Kalahandi	33/11KV-KESINGA	11KV-BORINGPADAR	11	112	34sqmm to 100sqmm AAAC/ACSR	109		80-100	MS Joist/PCC Poles	To be taken up
172	Kalahandi	33/11KV-KESINGA	11KV-DURGALAXMI(RICE MILL)	11	2	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
173	Kalahandi	33/11KV-KESINGA	11KV-KASURPADA	11	139	34sqmm to 100sqmm AAAC/ACSR	46		80-100	MS Joist/PCC Poles	To be taken up
174	Kalahandi	33/11KV-KESINGA	11KV-NEW JAGNATHA PADA	11	8	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
175	Kalahandi	33/11KV-KESINGA	11KV-OLD JAGANATH PADA	11	15	34sqmm to 100sqmm AAAC/ACSR	54		80-100	MS Joist/PCC Poles	To be taken up
176	Kalahandi	33/11KV-KESINGA	11KV-PHD	11	5	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
177	Kalahandi	33/11KV-KESINGA	11KV-TOWN	11	12	34sqmm to 100sqmm AAAC/ACSR	116		80-100	MS Joist/PCC Poles	To be taken up
178	Kalahandi	33/11KV-NUNMATH	11KV-BELKHANDI	11	37	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
179	Kalahandi	33/11KV-NUNMATH	11KV-PALAM	11	15	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
180	Kalahandi	33/11KV-NUNMATH	11KV-TUNDLA	11	21	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up

181	Kalahandi	33/11KV-UTKELA	11KV_KUNDABANDHA	11	70	34sqmm to 100sqmm AAAC/ACSR	37		80-100	MS Joist/PCC Poles	To be taken up
182	Kalahandi	33/11KV-UTKELA	11KV_PASTIKUDA	11	169	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
183	Kalahandi	33/11KV-UTKELA	11KV_UTKELA	11	3	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
184	Kalahandi	33/11KV-BANDHAPARI	11KV-BANDHAPARI	11	3	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
185	Kalahandi	33/11KV-BANDHAPARI	11KV-BIJEPUR	11	140	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
186	Kalahandi	33/11KV-BANDHAPARI	11KV-HATISAL	11	86	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
187	Kalahandi	33/11KV-BANDHAPARI	11KV-MUSANAL	11	27	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
188	Kalahandi	33/11KV-BISWANATHPUR	11KV-BISWANATHPUR	11	3	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
189	Kalahandi	33/11KV-BISWANATHPUR	11KV-DUMENMUNDA	11	4	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
190	Kalahandi	33/11KV-BISWANATHPUR	11KV-OLD LANJIGARH	11	67	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up
191	Kalahandi	33/11KV-BISWANATHPUR	11KV-POKHARIBANDH	11	19	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
192	Kalahandi	33/11KV-JURADUBRA	11KV-KUSURLA	11	56	34sqmm to 100sqmm AAAC/ACSR	31		80-100	MS Joist/PCC Poles	To be taken up
193	Kalahandi	33/11KV-JURADUBRA	11KV-REGEDA	11	60	34sqmm to 100sqmm AAAC/ACSR	31		80-100	MS Joist/PCC Poles	To be taken up
194	Kalahandi	33/11KV-KARLAMUNDA	11KV-KARLAMUNDA	11	27	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
195	Kalahandi	33/11KV-KARLAMUNDA	11KV-PUTIGAON	11	44	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
196	Kalahandi	33/11KV-KARLAMUNDA	11KV-RISIDA	11	91	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
197	Kalahandi	33/11KV-LANJIGARH	11KV-LANJIGARH	11	62	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
198	Kalahandi	33/11KV-M.RAMPUR	11KV-URLADANI	11	219	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
199	Kalahandi	33/11KV-M.RAMPUR	11KV_AMBAGAON	11	102	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
200	Kalahandi	33/11KV-M.RAMPUR	11KV_BARABANDHA	11	93	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up

201	Kalahandi	33/11KV-M.RAMPUR	11KV_BLOCK	11	14	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
202	Kalahandi	33/11KV-M.RAMPUR	11KV_TOWN	11	6	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
203	Kalahandi	33/11KV-MADANPUR	11KV-BORIGHAT	11	55	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
204	Kalahandi	33/11KV-MADANPUR	11KV-DANGABAHAL	11	32	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
205	Kalahandi	33/11KV-MADANPUR	11KV-OLD REGEDA	11	31	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
206	Kalahandi	33/11KV-MOHANGIRI BANJAMUNDA	11KV-D.KARLAKHUNTA	11	21	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
207	Kalahandi	33/11KV-MOHANGIRI BANJAMUNDA	11KV-MOHANGIRI	11	65	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
208	Kalahandi	33/11KV-NARLA	11KV_BALIPADA	11	169	34sqmm to 100sqmm AAAC/ACSR	56		80-100	MS Joist/PCC Poles	To be taken up
209	Kalahandi	33/11KV-NARLA	11KV_CHHATIKUDA	11	135	34sqmm to 100sqmm AAAC/ACSR	93		80-100	MS Joist/PCC Poles	To be taken up
210	Kalahandi	33/11KV-NARLA	11KV_KAMARDHA	11	159	34sqmm to 100sqmm AAAC/ACSR	57		80-100	MS Joist/PCC Poles	To be taken up
211	Kalahandi	33/11KV-NARLA	11KV_NVODAYA	11	10	34sqmm to 100sqmm AAAC/ACSR	51		80-100	MS Joist/PCC Poles	To be taken up
212	Kalahandi	33/11KV-RUPRA ROAD	11KV-BALBASPUR	11	51	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
213	Kalahandi	33/11KV-RUPRA ROAD	11KV-MANDEL	11	23	34sqmm to 100sqmm AAAC/ACSR	17		80-100	MS Joist/PCC Poles	To be taken up
214	Kalahandi	33/11KV-RUPRA ROAD	11KV-RUPRA	11	57	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
215	Kalahandi	33/11KV-RUPRA ROAD	11KV-RUPRA ROAD-	11	8	34sqmm to 100sqmm AAAC/ACSR	14		80-100	MS Joist/PCC Poles	To be taken up
216	Kalahandi	33/11KV- KARLAPADA-SS	11KV_CHHELIAMAL FEEDER	11	20	34sqmm to 100sqmm AAAC/ACSR	17		80-100	MS Joist/PCC Poles	To be taken up
217	Kalahandi	33/11KV- KARLAPADA-SS	11KV_MADING FEEDER	11	16	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
218	Kalahandi	33/11KV- KARLAPADA-SS	11KV_CHAHAGON	11	30	34sqmm to 100sqmm AAAC/ACSR	29		80-100	MS Joist/PCC Poles	To be taken up
219	Kalahandi	33/11KV- KARLAPADA-SS	11KV_KARLAPADA	11	7	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up

220	Kalahandi	33/11KV-ATTANGUDA	11KV-JUGSAIPATNA	11	32	34sqmm to 100sqmm AAAC/ACSR	9		80-100	MS Joist/PCC Poles	To be taken up
221	Kalahandi	33/11KV-ATTANGUDA	11KV-KERUKUNDA	11	17	34sqmm to 100sqmm AAAC/ACSR	6		80-100	MS Joist/PCC Poles	To be taken up
222	Kalahandi	33/11KV-ATTANGUDA	11KV-SAGADA	11	42	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
223	Kalahandi	33/11KV-ATTANGUDA	11KV-SAIDHAM	11	6	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
224	Kalahandi	33/11KV-BANDHOPALA (KANDABANDHAPALA	11KV-BANDHOPALA (KANDABANDHAPALA	11	199	34sqmm to 100sqmm AAAC/ACSR	61		80-100	MS Joist/PCC Poles	To be taken up
225	Kalahandi	33/11KV-BHANGABARI	11KV-KAMATHANA	11	55	34sqmm to 100sqmm AAAC/ACSR	47		80-100	MS Joist/PCC Poles	To be taken up
226	Kalahandi	33/11KV-BHANGABARI	11KV-OMFED	11	4	34sqmm to 100sqmm AAAC/ACSR	2		80-100	MS Joist/PCC Poles	To be taken up
227	Kalahandi	33/11KV-NAKTIGUDA	11KV-DOORDARSHAN	11	2	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
228	Kalahandi	33/11KV-NAKTIGUDA	11KV-MEDICAL-	11	21	34sqmm to 100sqmm AAAC/ACSR	266	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
229	Kalahandi	33/11KV-NAKTIGUDA	11KV-N.SAGADA	11	32	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
230	Kalahandi	33/11KV-NAKTIGUDA	11KV-TOWN 1	11	5	34sqmm to 100sqmm AAAC/ACSR	113		80-100	MS Joist/PCC Poles	To be taken up
231	Kalahandi	33/11KV-NAKTIGUDA	11KV_TOWN 2	11	14	34sqmm to 100sqmm AAAC/ACSR	124		80-100	MS Joist/PCC Poles	To be taken up
232	Kalahandi	33/11KV-BHANGABARI	11KV-PARAMANADAPUR	11	6	34sqmm to 100sqmm AAAC/ACSR	3		80-100	MS Joist/PCC Poles	To be taken up
233	Kalahandi	33/11KV-KUSADANGAR	11KV-BHATANGPADAR	11	36	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
234	Kalahandi	33/11KV-KUSADANGAR	11KV-COLLEGE	11	15	34sqmm to 100sqmm AAAC/ACSR	155		80-100	MS Joist/PCC Poles	To be taken up
235	Kalahandi	33/11KV-KUSADANGAR	11KV-JALESWAR	11	12	34sqmm to 100sqmm AAAC/ACSR	164		80-100	MS Joist/PCC Poles	To be taken up
236	Kalahandi	33/11KV-KUSADANGAR	11KV-MEDINIPUR	11	101	34sqmm to 100sqmm AAAC/ACSR	81		80-100	MS Joist/PCC Poles	To be taken up
237	Kalahandi	33/11KV-NAKTIGUDA	11KV_TOWN 2	11	14	34sqmm to 100sqmm AAAC/ACSR	124		80-100	MS Joist/PCC Poles	To be taken up

238	Kalahandi	33/11KV-NAKTIGUDA	11KV_TOWN 3	11	5	34sqmm to 100sqmm AAAC/ACSR	52		80-100	MS Joist/PCC Poles	To be taken up
239	Kalahandi	33/11KV-RASINGPURSS	11KV-DUNGURIPADAR	11	1	34sqmm to 100sqmm AAAC/ACSR	4		80-100	MS Joist/PCC Poles	To be taken up
240	Kalahandi	33/11KV-RASINGPURSS	11KV_LINK_3	11	14	34sqmm to 100sqmm AAAC/ACSR	46		80-100	MS Joist/PCC Poles	To be taken up
241	Kalahandi	33/11KV-RASINGPURSS	11KV_RAISINGPUR FEEDER	11	20	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
242	Kalahandi	33/11KV-BADAKUTRU	11KV-BANER	11	97	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
243	Kalahandi	33/11KV-BADAKUTRU	11KV-DHANPUR	11	125	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
244	Kalahandi	33/11KV-BADAKUTRU	11KV-PANIGAON	11	40	34sqmm to 100sqmm AAAC/ACSR	23		80-100	MS Joist/PCC Poles	To be taken up
245	Kalahandi	33/11KV-CHARBAHAL STRUCTURE	11KV_CHARBAHAL	11	10	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
246	Kalahandi	33/11KV-CHARBAHAL STRUCTURE	11KV_DEUNDI	11	75	34sqmm to 100sqmm AAAC/ACSR	54		80-100	MS Joist/PCC Poles	To be taken up
247	Kalahandi	33/11KV-CHARBAHAL STRUCTURE	11KV_MOTER	11	26	34sqmm to 100sqmm AAAC/ACSR	29		80-100	MS Joist/PCC Poles	To be taken up
248	Kalahandi	33/11KV-CHARBAHAL STRUCTURE	11KV_RANAMAL	11	60	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
249	Kalahandi	33/11KV-GODRAMAL STRUCTURE	11KV_CHIKILI	11	260	34sqmm to 100sqmm AAAC/ACSR	99		80-100	MS Joist/PCC Poles	To be taken up
250	Kalahandi	33/11KV-GODRAMAL STRUCTURE	11KV_CHILIGUDA	11	62	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
251	Kalahandi	33/11KV-GODRAMAL STRUCTURE	11KV_KOKSARA	11	54	34sqmm to 100sqmm AAAC/ACSR	48		80-100	MS Joist/PCC Poles	To be taken up
252	Kalahandi	33/11KV-GODRAMAL STRUCTURE	11KV_OLMA	11	9	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
253	Kalahandi	33/11KV-JAIPATNA	11KA-JAIPATNA	11	31	34sqmm to 100sqmm AAAC/ACSR	91		80-100	MS Joist/PCC Poles	To be taken up
254	Kalahandi	33/11KV-JAIPATNA	11KV-BANJIBAHAL	11	83	34sqmm to 100sqmm AAAC/ACSR	33		80-100	MS Joist/PCC Poles	To be taken up

255	Kalahandi	33/11KV-JAIPATNA	11KV-KHALIBATA	11	29	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
256	Kalahandi	33/11KV-JAIPATNA	11KV-NEW BANER	11	7	34sqmm to 100sqmm AAAC/ACSR	7		80-100	MS Joist/PCC Poles	To be taken up
257	Kalahandi	33/11KV-LADUGAON	11KV_AMPANI	11	99	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
258	Kalahandi	33/11KV-LADUGAON	11KV_INDUSTRIAL	11	23	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
259	Kalahandi	33/11KV-LADUGAON	11KV_LODUGAON	11	16	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
260	Kalahandi	33/11KV-MAHICHALA	11KV-KALOPADA	11	59	34sqmm to 100sqmm AAAC/ACSR	52		80-100	MS Joist/PCC Poles	To be taken up
261	Kalahandi	33/11KV-MAHICHALA	11KV-MAHICHALA	11	34	34sqmm to 100sqmm AAAC/ACSR	33		80-100	MS Joist/PCC Poles	To be taken up
262	Kalahandi	33/11KV-MAHICHALA	11KV-NANDIGAON	11	21	34sqmm to 100sqmm AAAC/ACSR	13		80-100	MS Joist/PCC Poles	To be taken up
263	Kalahandi	33/11KV-MUKHIGUDA	11KV_MAHULPATNA	11	77	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
264	Kalahandi	33/11KV-MUKHIGUDA	11KV_MANGLAPUR	11	92	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
265	Kalahandi	33/11KV-MUKHIGUDA	11KV_MUKHIGUDA	11	3	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
266	Kalahandi	33/11KV-TEMRA	11KV-KENDUGUDA	11	69	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
267	Kalahandi	33/11KV-TEMRA	11KV-KULERGUDA	11	40	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
268	Kalahandi	33/11KV-TEMRA	11KV-TEMRA	11	21	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
269	Kalahandi	33/11KV-BHERA STRUCTURE	11KV -CHHANCHANBAHALI	11	68	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
270	Kalahandi	33/11KV-BHERA STRUCTURE	11KV-BEHERA(DHARAMGARH)	11	40	34sqmm to 100sqmm AAAC/ACSR	29		80-100	MS Joist/PCC Poles	To be taken up
271	Kalahandi	33/11KV-BHERA STRUCTURE	11KV-PARLA	11	54	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
272	Kalahandi	33/11KV-DASPUR	11KV-BRUNDHAMAL	11	50	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
273	Kalahandi	33/11KV-DASPUR	11KV-DASPUR	11	29	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up

274	Kalahandi	33/11KV-DASPUR	11KV-KUMARI	11	36	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
275	Kalahandi	33/11KV-DHARMAGARH	11KV-BEHERA	11	79	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
276	Kalahandi	33/11KV-DHARMAGARH	11KV-CHHENDIA	11	86	34sqmm to 100sqmm AAAC/ACSR	68		80-100	MS Joist/PCC Poles	To be taken up
277	Kalahandi	33/11KV-DHARMAGARH	11KV-CHILPA	11	111	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
278	Kalahandi	33/11KV-DHARMAGARH	11KV-DHARAMGARH	11	36	34sqmm to 100sqmm AAAC/ACSR	147	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
279	Kalahandi	33/11KV-GOLAMUNDA	11KV-CHAPERIA	11	47	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
280	Kalahandi	33/11KV-GOLAMUNDA	11KV-GOLAMUNDA	11	17	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
281	Kalahandi	33/11KV-GOLAMUNDA	11KV-KHALIAKANI	11	116	34sqmm to 100sqmm AAAC/ACSR	27		80-100	MS Joist/PCC Poles	To be taken up
282	Kalahandi	33/11KV-GOLAMUNDA	11KV-TAMRA	11	25	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
283	Kalahandi	33/11KV-KASIBAHAL STRUCTURE	11KV_BASUL	11	19	34sqmm to 100sqmm AAAC/ACSR	13		80-100	MS Joist/PCC Poles	To be taken up
284	Kalahandi	33/11KV-KASIBAHAL STRUCTURE	11KV_BODEN	11	22	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
285	Kalahandi	33/11KV-KASIBAHAL STRUCTURE	11KV_INDRAVATI	11	8	34sqmm to 100sqmm AAAC/ACSR	9		80-100	MS Joist/PCC Poles	To be taken up
286	Kalahandi	33/11KV-KASIBAHAL STRUCTURE	11KV_KASIBHAL	11	9	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
287	Kalahandi	33/11KV-KEGAON STRUCTURE	11KV_BADCHERGAON	11	116	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
288	Kalahandi	33/11KV-KEGAON STRUCTURE	11KV_BARACK	11	5	34sqmm to 100sqmm AAAC/ACSR	2		80-100	MS Joist/PCC Poles	To be taken up
289	Kalahandi	33/11KV-KEGAON STRUCTURE	11KV_KEGAON	11	23	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
290	Kalahandi	33/11KV-KEGAON STRUCTURE	11KV_LANJI	11	15	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
291	Kalahandi	33/11KV- DASPUR STRUCTURE	11KV-FARAUNG	11	50	34sqmm to 100sqmm AAAC/ACSR	42		80-100	MS Joist/PCC Poles	To be taken up
292	Kalahandi	33/11KV-ADRI STRUCTURE	11KV_ADRI	11	3	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up

293	Kalahandi	33/11KV-ADRI STRUCTURE	11KV_DALGUDA	11	9	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
294	Kalahandi	33/11KV-ADRI STRUCTURE	11KV_GOPINATHPUR	11	21	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
295	Kalahandi	33/11KV-ADRI STRUCTURE	11KV_MALIGAON	11	41	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
296	Kalahandi	33/11KV-CHICHIGUDA	11KV-BALDHIAMAL	11	30	34sqmm to 100sqmm AAAC/ACSR	48		80-100	MS Joist/PCC Poles	To be taken up
297	Kalahandi	33/11KV-CHICHIGUDA	11KV-CHICHEIGUDA	11	55	34sqmm to 100sqmm AAAC/ACSR	97		80-100	MS Joist/PCC Poles	To be taken up
298	Kalahandi	33/11KV-CHICHIGUDA	11KV-S.KUNDAMAL	11	35	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
299	Kalahandi	33/11KV-JUNAGARH	11KV-DASIGAON	11	196	34sqmm to 100sqmm AAAC/ACSR	97		80-100	MS Joist/PCC Poles	To be taken up
300	Kalahandi	33/11KV-JUNAGARH	11KV-KASTURA	11	23	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
301	Kalahandi	33/11KV-JUNAGARH	11KV-KURUGUDA	11	125	34sqmm to 100sqmm AAAC/ACSR	66		80-100	MS Joist/PCC Poles	To be taken up
302	Kalahandi	33/11KV-JUNAGARH	11KV-TOWN	11	18	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
303	Kalahandi	33/11KV-JUNAGARH	11KV-TULASIPALI	11	165	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
304	Kalahandi	33/11KV-K.SINGHPUR(TPSODL)	11KV-HATIMUNDA	11	17	34sqmm to 100sqmm AAAC/ACSR	6		80-100	MS Joist/PCC Poles	To be taken up
305	Kalahandi	33/11KV-KALAMPUR	11KV-BANDHAKANA	11	73	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
306	Kalahandi	33/11KV-KALAMPUR	11KV-BANKAPALA	11	43	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
307	Kalahandi	33/11KV-KALAMPUR	11KV-KALAMPUR	11	7	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
308	Kalahandi	33/11KV-KALAMPUR	11KV-PANDIGAON	11	23	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
309	Kalahandi	33/11KV-KASHIPUR(TPSODL)	11KV-SUNGER	11	21	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
310	Kalahandi	33/11KV-T RAMPUR	11KV-BADCHATRANG	11	40	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up

311	Kalahandi	33/11KV-T RAMPUR	11KV-DUMERPADAR	11	38	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
312	Kalahandi	33/11KV-T RAMPUR	11KV-GOPALPUR	11	250	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
313	Kalahandi	33/11KV-T RAMPUR	11KV-T RAMPUR	11	17	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
314	Kalahandi	33/11KV-TETELKUNTI(TPSODL)	11KV GOUD-DEOPALI	11	9	34sqmm to 100sqmm AAAC/ACSR	4		80-100	MS Joist/PCC Poles	To be taken up
315	Kalahandi	33/11KV-TETELKUNTI(TPSODL)	11KV-MURAN	11	6	34sqmm to 100sqmm AAAC/ACSR	1		80-100	MS Joist/PCC Poles	To be taken up
316	Kalahandi	33/11KV-BISORA	11KV-BELTUKURI	11	47	34sqmm to 100sqmm AAAC/ACSR	102		80-100	MS Joist/PCC Poles	To be taken up
317	Kalahandi	33/11KV-BISORA	11KV-BHELASHWAR	11	78	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
318	Kalahandi	33/11KV-BISORA	11KV-BISORA	11	28	34sqmm to 100sqmm AAAC/ACSR	21		80-100	MS Joist/PCC Poles	To be taken up
319	Kalahandi	33/11KV-BISORA	11KV-KULIABANDHA	11	45	34sqmm to 100sqmm AAAC/ACSR	119		80-100	MS Joist/PCC Poles	To be taken up
320	Kalahandi	33/11KV-KHARIAR ROAD	11KV-BANKA	11	26	34sqmm to 100sqmm AAAC/ACSR	43		80-100	MS Joist/PCC Poles	To be taken up
321	Kalahandi	33/11KV-KHARIAR ROAD	11KV-BIROMAL	11	109	34sqmm to 100sqmm AAAC/ACSR	155		80-100	MS Joist/PCC Poles	To be taken up
322	Kalahandi	33/11KV-KHARIAR ROAD	11KV-PATEL NAGAR	11	19	34sqmm to 100sqmm AAAC/ACSR	41		80-100	MS Joist/PCC Poles	To be taken up
323	Kalahandi	33/11KV-KHARIAR ROAD	11KV-TOWN	11	19	34sqmm to 100sqmm AAAC/ACSR	96		80-100	MS Joist/PCC Poles	To be taken up
324	Kalahandi	33/11KV-SAIPALA	11KV-DERLIMUNDA	11	103	34sqmm to 100sqmm AAAC/ACSR	78		80-100	MS Joist/PCC Poles	To be taken up
325	Kalahandi	33/11KV-SAIPALA	11KV-SAIPALA	11	11	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
326	Kalahandi	33/11KV-BADI	11KV-AREDA	11	36	34sqmm to 100sqmm AAAC/ACSR	34		80-100	MS Joist/PCC Poles	To be taken up
327	Kalahandi	33/11KV-BADI	11KV-CHHELIAPADA	11	12	34sqmm to 100sqmm AAAC/ACSR	111		80-100	MS Joist/PCC Poles	To be taken up
328	Kalahandi	33/11KV-BADI	11KV-SIKUAN	11	82	34sqmm to 100sqmm AAAC/ACSR	97		80-100	MS Joist/PCC Poles	To be taken up
329	Kalahandi	33/11KV-BARGAON	11KV-LAXMIPUR	11	29	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up

330	Kalahandi	33/11KV-BARGAON	11KV-NEW BARGAON	11	17	34sqmm to 100sqmm AAAC/ACSR	13		80-100	MS Joist/PCC Poles	To be taken up
331	Kalahandi	33/11KV-BARGAON	11KV-RAJAMUNDA	11	57	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
332	Kalahandi	33/11KV-BARGAON	11KV-SANMAHESWAR	11	32	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
333	Kalahandi	33/11KV-BODEN	11KV-BODEN (KHARIAR)	11	13	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
334	Kalahandi	33/11KV-BODEN	11KV-BOIRGAON	11	59	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
335	Kalahandi	33/11KV-BODEN	11KV-LARKA	11	101	34sqmm to 100sqmm AAAC/ACSR	31		80-100	MS Joist/PCC Poles	To be taken up
336	Kalahandi	33/11KV-BODEN	11KV-NAGAPADA	11	34	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
337	Kalahandi	33/11KV-CHALNA	11KV-BHARMUNDA	11	40	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
338	Kalahandi	33/11KV-CHALNA	11KV-CHALNA	11	25	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
339	Kalahandi	33/11KV-CHALNA	11KV-SARADHAPUR	11	27	34sqmm to 100sqmm AAAC/ACSR	19		80-100	MS Joist/PCC Poles	To be taken up
340	Kalahandi	33/11KV-KHARIAR	11KV-BODEN	11	111	34sqmm to 100sqmm AAAC/ACSR	57		80-100	MS Joist/PCC Poles	To be taken up
341	Kalahandi	33/11KV-KHARIAR	11KV-DUAJHAR	11	111	34sqmm to 100sqmm AAAC/ACSR	82		80-100	MS Joist/PCC Poles	To be taken up
342	Kalahandi	33/11KV-KHARIAR	11KV-MISSION	11	15	34sqmm to 100sqmm AAAC/ACSR	72		80-100	MS Joist/PCC Poles	To be taken up
343	Kalahandi	33/11KV-KHARIAR	11KV-OLD BARGAON	11	93	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
344	Kalahandi	33/11KV-KHARIAR	11KV-PUTUPADA	11	17	34sqmm to 100sqmm AAAC/ACSR	92		80-100	MS Joist/PCC Poles	To be taken up
345	Kalahandi	33/11KV-KHARIAR	11KV-THANA CHHAK	11	4	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
346	Kalahandi	33/11KV-KHARIAR	11KV-TUKULA	11	61	34sqmm to 100sqmm AAAC/ACSR	112		80-100	MS Joist/PCC Poles	To be taken up
347	Kalahandi	33/11KV-SINAPALI	11KV-BARGAON	11	82	34sqmm to 100sqmm AAAC/ACSR	93		80-100	MS Joist/PCC Poles	To be taken up
348	Kalahandi	33/11KV-SINAPALI	11KV-HATHIBANDHA	11	136	34sqmm to 100sqmm AAAC/ACSR	77		80-100	MS Joist/PCC Poles	To be taken up

349	Kalahandi	33/11KV-SINAPALI	11KV-KENDUMUNDA	11	111	34sqmm to 100sqmm AAAC/ACSR	67		80-100	MS Joist/PCC Poles	To be taken up
350	Kalahandi	33/11KV-SINAPALI	11KV-SINAPALI	11	6	34sqmm to 100sqmm AAAC/ACSR	78		80-100	MS Joist/PCC Poles	To be taken up
351	Kalahandi	33/11KV-TIMANPUR	11KV-BABEBIR	11	45	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up
352	Kalahandi	33/11KV-TIMANPUR	11KV-GORLA	11	30	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
353	Kalahandi	33/11KV-TIMANPUR	11KV-NILJI	11	22	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up
354	Kalahandi	33/11KV-TIMANPUR	11KV-TIMANPUR	11	30	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
355	Kalahandi	33/11KV-BATIBAHAL	11KV-KUTRIBAHAL	11	120	34sqmm to 100sqmm AAAC/ACSR	38		80-100	MS Joist/PCC Poles	To be taken up
356	Kalahandi	33/11KV-BATIBAHAL	11KV-SUNABEDA	11	106	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
357	Kalahandi	33/11KV-KOMNA	11KV-BUDHIKOMNA	11	88	34sqmm to 100sqmm AAAC/ACSR	54		80-100	MS Joist/PCC Poles	To be taken up
358	Kalahandi	33/11KV-KOMNA	11KV-KOMNA TOWN	11	29	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
359	Kalahandi	33/11KV-KOMNA	11KV-KONABIRA	11	58	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
360	Kalahandi	33/11KV-KOMNA	11KV-MALIMUNDA	11	47	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
361	Kalahandi	33/11KV-KOMNA	11KV-UDYANBANDH	11	102	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
362	Kalahandi	33/11KV-KURUMPURI	11KV-LAKHNA	11	158	34sqmm to 100sqmm AAAC/ACSR	67		80-100	MS Joist/PCC Poles	To be taken up
363	Kalahandi	33/11KV-KURUMPURI	11KV-SIALATI	11	162	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
364	Kalahandi	33/11KV-KURUMPURI	11KV-TARBOD	11	68	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
365	Kalahandi	33/11KV-NUAPADA	11KV-RAILWAY	11	83	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
366	Kalahandi	33/11KV-NUAPADA	11KV-SHAKHATORA	11	47	34sqmm to 100sqmm AAAC/ACSR	79		80-100	MS Joist/PCC Poles	To be taken up
367	Kalahandi	33/11KV-NUAPADA	11KV-TANWAT	11	54	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up

368	Kalahandi	33/11KV-NUAPADA	11KV-TOWN	11	31	34sqmm to 100sqmm AAAC/ACSR	144		80-100	MS Joist/PCC Poles	To be taken up
369	Kalahandi	33/11KV-SAIPALA	11KV-KHAIRANJI	11	59	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
370	Kalahandi	33/11KV-SARABONG	11KV-BHAINSMUNDI	11	24	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
371	Kalahandi	33/11KV-SARABONG	11KV-DHARMABANDH	11	150	34sqmm to 100sqmm AAAC/ACSR	66		80-100	MS Joist/PCC Poles	To be taken up
372	Kalahandi	33/11KV-SARABONG	11KV-TANWAT/SARABONG	11	54	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
373	Rourkela	33/11KV-BASANTI DAV STRUCTURE	11KV_DAV	11	5	34sqmm to 100sqmm AAAC/ACSR	219		80-100	MS Joist/PCC Poles	To be taken up
374	Rourkela	33/11KV-BASANTI DAV STRUCTURE	11KV_PHD	11	7	34sqmm to 100sqmm AAAC/ACSR	185	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
375	Rourkela	33/11KV-GOPABANDHUPALI STRUCTURE	11KV_GOPABANDHUPALI	11	3	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
376	Rourkela	33/11KV-GOPABANDHUPALI STRUCTURE	11KV_MSPALI	11	8	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
377	Rourkela	33/11KV-GOPABANDHUPALI STRUCTURE	11KV_TIMBER	11	4	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
378	Rourkela	33/11KV-BANDAMUNDA STRUCTURE	11KV_BALABHADRA MARKET	11	10	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
379	Rourkela	33/11KV-BANDAMUNDA STRUCTURE	11KV_BANDHAMUNDA	11	45	34sqmm to 100sqmm AAAC/ACSR	211		80-100	MS Joist/PCC Poles	To be taken up
380	Rourkela	33/11KV-BISRA STRUCTURE	11KV_BARSUAN	11	44	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
381	Rourkela	33/11KV-BISRA STRUCTURE	11KV_BISRA_1	11	4	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
382	Rourkela	33/11KV-BISRA STRUCTURE	11KV_BISRA_2	11	12	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
383	Rourkela	33/11KV-BISRA STRUCTURE	11KV_DHADARI	11	11	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
384	Rourkela	33/11KV-BISRA STRUCTURE	11KV_JARAIKELA	11	38	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
385	Rourkela	33/11KV-BISRA STRUCTURE	11KV_SANBABUA	11	64	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

386	Rourkela	33/11KV-DALPOSH STRUCTURE	11KV_BARTOLI	11	8	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
387	Rourkela	33/11KV-DALPOSH STRUCTURE	11KV_JAMSERA	11	32	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
388	Rourkela	33/11KV-NIT STRUCTURE	11KV_NAYA BAZAR	11	10	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
389	Rourkela	33/11KV-NIT STRUCTURE	11KV_OSAP	11	50	34sqmm to 100sqmm AAAC/ACSR	151		80-100	MS Joist/PCC Poles	To be taken up
390	Rourkela	33/11KV-HAMIRPUR STRUCTURE	11KV-HAMIRPUR	11	10	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
391	Rourkela	33/11KV-HAMIRPUR STRUCTURE	11KV-RAMAGADA	11	2	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
392	Rourkela	33/11KV-KOELNAGAR STRUCTURE	11KV-ADBE	11	10	34sqmm to 100sqmm AAAC/ACSR	316	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
393	Rourkela	33/11KV-KOELNAGAR STRUCTURE	11KV-C BLOCK	11	3	34sqmm to 100sqmm AAAC/ACSR	179		80-100	MS Joist/PCC Poles	To be taken up
394	Rourkela	33/11KV-KOELNAGAR STRUCTURE	11KV-JHIRPANI	11	7	34sqmm to 100sqmm AAAC/ACSR	169		80-100	MS Joist/PCC Poles	To be taken up
395	Rourkela	33/11KV-NIT STRUCTURE	11KV-JAGADA	11	10	34sqmm to 100sqmm AAAC/ACSR	224		80-100	MS Joist/PCC Poles	To be taken up
396	Rourkela	33/11KV-POWER HOUSE STRUCTURE	11KV-PLANT SITE	11	8	34sqmm to 100sqmm AAAC/ACSR	300	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
397	Rourkela	33/11KV-POWER HOUSE STRUCTURE	11KV- UDIT NAGAR	11	15	34sqmm to 100sqmm AAAC/ACSR	268	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
398	Rourkela	33/11KV-POWER HOUSE STRUCTURE	11KV-MAIN ROAD	11	9	34sqmm to 100sqmm AAAC/ACSR	299	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
399	Rourkela	33/11KV-POWER HOUSE STRUCTURE	11KV-PH ROAD	11	2	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
400	Rourkela	33/11KV-BALANDA STRUCTURE	11KV_BALANDA	11	13	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
401	Rourkela	33/11KV-BALANDA STRUCTURE	11KV_GARJAN	11	33	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
402	Rourkela	33/11KV-BALANDA STRUCTURE	11KV_TYNSAR	11	262	34sqmm to 100sqmm AAAC/ACSR	99		80-100	MS Joist/PCC Poles	To be taken up
403	Rourkela	33/11KV-KALUNGA (IDC) STRUCTURE	11KV_IDC	11	10	34sqmm to 100sqmm AAAC/ACSR	139	Overloaded	80-100	MS Joist/PCC Poles	To be taken up

404	Rourkela	33/11KV-KALUNGA (IDC) STRUCTURE	11KV_KALUNGA BASTI	11	7	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
405	Rourkela	33/11KV-KALUNGA (IDC) STRUCTURE	11KV_THIRD PHASE	11	5	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
406	Rourkela	33/11KV-OTTOINDIA	11KV-BIRKERA	11	12	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
407	Rourkela	33/11KV-OTTOINDIA	11KV-KALUNGA TOWN 1	11	21	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
408	Rourkela	33/11KV-VEDVYAS	11KV-BELDIHI	11	21	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
409	Rourkela	33/11KV-VEDVYAS	11KV-GOPAPALI	11	9	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
410	Rourkela	33/11KV-VEDVYAS	11KV-VEDVYAS	11	8	34sqmm to 100sqmm AAAC/ACSR	199		80-100	MS Joist/PCC Poles	To be taken up
411	Rourkela	33/11KV-BIRAMITRAPUR	11KV-BIJABAHAL	11	153	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
412	Rourkela	33/11KV-BIRAMITRAPUR	11KV-JHARBEDA	11	94	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
413	Rourkela	33/11KV-BIRAMITRAPUR	11KV-RAIBOGA	11	64	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
414	Rourkela	33/11KV-BIRAMITRAPUR	11KV-TOWN-1	11	10	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
415	Rourkela	33/11KV-BIRAMITRAPUR	11KV-TOWN-2	11	58	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
416	Rourkela	33/11KV-HATIBARI RAJGANGPUR	11KV-BAUNSJORE	11	30	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
417	Rourkela	33/11KV-HATIBARI RAJGANGPUR	11KV-BEMTA	11	77	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
418	Rourkela	33/11KV-HATIBARI RAJGANGPUR	11KV-HATIBARI/NUAGAON	11	101	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
419	Rourkela	33/11KV-KUARMUNADA	11KV-BANIGUNI	11	34	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
420	Rourkela	33/11KV-KUARMUNADA	11KV-GOBERA	11	40	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
421	Rourkela	33/11KV-KUARMUNADA	11KV-KALOSARIA	11	74	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
422	Rourkela	33/11KV-KUARMUNADA	11KV-PADAMPUR	11	29	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
423	Rourkela	33/11KV-KUARMUNADA	11KV-SARVESH	11	11	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
424	Rourkela	33/11KV-KUARMUNADA	11KV-TOWN	11	10	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

425	Rourkela	33/11KV-NUAGAON	11KV-LUKUBEDA	11	29	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
426	Rourkela	33/11KV-NUAGAON	11KV-NUAGAON(KUARMUNDA)	11	25	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
427	Rourkela	33/11KV-NUAGAON	11KV-POTRAPALI	11	135	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
428	Rourkela	33/11KV-NUAGAON	11KV-SARADA	11	122	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
429	Rourkela	33/11KV-RAIBOGA	11KV-KADOBAHAL	11	25	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
430	Rourkela	33/11KV-RAIBOGA	11KV-SALONGBAHAL	11	108	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
431	Rourkela	33/11KV_LINDRA STRUCTURE	11KV - KERKETA FEEDER	11	24	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
432	Rourkela	33/11KV_LINDRA STRUCTURE	11KV - KHUTGAON	11	28	34sqmm to 100sqmm AAAC/ACSR	19		80-100	MS Joist/PCC Poles	To be taken up
433	Rourkela	33/11KV_LINDRA STRUCTURE	11KV - PHULJHER FEEDER	11	3	34sqmm to 100sqmm AAAC/ACSR	4		80-100	MS Joist/PCC Poles	To be taken up
434	Rourkela	33/11KV-ALONDA STRUCTURE	11KV-ALONDA	11	48	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
435	Rourkela	33/11KV-ALONDA STRUCTURE	11KV-KUKUMUNDA	11	68	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
436	Rourkela	33/11KV-ALONDA STRUCTURE	11KV-LAXMIPOSH(ALONDA STRUCTURE)	11	142	34sqmm to 100sqmm AAAC/ACSR	27		80-100	MS Joist/PCC Poles	To be taken up
437	Rourkela	33/11KV-BHOGOTOLA	11KV-KUMARKELA	11	16	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
438	Rourkela	33/11KV-BHOGOTOLA	11KV-MALDAHI	11	158	34sqmm to 100sqmm AAAC/ACSR	17		80-100	MS Joist/PCC Poles	To be taken up
439	Rourkela	33/11KV-BHOGOTOLA	11KV-TOWN	11	25	34sqmm to 100sqmm AAAC/ACSR	71		80-100	MS Joist/PCC Poles	To be taken up
440	Rourkela	33/11KV-MANDIAKUNDAR	11KV-INDUSTRIAL	11	18	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
441	Rourkela	33/11KV-MANDIAKUNDAR	11KV-NEW VILAIGARH	11	120	34sqmm to 100sqmm AAAC/ACSR	51		80-100	MS Joist/PCC Poles	To be taken up

442	Rourkela	33/11KV-MANDIAKUNDAR	11KV-OLD BILAIGARH	11	57	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
443	Rourkela	33/11KV-RAJGANGPUR	11KV-ESI	11	8	34sqmm to 100sqmm AAAC/ACSR	54		80-100	MS Joist/PCC Poles	To be taken up
444	Rourkela	33/11KV-RAJGANGPUR	11KV-HARI MACHINE	11	19	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
445	Rourkela	33/11KV-RAJGANGPUR	11KV-MANDIAKUDAR	11	37	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
446	Rourkela	33/11KV-RAJGANGPUR	11KV-MISSION	11	10	34sqmm to 100sqmm AAAC/ACSR	58		80-100	MS Joist/PCC Poles	To be taken up
447	Rourkela	33/11KV-RAJGANGPUR	11KV-NEW TOWN1	11	5	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
448	Rourkela	33/11KV-RAJGANGPUR	11KV-TOWN-2	11	52	34sqmm to 100sqmm AAAC/ACSR	144		80-100	MS Joist/PCC Poles	To be taken up
449	Rourkela	33/11KV-BARGAON RAJGANGPUR	11KV-BARGAON	11	51	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
450	Rourkela	33/11KV-BARGAON RAJGANGPUR	11KV-JARANGLAI	11	46	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
451	Rourkela	33/11KV-BARGAON RAJGANGPUR	11KV-SAHAJBAHAL	11	82	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
452	Rourkela	33/11KV-BARGAON RAJGANGPUR	11KV-TULALAYA/TUDALAGA	11	118	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
453	Rourkela	33/11KV-BIRNGATALI	11KV-BIRANGTALI	11	60	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
454	Rourkela	33/11KV-BIRNGATALI	11KV-KHURAPALI	11	44	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
455	Rourkela	33/11KV-BIRNGATALI	11KV-PURKHAPALI	11	55	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
456	Rourkela	33/11KV-JARANGLAI	11KV-BARANGA KACHHAR	11	77	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
457	Rourkela	33/11KV-JARANGLAI	11KV-ITMA	11	52	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
458	Rourkela	33/11KV-JARANGLAI	11KV-JHARMUNDA	11	58	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
459	Rourkela	33/11KV-JHARBEDA STRUCTURE	11KV-JAMPALI	11	28	34sqmm to 100sqmm AAAC/ACSR	48		80-100	MS Joist/PCC Poles	To be taken up
460	Rourkela	33/11KV-JHARBEDA STRUCTURE	11KV-JHARBEDA NEW	11	10	34sqmm to 100sqmm AAAC/ACSR	17		80-100	MS Joist/PCC Poles	To be taken up

461	Rourkela	33/11KV-JHARBEDA STRUCTURE	11KV-SONA KHAN	11	104	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
462	Rourkela	33/11KV-KUTURA	11KV-GARPOSHI	11	78	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
463	Rourkela	33/11KV-KUTURA	11KV-JARBEDA	11	91	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
464	Rourkela	33/11KV-KUTURA	11KV-KUTURA	11	15	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
465	Rourkela	33/11KV-KUTURA	11KV-LANJIBERNA	11	232	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
466	Rourkela	33/11KV-SAHJBAHAL	11KV-EKMA	11	31	34sqmm to 100sqmm AAAC/ACSR	9		80-100	MS Joist/PCC Poles	To be taken up
467	Rourkela	33/11KV-SAHJBAHAL	11KV-PANCHORA FDR	11	21	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
468	Rourkela	33/11KV-SAHJBAHAL	11KV-SINGARMUNDA	11	95	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
469	Rourkela	33/11 GURUNDIA	11KV_GURUNDIA	11	52	34sqmm to 100sqmm AAAC/ACSR	81		80-100	MS Joist/PCC Poles	To be taken up
470	Rourkela	33/11 GURUNDIA	11KV_GURUNDIA (BANEKELA)	11	148	34sqmm to 100sqmm AAAC/ACSR	61		80-100	MS Joist/PCC Poles	To be taken up
471	Rourkela	33/11 K.BALANG	11KV_JHARBEDA	11	134	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
472	Rourkela	33/11 K.BALANG	11KV_KBALANG	11	63	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
473	Rourkela	33/11 K.BALANG	11KV_ROXY(K.BALANG)	11	179	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
474	Rourkela	33/11 KOIRA	11KV - INDUSTRY - 2	11	31	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
475	Rourkela	33/11 KOIRA	11KV-INDUSTRY - 1	11	32	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
476	Rourkela	33/11 KOIRA	11KV-KOIRA (KOIRA)	11	51	34sqmm to 100sqmm AAAC/ACSR	101		80-100	MS Joist/PCC Poles	To be taken up
477	Rourkela	33/11 MAHULDIA	11KV-BADAGAON	11	96	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
478	Rourkela	33/11 MAHULDIA	11KV-FULJHAR	11	41	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
479	Rourkela	33/11 MAHULDIA	11KV-KULIPOSH	11	94	34sqmm to 100sqmm AAAC/ACSR	83		80-100	MS Joist/PCC Poles	To be taken up

480	Rourkela	33/11 MAHULDIA	11KV-MAHULPADA	11	40	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
481	Rourkela	33/11 RAJAMUNDA	11KV-DARJING	11	100	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
482	Rourkela	33/11 RAJAMUNDA	11KV-LAHUNIAPADA	11	76	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
483	Rourkela	33/11 RAJAMUNDA	11KV- LALEI	11	47	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
484	Rourkela	33/11 RAJAMUNDA	11KV-ROXY (RAJAMUNDA)	11	88	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
485	Rourkela	33/11 TENSA	11KV-KOIRA (TENSA)	11	49	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
486	Rourkela	33/11 TUNIAPALI	11KV-INDRAPUR	11	116	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
487	Rourkela	33/11 TUNIAPALI	11KV-SARSARA	11	78	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
488	Rourkela	33/11KV-BONAI STRUCTURE	11KV_GOGUA	11	31	34sqmm to 100sqmm AAAC/ACSR	59		80-100	MS Joist/PCC Poles	To be taken up
489	Rourkela	33/11KV-BONAI STRUCTURE	11KV_GURUNDIA(NARENDRA)	11	240	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
490	Rourkela	33/11KV-BONAI STRUCTURE	11KV_KENAVETA	11	49	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
491	Rourkela	33/11KV-BONAI STRUCTURE	11KV_TOWN (BONEI)	11	27	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
492	Rourkela	33/11 CHHEND STRUCTURE	11KV_1ST PHASE	11	6	34sqmm to 100sqmm AAAC/ACSR	155		80-100	MS Joist/PCC Poles	To be taken up
493	Rourkela	33/11 CHHEND STRUCTURE	11KV_KALINGAVIHAR	11	12	34sqmm to 100sqmm AAAC/ACSR	160		80-100	MS Joist/PCC Poles	To be taken up
494	Rourkela	33/11 CHHEND STRUCTURE	11KV_LUHAKERA	11	20	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
495	Rourkela	33/11 CHHEND STRUCTURE	11KV_PANPOSH	11	12	34sqmm to 100sqmm AAAC/ACSR	155		80-100	MS Joist/PCC Poles	To be taken up
496	Rourkela	33/11 CHHEND STRUCTURE	11KV_SELF FINANCE	11	4	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
497	Rourkela	33/11 CHHEND STRUCTURE	11V_RDA	11	10	34sqmm to 100sqmm AAAC/ACSR	135		80-100	MS Joist/PCC Poles	To be taken up
498	Rourkela	33/11CIVIL TOWNSHIP STRUCTURE	11KV_BIRSHA MUNDA	11	3	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up

499	Rourkela	33/11CIVIL TOWNSHIP STRUCTURE	11KV_COLLEGE	11	3	34sqmm to 100sqmm AAAC/ACSR	125		80-100	MS Joist/PCC Poles	To be taken up
500	Rourkela	33/11CIVIL TOWNSHIP STRUCTURE	11KV_HANUMAN VATIKA	11	3	34sqmm to 100sqmm AAAC/ACSR	135		80-100	MS Joist/PCC Poles	To be taken up
501	Rourkela	33/11CIVIL TOWNSHIP STRUCTURE	11KV_RGH	11	1	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
502	Rourkela	33/11KV-INDUSTRIAL ESTATE STRUCTURE	11KV_GANGADHARPALI	11	5	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
503	Rourkela	33/11KV-INDUSTRIAL ESTATE STRUCTURE	11KV_INDUSTRIAL	11	8	34sqmm to 100sqmm AAAC/ACSR	149		80-100	MS Joist/PCC Poles	To be taken up
504	Rourkela	33/11KV-INDUSTRIAL ESTATE STRUCTURE	11KV_TOWN	11	2	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
505	Rourkela	33/11KV-JALDA STRUCTURE	11KV-INDUSTRIAL	11	26	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
506	Rourkela	33/11KV-JALDA STRUCTURE	11KV-JALDA C BLOCK	11	5	34sqmm to 100sqmm AAAC/ACSR	159		80-100	MS Joist/PCC Poles	To be taken up
507	Rourkela	33/11KV-JALDA STRUCTURE	11KV-TOWN	11	16	34sqmm to 100sqmm AAAC/ACSR	145		80-100	MS Joist/PCC Poles	To be taken up
508	Rourkela	33/11KV-LATHIKATA STRUCTURE	11KV MODERN INDIA 2	11	53	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
509	Rourkela	33/11KV-LATHIKATA STRUCTURE	11KV-MODERN INDIA 1	11	39	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
510	Rourkela	33/11KV-LATHIKATA STRUCTURE	11KV-RAMJODI	11	125	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
511	Rourkela	33/11KV-LATHIKATA STRUCTURE	11KV_BANKI	11	83	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
512	Rourkela	33/11KV-PANPOSH STRUCTURE	11KV- PHD	11	5	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
513	Rourkela	33/11KV-PANPOSH STRUCTURE	11KV- RAW WATER	11	3	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
514	Rourkela	33/11KV-PANPOSH STRUCTURE	11KV-BALUGHAT	11	9	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up

515	Rourkela	33/11KV-PANPOSH STRUCTURE	11KV-COLLEGE	11	3	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
516	Rourkela	33/11KV-11KV-KARAMDIHI STRUCTURE	11KV - SUBALAYA	11	75	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
517	Rourkela	33/11KV-11KV-KARAMDIHI STRUCTURE	11KV-PANCHMAHAL	11	35	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
518	Rourkela	33/11KV-11KV-KARAMDIHI STRUCTURE	11KV-HAMIRPUR	11	24	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
519	Rourkela	33/11KV-11KV-KARAMDIHI STRUCTURE	11KV-KARAMDIHI	11	43	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
520	Rourkela	33/11KV-BALISANKARA	11KV-BALISANKARA	11	76	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
521	Rourkela	33/11KV-BALISANKARA	11KV-BUDABAHAL	11	129	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
522	Rourkela	33/11KV-BALISANKARA	11KV-JAMUNA	11	40	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
523	Rourkela	33/11KV-COLLEGE STRUCTURE	11KV-COLLEGE	11	15	34sqmm to 100sqmm AAAC/ACSR	217		80-100	MS Joist/PCC Poles	To be taken up
524	Rourkela	33/11KV-COLLEGE STRUCTURE	11KV-HOSPITAL	11	4	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
525	Rourkela	33/11KV-COLLEGE STRUCTURE	11KV-RRIT	11	6	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
526	Rourkela	33/11KV-KUNDUKELA STRUCTURE	11KV - KINJIRMA	11	89	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
527	Rourkela	33/11KV-KUNDUKELA STRUCTURE	11KV-BHASMA	11	37	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
528	Rourkela	33/11KV-KUNDUKELA STRUCTURE	11KV-DEULI	11	32	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
529	Rourkela	33/11KV-MAJAHPADA	11KV-DHARUADIH	11	64	34sqmm to 100sqmm AAAC/ACSR	33		80-100	MS Joist/PCC Poles	To be taken up
530	Rourkela	33/11KV-MAJAHPADA	11KV-KULTA	11	48	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
531	Rourkela	33/11KV-MAJAHPADA	11KV-MAJHAPADA	11	86	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up

532	Rourkela	33/11KV-MAJAHPADA	11KV-SALEPALI/BIRBIRA	11	76	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
533	Rourkela	33/11KV-SANKARA	11KV-BARGAD	11	8	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
534	Rourkela	33/11KV-SANKARA	11KV-KUNDUKELA	11	68	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
535	Rourkela	33/11KV-SANKARA	11KV-PATRAPALI	11	136	34sqmm to 100sqmm AAAC/ACSR	182		80-100	MS Joist/PCC Poles	To be taken up
536	Rourkela	33/11KV-SANKARA	11KV-PMU	11	6	34sqmm to 100sqmm AAAC/ACSR	159		80-100	MS Joist/PCC Poles	To be taken up
537	Rourkela	33/11KV-SANKARA	11KV-SANKARA	11	12	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
538	Rourkela	33/11KV-SANKARA	11KV-TOWN-1	11	23	34sqmm to 100sqmm AAAC/ACSR	174		80-100	MS Joist/PCC Poles	To be taken up
539	Rourkela	33/11KV-SUBDEGA STRUCTURE	11KV-BALISANKRA	11	68	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
540	Rourkela	33/11KV-SUBDEGA STRUCTURE	11KV-DEOGAON	11	55	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
541	Rourkela	33/11KV-SUBDEGA STRUCTURE	11KV-SUBDEGA	11	49	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
542	Rourkela	33/11KV-SUBDEGA STRUCTURE	11KV-TANGARGAON	11	244	34sqmm to 100sqmm AAAC/ACSR	68		80-100	MS Joist/PCC Poles	To be taken up
543	Rourkela	33/11KV-SUBDEGA STRUCTURE	11KV-ROULDEGA	11	86	34sqmm to 100sqmm AAAC/ACSR	103		80-100	MS Joist/PCC Poles	To be taken up
544	Rourkela	33/11KV-BILEIMUNDA	11KV-BADHIBAHAL	11	73	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
545	Rourkela	33/11KV-BILEIMUNDA	11KV-JHARPALAM	11	28	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
546	Rourkela	33/11KV-BILEIMUNDA	11KV-TAPARIA	11	60	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
547	Rourkela	33/11KV-DARLIPALI	11KV-DARLIPALI	11	18	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
548	Rourkela	33/11KV-DARLIPALI	11KV-GHANTIMAL	11	21	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
549	Rourkela	33/11KV-DARLIPALI	11KV-KANAKTURA	11	19	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
550	Rourkela	33/11KV-DARLIPALI	11KV-RUHIDIHI	11	37	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up

551	Rourkela	33/11KV-GARJAN BAHAL	11KV-DUDUKA	11	59	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
552	Rourkela	33/11KV-GARJAN BAHAL	11KV-GARJANBAHAL	11	24	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
553	Rourkela	33/11KV-GARJAN BAHAL	11KV-GOPALPUR	11	150	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
554	Rourkela	33/11KV-GARJAN BAHAL	11KV-HEMGIRI-DURUBAGA	11	43	34sqmm to 100sqmm AAAC/ACSR	124		80-100	MS Joist/PCC Poles	To be taken up
555	Rourkela	33/11KV-GARJAN BAHAL	11KV-KALMEK	11	23	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
556	Rourkela	33/11KV-HEMGIRI	11KV-KANIKA	11	133	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
557	Rourkela	33/11KV-HEMGIRI	11KV-NEW HEMGIRI	11	55	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
558	Rourkela	33/11KV-KINJIRKELA STRUCTURE	11KV_BANDHABAHAL	11	112	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
559	Rourkela	33/11KV-KINJIRKELA STRUCTURE	11KV_KHARUABAHAL	11	128	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
560	Rourkela	33/11KV-KINJIRKELA STRUCTURE	11KV_KINJIRKELA	11	384	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
561	Rourkela	33/11KV-KINJIRKELA STRUCTURE	11KV_SIKAJORE	11	202	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
562	Rourkela	33/11KV-LEPHRIPADA STRUCTURE	11KV_CHHETANPALI	11	90	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
563	Rourkela	33/11KV-LEPHRIPADA STRUCTURE	11KV_DUMABHALA	11	273	34sqmm to 100sqmm AAAC/ACSR	99		80-100	MS Joist/PCC Poles	To be taken up
564	Rourkela	33/11KV-LEPHRIPADA STRUCTURE	11KV_GUNDIADIHI	11	111	34sqmm to 100sqmm AAAC/ACSR	118		80-100	MS Joist/PCC Poles	To be taken up
565	Rourkela	33/11KV-LEPHRIPADA STRUCTURE	11KV_KULABIRA	11	68	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
566	Rourkela	33/11KV-LEPHRIPADA STRUCTURE	11KV_LEFRIPADA	11	29	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up

567	Rourkela	33/11KV-MANGASPUR(GULTHA)	11KV-DARLIPALI-BILEIGARH	11	25	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
568	Rourkela	33/11KV-MANGASPUR(GULTHA)	11KV-MANGASPUR	11	18	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
569	Rourkela	33/11KV-MANGASPUR(GULTHA)	11KV-REMANDA	11	13	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
570	Rourkela	33/11KV-SADAR STRUCTURE	11KV_BAILJORI	11	98	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
571	Rourkela	33/11KV-SADAR STRUCTURE	11KV_BANDHAPALI	11	81	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
572	Rourkela	33/11KV-SADAR STRUCTURE	11KV_KALOBAHAL	11	69	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
573	Rourkela	33/11KV-SADAR STRUCTURE	11KV_SADAR	11	2	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
574	Rourkela	33/11KV-SARGIPALI	11KV-BHARATPUR	11	9	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
575	Rourkela	33/11KV-SARGIPALI	11KV-JHARGAON	11	24	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
576	Rourkela	33/11KV-SARGIPALI	11KV-OLD MANGASPUR	11	33	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
577	Rourkela	33/11KV-SARGIPALI	11KV-SARGIPALI	11	60	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
578	Rourkela	33/11KV-TUMAPALI	11KV-JHARIAPALI	11	25	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
579	Rourkela	33/11KV-TUMAPALI	11KV-TANGARPALI	11	34	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
580	Rourkela	33/11KV-TUMAPALI	11KV-UJJALPUR	11	9	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
581	Bolangir	33/11KV-KENDUMUNDI	11KV-BHARSUJA	11	25	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
582	Bolangir	33/11KV-KENDUMUNDI	11KV-BINDHAPALI	11	29	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
583	Bolangir	33/11KV-KENDUMUNDI	11KV-KHALIAPALI	11	12	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
584	Bolangir	33/11KV-KENDUMUNDI	11KV-PANDESARA	11	11	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
585	Bolangir	33/11KV-LOISINGHA	11KV-LOISINGHA	11	30	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up

586	Bolangir	33/11KV-LOISINGHA	11KV-MENDA	11	92	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
587	Bolangir	33/11KV-LOISINGHA	11KV-NAGAON	11	33	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
588	Bolangir	33/11KV-SALEBHATA	11KV-BAKTI	11	118	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
589	Bolangir	33/11KV-SALEBHATA	11KV-DUDUKA	11	40	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
590	Bolangir	33/11KV-SALEBHATA	11KV-LUPURSINGHA	11	105	34sqmm to 100sqmm AAAC/ACSR	199	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
591	Bolangir	33/11KV-SALEBHATA	11KV-SALEBHATA	11	14	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
592	Bolangir	33/11KV_AGALPUR	11KV_BHARSUJA	11	2	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
593	Bolangir	33/11KV_AGALPUR	11KV_NUAGAON	11	90	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
594	Bolangir	33/11KV_AGALPUR	11KV_RENGALI	11	54	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
595	Bolangir	33/11KV_AGALPUR	11KV_ROTH	11	83	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
596	Bolangir	33/11KV-BARAPUDUGIA	11KV-CHUDAPALI	11	11	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
597	Bolangir	33/11KV-BARAPUDUGIA	11KV-GARJAN	11	92	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
598	Bolangir	33/11KV-BARAPUDUGIA	11KV-HARDATAL	11	152	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
599	Bolangir	33/11KV-BARAPUDUGIA	11KV-PIPALKANI	11	127	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
600	Bolangir	33/11KV-BARAPUDUGIA	11KV-SHIBATALA	11	145	34sqmm to 100sqmm AAAC/ACSR	135		80-100	MS Joist/PCC Poles	To be taken up
601	Bolangir	33/11KV-BEHERAPALI	11KV-BEHERAPALI	11	1	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
602	Bolangir	33/11KV-BEHERAPALI	11KV-BHALER	11	24	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
603	Bolangir	33/11KV-BEHERAPALI	11KV-SANTPUR	11	28	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
604	Bolangir	33/11KV-BEHERAPALI	11KV-UMRIA	11	114	34sqmm to 100sqmm AAAC/ACSR	106		80-100	MS Joist/PCC Poles	To be taken up
605	Bolangir	33/11KV-BHADRA	11KV-KANDAJURI	11	23	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
606	Bolangir	33/11KV-BHADRA	11KV-KUSUNGA	11	55	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up

607	Bolangir	33/11KV-BHADRA	11KV-SARGADA	11	73	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
608	Bolangir	33/11KV-CHHATMAKHANA	11KV-CHHUIBANDH	11	9	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
609	Bolangir	33/11KV-CHHATMAKHANA	11KV-DURGAPALI	11	62	34sqmm to 100sqmm AAAC/ACSR	121		80-100	MS Joist/PCC Poles	To be taken up
610	Bolangir	33/11KV-CHHATMAKHANA	11KV-KHARMARMUNDA	11	7	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
611	Bolangir	33/11KV-CHHATMAKHANA	11KV-KUSUMEL	11	79	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
612	Bolangir	33/11KV-CHHATMAKHANA	11KV-PHD	11	6	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
613	Bolangir	33/11KV-CHHATMAKHANA	11KV-SUJIA	11	46	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
614	Bolangir	33/11KV-INDUSTRIAL ESTATE	11KV-INDUSTRIAL EST 1	11	16	34sqmm to 100sqmm AAAC/ACSR	180		80-100	MS Joist/PCC Poles	To be taken up
615	Bolangir	33/11KV-INDUSTRIAL ESTATE	11KV-INDUSTRIAL EST 2	11	7	34sqmm to 100sqmm AAAC/ACSR	140		80-100	MS Joist/PCC Poles	To be taken up
616	Bolangir	33/11KV-INDUSTRIAL ESTATE	11KV-INDUSTRIAL EST 3	11	7	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
617	Bolangir	33/11KV-INDUSTRIAL ESTATE	11KV-INDUSTRIAL EST 4	11	28	34sqmm to 100sqmm AAAC/ACSR	82		80-100	MS Joist/PCC Poles	To be taken up
618	Bolangir	33/11KV-INDUSTRIAL ESTATE	11KV-INDUSTRIAL EST 5	11	8	34sqmm to 100sqmm AAAC/ACSR	98		80-100	MS Joist/PCC Poles	To be taken up
619	Bolangir	33/11KV-KASABAHAL STRUCTURE	11KV-KURUL	11	38	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
620	Bolangir	33/11KV-KASABAHAL STRUCTURE	11KV-MAHIMUNDA	11	28	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
621	Bolangir	33/11KV-MADHIAPALI	11KV-MADHIAPALI INDUSTRIAL	11	7	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
622	Bolangir	33/11KV-MADHIAPALI	11KV-RE MADHIAPALI	11	1	34sqmm to 100sqmm AAAC/ACSR	3		80-100	MS Joist/PCC Poles	To be taken up

623	Bolangir	33/11KV-MADHIAPALI	11KV-SADEIPALI	11	47	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
624	Bolangir	33/11KV_KASABAHAL STRUCTURE	11KV_ODIA PALI	11	32	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
625	Bolangir	33/11KV_KUDASINGHA STRUCTURE	11KV_CHIK ALBAHAL	11	10	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
626	Bolangir	33/11KV_KUDASINGHA STRUCTURE	11KV_KUDA SINGHA	11	92	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
627	Bolangir	33/11KV_KUDASINGHA STRUCTURE	11KV_SIKC HHAIDA	11	28	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
628	Bolangir	33/11KV-JAIL	11KV-BEHERPAL LI	11	17	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
629	Bolangir	33/11KV-JAIL	11KV-GANDHINA GAR	11	6	34sqmm to 100sqmm AAAC/ACSR	145		80-100	MS Joist/PCC Poles	To be taken up
630	Bolangir	33/11KV-LALITKRA	11KV-FEEDER 1	11	13	34sqmm to 100sqmm AAAC/ACSR	320	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
631	Bolangir	33/11KV-LALITKRA	11KV-FEEDER 2	11	7	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
632	Bolangir	33/11KV-LALITKRA	11KV-FEEDER 3	11	32	34sqmm to 100sqmm AAAC/ACSR	140		80-100	MS Joist/PCC Poles	To be taken up
633	Bolangir	33/11KV-LALITKRA	11KV-RE FEEDER.	11	21	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
634	Bolangir	33/11KV-POWER HOUSE	11KV-HATISAL	11	3	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
635	Bolangir	33/11KV-POWER HOUSE	11KV-MALPADA	11	5	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
636	Bolangir	33/11KV-SUDPADA	11KV-KANSARIPA DA	11	4	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
637	Bolangir	33/11KV-BUDHABAHAL STRUCTURE	11 KV-TEPREN	11	34	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
638	Bolangir	33/11KV-BUDHABAHAL STRUCTURE	11KV-BHUTIBAHA L	11	75	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
639	Bolangir	33/11KV-BUDHABAHAL STRUCTURE	11KV-GAMBHARI MAL	11	44	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
640	Bolangir	33/11KV-BUDHABAHAL STRUCTURE	11KV-SARASMAL	11	16	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up

641	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-ADARSH 2	11	9	34sqmm to 100sqmm AAAC/ACSR	3		80-100	MS Joist/PCC Poles	To be taken up
642	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-DEOGAON	11	5	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
643	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-GAIBAHAL-1	11	113	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
644	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-GAIBAHAL-2	11	35	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
645	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-SAGARPALI	11	6	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
646	Bolangir	33/11KV-DEAGAON STRUCTURE	11KV-TUSURA	11	37	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
647	Bolangir	33/11KV-JARASINGHA STRUCTURE	11KV-JARSINGHA	11	2	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
648	Bolangir	33/11KV-JARASINGHA STRUCTURE	11KV-SALEPALI	11	14	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
649	Bolangir	33/11KV-JARASINGHA STRUCTURE	11KV-UDAR	11	30	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
650	Bolangir	33/11KV-JARASINGHA STRUCTURE	11KV-CHANDRAPUR	11	11	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
651	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-ARJUNPUR	11	122	34sqmm to 100sqmm AAAC/ACSR	137		80-100	MS Joist/PCC Poles	To be taken up
652	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-GUDVELLA	11	325	34sqmm to 100sqmm AAAC/ACSR	160		80-100	MS Joist/PCC Poles	To be taken up
653	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-MAHALAI	11	176	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
654	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-NATRAJ	11	38	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
655	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-SAMARA	11	56	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
656	Bolangir	33/11KV-TUSRA STRUCTURE	11KV-TUSRA TOWN	11	24	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
657	Bolangir	33/11KV-CHARBHATA	11KV-BALIKHAMAR	11	48	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
658	Bolangir	33/11KV-CHARBHATA	11KV-CHARBHATA	11	8	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up

659	Bolangir	33/11KV-CHARBHATA	11KV-RENGSA	11	36	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
660	Bolangir	33/11KV-DUMERBAHAL	11KV-JAMGAON	11	54	34sqmm to 100sqmm AAAC/ACSR	47		80-100	MS Joist/PCC Poles	To be taken up
661	Bolangir	33/11KV-DUMERBAHAL	11KV-JHARBALANGIR	11	50	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
662	Bolangir	33/11KV-DUMERBAHAL	11KV-TARVA	11	96	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
663	Bolangir	33/11KV-HARDOKHOL	11KV-BAIDYANATH	11	32	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
664	Bolangir	33/11KV-HARDOKHOL	11KV-BISIMUNDA	11	110	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
665	Bolangir	33/11KV-HARDOKHOL	11KV-HARDOKHOL	11	26	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
666	Bolangir	33/11KV-HARDOKHOL	11KV-KHAMBESWARIPALLI	11	32	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
667	Bolangir	33/11KV-HARDOKHOL	11KV-MAJHI-MUNDA	11	10	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
668	Bolangir	33/11KV-HEADKITIKRA-KALAPATHAR	11KV-JAMMURA	11	22	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
669	Bolangir	33/11KV-HEADKITIKRA-KALAPATHAR	11KV-KALAPATHAR	11	21	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
670	Bolangir	33/11KV-SONEPUR NEW	11KV-BADBAZAR	11	11	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
671	Bolangir	33/11KV-SONEPUR NEW	11KV-COLLECTORATE	11	10	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
672	Bolangir	33/11KV-SONEPUR NEW	11KV-MEDICAL	11	2	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
673	Bolangir	33/11KV-SONEPUR OLD	11KV-HARDOKHOL-TOWN	11	11	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
674	Bolangir	33/11KV-SONEPUR OLD	11KV-JANMURA-TOWN	11	9	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
675	Bolangir	33/11KV-SONEPUR OLD	11KV-MAJHIPADA	11	6	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up

676	Bolangir	33/11KV-SONEPUR OLD	11KV-SHANTI-NAGAR	11	7	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
677	Bolangir	33/11KV_DUBLA	11KV-BAGHIA	11	19	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
678	Bolangir	33/11KV_DUBLA	11KV-LUKAPALI	11	82	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
679	Bolangir	33/11KV_DUBLA	11KV-TALPADAR	11	53	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
680	Bolangir	33/11KV_DUBLA	11KV_PURUNAPANI	11	23	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
681	Bolangir	33/11KV_KHARI	11KV-BIJEPADAR	11	66	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
682	Bolangir	33/11KV_KHARI	11KV-NARAYANPUR	11	64	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
683	Bolangir	33/11KV_KHARI	11KV-PUA	11	87	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
684	Bolangir	33/11KV_KHARI	11KV-TARAIKELA	11	9	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
685	Bolangir	33/11KV_KHARI	11KV_KENDUMUNDA	11	49	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
686	Bolangir	33/11KV_KHARI	11KV_MAHULA	11	45	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
687	Bolangir	33/11KV_TARVA	11KV-SARGAJ	11	22	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
688	Bolangir	33/11KV_TARVA	11KV-TARVA TOWN 2	11	9	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
689	Bolangir	33/11KV_TARVA	11KV-TARVA TOWN1	11	18	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
690	Bolangir	33/11KV_TARVA	11KV_TANTULIKHUNI	11	33	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
691	Bolangir	33/11KV-BHATABAHALI	11KV-JULUNDA	11	30	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
692	Bolangir	33/11KV-BHATABAHALI	11KV-KAPASIRA	11	37	34sqmm to 100sqmm AAAC/ACSR	128		80-100	MS Joist/PCC Poles	To be taken up
693	Bolangir	33/11KV-BHATABAHALI	11KV-SALEPALI	11	71	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
694	Bolangir	33/11KV-BHATABAHALI	11KV-TAMAMURA	11	29	34sqmm to 100sqmm AAAC/ACSR	68		80-100	MS Joist/PCC Poles	To be taken up
695	Bolangir	33/11KV-BINKA	11KV-BINKA	11	15	34sqmm to 100sqmm AAAC/ACSR	106		80-100	MS Joist/PCC Poles	To be taken up
696	Bolangir	33/11KV-BINKA	11KV-GULUNDA	11	34	34sqmm to 100sqmm AAAC/ACSR	37		80-100	MS Joist/PCC Poles	To be taken up

697	Bolangir	33/11KV-BINKA	11KV-GULUNDA AGRICULTURE	11	6	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
698	Bolangir	33/11KV-BINKA	11KV-INDUSTRIAL	11	16	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
699	Bolangir	33/11KV-BINKA	11KV-MAHADEVI	11	3	34sqmm to 100sqmm AAAC/ACSR	6		80-100	MS Joist/PCC Poles	To be taken up
700	Bolangir	33/11KV-BINKA	11KV-RAMPUR	11	14	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
701	Bolangir	33/11KV-BINKA	11KV-SANKERA	11	55	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
702	Bolangir	33/11KV-BISHALPALI	11KV INDUSTRIAL	11	4	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
703	Bolangir	33/11KV-BISHALPALI	11KV-BANKIGINDI	11	83	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
704	Bolangir	33/11KV-BISHALPALI	11KV-KADLIPALI	11	35	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
705	Bolangir	33/11KV-BISHALPALI	11KV_SINGHJUBA	11	28	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
706	Bolangir	33/11KV-CHERUPALLI	11KV-CHERUPALLI	11	44	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
707	Bolangir	33/11KV-CHERUPALLI	11KV-DUNGRUIPALLI	11	37	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
708	Bolangir	33/11KV-CHERUPALLI	11KV-PANDKITAL	11	37	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
709	Bolangir	33/11KV-CHERUPALLI	11KV-SARGUL	11	137	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
710	Bolangir	33/11KV-PANKITAL STRUCTURE	11KV-BADKERLEY	11	103	34sqmm to 100sqmm AAAC/ACSR	171		80-100	MS Joist/PCC Poles	To be taken up
711	Bolangir	33/11KV-PANKITAL STRUCTURE	11KV-MAYABARHA	11	23	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
712	Bolangir	33/11KV-PANKITAL STRUCTURE	11KV_RAMPUR	11	16	34sqmm to 100sqmm AAAC/ACSR	52		80-100	MS Joist/PCC Poles	To be taken up
713	Bolangir	33/11KV-SALEDI	11KV-BHAMARPALI	11	52	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
714	Bolangir	33/11KV-SALEDI	11KV-IRRIGATION	11	15	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up

715	Bolangir	33/11KV-SALEDI	11KV-MAHADEVPALI	11	38	34sqmm to 100sqmm AAAC/ACSR	68		80-100	MS Joist/PCC Poles	To be taken up
716	Bolangir	33/11KV_BISHALPALI	11KV-SINDURPUR	11	23	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
717	Bolangir	33/11KV_ ULLUNDA	11 KV-MARALOI	11	31	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
718	Bolangir	33/11KV_ ULLUNDA	11 KV-ULLNDA	11	2	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
719	Bolangir	33/11KV_ ULLUNDA	11KV - GANDABAHAL	11	11	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
720	Bolangir	33/11KV_ ULLUNDA	11KV - GOEDMARA	11	52	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
721	Bolangir	33/11KV_ ULLUNDA	11KV - HIKUNDA	11	44	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
722	Bolangir	33/11KV_ ULLUNDA	11KV - SINDHOL	11	174	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
723	Bolangir	33/11KV_ ULLUNDA	11KV-HINGMA	11	42	34sqmm to 100sqmm AAAC/ACSR	38		80-100	MS Joist/PCC Poles	To be taken up
724	Bolangir	33/11KV_ ULLUNDA	11KV-THENGO	11	185	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
725	Bolangir	33/11KV_BM PUR	11KV-TELIPALI	11	55	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
726	Bolangir	33/11KV_BM PUR	11KV_BM PUR	11	34	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
727	Bolangir	33/11KV_BM PUR	11KV_CHAMPAPUR	11	27	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
728	Bolangir	33/11KV_BM PUR	11KV_DHARMASALA	11	51	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
729	Bolangir	33/11KV_BM PUR	11KV_JALOI	11	106	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
730	Bolangir	33/11KV_BM PUR	11KV_KHANDATOTA	11	6	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
731	Bolangir	33/11KV_MURSUNDI	11KV-MANIKPUR	11	52	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
732	Bolangir	33/11KV_MURSUNDI	11KV_BUTHIPADAR	11	79	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
733	Bolangir	33/11KV_MURSUNDI	11KV_KHANDOKATA	11	60	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
734	Bolangir	33/11KV_MURSUNDI	11KV_MURSUNDI	11	22	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up

735	Bolangir	33/11KV_RAXA CHOWK	11KV - HINGMA-II	11	54	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
736	Bolangir	33/11KV_RAXA CHOWK	11KV-HIKUDI CHOWK	11	45	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
737	Bolangir	33/11KV_SUBALAYA	11KV-JATESINGHA	11	15	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
738	Bolangir	33/11KV_SUBALAYA	11KV-KAMIRA	11	6	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
739	Bolangir	33/11KV_SUBALAYA	11KV-SUBALAYA	11	10	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
740	Bolangir	33/11KV_SUBALAYA	11KV_GARIAMUNDA	11	65	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
741	Bolangir	33/11KV-BAGABAHAL	11KV-BELPADA	11	3	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
742	Bolangir	33/11KV-BAGABAHAL	11KV-BHALUMUNDA	11	33	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
743	Bolangir	33/11KV-BAGABAHAL	11KV-JURABANDH	11	28	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
744	Bolangir	33/11KV-BAGABAHAL	11KV-SORGUL	11	28	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
745	Bolangir	33/11KV-BANGOMUNDA	11KV-BHALUMUNDA_12	11	14	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
746	Bolangir	33/11KV-BANGOMUNDA	11KV-BONGOMUNDA	11	8	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
747	Bolangir	33/11KV-BANGOMUNDA	11KV-GOHIRAPADER	11	12	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
748	Bolangir	33/11KV-BANGOMUNDA	11KV-LUKAPADA	11	28	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
749	Bolangir	33/11KV-DABRI	11KV-DABRI	11	29	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
750	Bolangir	33/11KV-DABRI	11KV-DHAMANDONGA	11	64	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
751	Bolangir	33/11KV-DABRI	11KV-DUMERCHUAN	11	57	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
752	Bolangir	33/11KV-GUDIGHAT	11KV-CHALKI	11	86	34sqmm to 100sqmm AAAC/ACSR	72		80-100	MS Joist/PCC Poles	To be taken up

753	Bolangir	33/11KV-GUDIGHAT	11KV-CHANABAHAL	11	41	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
754	Bolangir	33/11KV-GUDIGHAT	11KV_ANDALDORO	11	21	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
755	Bolangir	33/11KV-GUDIGHAT	11KV_ANTARLA	11	36	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
756	Bolangir	33/11KV-KANTABANJI	11KV-ASHRAM PADA	11	12	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
757	Bolangir	33/11KV-KANTABANJI	11KV-TOWN-1	11	17	34sqmm to 100sqmm AAAC/ACSR	180		80-100	MS Joist/PCC Poles	To be taken up
758	Bolangir	33/11KV-KANTABANJI	11KV-TOWN-2	11	27	34sqmm to 100sqmm AAAC/ACSR	185		80-100	MS Joist/PCC Poles	To be taken up
759	Bolangir	33/11KV-MURIBAHAL	11KV-GUDIA HAT	11	17	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
760	Bolangir	33/11KV-MURIBAHAL	11KV-JAMUNA	11	13	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
761	Bolangir	33/11KV-MURIBAHAL	11KV-TOWN	11	5	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
762	Bolangir	33/11KV-MURIBAHAL	11KV_DUBUNG	11	57	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
763	Bolangir	33/11KV-MURIBAHAL	11KV_TUPAVDHAR	11	75	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
764	Bolangir	33/11KV-TUREIKELA	11KV-BADABANKI	11	68	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
765	Bolangir	33/11KV-TUREIKELA	11KV-GHUNESH	11	54	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
766	Bolangir	33/11KV-TUREIKELA	11KV-R.E	11	74	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
767	Bolangir	33/11KV-TUREIKELA	11KV-TUREIKELA	11	11	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
768	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-BELPADA	11	20	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
769	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-FACTORY	11	20	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
770	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-GHAGURLI	11	103	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
771	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-KAPANI	11	42	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
772	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-MANDAL	11	7	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
773	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-NAVODAYA	11	2	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up

774	Bolangir	33/11KV-BELPADA STRUCTURE	11KV-PADAMPUR	11	3	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
775	Bolangir	33/11KV-DHUMABHATA STRUCTURE	11KV-DHUMABHATA	11	17	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
776	Bolangir	33/11KV-DHUMABHATA STRUCTURE	11KV-JUBA	11	91	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
777	Bolangir	33/11KV-DHUMABHATA STRUCTURE	11KV-RADBAHAL	11	27	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
778	Bolangir	33/11KV-DHUMABHATA STRUCTURE	11KV-SULEIKALA	11	86	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
779	Bolangir	33/11KV-GHUMER STRUCTURE	11KV-DALAPALI	11	38	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
780	Bolangir	33/11KV-GHUMER STRUCTURE	11KV-TAMIA&THAISOM	11	96	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
781	Bolangir	33/11KV-JURIA STRUCTURE	11KV-DAMAIPALI	11	45	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
782	Bolangir	33/11KV-JURIA STRUCTURE	11KV-GHAGRA-BHATLI	11	15	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
783	Bolangir	33/11KV-JURIA STRUCTURE	11KV-JURIA	11	20	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
784	Bolangir	33/11KV-JURIA STRUCTURE	11KV-LUHASINGHA	11	16	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
785	Bolangir	33/11KV-KANUT STRUCTURE	11KV-BHARUAPALI	11	99	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
786	Bolangir	33/11KV-KANUT STRUCTURE	11KV-NUAHAD	11	75	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
787	Bolangir	33/11KV-KANUT STRUCTURE	11KV-SALANDI	11	177	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
788	Bolangir	33/11KV-KANUT STRUCTURE	11KV-TANLA	11	438	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
789	Bolangir	33/11KV-KHAPRAKHOL STRUCTURE	11KV-BHALDUNGARI	11	37	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
790	Bolangir	33/11KV-KHAPRAKHOL STRUCTURE	11KV-DHANDAMUNDA	11	77	34sqmm to 100sqmm AAAC/ACSR	58		80-100	MS Joist/PCC Poles	To be taken up

791	Bolangir	33/11KV-KHAPRAKHOL STRUCTURE	11KV-HARISANKAR	11	64	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
792	Bolangir	33/11KV-KHAPRAKHOL STRUCTURE	11KV-RENGALI	11	74	34sqmm to 100sqmm AAAC/ACSR	64		80-100	MS Joist/PCC Poles	To be taken up
793	Bolangir	33/11KV-LARAMBHA STRUCTURE	11KV-BAGMUNDA	11	70	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
794	Bolangir	33/11KV-LARAMBHA STRUCTURE	11KV-DANGBAHAL	11	60	34sqmm to 100sqmm AAAC/ACSR	42		80-100	MS Joist/PCC Poles	To be taken up
795	Bolangir	33/11KV-LARAMBHA STRUCTURE	11KV-LARAMBHA	11	18	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
796	Bolangir	33/11KV-LATHORA STRUCTURE	11KV-BAGDIHA	11	21	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
797	Bolangir	33/11KV-LATHORA STRUCTURE	11KV-BENDIR	11	19	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
798	Bolangir	33/11KV-LATHORA STRUCTURE	11KV-BUSSTAND	11	9	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
799	Bolangir	33/11KV-LATHORA STRUCTURE	11KV-COLONY PADA	11	26	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
800	Bolangir	33/11KV-LATHORA STRUCTURE	11KV-TANKAPANI	11	24	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
801	Bolangir	33/11KV-PATNAGARH STRUCTURE	11KV-BATHARLA	11	103	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
802	Bolangir	33/11KV-PATNAGARH STRUCTURE	11KV-OLD GHASIAN	11	99	34sqmm to 100sqmm AAAC/ACSR	83		80-100	MS Joist/PCC Poles	To be taken up
803	Bolangir	33/11KV-PATNAGARH STRUCTURE	11KV-PHD	11	5	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
804	Bolangir	33/11KV-PATNAGARH STRUCTURE	11KV-TOWN-1	11	6	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
805	Bolangir	33/11KV-PATNAGARH STRUCTURE	11KV-TOWN-2	11	10	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
806	Bolangir	33/11KV-TANDPADAR STRUCTURE	11KV-BADAJHANKARPALI	11	26	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up

807	Bolangir	33/11KV-TANDPADAR STRUCTURE	11KV-BHAISA	11	26	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
808	Bolangir	33/11KV-TANDPADAR STRUCTURE	11KV-RAMPUR	11	18	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
809	Bolangir	33/11KV-THAKPADA STRUCTURE	11KV-BANJARI	11	70	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
810	Bolangir	33/11KV-THAKPADA STRUCTURE	11KV-GMBHARI	11	39	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
811	Bolangir	33/11KV-THAKPADA STRUCTURE	11KV-JOGIMUNDA	11	71	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
812	Bolangir	33/11KV-THAKPADA STRUCTURE	11KV-MATIKHAI	11	41	34sqmm to 100sqmm AAAC/ACSR	27		80-100	MS Joist/PCC Poles	To be taken up
813	Bolangir	33/11KV-BELGAON STRUCTURE	11KV -BADIPADA	11	44	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
814	Bolangir	33/11KV-BELGAON STRUCTURE	11KV -PHD FEEDER	11	19	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
815	Bolangir	33/11KV-BELGAON STRUCTURE	11KV-BHADRA	11	45	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
816	Bolangir	33/11KV-BELGAON STRUCTURE	11KV-BIJEPUR	11	70	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
817	Bolangir	33/11KV-BELGAON STRUCTURE	11KV-GHUNSIR	11	67	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
818	Bolangir	33/11KV-KARMATALA STRUCTURE	11KV -PATAMARA	11	24	34sqmm to 100sqmm AAAC/ACSR	7		80-100	MS Joist/PCC Poles	To be taken up
819	Bolangir	33/11KV-KARMATALA STRUCTURE	11KV-KARAMTALA	11	35	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
820	Bolangir	33/11KV-KARMATALA STRUCTURE	11KV-PHAPSI	11	48	34sqmm to 100sqmm AAAC/ACSR	52		80-100	MS Joist/PCC Poles	To be taken up
821	Bolangir	33/11KV-SAINTALA STRUCTURE	11KV-BLOCK	11	1	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
822	Bolangir	33/11KV-SAINTALA STRUCTURE	11KV-BUDHABAHAL	11	78	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
823	Bolangir	33/11KV-SAINTALA STRUCTURE	11KV-KUMBHARI	11	35	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
824	Bolangir	33/11KV-SAINTALA STRUCTURE	11KV-PITAMBUL	11	28	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
825	Bolangir	33/11KV-SAINTALA STRUCTURE	11KV-SAINTALA	11	8	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up

826	Bolangir	33/11KV-KHOLAN	11KV-DAM	11	45	34sqmm to 100sqmm AAAC/ACSR	47		80-100	MS Joist/PCC Poles	To be taken up
827	Bolangir	33/11KV-KHOLAN	11KV-KHOLAN	11	49	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
828	Bolangir	33/11KV-KHOLAN	11KV-LIMPADA	11	20	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
829	Bolangir	33/11KV-KHOLAN	11KV-LUTHURBANDH	11	88	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
830	Bolangir	33/11KV-PANDRIPANI	11KV-ALANDA	11	36	34sqmm to 100sqmm AAAC/ACSR	23		80-100	MS Joist/PCC Poles	To be taken up
831	Bolangir	33/11KV-PANDRIPANI	11KV-BAGBHAL	11	32	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
832	Bolangir	33/11KV-PANDRIPANI	11KV-DEDGAON	11	90	34sqmm to 100sqmm AAAC/ACSR	89		80-100	MS Joist/PCC Poles	To be taken up
833	Bolangir	33/11KV-PANDRIPANI	11KV-JHARIAL	11	20	34sqmm to 100sqmm AAAC/ACSR	52		80-100	MS Joist/PCC Poles	To be taken up
834	Bolangir	33/11KV-PIPLAPADA	11KV-CHARBHATA	11	36	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
835	Bolangir	33/11KV-PIPLAPADA	11KV-MANIGAON	11	66	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
836	Bolangir	33/11KV-PIPLAPADA	11KV-PIPALAPADAR	11	7	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
837	Bolangir	33/11KV-SINDHEKELA	11KV-CHANDOTARA	11	70	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
838	Bolangir	33/11KV-SINDHEKELA	11KV-PARASARA	11	4	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
839	Bolangir	33/11KV-SINDHEKELA	11KV-PUTUPADA	11	6	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
840	Bolangir	33/11KV-SINDHEKELA	11KV-TOWN-SINDHEKELA	11	13	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
841	Bolangir	33/11KV-TITILAGARH	11KV-BANDHUPALA	11	14	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
842	Bolangir	33/11KV-TITILAGARH	11KV-BHATIPADA	11	28	34sqmm to 100sqmm AAAC/ACSR	130	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
843	Bolangir	33/11KV-TITILAGARH	11KV-FOUR-POLE-POLICE-STATION	11	1	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up

844	Bolangir	33/11KV-TITILAGARH	11KV-GUNCHITAR	11	43	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
845	Bolangir	33/11KV-TITILAGARH	11KV-LIC	11	5	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
846	Bargarh	33/11KV-ATTABIRA PSS	11KV-ATTABIRA TOWN	11	12	34sqmm to 100sqmm AAAC/ACSR	119		80-100	MS Joist/PCC Poles	To be taken up
847	Bargarh	33/11KV-ATTABIRA PSS	11KV-KANDPALI	11	230	34sqmm to 100sqmm AAAC/ACSR	419	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
848	Bargarh	33/11KV-ATTABIRA PSS	11KV-SARANDA	11	45	34sqmm to 100sqmm AAAC/ACSR	82		80-100	MS Joist/PCC Poles	To be taken up
849	Bargarh	33/11KV-ATTABIRA PSS	11LV-RANGALI CAMP	11	69	34sqmm to 100sqmm AAAC/ACSR	251	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
850	Bargarh	33/11KV-GUDBHANGA PSS	11KV-GODBHAGA	11	74	34sqmm to 100sqmm AAAC/ACSR	160	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
851	Bargarh	33/11KV-GUDBHANGA PSS	11KV-LARAMBHA	11	161	34sqmm to 100sqmm AAAC/ACSR	244		80-100	MS Joist/PCC Poles	To be taken up
852	Bargarh	33/11KV-PATRAPALI PSS	11KV-DUNGURIPALI	11	13	34sqmm to 100sqmm AAAC/ACSR	38		80-100	MS Joist/PCC Poles	To be taken up
853	Bargarh	33/11KV-PATRAPALI PSS	11KV-JANHAPADA/RENGALI	11	20	34sqmm to 100sqmm AAAC/ACSR	47		80-100	MS Joist/PCC Poles	To be taken up
854	Bargarh	33/11KV-PATRAPALI PSS	11KV-KHIRAPALI	11	54	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
855	Bargarh	33/11KV-PATRAPALI PSS	11KV-PATRAPALI	11	8	34sqmm to 100sqmm AAAC/ACSR	37		80-100	MS Joist/PCC Poles	To be taken up
856	Bargarh	33/11KV-DIVISION 2 PSS	11KV-GOVINDPALI	11	10	34sqmm to 100sqmm AAAC/ACSR	210		80-100	MS Joist/PCC Poles	To be taken up
857	Bargarh	33/11KV-DIVISION 2 PSS	11KV-TOWN-2	11	7	34sqmm to 100sqmm AAAC/ACSR	230		80-100	MS Joist/PCC Poles	To be taken up
858	Bargarh	33/11KV-DIVISION I-PSS	11KV-BANDHUTIKRA FEEDER	11	5	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
859	Bargarh	33/11KV-DIVISION I-PSS	11KV-PRIVATE BUS STAND	11	8	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
860	Bargarh	33/11KV-DIVISION I-PSS	11KV-BARGARH TOWN-1	11	15	34sqmm to 100sqmm AAAC/ACSR	312		80-100	MS Joist/PCC Poles	To be taken up

861	Bargarh	33/11KV-TORA	11KV - REMUNDA	11	56	34sqmm to 100sqmm AAAC/ACSR	137		80-100	MS Joist/PCC Poles	To be taken up
862	Bargarh	33/11KV-TORA	11KV - GAISIMA	11	56	34sqmm to 100sqmm AAAC/ACSR	131		80-100	MS Joist/PCC Poles	To be taken up
863	Bargarh	33/11KV-TORA	11KV-SUGARMILL	11	12	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
864	Bargarh	33/11KV-TORA	11KV-TORA	11	7	34sqmm to 100sqmm AAAC/ACSR	57		80-100	MS Joist/PCC Poles	To be taken up
865	Bargarh	33/11KV-TURUNGA	11KV - AMBAPALI	11	29	34sqmm to 100sqmm AAAC/ACSR	115		80-100	MS Joist/PCC Poles	To be taken up
866	Bargarh	33/11KV-TURUNGA	11KV - NEW INDUSTRIAL	11	5	34sqmm to 100sqmm AAAC/ACSR	91		80-100	MS Joist/PCC Poles	To be taken up
867	Bargarh	33/11KV-TURUNGA	11KV-BARPALI	11	58	34sqmm to 100sqmm AAAC/ACSR	185		80-100	MS Joist/PCC Poles	To be taken up
868	Bargarh	33/11KV-TURUNGA	11KV-DEOGAON	11	63	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
869	Bargarh	33/11KV-TURUNGA	11KV- OLD INDUSTRIAL	11	35	34sqmm to 100sqmm AAAC/ACSR	247	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
870	Bargarh	33/11KV-TURUNGA	11KV-SOHELA	11	29	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
871	Bargarh	33/11KV_KAMGAON PSS	11KV-LANDIJURI FEEDER	11	31	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
872	Bargarh	33/11KV_KAMGAON PSS	11KV_KAMGAON FEEDER	11	70	34sqmm to 100sqmm AAAC/ACSR	180		80-100	MS Joist/PCC Poles	To be taken up
873	Bargarh	33/11KV_KHEDAPALI PSS	11KV-KAMAGAON OLD FEEDER	11	7	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
874	Bargarh	33/11KV_KHEDAPALI PSS	11KV_BARDOL FEEDER	11	43	34sqmm to 100sqmm AAAC/ACSR	174		80-100	MS Joist/PCC Poles	To be taken up
875	Bargarh	33/11KV_KHEDAPALI PSS	11KV_KATAPALI FEEDER	11	9	34sqmm to 100sqmm AAAC/ACSR	85		80-100	MS Joist/PCC Poles	To be taken up
876	Bargarh	33/11KV_PRADAHANPALI	11KV_ATTABIRA	11	37	34sqmm to 100sqmm AAAC/ACSR	151	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
877	Bargarh	33/11KV_PRADAHANPALI	11KV_INDUSTRIAL_I	11	33	34sqmm to 100sqmm AAAC/ACSR	259	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
878	Bargarh	33/11KV_PRADAHANPALI	11KV_INDUSTRIAL_II	11	11	34sqmm to 100sqmm AAAC/ACSR	160		80-100	MS Joist/PCC Poles	To be taken up
879	Bargarh	33/11KV_PRADAHANPALI	11KV_OLD KATAPALI	11	14	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

880	Bargarh	33/11KV-AMBABHONA PSS	11KV-AMBABHONA FEEDER	11	21	34sqmm to 100sqmm AAAC/ACSR	54		80-100	MS Joist/PCC Poles	To be taken up
881	Bargarh	33/11KV-AMBABHONA PSS	11KV-BANJIPALI FEEDER	11	5	34sqmm to 100sqmm AAAC/ACSR	4		80-100	MS Joist/PCC Poles	To be taken up
882	Bargarh	33/11KV-AMBABHONA PSS	11KV-SAMBALPURI FEEDER	11	33	34sqmm to 100sqmm AAAC/ACSR	14		80-100	MS Joist/PCC Poles	To be taken up
883	Bargarh	33/11KV-BHATLI PSS	11KV-BARTUNDA FEEDER	11	40	34sqmm to 100sqmm AAAC/ACSR	125		80-100	MS Joist/PCC Poles	To be taken up
884	Bargarh	33/11KV-BHATLI PSS	11KV-KENDUGUDIA FEEDER	11	69	34sqmm to 100sqmm AAAC/ACSR	200	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
885	Bargarh	33/11KV-BHATLI PSS	11KV-SUKUDA FEEDER	11	48	34sqmm to 100sqmm AAAC/ACSR	132		80-100	MS Joist/PCC Poles	To be taken up
886	Bargarh	33/11KV-BHATLI PSS	11KV-BADMAL FEEDER	11	36	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
887	Bargarh	33/11KV-BHATLI PSS	11KV-BHATLI TOWN FEEDER	11	18	34sqmm to 100sqmm AAAC/ACSR	123		80-100	MS Joist/PCC Poles	To be taken up
888	Bargarh	33/11KV-BHATLI PSS	11KV-TEMREN FEEDER	11	17	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
889	Bargarh	33/11KV-BHUKTA PSS	11KV-DARLIPALI FEEDER	11	6	34sqmm to 100sqmm AAAC/ACSR	97		80-100	MS Joist/PCC Poles	To be taken up
890	Bargarh	33/11KV-BHUKTA PSS	11KV-KAPASIRA FEEDER	11	74	34sqmm to 100sqmm AAAC/ACSR	105		80-100	MS Joist/PCC Poles	To be taken up
891	Bargarh	33/11KV-BHUKTA PSS	11KV-BHUKTA FEEDER	11	8	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
892	Bargarh	33/11KV-BHUKTA PSS	11KV-RUCHIDA FEEDER	11	60	34sqmm to 100sqmm AAAC/ACSR	98		80-100	MS Joist/PCC Poles	To be taken up
893	Bargarh	33/11KV-DUNGRI PSS	11KV-BADMAL FEEDER	11	18	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
894	Bargarh	33/11KV-DUNGRI PSS	11KV-DUNGRI FEEDER	11	4	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up

895	Bargarh	33/11KV-DUNGRI PSS	11KV-LAKHANPUR FEEDER	11	142	34sqmm to 100sqmm AAAC/ACSR	231	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
896	Bargarh	33/11KV-KANDPALA PSS	11KV-KALMI FEEDER	11	30	34sqmm to 100sqmm AAAC/ACSR	88		80-100	MS Joist/PCC Poles	To be taken up
897	Bargarh	33/11KV-KANDPALA PSS	11KV-KANDPALA FEEDER	11	6	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
898	Bargarh	33/11KV-KANDPALA PSS	11KV-KUMBHO FEEDER	11	38	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
899	Bargarh	33/11KV-RAISOBHA PSS	11KV-GOPALPUR FEEDER	11	43	34sqmm to 100sqmm AAAC/ACSR	152		80-100	MS Joist/PCC Poles	To be taken up
900	Bargarh	33/11KV-RAISOBHA PSS	11KV-JIRATORA FEEDER	11	61	34sqmm to 100sqmm AAAC/ACSR	190	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
901	Bargarh	33/11KV-RAISOBHA PSS	11KV-TEJAGOLA FEEDER	11	33	34sqmm to 100sqmm AAAC/ACSR	106		80-100	MS Joist/PCC Poles	To be taken up
902	Bargarh	33/11KV-UDAYAPALI PSS	11KV-HATISAR FEEDER	11	97	34sqmm to 100sqmm AAAC/ACSR	202	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
903	Bargarh	33/11KV-UDAYAPALI PSS	11KV-NILJEE FEEDER	11	59	34sqmm to 100sqmm AAAC/ACSR	195		80-100	MS Joist/PCC Poles	To be taken up
904	Bargarh	33/11KV-BHEDEN	11KV-BARPADAR	11	72	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
905	Bargarh	33/11KV-BHEDEN	11KV-BHEDEN	11	30	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
906	Bargarh	33/11KV-BHEDEN	11KV-SAHARA TIKRA	11	41	34sqmm to 100sqmm AAAC/ACSR	93		80-100	MS Joist/PCC Poles	To be taken up
907	Bargarh	33/11KV-DHATKUPALI	11KV-JAMTIKRA	11	4	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
908	Bargarh	33/11KV-DHATKUPALI	11KV-KAMGAON	11	2	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
909	Bargarh	33/11KV-DHATKUPALI	11KV-PAPANGA 2	11	26	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
910	Bargarh	33/11KV-DHATKUPALI	11KV-TILKINDA(RUSUDA)	11	22	34sqmm to 100sqmm AAAC/ACSR	72		80-100	MS Joist/PCC Poles	To be taken up
911	Bargarh	33/11KV-KUHUNTULIPALI	11KV-GARVANA	11	37	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up

912	Bargarh	33/11KV-KUHUNTULIPALI	11KV-INDUSTRIAL	11	5	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
913	Bargarh	33/11KV-KUHUNTULIPALI	11KV-KHUNTULIPALI	11	28	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
914	Bargarh	33/11KV-KUHUNTULIPALI	11KV-SANKARDA	11	45	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
915	Bargarh	33/11KV-MAHULPALI(GANDTURUM)	11KV-MAHULPALI	11	33	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
916	Bargarh	33/11KV-MAHULPALI(GANDTURUM)	11KV-SIALCHANDAHAT	11	48	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
917	Bargarh	33/11KV-MAHULPALI(GANDTURUM)	11KV-TURUM	11	14	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
918	Bargarh	33/11KV-THUAPALI	11KV-KHUTULIPALI	11	11	34sqmm to 100sqmm AAAC/ACSR	21		80-100	MS Joist/PCC Poles	To be taken up
919	Bargarh	33/11KV-THUAPALI	11KV-PAPANGA NEW	11	62	34sqmm to 100sqmm AAAC/ACSR	41		80-100	MS Joist/PCC Poles	To be taken up
920	Bargarh	33/11KV-THUAPALI	11KV-PAPANGA OLD	11	59	34sqmm to 100sqmm AAAC/ACSR	155		80-100	MS Joist/PCC Poles	To be taken up
921	Bargarh	33/11KV-THUAPALI	11KV-REMMUNDA	11	26	34sqmm to 100sqmm AAAC/ACSR	156		80-100	MS Joist/PCC Poles	To be taken up
922	Bargarh	33/11KV-THUAPALI	11KV-THUAPALI	11	5	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
923	Bargarh	33/11KV- BARPALI	11KV-AGALPUR_B	11	9	34sqmm to 100sqmm AAAC/ACSR	86		80-100	MS Joist/PCC Poles	To be taken up
924	Bargarh	33/11KV- BARPALI	11KV-BADGAON	11	54	34sqmm to 100sqmm AAAC/ACSR	221	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
925	Bargarh	33/11KV- BARPALI	11KV-BANDHAPALI	11	36	34sqmm to 100sqmm AAAC/ACSR	190	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
926	Bargarh	33/11KV- BARPALI	11KV-LENDA	11	14	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
927	Bargarh	33/11KV- BARPALI	11KV-PHULAPALI	11	67	34sqmm to 100sqmm AAAC/ACSR	144		80-100	MS Joist/PCC Poles	To be taken up
928	Bargarh	33/11KV- BARPALI	11KV-RAMPUR	11	94	34sqmm to 100sqmm AAAC/ACSR	144		80-100	MS Joist/PCC Poles	To be taken up

929	Bargarh	33/11KV- BARPALI	11KV-TOWN FEEDER	11	4	34sqmm to 100sqmm AAAC/ACSR	298	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
930	Bargarh	33/11KV-BALITIKA	11KV - REASAMA	11	86	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
931	Bargarh	33/11KV-BALITIKA	11KV-TULUNDI	11	112	34sqmm to 100sqmm AAAC/ACSR	240	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
932	Bargarh	33/11KV-CHARMUNDA	11KV-AGALPUR	11	20	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
933	Bargarh	33/11KV-CHARMUNDA	11KV-SUJIA	11	47	34sqmm to 100sqmm AAAC/ACSR	132		80-100	MS Joist/PCC Poles	To be taken up
934	Bargarh	33/11KV-CHARMUNDA	11KV-TINKANI	11	23	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
935	Bargarh	33/11KV-DAHITA PSS	11KV-DANGACHHANCHA FEEDER	11	63	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
936	Bargarh	33/11KV-DAHITA PSS	11KV-JAMARTALA FEEDER	11	33	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
937	Bargarh	33/11KV-DAHITA PSS	11KV-SLETPALI FEEDER	11	54	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
938	Bargarh	33/11KV-GAISILET PSS	11KV-BUROMUNDA FEEDER	11	19	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
939	Bargarh	33/11KV-GAISILET PSS	11KV-FRINGIMAL FEEDER	11	86	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
940	Bargarh	33/11KV-GAISILET PSS	11KV-GAISILAT FEEDER	11	53	34sqmm to 100sqmm AAAC/ACSR	86		80-100	MS Joist/PCC Poles	To be taken up
941	Bargarh	33/11KV-GAISILET PSS	11KV-LEBEDI FEEDER	11	71	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
942	Bargarh	33/11KV-GAISILET PSS	11KV-TALPALI FEEDER	11	46	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
943	Bargarh	33/11KV-KUNDAKHAI PSS	11KV-JAMUDPALI FEEDER	11	44	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
944	Bargarh	33/11KV-KUNDAKHAI PSS	11KV-KUNDAKHAI FEEDER	11	48	34sqmm to 100sqmm AAAC/ACSR	133		80-100	MS Joist/PCC Poles	To be taken up

945	Bargarh	33/11KV-LAKHMARA PSS	11KV-BADIKATA FEEDER	11	117	34sqmm to 100sqmm AAAC/ACSR	150		80-100	MS Joist/PCC Poles	To be taken up
946	Bargarh	33/11KV-LAKHMARA PSS	11KV-SAMBALPURI FEEDER	11	77	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
947	Bargarh	33/11KV-MELCHAMUNDA PSS	11KV-BELMUNDA FEEDER	11	22	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
948	Bargarh	33/11KV-MELCHAMUNDA PSS	11KV-GHENSS FEEDER	11	59	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
949	Bargarh	33/11KV-MELCHAMUNDA PSS	11KV-MELCHANMUNDA FEEDER	11	72	34sqmm to 100sqmm AAAC/ACSR	140		80-100	MS Joist/PCC Poles	To be taken up
950	Bargarh	33/11KV-MELCHAMUNDA PSS	11KV-SARGIBAHAL FEEDER	11	87	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
951	Bargarh	33/11KV-PADAMPUR PSS	11KV-BARIKEL FEEDER	11	142	34sqmm to 100sqmm AAAC/ACSR	70		80-100	MS Joist/PCC Poles	To be taken up
952	Bargarh	33/11KV-PADAMPUR PSS	11KV-BUDEN FEEDER	11	4	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
953	Bargarh	33/11KV-PADAMPUR PSS	11KV-GAISILET FEEDER	11	85	34sqmm to 100sqmm AAAC/ACSR	68		80-100	MS Joist/PCC Poles	To be taken up
954	Bargarh	33/11KV-PADAMPUR PSS	11KV-LAKHMARA FEEDER	11	54	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
955	Bargarh	33/11KV-PADAMPUR PSS	11KV-MELCHAMUNDA FEEDER	11	101	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
956	Bargarh	33/11KV-PADAMPUR PSS	11KV-TOWN1 FEEDER	11	46	34sqmm to 100sqmm AAAC/ACSR	180		80-100	MS Joist/PCC Poles	To be taken up
957	Bargarh	33/11KV-PADAMPUR PSS	11KV-TOWN2 FEEDER	11	12	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
958	Bargarh	33/11KV-DOVA STRUCTURE	11KV-DOVA	11	76	34sqmm to 100sqmm AAAC/ACSR	295	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
959	Bargarh	33/11KV-DOVA STRUCTURE	11KV-KRULIPALI	11	141	34sqmm to 100sqmm AAAC/ACSR	292	Overloaded	80-100	MS Joist/PCC Poles	To be taken up

960	Bargarh	33/11KV-DUNGURIPALI STRUCTURE	11KV-BHAISADHARA	11	31	34sqmm to 100sqmm AAAC/ACSR	150		80-100	MS Joist/PCC Poles	To be taken up
961	Bargarh	33/11KV-DUNGURIPALI STRUCTURE	11KV-DUNGURIPALI	11	17	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
962	Bargarh	33/11KV-DUNGURIPALI STRUCTURE	11KV-JAGDALPUR	11	30	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
963	Bargarh	33/11KV-JHARBANDH STRUCTURE	11KV-JHARBANDH	11	2	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
964	Bargarh	33/11KV-JHARBANDH STRUCTURE	11KV-OLD DUNGURIPALI	11	29	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
965	Bargarh	33/11KV-JHARBANDH STRUCTURE	11KV-SARGUL	11	43	34sqmm to 100sqmm AAAC/ACSR	150	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
966	Bargarh	33/11KV-JHARBANDH STRUCTURE	11KV-TAPEN	11	104	34sqmm to 100sqmm AAAC/ACSR	189	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
967	Bargarh	33/11KV-JHITIKI STRUCTURE	11KV-BARPALI	11	34	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
968	Bargarh	33/11KV-JHITIKI STRUCTURE	11KV-BHUBANESWARPUR	11	30	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
969	Bargarh	33/11KV-JHITIKI STRUCTURE	11KV-CHHETAGAON	11	18	34sqmm to 100sqmm AAAC/ACSR	17		80-100	MS Joist/PCC Poles	To be taken up
970	Bargarh	33/11KV-MANDOSIL STRUCTURE	11KV-CHHINEIKELA	11	89	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up
971	Bargarh	33/11KV-MANDOSIL STRUCTURE	11KV-BARTUNDA	11	48	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
972	Bargarh	33/11KV-MANDOSIL STRUCTURE	11KV-MANDOSIL	11	47	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
973	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-PAIKAMAL TOWN	11	14	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
974	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-CHUHAPALI	11	25	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
975	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-JHARMUNDA	11	72	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
976	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-JHITIKI	11	64	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up

977	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-MANDOSIL_PAIKAMAL	11	42	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
978	Bargarh	33/11KV-PAIKAMAL STRUCTURE	11KV-NURSINGHANATH	11	14	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
979	Bargarh	33/11KV-ARDA-PSS	11KV-JOKIAPALI FEEDER	11	76	34sqmm to 100sqmm AAAC/ACSR	151	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
980	Bargarh	33/11KV-ARDA-PSS	11KV-LAUMUNDA FEEDER	11	71	34sqmm to 100sqmm AAAC/ACSR	234	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
981	Bargarh	33/11KV-ARDA-PSS	11KV-SAIPALI FEEDER	11	137	34sqmm to 100sqmm AAAC/ACSR	172		80-100	MS Joist/PCC Poles	To be taken up
982	Bargarh	33/11KV-BIJEPUR PSS	11KV-BARAMUNDA FEEDER	11	187	34sqmm to 100sqmm AAAC/ACSR	271	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
983	Bargarh	33/11KV-BIJEPUR PSS	11KV-BIJEPUR TOWN FEEDER	11	16	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
984	Bargarh	33/11KV-BIJEPUR PSS	11KV-JARING FEEDER	11	69	34sqmm to 100sqmm AAAC/ACSR	211	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
985	Bargarh	33/11KV-BIJEPUR PSS	11KV-KHARMUNDA FEEDER	11	52	34sqmm to 100sqmm AAAC/ACSR	209	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
986	Bargarh	33/11KV-BIJEPUR PSS	11KV-M.GANDPALI FEEDER	11	68	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
987	Bargarh	33/11KV-DASMILE PSS	11KV-BISHALPALI FEEDER	11	90	34sqmm to 100sqmm AAAC/ACSR	259	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
988	Bargarh	33/11KV-DASMILE PSS	11KV-DASMILE FEEDER	11	15	34sqmm to 100sqmm AAAC/ACSR	93		80-100	MS Joist/PCC Poles	To be taken up
989	Bargarh	33/11KV-DASMILE PSS	11KV-KENDIPALI FEEDER	11	54	34sqmm to 100sqmm AAAC/ACSR	180		80-100	MS Joist/PCC Poles	To be taken up
990	Bargarh	33/11KV-DASMILE PSS	11KV-SRIGIDA FEEDER	11	56	34sqmm to 100sqmm AAAC/ACSR	175		80-100	MS Joist/PCC Poles	To be taken up
991	Bargarh	33/11KV-GHENSS PSS	11KV-GHENSS FEEDER	11	10	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up

992	Bargarh	33/11KV-GHENSS PSS	11KV-JAMPALI FEEDER	11	49	34sqmm to 100sqmm AAAC/ACSR	223	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
993	Bargarh	33/11KV-GHENSS PSS	11KV-JHAR FEEDER	11	79	34sqmm to 100sqmm AAAC/ACSR	273	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
994	Bargarh	33/11KV-GHENSS PSS	11KV-KUCHIPALI FEEDER	11	74	34sqmm to 100sqmm AAAC/ACSR	219	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
995	Bargarh	33/11KV-SARANDAPALI PSS	11KV-BANBASPALI FEEDER	11	85	34sqmm to 100sqmm AAAC/ACSR	184		80-100	MS Joist/PCC Poles	To be taken up
996	Bargarh	33/11KV-SARANDAPALI PSS	11KV-KATAPALI FEEDER	11	13	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
997	Bargarh	33/11KV-SARANDAPALI PSS	11KV-S.DUMERPALI FEEDER	11	109	34sqmm to 100sqmm AAAC/ACSR	294	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
998	Bargarh	33/11KV-SARANDAPALI PSS	11KV-SARANDAPALI FFEDER	11	60	34sqmm to 100sqmm AAAC/ACSR	170	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
999	Bargarh	33/11KV-SOHELA PSS	11KV-CHHURIAPALI FEEDER	11	79	34sqmm to 100sqmm AAAC/ACSR	199	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1000	Bargarh	33/11KV-SOHELA PSS	11KV-GRINJEL FEEDER	11	68	34sqmm to 100sqmm AAAC/ACSR	229	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1001	Bargarh	33/11KV-SOHELA PSS	11KV-INDUSTRIAL FEEDER	11	26	34sqmm to 100sqmm AAAC/ACSR	120		80-100	MS Joist/PCC Poles	To be taken up
1002	Bargarh	33/11KV-SOHELA PSS	11KV-KANGAON FEEDER	11	34	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
1003	Bargarh	33/11KV-SOHELA PSS	11KV-LUHURACHATI FEEDER	11	208	34sqmm to 100sqmm AAAC/ACSR	226	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1004	Bargarh	33/11KV-SOHELA PSS	11KV-PADAMPUR FEEDER	11	122	34sqmm to 100sqmm AAAC/ACSR	449	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1005	Bargarh	33/11KV-SOHELA PSS	11KV-SOHELA TOWN FEEDER	11	29	34sqmm to 100sqmm AAAC/ACSR	190	Overloaded	80-100	MS Joist/PCC Poles	To be taken up

1006	Sambalpur	33/11KV-BANDHBAHAL	11KV-BALANDA	11	103	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
1007	Sambalpur	33/11KV-BANDHBAHAL	11KV-BANDHBAHAL	11	49	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1008	Sambalpur	33/11KV-BANDHBAHAL	11KV-GANESH NAGAR	11	10	34sqmm to 100sqmm AAAC/ACSR	220	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1009	Sambalpur	33/11KV-DHULUNDA PSS	11KV-CHARPALI FEEDER	11	37	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
1010	Sambalpur	33/11KV-DHULUNDA PSS	11KV-DEHERIDHIPA FEEDER	11	31	34sqmm to 100sqmm AAAC/ACSR	59		80-100	MS Joist/PCC Poles	To be taken up
1011	Sambalpur	33/11KV-DHULUNDA PSS	11KV-KANAKTORA FEEDER	11	54	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
1012	Sambalpur	33/11KV-DHULUNDA PSS	11KV-REMDA FEEDER	11	29	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
1013	Sambalpur	33/11KV-GOVIND PUR	11KV-LINE-2 KUDABAGA	11	10	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
1014	Sambalpur	33/11KV-GOVIND PUR	11KV-LINE-3 BHANURKHOL	11	64	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1015	Sambalpur	33/11KV-JHARUAPADA PSS	11KV BALAJI FFEDER	11	1	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1016	Sambalpur	33/11KV-JHARUAPADA PSS	11KV-BHIKAMPALI	11	20	34sqmm to 100sqmm AAAC/ACSR	34		80-100	MS Joist/PCC Poles	To be taken up
1017	Sambalpur	33/11KV-JHARUAPADA PSS	11KV-JAMGAON FDR	11	76	34sqmm to 100sqmm AAAC/ACSR	74		80-100	MS Joist/PCC Poles	To be taken up
1018	Sambalpur	33/11KV-JHARUAPADA PSS	11KV-RENGALI FEEDER	11	43	34sqmm to 100sqmm AAAC/ACSR	79		80-100	MS Joist/PCC Poles	To be taken up
1019	Sambalpur	33/11KV-MUCHBAHAL	11KV-JORABAGA	11	98	34sqmm to 100sqmm AAAC/ACSR	95		80-100	MS Joist/PCC Poles	To be taken up
1020	Sambalpur	33/11KV-MUCHBAHAL	11KV-JUNADIHI	11	51	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
1021	Sambalpur	33/11KV-MUCHBAHAL	11KV-KANTATIKRA	11	24	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1022	Sambalpur	33/11KV-MUCHBAHAL	11KV-LINE-1	11	41	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up

			LAKHANPUR								
1023	Sambalpur	33/11KV-MUCHBAHAL	11KV-TOWN	11	91	34sqmm to 100sqmm AAAC/ACSR	279	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1024	Sambalpur	33/11KV-PANDIRI	11KV-PIPLIKANI LINE-1	11	43	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1025	Sambalpur	33/11KV_BRAJARAJNAGAR	11KV_BRAJARAJNAGAR	11	38	34sqmm to 100sqmm AAAC/ACSR	146		80-100	MS Joist/PCC Poles	To be taken up
1026	Sambalpur	33/11KV_BRAJARAJNAGAR	11KV_GANDHI CHOWK	11	136	34sqmm to 100sqmm AAAC/ACSR	170		80-100	MS Joist/PCC Poles	To be taken up
1027	Sambalpur	33/11KV_BRAJARAJNAGAR	11KV_LAMTIBAHAL	11	25	34sqmm to 100sqmm AAAC/ACSR	165		80-100	MS Joist/PCC Poles	To be taken up
1028	Sambalpur	33/11KV_BRAJARAJNAGAR	11KV_TELANPALLI	11	12	34sqmm to 100sqmm AAAC/ACSR	59		80-100	MS Joist/PCC Poles	To be taken up
1029	Sambalpur	33/11KV-BURLA	11KV-CONTRACTOR-COLONY	11	7	34sqmm to 100sqmm AAAC/ACSR	99		80-100	MS Joist/PCC Poles	To be taken up
1030	Sambalpur	33/11KV-BURLA	11KV-MARKET-FEEDER	11	2	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1031	Sambalpur	33/11KV-BURLA	11KV-UCE	11	14	34sqmm to 100sqmm AAAC/ACSR	94		80-100	MS Joist/PCC Poles	To be taken up
1032	Sambalpur	33/11KV-BURLA	11KV-WESCO	11	16	34sqmm to 100sqmm AAAC/ACSR	154		80-100	MS Joist/PCC Poles	To be taken up
1033	Sambalpur	33/11KV-BURLA MEDICAL	11KV-DOCTOR-COLONY	11	13	34sqmm to 100sqmm AAAC/ACSR	34		80-100	MS Joist/PCC Poles	To be taken up
1034	Sambalpur	33/11KV-BURLA MEDICAL	11KV-KV HOSTEL	11	3	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1035	Sambalpur	33/11KV-BURLA MEDICAL	11KV-MEDICAL-1	11	3	34sqmm to 100sqmm AAAC/ACSR	79		80-100	MS Joist/PCC Poles	To be taken up
1036	Sambalpur	33/11KV-JYOTIBIHAR	11KV-BHUNDUNGURIPADARD	11	8	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1037	Sambalpur	33/11KV-JYOTIBIHAR	11KV-GOLKUNDA	11	6	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1038	Sambalpur	33/11KV-JYOTIBIHAR	11KV-KTAPALI	11	25	34sqmm to 100sqmm AAAC/ACSR	29		80-100	MS Joist/PCC Poles	To be taken up

1039	Sambalpur	33/11KV-JYOTIBIHAR	11KV-LADIES-HOSTEL	11	11	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1040	Sambalpur	33/11KV-CHIPILIMA	11KV-BASANTPUR	11	20	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1041	Sambalpur	33/11KV-CHIPILIMA	11KV-TULANDI(CHIPILIMA)	11	49	34sqmm to 100sqmm AAAC/ACSR	64		80-100	MS Joist/PCC Poles	To be taken up
1042	Sambalpur	33/11KV-CHORPUR	11KV-BADASINGHARI	11	13	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
1043	Sambalpur	33/11KV-CHORPUR	11KV-MUNDAGHAT	11	17	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
1044	Sambalpur	33/11KV-CHORPUR	11KV-SENHAPALI	11	18	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
1045	Sambalpur	33/11KV-GOSHALA	11KV-BURLA	11	15	34sqmm to 100sqmm AAAC/ACSR	74		80-100	MS Joist/PCC Poles	To be taken up
1046	Sambalpur	33/11KV-GOSHALA	11KV-GODBHAGA	11	15	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
1047	Sambalpur	33/11KV-GOSHALA	11KV-KALAMATI	11	15	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1048	Sambalpur	33/11KV-GOSHALA	11KV-MAHALAXMI	11	16	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
1049	Sambalpur	33/11KV-GOSHALA	11KV-MUNDOGHAT	11	14	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1050	Sambalpur	33/11KV-GOSHALA	11KV-TULANDI(GOSHALA)	11	9	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1051	Sambalpur	33/11KV-HIRAKUD	11KV-ALINDRE	11	35	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
1052	Sambalpur	33/11KV-HIRAKUD	11KV-GANDHINAGAR	11	11	34sqmm to 100sqmm AAAC/ACSR	143		80-100	MS Joist/PCC Poles	To be taken up
1053	Sambalpur	33/11KV-HIRAKUD	11KV-HPCL	11	9	34sqmm to 100sqmm AAAC/ACSR	6		80-100	MS Joist/PCC Poles	To be taken up
1054	Sambalpur	33/11KV-HIRAKUD	11KV-MEDICAL-1	11	5	34sqmm to 100sqmm AAAC/ACSR	74		80-100	MS Joist/PCC Poles	To be taken up
1055	Sambalpur	33/11KV-HIRAKUD	11KV-SAMBALPUR-1	11	12	34sqmm to 100sqmm AAAC/ACSR	64		80-100	MS Joist/PCC Poles	To be taken up

1056	Sambalpur	33/11KV-HIRAKUD	11KV-SAMBALPUR-2	11	34	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
1057	Sambalpur	33/11KV-BADABAZAR PSS	11KV-BADABAZAR FEEDER	11	4	34sqmm to 100sqmm AAAC/ACSR	163	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1058	Sambalpur	33/11KV-BADABAZAR PSS	11KV-FARM ROAD FEEDER	11	6	34sqmm to 100sqmm AAAC/ACSR	148		80-100	MS Joist/PCC Poles	To be taken up
1059	Sambalpur	33/11KV-BADABAZAR PSS	11KV-SAMALESWARI FEEDER	11	2	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1060	Sambalpur	33/11KV-CHERUAPADA STRUCTURE	11KV_BULI BANDH	11	11	34sqmm to 100sqmm AAAC/ACSR	169		80-100	MS Joist/PCC Poles	To be taken up
1061	Sambalpur	33/11KV-CHERUAPADA STRUCTURE	11KV_HOSPITAL	11	2	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1062	Sambalpur	33/11KV-CHERUAPADA STRUCTURE	11KV_PHD	11	7	34sqmm to 100sqmm AAAC/ACSR	158		80-100	MS Joist/PCC Poles	To be taken up
1063	Sambalpur	33/11KV-AINTHAPALI	11KV-BHALUPALI	11	35	34sqmm to 100sqmm AAAC/ACSR	67		80-100	MS Joist/PCC Poles	To be taken up
1064	Sambalpur	33/11KV-AINTHAPALI	11KV-BUDHARAJA SCHOOL	11	7	34sqmm to 100sqmm AAAC/ACSR	84		80-100	MS Joist/PCC Poles	To be taken up
1065	Sambalpur	33/11KV-AINTHAPALI	11KV-BURLA	11	2	34sqmm to 100sqmm AAAC/ACSR	58		80-100	MS Joist/PCC Poles	To be taken up
1066	Sambalpur	33/11KV-AINTHAPALI	11KV-COLLEGE	11	8	34sqmm to 100sqmm AAAC/ACSR	169	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1067	Sambalpur	33/11KV-AINTHAPALI	11KV-FAMILY PLANNING	11	11	34sqmm to 100sqmm AAAC/ACSR	113		80-100	MS Joist/PCC Poles	To be taken up
1068	Sambalpur	33/11KV-AINTHAPALI	11KV-FATAK	11	9	34sqmm to 100sqmm AAAC/ACSR	66		80-100	MS Joist/PCC Poles	To be taken up
1069	Sambalpur	33/11KV-AINTHAPALI	11KV-GOPALPALI	11	32	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
1070	Sambalpur	33/11KV-AINTHAPALI	11KV-INDUSTRIAL	11	3	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
1071	Sambalpur	33/11KV-AINTHAPALI	11KV-KHETRAJPUR	11	15	34sqmm to 100sqmm AAAC/ACSR	145		80-100	MS Joist/PCC Poles	To be taken up
1072	Sambalpur	33/11KV-AINTHAPALI	11KV-RAW WATER	11	8	34sqmm to 100sqmm AAAC/ACSR	107		80-100	MS Joist/PCC Poles	To be taken up

1073	Sambalpur	33/11KV-AINTHAPALI	11KV-RE KAINSIR	11	43	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1074	Sambalpur	33/11KV-AINTHAPALI	11KV-REMED	11	16	34sqmm to 100sqmm AAAC/ACSR	140		80-100	MS Joist/PCC Poles	To be taken up
1075	Sambalpur	33/11KV-DHAMA STRUCTURE	11KV-DHAMA	11	44	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
1076	Sambalpur	33/11KV-DHAMA STRUCTURE	11KV-INDUSTRY	11	10	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
1077	Sambalpur	33/11KV-DHAMA STRUCTURE	11KV-KHINDA	11	119	34sqmm to 100sqmm AAAC/ACSR	62		80-100	MS Joist/PCC Poles	To be taken up
1078	Sambalpur	33/11KV-DHAMA STRUCTURE	11KV-LARASARA	11	68	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
1079	Sambalpur	33/11KV-GUNDERPUR	11KV-GUNDERPUR	11	42	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1080	Sambalpur	33/11KV-GUNDERPUR	11KV-SAHASPUR	11	96	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
1081	Sambalpur	33/11KV-PADIABAHAL STRUCTURE	11KV-BAHAMPUR	11	65	34sqmm to 100sqmm AAAC/ACSR	37		80-100	MS Joist/PCC Poles	To be taken up
1082	Sambalpur	33/11KV-PADIABAHAL STRUCTURE	11KV-JAYANTPUR FDR	11	85	34sqmm to 100sqmm AAAC/ACSR	134		80-100	MS Joist/PCC Poles	To be taken up
1083	Sambalpur	33/11KV-PADIABAHAL STRUCTURE	11KV-PADIABAHAL	11	189	34sqmm to 100sqmm AAAC/ACSR	102		80-100	MS Joist/PCC Poles	To be taken up
1084	Sambalpur	33/11KV-PUTIBANDH	11KV-DHANUPALI	11	27	34sqmm to 100sqmm AAAC/ACSR	302	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1085	Sambalpur	33/11KV-PUTIBANDH	11KV-MANESWAR	11	38	34sqmm to 100sqmm AAAC/ACSR	116		80-100	MS Joist/PCC Poles	To be taken up
1086	Sambalpur	33/11KV-PUTIBANDH	11KV-SINDURPANKHA	11	24	34sqmm to 100sqmm AAAC/ACSR	108		80-100	MS Joist/PCC Poles	To be taken up
1087	Sambalpur	33/11KV-PUTIBANDH	11KV-BHUTAPADA	11	5	34sqmm to 100sqmm AAAC/ACSR	251	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1088	Sambalpur	33/11KV-PUTIBANDH	11KV-BROOKS HILL	11	39	34sqmm to 100sqmm AAAC/ACSR	337	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1089	Sambalpur	33/11KV-PUTIBANDH	11KV-GOLEBAZAR	11	1	34sqmm to 100sqmm AAAC/ACSR	135		80-100	MS Joist/PCC Poles	To be taken up
1090	Sambalpur	33/11KV-PUTIBANDH	11KV-NEW CS COLONY	11	10	34sqmm to 100sqmm AAAC/ACSR	138		80-100	MS Joist/PCC Poles	To be taken up

1091	Sambalpur	33/11KV-PUTIBANDH	11KV-SHIKHAPARA	11	19	34sqmm to 100sqmm AAAC/ACSR	270		80-100	MS Joist/PCC Poles	To be taken up
1092	Sambalpur	33/11KV-HATIBARI	11KV-BASIAPADA	11	45	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
1093	Sambalpur	33/11KV-HATIBARI	11KV-HATIBARI	11	77	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
1094	Sambalpur	33/11KV-HATIBARI	11KV-MEGHAPAL	11	284	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
1095	Sambalpur	33/11KV-HATIBARI	11KV-MUNDHAR	11	78	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1096	Sambalpur	33/11KV-HERO	11KV-BARANGAMAL	11	296	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1097	Sambalpur	33/11KV-HERO	11KV-NEW BARANGAMAL	11	24	34sqmm to 100sqmm AAAC/ACSR	66		80-100	MS Joist/PCC Poles	To be taken up
1098	Sambalpur	33/11KV-JUJUMARA	11KV-JUJUMURA	11	295	34sqmm to 100sqmm AAAC/ACSR	72		80-100	MS Joist/PCC Poles	To be taken up
1099	Sambalpur	33/11KV-JUJUMARA	11KV-RAMBADAMAL	11	57	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1100	Sambalpur	33/11KV-KISINDA	11KV-BALARAMA	11	57	34sqmm to 100sqmm AAAC/ACSR	16		80-100	MS Joist/PCC Poles	To be taken up
1101	Sambalpur	33/11KV-KISINDA	11KV-GIRISHCHANDRAPUR	11	66	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1102	Sambalpur	33/11KV-KISINDA	11KV-PANIMURA	11	155	34sqmm to 100sqmm AAAC/ACSR	32		80-100	MS Joist/PCC Poles	To be taken up
1103	Sambalpur	33/11KV-NAKTIDEUL	11KV-BATGAON	11	248	34sqmm to 100sqmm AAAC/ACSR	57		80-100	MS Joist/PCC Poles	To be taken up
1104	Sambalpur	33/11KV-NAKTIDEUL	11KV-DAINCHA	11	215	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1105	Sambalpur	33/11KV-NAKTIDEUL	11KV-JAGANNATHPRASAD	11	7	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
1106	Sambalpur	33/11KV-NAKTIDEUL	11KV-KISINDA	11	94	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1107	Sambalpur	33/11KV-NAKTIDEUL	11KV-MICRO	11	38	34sqmm to 100sqmm AAAC/ACSR	6		80-100	MS Joist/PCC Poles	To be taken up
1108	Sambalpur	33/11KV-NAKTIDEUL	11KV-NAKTIDEUL	11	1	34sqmm to 100sqmm AAAC/ACSR	35		80-100	MS Joist/PCC Poles	To be taken up
1109	Sambalpur	33/11KV-RAIRAKHOL	11KV-BARBANK	11	230	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

1110	Sambalpur	33/11KV-RAIRAKHOL	11KV-CHARMAL	11	52	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
1111	Sambalpur	33/11KV-RAIRAKHOL	11KV-COLLEGE	11	11	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1112	Sambalpur	33/11KV-RAIRAKHOL	11KV-KADALIGARH	11	211	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1113	Sambalpur	33/11KV-RAIRAKHOL	11KV-LUHAPANK	11	88	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1114	Sambalpur	33/11KV-RAIRAKHOL	11KV-RAIRAKHOL	11	20	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
1115	Sambalpur	33/11KV-KATARBAGHA	11KV-KATARBAG TOWN	11	31	34sqmm to 100sqmm AAAC/ACSR	65		80-100	MS Joist/PCC Poles	To be taken up
1116	Sambalpur	33/11KV-KATARBAGHA	11KV-TAMPERKELA	11	98	34sqmm to 100sqmm AAAC/ACSR	106		80-100	MS Joist/PCC Poles	To be taken up
1117	Sambalpur	33/11KV-LAIDA	11KV-KANTAPLAI	11	25	34sqmm to 100sqmm AAAC/ACSR	7		80-100	MS Joist/PCC Poles	To be taken up
1118	Sambalpur	33/11KV-LAIDA	11KV-LAIDA	11	29	34sqmm to 100sqmm AAAC/ACSR	11		80-100	MS Joist/PCC Poles	To be taken up
1119	Sambalpur	33/11KV-LAIDA	11KV-RANGALI	11	38	34sqmm to 100sqmm AAAC/ACSR	41		80-100	MS Joist/PCC Poles	To be taken up
1120	Sambalpur	33/11KV-LAPANGA	11KV-KHINDA	11	25	34sqmm to 100sqmm AAAC/ACSR	109		80-100	MS Joist/PCC Poles	To be taken up
1121	Sambalpur	33/11KV-LAPANGA	11KV-LAPANGA	11	9	34sqmm to 100sqmm AAAC/ACSR	89		80-100	MS Joist/PCC Poles	To be taken up
1122	Sambalpur	33/11KV-LAPANGA	11KV-THELKOLI	11	18	34sqmm to 100sqmm AAAC/ACSR	197		80-100	MS Joist/PCC Poles	To be taken up
1123	Sambalpur	33/11KV-PARMANPUR	11KV-MURA	11	86	34sqmm to 100sqmm AAAC/ACSR	58		80-100	MS Joist/PCC Poles	To be taken up
1124	Sambalpur	33/11KV-PARMANPUR	11KV-PANDRI	11	41	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1125	Sambalpur	33/11KV-PARMANPUR	11KV-PARMANPUR(PARMANPUR)	11	120	34sqmm to 100sqmm AAAC/ACSR	94		80-100	MS Joist/PCC Poles	To be taken up
1126	Sambalpur	33/11KV-RENGALI	11KV-KHIASAHI	11	28	34sqmm to 100sqmm AAAC/ACSR	37		80-100	MS Joist/PCC Poles	To be taken up
1127	Sambalpur	33/11KV-RENGALI	11KV-KITARBAGA	11	30	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
1128	Sambalpur	33/11KV-RENGALI	11KV-LAPANGA(RANGALI)	11	19	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
1129	Sambalpur	33/11KV-RENGALI	11KV-RENGALI	11	5	34sqmm to 100sqmm AAAC/ACSR	106		80-100	MS Joist/PCC Poles	To be taken up

1130	Sambalpur	33/11KV-RENGALI	11KV-SALAD	11	6	34sqmm to 100sqmm AAAC/ACSR	4		80-100	MS Joist/PCC Poles	To be taken up
1131	Sambalpur	33/11KV-RENGALI NEW	11KV-INDUSTRIAL	11	7	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1132	Sambalpur	33/11KV-RENGALI NEW	11KV-NISHABHANGA	11	10	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1133	Sambalpur	33/11KV-RENGALI NEW	11KV-SAPNE	11	12	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
1134	Sambalpur	33/11KV-SASON	11KV-MAJHIPALI	11	10	34sqmm to 100sqmm AAAC/ACSR	119		80-100	MS Joist/PCC Poles	To be taken up
1135	Sambalpur	33/11KV-SASON	11KV-PARMANPUR (SASON)	11	62	34sqmm to 100sqmm AAAC/ACSR	87		80-100	MS Joist/PCC Poles	To be taken up
1136	Sambalpur	33/11KV-SASON	11KV-SASON	11	85	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1137	Sambalpur	33/11KV-BUDHAPAL	11KV_BUDHAPAL	11	131	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1138	Sambalpur	33/11KV-REAMAL STRUCTURE	11KV - LULANG	11	359	34sqmm to 100sqmm AAAC/ACSR	8		80-100	MS Joist/PCC Poles	To be taken up
1139	Sambalpur	33/11KV-REAMAL STRUCTURE	11KV-TINKBIR	11	166	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
1140	Sambalpur	33/11KV-REAMAL STRUCTURE	11KV_KADOPADA	11	72	34sqmm to 100sqmm AAAC/ACSR	7		80-100	MS Joist/PCC Poles	To be taken up
1141	Sambalpur	33/11KV-REAMAL STRUCTURE	11KV_REAMAL	11	94	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1142	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV - MIRGIDIYA	11	80	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1143	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV-DONAGAGHOT	11	51	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1144	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV-GOHIRA	11	102	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1145	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV-KHILEI	11	39	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1146	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV-REAMAL(RENGALLBEDA)	11	8	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up

1147	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV-TINKBIR OLD	11	12	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1148	Sambalpur	33/11KV-RENGALLBEDA STRUCTURE	11KV_RENGALBEDA	11	2	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1149	Sambalpur	33/11KV-TELEIBANI STRUCTURE	11KV - KANSARA	11	253	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1150	Sambalpur	33/11KV-TELEIBANI STRUCTURE	11KV-LAIMURA	11	254	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
1151	Sambalpur	33/11KV-TELEIBANI STRUCTURE	11KV-TAIDISAR	11	43	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
1152	Sambalpur	33/11KV-TELEIBANI STRUCTURE	11KV-TILEIBANI	11	6	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1153	Sambalpur	33/11KV-TELEIBANI STRUCTURE	11KV_PRABMASUNI	11	35	34sqmm to 100sqmm AAAC/ACSR	14		80-100	MS Joist/PCC Poles	To be taken up
1154	Sambalpur	33/11KV_BARKOTE	11KV-KADOPADA (BARKOTE)-500	11	115	34sqmm to 100sqmm AAAC/ACSR	124		80-100	MS Joist/PCC Poles	To be taken up
1155	Sambalpur	33/11KV_BARKOTE STRUCTURE	11KV_BARKOTE	11	13	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
1156	Sambalpur	33/11KV_BARKOTE STRUCTURE	11KV_DANGASINGA	11	53	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1157	Sambalpur	33/11KV_BHAKTABADKUDAR STRUCTURE	11KV_FEEDER-2 BEHEDAPOSHI	11	150	34sqmm to 100sqmm AAAC/ACSR	18		80-100	MS Joist/PCC Poles	To be taken up
1158	Sambalpur	33/11KV_BHAKTABADKUDAR STRUCTURE	11KV_FEEDER-I THAIANALA	11	106	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
1159	Sambalpur	33/11KV_BHAKTABADKUDAR STRUCTURE	11KV_KALLA	11	41	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1160	Sambalpur	33/11KV_BHAKTABADKUDAR STRUCTURE	11KV_KHAJURIKHAMAN	11	162	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
1161	Sambalpur	33/11KV_BUDHAPAL	11KV-KUNDHIGOLA	11	37	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

1162	Sambalpur	33/11KV_BUDHAPAL	11KV-PALOSOMA FEEDER	11	189	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
1163	Sambalpur	33/11KV_DEOGARH STRUCTURE	11KV-RE	11	60	34sqmm to 100sqmm AAAC/ACSR	75		80-100	MS Joist/PCC Poles	To be taken up
1164	Sambalpur	33/11KV_DEOGARH STRUCTURE	11KV_TOWN -1	11	13	34sqmm to 100sqmm AAAC/ACSR	74		80-100	MS Joist/PCC Poles	To be taken up
1165	Sambalpur	33/11KV_DEOGARH STRUCTURE	11KV_TOWN -2	11	17	34sqmm to 100sqmm AAAC/ACSR	80		80-100	MS Joist/PCC Poles	To be taken up
1166	Sambalpur	33/11KV_DEOGARH STRUCTURE	11KV_TOWN -3	11	11	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1167	Sambalpur	33/11KV_KANDHAL STRUCTURE	11KV-BASADAHI	11	77	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1168	Sambalpur	33/11KV_KANDHAL STRUCTURE	11KV-KANDHAL	11	25	34sqmm to 100sqmm AAAC/ACSR	26		80-100	MS Joist/PCC Poles	To be taken up
1169	Sambalpur	33/11KV_KANDHAL STRUCTURE	11KV_KATAPALI	11	47	34sqmm to 100sqmm AAAC/ACSR	28		80-100	MS Joist/PCC Poles	To be taken up
1170	Sambalpur	33/11KV_KANDHAL STRUCTURE	11KV_SAMARKHAI	11	86	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1171	Sambalpur	33/11KV- FASIMAL	11KV-FASIMAL	11	133	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1172	Sambalpur	33/11KV- FASIMAL	11KV-GURJIPALI	11	57	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1173	Sambalpur	33/11KV-ARDABAHAL	11KV-ARDABAHAL	11	14	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1174	Sambalpur	33/11KV-ARDABAHAL	11KV-BAURIGUDA	11	16	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1175	Sambalpur	33/11KV-ARDABAHAL	11KV-JAYPEERDHAR	11	15	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1176	Sambalpur	33/11KV-BAMRA	11KV-ASHIRVAD	11	15	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1177	Sambalpur	33/11KV-BAMRA	11KV-BAMRA	11	14	34sqmm to 100sqmm AAAC/ACSR	59		80-100	MS Joist/PCC Poles	To be taken up
1178	Sambalpur	33/11KV-BAMRA	11KV-GARPOSH	11	91	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
1179	Sambalpur	33/11KV-BAMRA	11KV-GHANSARA	11	39	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1180	Sambalpur	33/11KV-BAMRA	11KV-RANGIATIKRA	11	106	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1181	Sambalpur	33/11KV-BAMRA	11KV-SOLAR	11	5	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up

1182	Sambalpur	33/11KV-BHOJPUR	11KV-BHOJPUR	11	92	34sqmm to 100sqmm AAAC/ACSR	24		80-100	MS Joist/PCC Poles	To be taken up
1183	Sambalpur	33/11KV-BHOJPUR	11KV-BADMAL	11	77	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1184	Sambalpur	33/11KV-BHOJPUR	11KV-DIMIRIMUNDA	11	79	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1185	Sambalpur	33/11KV-BHOJPUR	11KV-SIRID	11	38	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1186	Sambalpur	33/11KV-GARPOSH	11KV-GARPOSH_GARPOSH	11	11	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1187	Sambalpur	33/11KV-GARPOSH	11KV-KINABAGA	11	93	34sqmm to 100sqmm AAAC/ACSR	22		80-100	MS Joist/PCC Poles	To be taken up
1188	Sambalpur	33/11KV-GARPOSH	11KV-PINDA PATHER	11	21	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1189	Sambalpur	33/11KV-GARPOSH	11KV-SAGRA	11	42	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1190	Sambalpur	33/11KV-GOCHARA	11KV-RAM TILAIMAL	11	9	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1191	Sambalpur	33/11KV-GOCHARA	11KV-TURAI	11	123	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1192	Sambalpur	33/11KV-GOCHARA	11KV-ULLANDA	11	22	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1193	Sambalpur	33/11KV-JAMANKIRA	11KV-BADRAMA	11	95	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1194	Sambalpur	33/11KV-JAMANKIRA	11KV-JAMANKIRA	11	23	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1195	Sambalpur	33/11KV-JAMANKIRA	11KV-KUAGOLA	11	119	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1196	Sambalpur	33/11KV-JAMANKIRA	11KV-SARDA	11	20	34sqmm to 100sqmm AAAC/ACSR	12		80-100	MS Joist/PCC Poles	To be taken up
1197	Sambalpur	33/11KV-JAMANKIRA	11KV-TULUB	11	123	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1198	Sambalpur	33/11KV-KESAIBAHAL	11KV-BHIKAPALI	11	74	34sqmm to 100sqmm AAAC/ACSR	45		80-100	MS Joist/PCC Poles	To be taken up
1199	Sambalpur	33/11KV-KESAIBAHAL	11KV-JARABAGA	11	424	34sqmm to 100sqmm AAAC/ACSR	53		80-100	MS Joist/PCC Poles	To be taken up
1200	Sambalpur	33/11KV-KESAIBAHAL	11KV-KESAIBAHAL	11	5	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1201	Sambalpur	33/11KV-KESAIBAHAL	11KV-MAHULA PALI	11	123	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up

1202	Sambalpur	33/11KV-KHANDAKATS(HARDIPALI)	11KV-HADIPALI	11	67	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1203	Sambalpur	33/11KV-KHANDAKATS(HARDIPALI)	11KV-JUNANI	11	8	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1204	Sambalpur	33/11KV-KHANDAKATS(HARDIPALI)	11KV-KHANDOKATA	11	17	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1205	Sambalpur	33/11KV-KUCHINDA	11KV-GOSHA	11	7	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1206	Sambalpur	33/11KV-KUCHINDA	11KV-KUCHINDA TOWN 1	11	12	34sqmm to 100sqmm AAAC/ACSR	79		80-100	MS Joist/PCC Poles	To be taken up
1207	Sambalpur	33/11KV-KUCHINDA	11KV-SAIDA	11	11	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1208	Sambalpur	33/11KV-KUCHINDA	11KV-TOWN-2	11	12	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1209	Sambalpur	33/11KV-KUCHINDA	11KV_KUSUMI	11	58	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
1210	Sambalpur	33/11KV-KUSUMI	11KV-KUSUMI TOWN	11	124	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1211	Sambalpur	33/11KV-KUSUMI	11KV-LOIDAGUNA	11	85	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1212	Sambalpur	33/11KV-KUSUMI	11KV_BANDABAHAL	11	141	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1213	Sambalpur	33/11KV-LASA	11KV- LASA	11	14	34sqmm to 100sqmm AAAC/ACSR	34		80-100	MS Joist/PCC Poles	To be taken up
1214	Sambalpur	33/11KV-LASA	11KV-CHANDANIMAL	11	56	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1215	Sambalpur	33/11KV-LASA	11KV-GUNDUCHUAN	11	22	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up
1216	Sambalpur	33/11KV-ARDA(JAMKANI)	11KV-BANDHAPALI	11	5	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
1217	Sambalpur	33/11KV-ARDA(JAMKANI)	11KV-DULESARA	11	46	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1218	Sambalpur	33/11KV-ARDA(JAMKANI)	11KV-JAMKANI	11	11	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1219	Sambalpur	33/11KV-BAGDEHI	11KV-BAGDIHI	11	5	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up

1220	Sambalpur	33/11KV-BAGDEHI	11KV-BHAJUPATRA	11	181	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up
1221	Sambalpur	33/11KV-BAGDEHI	11KV-BHIMJORE	11	26	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1222	Sambalpur	33/11KV-BAGDEHI	11KV-TUMBADIHI	11	19	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1223	Sambalpur	33/11KV-DURLAGA(CACHERY)	11KV-COLLECTORA	11	10	34sqmm to 100sqmm AAAC/ACSR	109		80-100	MS Joist/PCC Poles	To be taken up
1224	Sambalpur	33/11KV-DURLAGA(CACHERY)	11KV-LIC_DURLAGA(CACHERY)	11	51	34sqmm to 100sqmm AAAC/ACSR	44		80-100	MS Joist/PCC Poles	To be taken up
1225	Sambalpur	33/11KV-DURLAGA(CACHERY)	11KV-TALPATIA	11	38	34sqmm to 100sqmm AAAC/ACSR	114		80-100	MS Joist/PCC Poles	To be taken up
1226	Sambalpur	33/11KV-LAHANDABUD	11KV-HKATAPALI	11	20	34sqmm to 100sqmm AAAC/ACSR	39		80-100	MS Joist/PCC Poles	To be taken up
1227	Sambalpur	33/11KV-LAHANDABUD	11KV-HOUSING BOARD	11	8	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
1228	Sambalpur	33/11KV-LAHANDABUD	11KV-INDUSTRIAL	11	16	34sqmm to 100sqmm AAAC/ACSR	36		80-100	MS Joist/PCC Poles	To be taken up
1229	Sambalpur	33/11KV-MEDICAL-DHH	11KV-DHH-1	11	3	34sqmm to 100sqmm AAAC/ACSR	5		80-100	MS Joist/PCC Poles	To be taken up
1230	Sambalpur	33/11KV-MEDICAL-DHH	11KV-MEDICAL-2	11	1	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1231	Sambalpur	33/11KV-PURNA(KUMUDPALI) PSS	11KV-DEBADIHI FEEDER	11	24	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1232	Sambalpur	33/11KV-PURNA(KUMUDPALI) PSS	11KV-JHADESWER FEEDER	11	19	34sqmm to 100sqmm AAAC/ACSR	130		80-100	MS Joist/PCC Poles	To be taken up
1233	Sambalpur	33/11KV-PURNA(KUMUDPALI) PSS	11KV-KALIMANDIR FEEDER	11	33	34sqmm to 100sqmm AAAC/ACSR	241		80-100	MS Joist/PCC Poles	To be taken up
1234	Sambalpur	33/11KV-PURNA(KUMUDPALI) PSS	11KV-SIRIPALI FEEDER	11	18	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1235	Sambalpur	33/11KV-SARASMAL	11KV-DURGAMANDAP	11	2	34sqmm to 100sqmm AAAC/ACSR	128		80-100	MS Joist/PCC Poles	To be taken up
1236	Sambalpur	33/11KV-SARASMAL	11KV-IB	11	28	34sqmm to 100sqmm AAAC/ACSR	40		80-100	MS Joist/PCC Poles	To be taken up

1237	Sambalpur	33/11KV-SARASMAL	11KV-JSG - III	11	14	34sqmm to 100sqmm AAAC/ACSR	109		80-100	MS Joist/PCC Poles	To be taken up
1238	Sambalpur	33/11KV-SARASMAL	11KV-JSG-I	11	10	34sqmm to 100sqmm AAAC/ACSR	283	Overloaded	80-100	MS Joist/PCC Poles	To be taken up
1239	Sambalpur	33/11KV-SARASMAL	11KV-KACHERY	11	15	34sqmm to 100sqmm AAAC/ACSR	181		80-100	MS Joist/PCC Poles	To be taken up
1240	Sambalpur	33/11KV-SARASMAL	11KV-LIC	11	41	34sqmm to 100sqmm AAAC/ACSR	140		80-100	MS Joist/PCC Poles	To be taken up
1241	Sambalpur	33/11KV-SARASMAL	11KV-OMP	11	46	34sqmm to 100sqmm AAAC/ACSR	110		80-100	MS Joist/PCC Poles	To be taken up
1242	Sambalpur	33/11KV-SARASMAL	11KV-SRIPURA	11	132	34sqmm to 100sqmm AAAC/ACSR	90		80-100	MS Joist/PCC Poles	To be taken up
1243	Sambalpur	33/11KV-SARASMAL	11KV-SUNARIMUNDA	11	6	34sqmm to 100sqmm AAAC/ACSR	168		80-100	MS Joist/PCC Poles	To be taken up
1244	Sambalpur	33/11KV-SODAMAL	11KV-BEUNRA	11	15	34sqmm to 100sqmm AAAC/ACSR	2		80-100	MS Joist/PCC Poles	To be taken up
1245	Sambalpur	33/11KV-SODAMAL	11KV-SODAMAL	11	10	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1246	Sambalpur	33/11KV-BADMAL	11KV-BADMAL	11	32	34sqmm to 100sqmm AAAC/ACSR	49		80-100	MS Joist/PCC Poles	To be taken up
1247	Sambalpur	33/11KV-BADMAL	11KV-HIRMA	11	111	34sqmm to 100sqmm AAAC/ACSR	55		80-100	MS Joist/PCC Poles	To be taken up
1248	Sambalpur	33/11KV-BADMAL	11KV-SINGHABADA	11	15	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1249	Sambalpur	33/11KV-KIRMIRA	11KV LINE 2 KIRIMIRA	11	10	34sqmm to 100sqmm AAAC/ACSR	15		80-100	MS Joist/PCC Poles	To be taken up
1250	Sambalpur	33/11KV-KIRMIRA	11KV-BEHERAMAL	11	27	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1251	Sambalpur	33/11KV-KIRMIRA	11KV-LINE-3-NAXAPALI	11	13	34sqmm to 100sqmm AAAC/ACSR	10		80-100	MS Joist/PCC Poles	To be taken up
1252	Sambalpur	33/11KV-KOLABIRA	11KV-JHIRLAPALI	11	103	34sqmm to 100sqmm AAAC/ACSR	100		80-100	MS Joist/PCC Poles	To be taken up
1253	Sambalpur	33/11KV-KOLABIRA	11KV-KOLABIRA	11	8	34sqmm to 100sqmm AAAC/ACSR	20		80-100	MS Joist/PCC Poles	To be taken up
1254	Sambalpur	33/11KV-KOLABIRA	11KV-RAGHUNATH-PALI	11	70	34sqmm to 100sqmm AAAC/ACSR	69		80-100	MS Joist/PCC Poles	To be taken up
1255	Sambalpur	33/11KV-KOLABIRA	11KV-SAMASINGHA	11	69	34sqmm to 100sqmm AAAC/ACSR	50		80-100	MS Joist/PCC Poles	To be taken up

1256	Sambalpur	33/11KV-LAIEKRA	11KV-MUNDRAJORE	11	189	34sqmm to 100sqmm AAAC/ACSR	60		80-100	MS Joist/PCC Poles	To be taken up
1257	Sambalpur	33/11KV-LAIEKRA	11KV-BHATLAIDA	11	23	34sqmm to 100sqmm AAAC/ACSR	25		80-100	MS Joist/PCC Poles	To be taken up
1258	Sambalpur	33/11KV-LAIEKRA	11KV-LAIEKRA	11	10	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up
1259	Sambalpur	33/11KV-LAIEKRA	11KV-SAHASPUR	11	179	34sqmm to 100sqmm AAAC/ACSR	30		80-100	MS Joist/PCC Poles	To be taken up

Annexure -5 Proposed new lines at 33 KV & 11 KV level based on load flow study

Basic information of proposed new lines at 33 kV & 11 kV level (based on load flow study of Distribution network)															
Sl.No.	Name of Circle/ District & Division	From	To	Voltage level (kV)	Single circuit or Double circuit or more no. of circuits & Length of line (kM)	Type & size (dia & area) of conductor	Design span (m)	Type of support structure (Pole/ Joist/ Lattice / PCC/ Steel pole/ other types, etc.)	Status of mapping of line Asset [completed/in progress(% of progress) /to be taken up]	Action Required/ Action being taken	Target for completion				
											2022-23	2023-24	2024-25	2025-26	2026-27
1	2	3	4	5	6	7	8	9	10	11	12				
1	Name	A	B	33 kV	D/C, 15 KM	ACSR (DOG), Dia: 14.15 mm, Area: 117.69 sqmm	60 M	Lattice Structure	To be taken up						
1	SEED	RENGALI PSS	KATARBAGA PSS	33 kV	20	AAAC 232SQMM	60 M	RSJ	to be taken up					✓	
2	SEED	PADIABAHAL PSS	PARMANPUR PSS	33 kV	15	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐	✓	
3	JED	Jamankira	Fasimal	33 kV	15	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐		✓
4	JED	Jhariabahal	Laikera.	33 kV	16	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐		✓
5	JED	sodamal PSS	laida PSS	33 kV	9.5	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐		✓

6	JED	sarbahal PSS	sahapada PSS	33 kV	6	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐		✓
7	JED	4-Pole of 33KV Industrial-II	Lahandabud	33 kV	0.6	AAAC 232 SQMM	60 M	RSJ	to be taken up				✓		
8	BNED	Sukapatanaik Chowk	Muchabahal pss	33 kV	4	AAAC 232 SQMM	60 M	RSJ	to be taken up				✓		
9	Deogarh	TELIMUNDA	Budhapal	33 kV	31	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐	✓	
10	Deogarh	Bhojpur	Tilaibani	33 kV	25	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐	✓	
11	Deogarh	Palahada PSS	Bhaktabadakuder	33 kV	18	AAAC 232 SQMM	60 M	RSJ	to be taken up				☐	✓	
12	JED	Samasingha.	Sodamal.	11 KV	1.5	148	50 M	RSJ	to be taken up				☐	✓	
13	JED	Rengalbeda.	Laikera	11 KV	3	100SQMM	50 M	RSJ	to be taken up				☐	✓	
14	BNED	JUNION DHABA	KUDALOI	11 KV	6	100SQMM	50 M	RSJ	to be taken up				☐	✓	
15	BNED	LAKHANPUR PSS	LAKHANPUR HOSPITAL	11 KV	1.5	100SQMM	50 M	RSJ	to be taken up				☐	✓	
16	BNED	Atal Chowk	Suncity bypass	11 KV	0.5	100SQMM	50 M	RSJ	to be taken up				☐	✓	
17	BNED	Bhikampali	Badimal	11 KV	10	100SQMM	50 M	RSJ	to be taken up				☐	✓	
18	BNED	Jharupada PSS	Rengali	11 KV	4	100SQMM	50 M	RSJ	to be taken up				☐	✓	

19	BNED	Gourmal	rankata	11 KV	3	100SQM M	50 M	RSJ	to be taken up				☐	✓		
20	BNED	Gandhi chowk PSS	Rajpur	11 KV	12	100SQM M	50 M	RSJ	to be taken up				☐	✓		
21	BNED	Brajarajnagar PSS	KHALIAKANI HOSPITAL	11 KV	2	100SQM M	50 M	RSJ	to be taken up				☐	✓		
22	BNED	Mangala Mandir	Mangala Mandir	11 KV	0.5	100SQM M	50 M	RSJ	to be taken up				☐	✓		
23	BNED	Belpahar Colledge	Gardakhai	11 KV	1	100SQM M	50 M	RSJ	to be taken up				☐	✓		
24	SAMBALPUR/SEED/BHUTAPADA	DHANKUDA	JAIL CHOWK PSS	33 kV	4	148	60 M	RSJ	to be taken up			✓	☐			
25	SAMBALPUR/SEED/BHUTAPADA	DHANKUDA	JAIL CHOWK PSS	33 kV	3	3*400 sqmm XLPE		RSJ	to be taken up			✓	☐			
26	ROURKELA/RSED/BONAI	BONAI PSS	DEOGAON	33 kV	1	232	60 M	RSJ	to be taken up			✓	☐			
27	Rourkela/Rajgangpur/Kuarmunda	Lindra PSS	Mega Lift Irrigation	33 kV	6	232	60 M	RSJ	to be taken up			✓	☐			
28	BARGARH/BED/BHATLI	Chorgrindola GSS	Near Bhatli Town	33 kV	13	232	60 M	RSJ	to be taken up			✓	☐			
29	Sambalpur/JED/S.D.O. KCD	Jamankira	Fasimal	33 kV	15	148	60 M	RSJ	to be taken up				✓			
30	Sambalpur/JED/SDO-II	Jhariabahal	Laikera.	33 kV	16	148	60 M	RSJ	to be taken up				✓			
31	Sambalpur/JED/SDO-II	sodamal PSS	laida PSS	33 kV	9.5	148	60 M	RSJ	to be taken up				✓			

32	Sambalpur/JED/SDO-II	sarbahal PSS	sahapada PSS	33 kV	6	148	60 M	RSJ	to be taken up				✓		
33	Sambalpur/JED/SDO-I	4-Pole of 33KV Industrial-II	Lahandabud	33 kV	0.6	148	60 M	RSJ	to be taken up				✓		
34	Sambalpur/Brajarajnagar/Belpahar	Sukapatanaik Chowk	Muchabahal pss	33 kV	4	232	60 M	RSJ	to be taken up				✓		
35	sambalpur/deogarh/deogarh	TELIMUNDA	Budhapal	33 kV	31	232	60 M	RSJ	to be taken up				✓		
36	sambalpur/deogarh/deogarh	Bhojpur	Tilaibani	33 kV	25	232	60 M	RSJ	to be taken up				✓		
37	sambalpur/deogarh/deogarh	Palahada PSS	Bhaktabadakuder	33 kV	18	232	60 M	RSJ	to be taken up				✓		
38	SAMBALPUR/SEED/RAIRAKHOL	Jujumura PSS	PSS RAIRAKHOL	33 kV	34	148	60 M	RSJ	to be taken up				✓		
39	SAMBALPUR/SEED/RENGALI	RENGALI PSS	KATARBAGA PSS	33 kV	20	148	60 M	RSJ	to be taken up				✓		
40	SAMBALPUR/SEED/DHANUPALI	PADIABAHAL PSS	PARMANPUR PSS	33 kV	15	148	60 M	RSJ	to be taken up				✓		
41	Balangir/Titlagarh/Titlagarh	Badi PSS	For Sindhekela line tapping	33 kV	5	232	60 M	RSJ	to be taken up				✓		
42	Balangir/Titlagarh/Titlagarh	Gudighat PSS	Titlagarh PSS	33 kV	31	232	60 M	RSJ	to be taken up				✓		
43	Balangir/Balangir/Balangir -1	RTO Chowk	Industrial Estate	33 kV	1	232	60 M	RSJ	to be taken up				✓		
44	Balangir/Balangir/Balangir -1	IDCO 33kv Line	Bolangir DHH	33 kV	2.5	232	60 M	RSJ	to be taken up				✓		

45	Balangir/Balangir/Balangir -1	Madhiapali PSS	Jail PSS	33 kV	2.5	232	60 M	RSJ	to be taken up				✓		
46	Balangir/Balangir/Balangir -4	Dhama	Ainlachat	33 kV	25	232	60 M	RSJ	to be taken up				✓		
47	Balangir/Balangir/Loisinga	hanuman vatika	hockey chowk	33 kV	5	232	60 M	RSJ	to be taken up				☐	✓	
48	Balangir/Balangir/Loisinga	INFRONT OF CCC/24	CIVIL TOWNSHIP PSS	33 kV	2	400 sq mm UG cable			to be taken up				☐	✓	
49	Balangir/Sonepur/Sonepur	Panposh Four pole srtucture	Panposh	33 kV	0.3	400 sq mm UG cable			to be taken up				☐		✓
50	Balangir/Sonepur/Sonepur	MALDA	ORAGHAT	33 kV	5	232	60 M	RSJ	to be taken up				☐	✓	
51	ROURKELA/RSED/PANPOSH	POIGAON	BONAI	33 kV	10	232	60 M	RSJ	to be taken up				☐	✓	
52	ROURKELA/RSED/INDUSTRIAL ESTATE	RAJAMUNDA PSS	4-POLE STRUCTURE NEAR BR SPONGE	33 kV	2	232	60 M	RSJ	to be taken up				☐	✓	
53	ROURKELA/RSED/Panposh	BSNL Office	GB pali PSS	33 kV	0.8	232	60 M	RSJ	to be taken up				☐	✓	
54	ROURKELA/RSED/BONAI	Gudgudjore	Bisra	33 kV	4.5	232	60 M	RSJ	to be taken up				☐	✓	
55	ROURKELA/RSED/BONAI	Near River Bramhani	Near River Bramhani	33 kV	0.2	232	60 M	RSJ	to be taken up				☐	✓	
56	ROURKELA/RSED/Bonai	Kuarmunda GSS	Rampal Chowk	33 kV	10	232	60 M	RSJ	to be taken up				☐	✓	

57	Rourkela/RED/Basanti	Near NTPC Medical	Near GSS	33 kV	0.5	232	60 M	RSJ	to be taken up				☐	✓	
58	Rourkela/RED/Bisra	Near Ambabhona PSS	33/11KV Ambabhona PSS	33 kV	5	232	60 M	RSJ	to be taken up				☐	✓	
59	Rourkela/Rajgangpur/Kalunga	33/11KV Kamgaon PSS	33/11KV Raisobha PSS	33 kV	8	232	60 M	RSJ	to be taken up				☐	✓	
60	Rourkela/Rajgangpur/Kuarmunda	Rengali Camp	33/11KV Tangerpali PSS	33 kV	15	232	60 M	RSJ	to be taken up				☐	✓	
61	Rourkela/Sundargarh/Sundargarh	Proposed 33/11KV Larambha PSS	33/11KV Godbhaga PSS	33 kV	15	232	60 M	RSJ	to be taken up				☐	✓	
62	BARGARH/BED/BHATLI	Near 33/11KV Patrapali PSS	33/11KV Patrapali PSS	33 kV	1	232	60 M	RSJ	to be taken up				☐		✓
63	BARGARH/BED/BHATLI & BARGARH-2	Near Division-1 PSS	33/11KV Division-1 PSS & 33/11KV Division 2 PSS	33 kV	1	232	60 M	RSJ	to be taken up				☐		✓
64	BARGARH/BED/ATTABIRA	Chorgrindola GSS	33/11KV Dashmile PSS	33 kV	26	232	60 M	RSJ	to be taken up				☐		✓
65	BARGARH/BED/ATTABIRA	33/11KV Saipala PSS	33/11KV Mandosil PSS	33 kV	8	232	60 M	RSJ	to be taken up				☐		✓
66	BARGARH/BED/ATTABIRA	JALPALI GSS	33/11KV BIJEPUR	33 kV	10	232	60 M	RSJ	to be taken up				☐		✓
67	BARGARH/BED/BARGARH-1	MELCHHAMUNDA	BARIHAPALI	33 kV	1	232	60 M	RSJ	to be taken up				☐		✓
68	BARGARH/BWED/SOHELA	ATTANGUDA PSS	KUSADUNGRI	33 kV	10	232	60 M	RSJ	to be taken up				☐		✓

69	BARGARH/BWED/PAIKMAL	Hati nadi	kashibahal village	33 kV	16	148	60 M	RSJ	to be taken up				☐		✓
70	BARGARH/BWED/SOHELA	TIMANPUR PSS	SINAPALI PSS	33 kV	8	232	60 M	RSJ	to be taken up				☐		✓
71	BARGARH/BWED/MELCHHAMUNDA	Samasingha.	Sodamal.	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
72	KALAHANDI/KEED/NAKTIGUDA	Rengalbeda.	Laikera	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
73	KALAHANDI/KWED/DHARAMGARH	JUNION DHABA	KUDALOI	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
74	KALAHANDI/NED/KHARIAR	LAKHANPUR PSS	LAKHANPUR HOSPITAL	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
75	SAMBALPUR/BRAJARAJNAGAR/BELPAHAR	Atal Chowk	Suncity bypass	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
76	sambalpur/Deogarh/Deogarh	TARANGA HIGH SCHOOL	TUHILAMAL RWSS	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
77	sambalpur/Deogarh/Deogarh	NILAGANDI	PATAR FODI	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
78	sambalpur/Deogarh/Deogarh	Reamal petrolpump	Sisumandir Abswitch	11 kV	2.5	100	60 M	RSJ	to be taken up			✓	☐		
79	sambalpur/Deogarh/Deogarh	telimunda	tinkbir	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
80	Sambalpur/SED Sambalpur/Ainthapali	Kainsir	Near Indian Oil Ainthapali Chowk	11 kV	1	100	60 M	RSJ	to be taken up			✓	☐		
81	Sambalpur/SED Sambalpur/Ainthapali	Ainthapali	Pardiapali Near Christianpada	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		

82	Sambalpur/SED Sambalpur/Ainthapali	SANKARMA	SANKARMA	11 kV	0.2	3*300 XLP Cable	100 M	RSJ	to be taken up			✓	☐		
83	Sambalpur/SED Sambalpur/Ainthapali	SANKARMA	NEAR 7 HILLS SCHOOL	11 kV	0.2	3*300 XLP Cable	100 M	RSJ	to be taken up			✓	☐		
84	Sambalpur/SED Sambalpur/Burla	Golgunda Overbridge	Golgunda	11 kV	0.2	100	60 M	RSJ	to be taken up			✓	☐		
85	Sambalpur/SED Sambalpur/burla	amul godown	sikirdi	11 kV	2.4 + 0.3 XLP	100 ,3*300 XLP Cable	60 M	RSJ	to be taken up			✓	☐		
86	Sambalpur/SED Sambalpur/HIRAKUD	DURGAMANDIR CHHAK	BHULIAPADA	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
87	SAMBALPUR/SEED/DHANUPALI	AINLAPALI	AINLAPALI	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
88	SAMBALPUR/SEED/DHANUPALI	NEAR SWAREAGE BOARD	NEAR SAMALESWARI ITI S/S	11 kV	0.55	100	60 M	RSJ	to be taken up			✓	☐		
89	Balangir/Balangir/Loisinga	Brajdham	Riddhi Siddhi	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
90	Balangir/Balangir/Balangir	Indranagar	Ichhapada	11 kV	0.6	100	60 M	RSJ	to be taken up			✓	☐		
91	Balangir/SED, Sonepur/Binka	Airtel tower	Rampur Hospital	11 kV	3	100	60 M	RSJ	to be taken up			✓	☐		
92	Balangir/SED, Sonepur/Binka	Pankital PSS	Road Side Naikenpali village	11 kV	2.5	100	60 M	RSJ	to be taken up			✓	☐		
93	Balangir/Balangir/Balangir -1	Hatisalpada	Sarojini resturant	11 kV	1	100	60 M	RSJ	to be taken up			✓	☐		

94	Balangir/Balangir/Balangir -1	LIC Office	Govt ITI	11 kV	2	100	60 M	RSJ	to be taken up			✓	☐		
95	Balangir/Balangir/Balangir -1	Metakani temple	500Kva DTR	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
96	ROURKELA/RSED/PANPOSH	JALDA PSS	4 POLE	11 kV	1	100	60 M	RSJ	to be taken up			✓	☐		
97	ROURKELA/RSED/PANPOSH	NAYADERA TAPPING	NAYADERA TAPPING	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
98	ROURKELA/RSED/IND-ESTATE	PILOT PROJECT PSS	KHARIABAHAL	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
99	ROURKELA/RSED/IND-ESTATE	INDUSTRIAL ESTATE PSS	GANGADHARPALI	11 kV	0.2	100	60 M	RSJ	to be taken up			✓	☐		
100	ROURKELA/RSED/IND EST	GM-48	BSNL CHOWK 500KVA DP	11 kV	0.3	100	60 M	RSJ	to be taken up			✓	☐		
101	ROURKELA/RSED/INDUSTRIAL ESTATE	CIVIL TOWNSHIP PSS	NEAR NEXA	11 kV	1	100	60 M	RSJ	to be taken up			✓	☐		
102	ROURKELA/RSED/BONAI	DEULHULI	SAN KATURIDHUA	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
103	ROURKELA/RSED/BONAI	BISHIPALI, MUSLIMPARA	JHUMKIBANDH	11 kV	1.5	100	60 M	RSJ	to be taken up			✓	☐		
104	Rourkela/RED/Koelnagar	St. Paul School	St. Paul School	11 kV	0.3	Covered conductor of 100 sq. mm AAAC	50 M	RSJ	to be taken up			✓	☐		
105	Rourkela/RED/Koelnagar	Jhirpani Police Station	Jhirpani Police Station	11 kV	0.1	100	60 M	RSJ	to be taken up			✓	☐		

106	Rourkela/RED/Koelnagar	C-Block market	C-Block market	11 kV	0.02	100	60 M	RSJ	to be taken up			✓	☐		
107	Rourkela/RED/Basanti	Near PSS	Near PSS	11 kV	0.4	100	60 M	RSJ	to be taken up			✓	☐		
108	Rourkela/RED/Basanti	Basanti Sani mandir, near PHD	Near PSS	11 kV	2.5	100	60 M	RSJ	to be taken up			✓	☐		
109	Rourkela/RED/Bisra	Nayabazar Chowk, near Traffic light	Nayabazar Chowk, near Traffic light	11 kV	0.02	100	60 M	RSJ	to be taken up			✓	☐		
110	Rourkela/RED/Bisra	Nabazar Basti	CISF Gate	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
111	ROURKELA/RAJGANGPUR/KUARMUNDA	Phuljhar	Phuljhar School	11 kV	1	100	60 M	RSJ	to be taken up			✓	☐		
112	ROURKELA/RAJGANGPUR/NO-IRGP	Palang khet	IDGA	11 kV	0.5	100	60 M	RSJ	to be taken up			✓	☐		
113	ROURKELA/SUNDARGARH/SUNDARGARH	Amlipali	Amlipali Petrol Pump	11 kV	0.6 + 0.3 XLP	100 ,3*300 XLP Cable	50 M	RSJ	to be taken up			✓	☐		
114	ROURKELA/SUNDARGARH/UJALPUR	BANDPALI ROAD	BANDPALI ROAD	11 kV	0.7	100	60 M	RSJ	to be taken up			✓	☐		
115	ROURKELA/SUNDARGARH/SUNDARGARH	Babu dihi	Babu Dihi	11 kV	0.2	100	60 M	RSJ	to be taken up			✓	☐		
116	BARGARH/BED/SDO 1	RANA PRATAP SCHOOL OVER BRIDGE	BHATLI CHOWK	11 kV	1.2	3*300 XLP Cable	60 M	RSJ	to be taken up			✓	☐		
117	BARGARH/BED/SDO 1	ASHAKIRAN FEEDER	RANAPRATAP SCHOOL FOUR POLE	11 kV	0.05	INSULATED CONDU	60 M	RSJ	to be taken up			✓	☐		

		NEAR OVER BRIDGE	OF TOWN 1 FEEDER			CTOR 100SQMM									
118	BARGARH/BWED/SOHELA	Sarandapali PSS	NUAPALI	11 kV	3.8	100	60 M	RSJ	to be taken up			✓	☐		
119	BARGARH/BWED/SOHELA	Sarandapali PSS	SARANDAPALI ANDHRA BANK	11 kV	2.3 + 0.4 XLP	100 ,3*300 XLP Cable	60 M	RSJ	to be taken up			✓	☐		
120	BARGARH/BWED/SOHELA	DASMILE PSS	TARAKANA	11 kV	4.8 + 0.4XLP	100 ,3*300 XLP Cable	60 M	RSJ	to be taken up			✓	☐		
121	BARGARH/BED/BHATLI	33/11KV-DUNGRI PSS	Lelher	11 kV	3	100	60 M	RSJ	to be taken up			✓	☐		
122	KALAHANDI/KEED/BHAWANIPATNA	BHANGABARI PSS	CHECKGATE	11 kV	4	100	60 M	RSJ	to be taken up			✓	☐		
123	Sambalpur/JED/	Kudursingha.	Jhirlapali.	11 kV	5	148	60 M	RSJ	to be taken up				✓		
124	Sambalpur/JED/	Jyotipada.	Samlei Mandir	11 kV	25	148	60 M	RSJ	to be taken up				✓		
125	Sambalpur/JED/	Mahulpali.	Jaipurgarh	11 kV	5	148	60 M	RSJ	to be taken up				✓		
126	Sambalpur/JED/	Bhatlaida.	Thiteimal	11 kV	0.4	100	60 M	RSJ	to be taken up				✓		
127	Sambalpur/JED/	Mundrajore.	Gauribud	11 kV	2	100	60 M	RSJ	to be taken up				✓		
128	Sambalpur/JED/	Kukerama.	Tileimal	11 kV	4	100	60 M	RSJ	to be taken up				✓		

129	Sambalpur/JED/	Odiapali.	A. Bagdihi	11 kV	3	100	60 M	RSJ	to be taken up				✓		
130	SAMBALPUR/BRAJARAJNAGAR/BELPAHAR	Bhikampali	Badimal	11 kV	10	100	60 M	RSJ	to be taken up				✓		
131	SAMBALPUR/BRAJARAJNAGAR/BELPAHAR	Jharupada PSS	Rengali	11 kV	4	100	60 M	RSJ	to be taken up				✓		
132	SAMBALPUR/BRAJARAJNAGAR/BRAJARAJNAGAR	Gourmal	rankata	11 kV	3	100	60 M	RSJ	to be taken up				✓		
133	SAMBALPUR/BRAJARAJNAGAR/BRAJARAJNAGAR	Gandhi chowk PSS	Rajpur	11 kV	12	100	60 M	RSJ	to be taken up				✓		
134	SAMBALPUR/BRAJARAJNAGAR/BRAJARAJNAGAR	Brajarajnagar PSS	KHALIAKANI HOSPITAL	11 kV	2	100	60 M	RSJ	to be taken up				✓		
135	SAMBALPUR/BRAJARAJNAGAR/BRAJARAJNAGAR	Mangala Mandir	Mangala Mandir	11 kV	0.5	100	60 M	RSJ	to be taken up				✓		
136	SAMBALPUR/BRAJARAJNAGAR/BELPAHAR	Belpahar Colledge	Gardakhai	11 kV	1	100	60 M	RSJ	to be taken up				✓		
137	sambalpur/Deogarh/Deogarh	PSS	TULIPOSI	11 kV	4	100	60 M	RSJ	to be taken up				✓		
138	sambalpur/Deogarh/Deogarh	BARKOTE	BAHADAPOSI	11 kV	5	100	60 M	RSJ	to be taken up				✓		
139	Sambalpur/SED Sambalpur/BURLA	GRID	4R SUBSTATION	11 kV	1	100	60 M	RSJ	to be taken up				✓		
140	Sambalpur/SED Sambalpur/BURLA	GRID	NETAJIO CHOWK	11 kV	1.5	100	60 M	RSJ	to be taken up				✓		
141	Sambalpur/SED Sambalpur/BURLA	KRUSHNA MANDIR	GOPABANDHU CHOWK	11 kV	0.2	100	60 M	RSJ	to be taken up				✓		

142	Sambalpur/SED Sambalpur/BURLA	OLD CENTRAL LINE	NEWCENTRAL LINE	11 kV	0.6	100	60 M	RSJ	to be taken up				✓		
143	Sambalpur/SED Sambalpur/BURLA	STORE S/S	LIC S/S	11 kV	0.6	100	60 M	RSJ	to be taken up				✓		
144	Sambalpur/SED Sambalpur/BURLA	BOLER PADA S/S	HANUMAN STSTUE S/S	11 kV	0.6	100	60 M	RSJ	to be taken up				✓		
145	Sambalpur/SED Sambalpur/HIRAKUD	CHAKRABARTIPADA	PATHARLINE	11 kV	2.5	100	60 M	RSJ	to be taken up				✓		
146	Sambalpur/SED Sambalpur/HIRAKUD	LAXMINAGAR	HIRAKUD PARK	11 kV	1.75	100	60 M	RSJ	to be taken up				✓		
147	SAMBALPUR/SEED/RAIRAKHOL	TRIBANPUR	TANTAGARD	11 kV	4	100	60 M	RSJ	to be taken up				✓		
148	SAMBALPUR/SEED/RAIRAKHOL	BADA KASHIBAHAL VILLAGE	BADA KASHIBAHAL VILLAGE	11 kV	2	100	60 M	RSJ	to be taken up				✓		
149	SAMBALPUR/SEED/RAIRAKHOL	TRIBANPUR	TRIBANPUR	11 kV	1.5	100	60 M	RSJ	to be taken up				✓		
150	SAMBALPUR/SEED/RAIRAKHOL	CHARMAL	CHARMAL	11 kV	1	100	60 M	RSJ	to be taken up				✓		
151	SAMBALPUR/SEED/RAIRAKHOL	HATIBARI GRID	STATION PADA	11 kV	8	100	60 M	RSJ	to be taken up				✓		
152	SAMBALPUR/SEED/RAIRAKHOL	JUJOMORA GRID	FORE POLE JUJOMORA	11 kV	5	100	60 M	RSJ	to be taken up				✓		
153	SAMBALPUR/SEED/RAIRAKHOL	JUJOMORA GRID	FORE POLE JUJOMORA	11 kV	5	100	60 M	RSJ	to be taken up				✓		
154	SAMBALPUR/SEED/RAIRAKHOL	Hero	Chilkam	11 kV	3	100	60 M	RSJ	to be taken up				✓		

155	SAMBALPUR/SEED/DHANUPALI	TAKBA	TAKBA	11 kV	2	100	60 M	RSJ	to be taken up				✓		
156	SAMBALPUR/SEED/DHANUPALI	CHOUDHURY CHOWK	CHOUDHURY CHOWK	11 kV	0.8	100	60 M	RSJ	to be taken up				✓		
157	SAMBALPUR/SEED/DHANUPALI	DHANUPALI CHOWK	STATE BANK SIDE	11 kV	0.35	100	60 M	RSJ	to be taken up				✓		
158	SAMBALPUR/SEED/DHANUPALI	BHATRA PETROL PUMP	KHANDUAL	11 kV	4	100	60 M	RSJ	to be taken up				✓		
159	SAMBALPUR/SEED/BHUTAPADA	PUTTIBANDH	KULUTKANI END	11 kV	2.6	148	60 M	RSJ	to be taken up				✓		
160	SAMBALPUR/SEED/BHUTAPADA	SARLAKANI	CT STATION	11 kV	1.2	148	60 M	RSJ	to be taken up				✓		
161	SAMBALPUR/SEED/BHUTAPADA	JAIL CHOWK	SAKHIPADA, CS COLONY, KALIBADI	11 kV	6	100	60 M	RSJ	to be taken up				✓		
162	Balangir/Balangir/Loisinga	Bharsuja PSS	Bharsuja PSS to Jharnipali	11 kV	3	100	60 M	RSJ	to be taken up				✓		
163	Balangir/Balangir/Loisinga	Narayanpur PSS	Lacchipur	11 kV	5	100	60 M	RSJ	to be taken up				✓		
164	Balangir/Balangir/Loisinga	Hardakhol PSS	Menda village	11 kV	4	100	60 M	RSJ	to be taken up				✓		
165	Balangir/Balangir/Balangir	Dhamnasaur	kusmel & Jharmunda	11 kV	30	100	60 M	RSJ	to be taken up				✓		
166	Balangir/SED, Sonepur/Binka	PSS	Bhimtikra Village	11 kV	14	100	60 M	RSJ	to be taken up				✓		
167	Balangir/SED, Sonepur/Binka	PSS	kamdhomunda-	11 kV	12	100	60 M	RSJ	to be taken up				✓		

168	ROURKELA/RSED/PANPOSH	TUNGURITOLA	RICEMILL	11 kV	1.5	100	60 M	RSJ	to be taken up				✓		
169	ROURKELA/RSED/PANPOSH	RUPUTOLA	RUPUTOLA	11 kV	0.05	100	60 M	RSJ	to be taken up				✓		
170	ROURKELA/RSED/PANPOSH	RUPUTOLA	RUPUTOLA	11 kV	1.5	100	60 M	RSJ	to be taken up				✓		
171	ROURKELA/RSED/PANPOSH	SARDAR BASTI	SARDAR BASTI	11 kV	0.3	100	60 M	RSJ	to be taken up				✓		
172	ROURKELA/RSED/PANPOSH	KANARSUAN	DISCO BAZAR	11 kV	6	100	60 M	RSJ	to be taken up				✓		
173	ROURKELA/RSED/PANPOSH	LATHIKATA PSS	KULAMUNDA	11 kV	3	300sqmm UG Cable	60 M	RSJ	to be taken up				✓		
174	ROURKELA/RSED/PANPOSH	LATHIKATA PSS	NAINETUNGRI (NEAR NH)	11 kV	2	300sqmm UG Cable	60 M	RSJ	to be taken up				✓		
175	ROURKELA/RSED/PANPOSH	NAINETUNGRI	BANKI TEMPLE	11 kV	10	100	60 M	RSJ	to be taken up				✓		
176	ROURKELA/RSED/IND-ESTATE	PILOT PROJECT PSS	GOVT ITI	11 kV	0.7	100SQMM	60 M	RSJ	to be taken up					✓	
177	BARGARH/BED/SDO-II	senapatimal andrapada	sinukhala	11 kV	1.5	100SQMM	60 M	RSJ	to be taken up					✓	
178	BARGARH/BED/SDO-II	OLD FOUR POLE	MISSION HOSPITAL S/S	11 kV	1.1	100SQMM	60 M	RSJ	to be taken up					✓	
179	BARGARH/BED/SDO-II	KARUAN PETROL PUMP	NUAGARH S/S	11 kV	1	100SQMM	60 M	RSJ	to be taken up					✓	
180	BARGARH/BED/ATTABIRA	RUGUDITIKRA	SODHAPALI	11 kV	2	100SQMM	60 M	RSJ	to be taken up					✓	

181	BARGARH/BED/ATTABIRA	LAHANDA GAON BARCHA	JUGIPALI	11 kV	2	100SQM M	60 M	RSJ	to be taken up				☐	✓	
182	BARGARH/BED/ATTABIRA	SILET LI POINT-2 CUT-POINT (WATER PARK)	BADMAL VILLAGE	11 kV	1.5	100SQM M	60 M	RSJ	to be taken up				☐	✓	
183	BARGARH/BED/ATTABIRA	100KVA S/S PARMANPUR VILLAGE	25KVA LI POINT S/S PARMANPUR	11 kV	1	100SQM M	60 M	RSJ	to be taken up				☐	✓	
184	BARGARH/BED/ATTABIRA	KHIRAPALI	JHILMINDA	11 kV	2	100SQM M	60 M	RSJ	to be taken up				☐	✓	
185	BARGARH/BED/ATTABIRA	KHIRAPALI	BUGBUGA	11 kV	2	100SQM M	60 M	RSJ	to be taken up				☐	✓	
186	BARGARH/BED/ATTABIRA	CHANDAN NAGAR	ANDHARIPA LI	11 kV	2	100	60 M	RSJ	to be taken up				✓		
187	BARGARH /BED/BHEDEN	NearPolice Station	Trekker Stand	11 kV	0.5	100	60 M	RSJ	to be taken up				✓		
188	BARGARH/BED/BHATLI	Dungipali	Khadiapara(Karma Para)	11 kV	1	100	60 M	RSJ	to be taken up				✓		
189	BARGARH/BWED/PADAMPUR	BRAMANPADA TAPPING	Near Pond	11 kV	2	100	60 M	RSJ	to be taken up				✓		
190	BARGARH/BWED/PAIKMAL	PAIKMAL	HIGHSCHOOL TO MITHAPALI	11 kV	4	100	60 M	RSJ	to be taken up				✓		
191	BARGARH/BWED/PAIKMAL	PAIKMAL	PSS TO KENAL PADA	11 kV	1	100	60 M	RSJ	to be taken up				✓		
192	BARGARH/BWED/PAIKMAL	MANDOSIL	DUMNERBAHAL	11 kV	2	100	60 M	RSJ	to be taken up				✓		

193	BARGARH/BWED/SOHELA	UPAR PADA	AMRUT DHARA NURSING HOME	11 kV	1.1	100	60 M	RSJ	to be taken up				✓		
194	BARGARH/BWED/SOHELA	33/11KV PSS BIJEPUR	LEMDHAR SHIV TEMPLE	11 kV	6.5	100	60 M	RSJ	to be taken up				✓		
195	BARGARH/BWED/SOHELA	PSS	CHEPTIBAHAL	11 kV	3.5	100	60 M	RSJ	to be taken up				✓		
196	BARGARH/BWED/SOHELA	Ghenss PSS	PSS TO TAPING POINT OF GHESS GOLLEGE	11 kV	3	100	60 M	RSJ	to be taken up				✓		
197	BARGARH/BWED/SOHELA	SALEPALI	SALEPALI BRIDGE	11 kV	1	100	60 M	RSJ	to be taken up				✓		
198	BARGARH/BWED/SOHELA	JATLA OLIC POINT	JATLA PANEL	11 kV	1	100SQM M	60 M	RSJ	to be taken up					✓	
199	BARGARH/BWED/SOHELA	Ghenss PSS	JJULEN BARGAH TO BANPALI	11 kV	1.5	100SQM M	60 M	RSJ	to be taken up					✓	
200	BARGARH/BWED/SOHELA	ARDA PSS	Laumunda Jor Ab switch	11 kV	8	100SQM M	60 M	RSJ	to be taken up					✓	
201	BARGARH/BWED/SOHELA	ARDA PSS	Saledamki	11 kV	10	100SQM M	60 M	RSJ	to be taken up					✓	
202	BARGARH/BED/ATTABIRA	33/11KV Patrapali PSS	Mudhimill	11 kV	8	100SQM M	60 M	RSJ	to be taken up					✓	
203	BARGARH/BED/BHATLI	33/11KV-UDAYAPALI PSS	Bartunda Village	11 kV	7	100SQM M	60 M	RSJ	to be taken up					✓	
204	BARGARH/BED/BHATLI	33/11KV-BHATLI PSS	Handasankari	11 kV	7	100SQM M	60 M	RSJ	to be taken up					✓	

205	BARGARH/BWED/PAIKMAL	Kashipani OLIC	Jogendranathpur	11 kV	5	100	60 M	RSJ	to be taken up				✓		
206	BARGARH/BED/BHATLI	33/11KV-RAISOBHA PSS	RUNIPALI	11 kV	4	100	60 M	RSJ	to be taken up				✓		
207	BARGARH/BED/BHATLI	33/11KV-UDAYAPALI PSS	Bishalpali	11 kV	4	100	60 M	RSJ	to be taken up				✓		
208	BARGARH/BED/BHATLI	SAMBALPURI VILLAGE	DWARI	11 kV	0.7	100	60 M	RSJ	to be taken up				✓		
209	BARGARH/BED,BARGARH/NO-2,BARGARH	NUASARSARA	KATATIKIRA	11 kV	2	100	60 M	RSJ	to be taken up				✓		
210	BARGARH/BED,BARGARH/NO-2,BARGARH	KHUNTPALI ROAD	DUNGURITIKIRA	11 kV	1	100	60 M	RSJ	to be taken up				✓		
211	BARGARH/BED,BARGARH/NO-2,BARGARH	KHUNTPALI BRAMHANPADA	KHUNTPALI BRAMHANPADA	11 kV	0.3	100	60 M	RSJ	to be taken up				✓		
212	BARGARH/BED,BARGARH/NO-2,BARGARH	BEHERA	BEHERA	11 kV	0.3	100	60 M	RSJ	to be taken up				✓		
213	BARGARH/BED,BARGARH/NO-2,BARGARH	SARSARA SIVA TEMPALE	SARSARA SIVA TEMPALE	11 kV	0.3	100	60 M	RSJ	to be taken up				✓		
214	BARGARH/BED,BARGARH/NO-2,BARGARH	BALGOPAL RICE MILL	SAMALEISWARI RICE MILL	11 kV	0.5	100	60 M	RSJ	to be taken up				✓		
215	BARGARH/BED,BARGARH/NO-2,BARGARH	IOCL	KALGAPALI DP	11 kV	0.5	100	60 M	RSJ	to be taken up				✓		
216	BARGARH/BED,BARGARH/NO-2,BARGARH	SHYAMJEE INDUSTRY	VAISNODEVI TAMPLE	11 kV	0.5	100	60 M	RSJ	to be taken up				✓		

217	KALAHANDI/KEED/COLLEGE SQUARE	KUSADUNGRI	DEYPUR	11 kV	10	100	60 M	RSJ	to be taken up				✓		
218	KALAHANDI/KEED/COLLEGE SQUARE	RISINGPUR	DUNGRIPADAR	11 kV	3	100	60 M	RSJ	to be taken up				✓		
219	KALAHANDI/KEED/COLLEGE SQUARE	PADAMPADA	KURLUBHATA	11 kV	2	100	60 M	RSJ	to be taken up				✓		
220	KALAHANDI/KEED/KESINGA	NEW LIFE HOSPITAL	AMATH	11 kV	15	100	60 M	RSJ	to be taken up				✓		
221	KALAHANDI/KEED/KESINGA	FOUR POLE OLD CHECK GATE	BAGAD KESINGA	11 kV	1.5	100	60 M	RSJ	to be taken up				✓		
222	KALAHANDI/KEED/KESINGA	GHANSYAM BARMA OLIC	JURKHABADI	11 kV	1.5	100SQM M	60 M	RSJ	to be taken up				☐	✓	
223	KALAHANDI/KEED/KESINGA	KENDUBAHALI PSS	AMATH	11 kV	11	100SQM M	60 M	RSJ	to be taken up				☐	✓	
224	KALAHANDI/KEED/KESINGA	KENDUBAHALI PSS	KHAIRMAL	11 kV	2	100SQM M	60 M	RSJ	to be taken up				☐	✓	
225	KALAHANDI/KEED/KESINGA	KENDUBAHALI PSS	SIRJAPALI	11 kV	6	100SQM M	60 M	RSJ	to be taken up				☐	✓	
226	KALAHANDI/KEED/KESINGA	BELKHANDI CHOWK	FALSAPADA	11 kV	4.5	100SQM M	60 M	RSJ	to be taken up				☐	✓	
227	KALAHANDI/KEED/KESINGA	UTKELA PSS	THEMRA	11 kV	2.5	100SQM M	60 M	RSJ	to be taken up				☐	✓	
228	KALAHANDI/KEED/NAKTIGUDA	TENTULIPADA	TENTULIPADA	11 kV	3	100SQM M	60 M	RSJ	to be taken up				☐	✓	
229	KALAHANDI/KEED/NAKTIGUDA	N SAGADA	BUDHIPADAR	11 kV	2	148SQM M	60 M	RSJ	to be taken up				☐	✓	

230	KALAHANDI/KEED/NAKTIGUDA	BANDOPALA	RISGAON	11 kV	2.5	148SQM M	60 M	RSJ	to be taken up				☐	✓	
231	KALAHANDI/KEED/NAKTIGUDA	KAMTHANA	MADING	11 kV	4	148SQM M	60 M	RSJ	to be taken up				☐	✓	
232	KALAHANDI/KWED/BHAWANIPATNA	PARADESWAR MANDIR	PARADESWAR MANDIR	11 kV	1.2	100SQM M	60 M	RSJ	to be taken up				☐	✓	
233	KALAHANDI/KWED/BHAWANIPATNA	KANTER	KANTER	11 kV	1	100	60 M	RSJ	to be taken up				✓		
234	KALAHANDI/KWED/BHAWANIPATNA	INDRAVATI	SHARDHAPUR	11 kV	2	100	60 M	RSJ	to be taken up				✓		
235	KALAHANDI/KWED/BHAWANIPATNA	BASUL	RANKABAHAL	11 kV	1	100	60 M	RSJ	to be taken up				✓		
236	KALAHANDI/KWED/CHARBAHAL	MAHICHALA U.P.SCHOOL	MAHICHALA BARGACHPADA	11 kV	0.7	100	60 M	RSJ	to be taken up				✓		
237	KALAHANDI/KWED/CHARBAHAL	RANIBAHAL		11 kV	3.5	100	60 M	RSJ	to be taken up				✓		
238	KALAHANDI/KWED/DHARAMGARH	CHAULIAPADA	BADGHUMER	11 kV	3	100	60 M	RSJ	to be taken up				✓		
239	KALAHANDI/KWED/DHARAMGARH	BEHERA BHATI	TENDAPALI	11 kV	4	100	60 M	RSJ	to be taken up				✓		
240	KALAHANDI/KWED/DHARAMGARH	RAJMOTOR	RAJMOTOR	11 kV	0.3	100	60 M	RSJ	to be taken up				✓		
241	KALAHANDI/KWED/DHARAMGARH	PARLA	JAYANTPUR	11 kV	3	100	60 M	RSJ	to be taken up				✓		
242	KALAHANDI/KWED/DHARAMGARH	KADALIMUNDA	PETROLPUMP	11 kV	2	100	60 M	RSJ	to be taken up				✓		

243	KALAHANDI/KWED/DHARAMGARH	BRUNDABAHAL CHOWCK	BRUNDABAHAL CHHOCK	11 kV	2	100	60 M	RSJ	to be taken up				✓		
244	KALAHANDI/KWED/DHARAMGARH	AMGUDA	BHHATICHHOCK	11 kV	1	100	60 M	RSJ	to be taken up				☐		✓
245	KALAHANDI/KWED/DHARAMGARH	KULERGUDA	DHAMANPUR	11 kV	2.5	100	60 M	RSJ	to be taken up				☐		✓
246	KALAHANDI/KWED/JUNAGARH	AMTHA	G.SARGIGUDA	11 kV	2	100	60 M	RSJ	to be taken up				☐		✓
247	KALAHANDI/KWED/JUNAGARH	PALAS CHOWK	PALAS	11 kV	2	100	60 M	RSJ	to be taken up				☐		✓
248	KALAHANDI/KWED/JUNAGARH	CHANCHARA BHADI SHIV MANDIR	CHANCHARA BHADI SHIV MANDIR	11 kV	0.6	100	60 M	RSJ	to be taken up				☐		✓
249	KALAHANDI/KWED/JUNAGARH	BADALDEI	BADALDEI	11 kV	0.7	100	60 M	RSJ	to be taken up				☐		✓
250	KALAHANDI/KWED/JUNAGARH	KALAMPUR BAGPADA	MODEL SCHOOL KALAMPUR	11 kV	0.6	100	60 M	RSJ	to be taken up				☐		✓
251	KALAHANDI/KWED/JUNAGARH	BRAHAMANPADA	PANCHAYAT PADA	11 kV	1.5	100	60 M	RSJ	to be taken up				☐		✓
252	KALAHANDI/KWED/JUNAGARH	Dengen	Semikhal	11 kV	6	100	60 M	RSJ	to be taken up				☐		✓
253	KALAHANDI/KWED/JUNAGARH	BHATIPADA	COLLEGEPADA	11 kV	1.2	100	60 M	RSJ	to be taken up				☐		✓
254	KALAHANDI/NED/KH.ROAD	AGRASEN BHAWAN	PANJABI PADA DSS	11 kV	0.9	100	60 M	RSJ	to be taken up				☐		✓
255	KALAHANDI/NED/KH.ROAD	AMSENA ROAD	ABHISEK GUPTA BACK SIDE	11 kV	0.9	100	60 M	RSJ	to be taken up				☐		✓

		RAILWAY GATE													
256	KALAHANDI/NED/KHARIAR	CHICHER CHOWK	NEHENA	11 kV	0.25	100	60 M	RSJ	to be taken up				☐		✓
257	KALAHANDI/NED/KHARIAR	PRADHAN PETROL PUMP	AJITPANDA HOUSE	11 kV	0.25	100	60 M	RSJ	to be taken up				☐		✓
258	KALAHANDI/NED/KHARIAR	DURKAMUNDA	BUDHAPADA	11 kV	3	100	60 M	RSJ	to be taken up				☐		✓
259	KALAHANDI/NED/KHARIAR	SINAPALI TOWN	PALSADA	11 kV	1	100	60 M	RSJ	to be taken up				☐		✓
260	KALAHANDI/NED/Khariar Road	BISORA PSS	SEMERIA	11 kV	3.5	100	60 M	RSJ	to be taken up				☐		✓
261	KALAHANDI/NED/KHR	BLOCK CHOWK	BLOCK COLONY	11 kV	0.6	100	60 M	RSJ	to be taken up				☐		✓
262	KALAHANDI/NED/NUAPADA	COLONYPADA POINR	TIKIRAPADA	11 kV	3	100	60 M	RSJ	to be taken up				☐		✓
263	KALAHANDI/NED/NUAPADA	MICHHAPALI	MICHHAPALI	11 kV	0.5	100	60 M	RSJ	to be taken up				☐		✓
264	KALAHANDI/NED/NUAPADA	DUNGURIPALI	KANKEDA	11 kV	2.5	100	60 M	RSJ	to be taken up				☐		✓
265	KALAHANDI/NED/NUAPADA	MALLIBHATA	MALLIBHATA	11 kV	1	100	60 M	RSJ	to be taken up				☐		✓
266	KALAHANDI/NED/NUAPADA	SARABANG	SARABANG	11 kV	0.6	100	60 M	RSJ	to be taken up				☐		✓
267	KALAHANDI/KEED/NARLA	DENDOGUDA RWSS	DANGARGUNDRI LIPOINT 2	11 kV	1.2	100	60 M	RSJ	to be taken up				☐		✓

268	KALAHANDI/KEED/NARLA	PIPALPADA	DEHELI	11 kV	3	100	60 M	RSJ	to be taken up				☐		✓
269	KALAHANDI/KEED/NARLA	DUMALPADA	ASURGARH HARIJANPADA	11 kV	1	100	60 M	RSJ	to be taken up				☐		✓
270	KALAHANDI/KEED/KESINGA	33/11 KV PSS KESINGA	AMATH	11 kV	15	100	60 M	RSJ	to be taken up				☐		✓

Annexure -6 DPR of Life enhancement of network and maintaining safe horizontal / vertical clearances

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
1	Statutory, Safety and Security	i) Life enhancement of network and maintaining safe horizontal / vertical clearances	Intermediate Pole Increase of height for 11 kV and 33 kV sagging line.	2.00
			National Highway, SH & River Crossing with Guarding	1.99
			Replacement of Open Conductor with Covered Conductor inside forest city and high-density public area	5.03

Cost sheet has been estimated based on the previous rates available with us, however rate may vary from time to time and accordingly cost summary will be changed.

Different no. of items to be executed has been calculated based on certain assumption/ calculation, however it may vary during execution.

Summary with work covered with proposed quantity and estimates:

SL.No.	Description of work	UOM	FY24 Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	Intermediate Pole with 9 Mtr PSC Pole for LT Line	EA	50	11,968	5,98,403
2	Intermediate Pole with 9 Mtr RS Joist Pole for 11KV Line	EA	500	13,912	69,56,184
3	Intermediate Pole with 11 Mtr RS Joist Pole for 11KV Line	EA	50	51,746	25,87,277
4	Intermediate Pole with 11 Mtr RS Joist Pole for 33KV Line	EA	190	51,765	98,35,369
5	National Highway, SH & River Crossing crossing with Guarding on 16 Mtr Pole	Nos.	52	3,86,128	2,00,68,142
6	Conversion of Open Conductor with 100 Sq.mm Covered Conductor	Ckt Km	24	20,93,827	5,02,49,843
	Total				**9,02,95,218**

Kshirod Ch Nanda

1. Cost & Material Estimate for LT Intermediate Pole with 9 Mtr PSC Pole:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**186000**
1	9 mtr long X 300 Kg. PSC Pole for interpole	Nos.	50	3720.00	186000
B	**Cost of transformers/RS Joist Poles**	**B**			**0**
C	**Cost of materials for line**	**C**			**66960**
1	Pole Clamp for AB Cable	Pair	50	248	12400
2	Eye Hook for AB Cable	Nos.	50	74.4	3720
3	Piercing Connector	Nos.	150	99.2	14880
4	Neutral Connector Type B	Nos.	50	40.92	2046
5	Earthing Coil	Nos.	50	205.84	10292
6	No.8G.I. wire for earthing	Kg.	150	93	13950
7	G.I. Nut & Bolts (Assorted size)	Kg.	100	96.72	9672
D	**SUBTOTAL(D)**	**D=A+B +C**			**252960**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**7589**
F	**Sub Total (F)**	**F=D+E**			**260549**
G	**T&P @ 2% of F**	**G**	**2%**		**5211**
H	**Contingency @ 3% of F**	**H**	**3%**		**7816**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**19541**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**38316**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**6897**
M	**Sub Total (M)**	M=F+G +H+I+J +K+L			**338330**
N	**Cost of Civil Works**	**N**			**135349**
	Padding and concreting materials for support	**No.**	**50**	**2706.98**	**135349**
O	**Sub Total (O)**	**O=M+N**			**473679**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**85262**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**28421**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		5116
S	Sub Total (S)	S=O+P +Q+R			592478
T	Labour Cess @ 1% of S=T	T	1%		5925
U	Grand Total (U)= S+T	U=S+T			598403

2. Cost & Material Estimate for 11 KV Intermediate Pole with 9 Mtr PSC Pole:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
A	Cost of PSC Poles	A			1860000
1	9m 300Kg PSC Pole		500	3720.00	1860000
B	Cost of RS Joist / Transformers	B			0
C	Cost of materials for line	C			1340604
1	11 KV V- Cross Arm (MS) (10.2 Kg each)	No.	500	947.55	473774
2	Back Clamp for 'V' Cross Arm (1.7kg)	No.	500	93.58	46792
3	11 KV F Clamp 2.9 Kg. each	No.	500	280.75	140377
4	11KV Pin Insulator, Polymer	No.	1500	233.96	350943
5	Earthing of support (Coil Type)	No.	500	194.19	97094
6	G.I. Nuts, bolt & Washer	Kg.	1000	91.24	91245
7	GI Barbered wire for anticlimbing	Kg.	1000	93.58	93585
8	Danger Plate	No.	500	93.58	46792
D	SUBTOTAL(D)	A+B +C			3200604
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		96018
F	Sub Total (F)	F=D +E			3296622
G	T&P @ 2% of F	G	2%		65932
H	Contingency @ 3% of F	H	3%		98899
I	Transportation @ 7.5% of F	I	8%		247247
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		383160
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		138082
M	Sub Total (M)	M=F+ G+H+			4229942

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
		I+J+ K+L			
N	Cost of Civil Works	N			1276383
1	Concrete materials for stay anchor plate.	No.	500	2552.76	1276383
O	Sub Total (O)	O=M +N			5506325
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		991138
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		330379
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		59468
S	Sub Total (S)	S=O +P+ Q+R			6887311
T	Labour Cess @ 1% of S=T	T	1%		68873
U	Grand Total (U)= S+T	U=S +T			6956184
	or say				6956184

3. Cost & Material Estimate for 11 KV Intermediate Pole with 11 Mtr RS Joist Pole:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of RS Joist / Transformers	B			1446997
1	11mtr RS Joist Pole	Nos.	50	28939.94	1446997
C	Cost of materials for line	C			134060
1	11 KV V- Cross Arm (MS) (10.2 Kg each)	No.	50	947.55	47377
2	Back Clamp for 'V' Cross Arm (1.7kg)	No.	50	93.58	4679
3	11 KV F Clamp 2.9 Kg. each	No.	50	280.75	14038
4	11KV Pin Insulator, Polymer	No.	150	233.96	35094
5	Earthing of support (Coil Type)	No.	50	194.19	9709
6	G.I. Nuts, bolt & Washer	Kg.	100	91.24	9125
7	GI Barbered wire for anticlimbing	Kg.	100	93.58	9358
8	Danger Plate	No.	50	93.58	4679
D	SUBTOTAL(D)	A+B+C			1581057
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		47432
F	Sub Total (F)	F=D+E			1628489
G	T&P @ 2% of F	G	2%		32570

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
H	**Contingency @ 3% of F**	**H**	**3%**		**48855**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**122137**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**74520**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**13808**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**1920379**
N	**Cost of Civil Works**	**N**			**127638**
1	Concrete materials for stay anchor plate.	No.	50	2552.76	127638
O	Sub Total (O)	O=M+N			2048017
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**368643**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**122881**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**22119**
S	**Sub Total (S)**	**S=O+P +Q+R**			**2561660**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**25617**
U	**Grand Total (U)= S+T**	**U=S+T**			**2587277**
				or say	**2587277**

4. Cost & Material Estimate for 33KV Intermediate Pole with 11 Mtr RS Joist Pole:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles**	**B**			**5498589**
1	11mtr RS Joist Pole	Nos.	190	28940	5498589
C	**Cost of materials for line**	**C**			**887501**
1	33 KV V- Cross Arm (MS)	No.	190	1848	351177
2	Back Clamp for 'V' Cross Arm	No.	190	175	33340
3	33 KV F Clamp	No.	190	351	66679
4	33KV Pin Insulator, Polymer	No.	570	562	320060
5	Earthing of support (Coil Type)	No.	190	194	36896
6	G.I. Nuts, bolt & Washer	Kg.	285	91	26005
7	GI Barbered wire for anticlimbing	Kg.	380.00	94	35562

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
8	Danger Plate	No.	190.00	94	17781
D	**SUBTOTAL(D)**	**D=A+B+C**			**6386090**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**191583**
F	**Sub Total (F)**	**F=D+E**			**6577673**
G	**T&P @ 2% of F**	**G**	**2%**		**131553**
H	**Contingency @ 3% of F**	**H**	**3%**		**197330**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**493325**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**283177**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**91413**
M	**Sub Total (M)**	**M=F+G+H +I+J+K+L**			**7774471**
N	**Cost of Civil Works**	**N**			**0**
O	**Sub Total (O)**	**O=M+N**			7774471
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		1399405
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		466468
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		83964
S	**Sub Total (S)**	**S=O+P+Q +R**			9724309
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**97243**
U	**Grand Total (U)= S+T**	**U=S+T**			**9821552**
				or say	**9821552**

5. Cost & Material Estimate for National Highway, SH & River Crossing crossing with Guarding on 16 Mtr Pole:

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles**	**B**			**8165128**
1	16mtr WPB Joist Pole	Nos.	208	39255.42	8165128
C	**Cost of materials for DP**				**4181948**
1	Top Channel 100x50x6mm	Kg	4784.00	80.60	385590
2	Belting Channel 75x40x6mm	Kg	7072.00	80.60	570003
3	Bracing Angle 50x50x6mm	Kg	3744.00	80.60	301766

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
4	Fish Plate 50x6mm	Kg	825.00	115.32	95139
5	GI Flat 50x6mm	Kg	1273.00	93.00	118389
6	GI Flat 25x3mm	Kg	936.00	93.00	87048
7	11KV Disc Insulator (B & S), Polymer	No.	312	1426.00	444912
8	11KV H/W Fitting (B & S type) for Disc Insulator	No.	312	434.00	135408
9	PG Clamp for 100Sqmm AAAC	No.	624	719.20	448781
10	11KV Pin Insulator, Polymer	No.	312	248.00	77376
11	H.T. Stay set complete	No.	104	1302.00	135408
12	HT Stay Insulator	No.	104	62.00	6448
13	HT Stay Clamp	Pair	104	155.00	16120
14	7/10 SWG GI wire for stay	Kg.	585.00	93.00	54405
15	7/8 SWG GI wire for earthing	Kg.	2237	93.00	208041
16	40mm nominal bore GI Pipe earthing device	No.	208	1302.00	270816
17	Pipe HDPE	Mtr	624	49.60	30950
18	Aluminium Socket 70mm	No.	416	18.60	7738
19	Back Clamp	No.	208	99.20	20634
20	No.8 GI wire (Dia-4.6mm)	Kg	1206	73.14	88206
21	No.6 GI wire (Dia-4.8mm)	Kg	351	21.28	7469
22	Material for manosary work for earth pit	Nos.	208	496.00	103168
23	Charcoal, Salt etc	Nos.	416	558.00	232128
24	G.I. Nuts, bolt & Washer	Kg.	834	96.72	80664
25	GI Barbered wire for anticlimbing	Kg.	416	99.20	41267
26	Danger Plate	No.	208	99.20	20634
27	Fabrication & Galvanisation	Kg.	15600	12.40	193440
D	**SUBTOTAL(C)**	**D=A+B+C**			**12347077**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**370412**
F	**Sub Total (F)**	**F=D+E**			**12717489**
G	**T&P @ 2% of F**	**G**	**2%**		**254350**
H	**Contingency @ 3% of F**	**H**	**3%**		**381525**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**953812**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**420504**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**430741**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**15158420**
N	**Cost of Civil Works**	**N**			**726972**
1	Concrete materials for stay anchor plate.	No.	104	1576.27	163932

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
2	Padding and concreting materials for support	No.	208	2706.92	563039
O	**Sub Total (O)**	**O=M+N**			**15885391**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2859370**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**953123**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**171562**
S	**Sub Total (S)**	**S=O+P+Q+R**			**19869448**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**198694**
U	**Grand Total (U)= S+T**	**U=S+T**			**20068142**
				or say	**20068142**

6. Cost & Material Estimate for Open Conductor to Cover Conductor 100sqmm:

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles /Transformers**	**B**			**16197118**
1	11mtr RS Joist Pole	Nos.	528	30676	16197118
C	**Cost of materials for line**	**C**			**15385470**
1	100 sqmm AAA Insulated Conductor	Km.	75.6	155000.00	11718000
2	MS Channel 100x50x6mm	Kg	2208.00	80.60	177965
3	MS Channel 75x40x6mm	Kg	1632.00	80.60	131539
4	MS Angle 50x50x6mm	Kg	1728.00	80.60	139277
5	Fish Plate 50x6mm	Kg	190.00	115.32	21911
6	GI Flat 50x6mm	Kg	587.52	93.00	54639
7	GI Flat 25x6mm	Kg	432.00	93.00	40176
8	11 KV V- Cross Arm (MS) (10.2 Kg each)	No.	432	1004.40	433901
9	Back Clamp for 'V' Cross Arm (1.7kg)	No.	432	99.20	42854
10	11 KV F Clamp 2.9 Kg. each	No.	432	297.60	128563
11	11KV Disc Insulator (B & S), Polymer	No.	288	1426.00	410688
12	11KV H/W Fitting (B & S type) for Disc Insulator	No.	288	434.00	124992
13	PG Clamp for 100Sqmm AAAC	No.	288	719.20	207130
14	11KV Pin Insulator, Polymer	No.	1440	248.00	357120
15	H.T. Stay set complete	No.	288	1302.00	374976
16	HT Stay Insulator	No.	288	62.00	17856
17	HT Stay Clamp	Pair	288	155.00	44640

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
18	7/10 SWG GI wire for stay	Kg.	1621.00	93.00	150753
19	7/8 SWG GI wire for earthing	Kg.	1032	93.00	95976
20	Earthing of support (Coil Type)	No.	432	205.84	88923
21	40mm nominal bore GI Pipe earthing device	No.	96	1302.00	124992
22	Pipe HDPE	Mtr	288	49.60	14285
23	Aluminium Socket 70mm	No.	192	18.60	3571
24	Material for manosary work for earth pit	No.	96	496.00	47616
25	Charcoal, Salt etc	No.	192	558.00	107136
26	G.I. Nuts, bolt & Washer	Kg.	1032	96.72	99815
27	GI Barbered wire for anticlimbing	Kg.	1056	99.20	104755
28	Danger Plate	No.	528	99.20	52378
29	Fabrication & Galvanisation	Kg.	5568.00	12.40	69043
D	**SUBTOTAL(D)**	**A+B+C**			**31582588**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**947478**
F	**Sub Total (F)**	**F=D+E**			**32530066**
G	**T&P @ 2% of F**	**G**	**2%**		**650601**
H	**Contingency @ 3% of F**	**H**	**3%**		**975902**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**2439755**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**834152**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1553932**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**38984408**
N	**Cost of Civil Works**	**N**			**791991**
1	**Concrete materials for stay anchor plate.**	**No.**	**288**	**1576.27**	**453966**
2	**Padding and concreting materials for support**	**No.**	**48**	**2706.92**	**129932**
3	**Cost of Dismentalling**	**CKm.**	**24**	**8670.54**	**208093**
O	**Sub Total (O)**	**O=M+N**			**39776399**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**7159752**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**2386584**

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		429585
S	Sub Total (S)	S=O+P+Q+R			49752320
T	Labour Cess @ 1% of S=T	T	1%		497523
U	Grand Total (U)= S+T	U=S+T			50249843
				or say	50249843

Annexure - 7 DPR for Provision of Testing Equipments & PPE

Activity Cost summary:

SL.No.	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
1	Statutory, Safety and Security	ii) Provision of Testing Equipment & PPEs to workforce	Testing equipment	1
			Safety Equipment (Discharge Rod, Man lifter, Neon Tester etc.)	2.79

Safety Equipments:

Sub-Category	Proposed budget	Remark if any
Neon Tester indicator,300 nos (Tools)	0.31	Approximate cost based on last procurement price
Multi function discharge rod with connector 600 nos (Tools)	0.65	Approximate cost based on last procurement price
Insulated rescue hook,300 nos	0.75	
LOTO arrangements	0.12	
Potacabin 12 nos for TPSDI training center. (30-seater)	0.96	
Total	**2.79**	

Necessity and Proposal:

The asset life can be enhanced by having prudent maintenance practices including condition-based monitoring of the electrical equipment. One of the critical aspects involve carrying out both on-line and off-line testing of the equipment. To ensure that these tests are carried out in the pre-defined intervals, availability of suitable testing instruments is of utmost importance. With an ageing asset base and addition of new ones to the operational portfolio, it has become challenging to comply to the testing schedule with the existing testing infrastructure. To augment the same, it is proposed to procure an additional set of testing instruments, which can cater to faster adherence to the testing schedule and prevent pre-mature failures.

Details of the requirement and Cost Breakup:

Kit Name	Unit Price (Each with GST)
Single phase variac	₹ 54,280.00
Three phase variac	₹ 1,38,296.00
IR Tester	₹ 1,52,220.00
CRM Kit- breaker test	₹ 1,77,708.00
Timing kit. -breaker test	₹ 1,27,440.00
Relay Test Kit (1 Phase) sverkar – relay test	₹ 9,73,500.00
Leakage mA meter (clamp meter)- for CT sec current checking	₹ 16,985.76
WRM (Winding resistance meter)	₹ 2,63,923.50
Contingency (5%)	₹ 95,646.74
Total requirement for one circle	₹ 20,00,000.00
Proposed amount for five circles	₹ 1,00,00,000.00

Annexure- 8 DPR for Boundary Wall and Infrastructure works at Grid Substation

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
1	Statutory, Safety and Security	iii) Earthing, Boundary Wall and infrastructure works at Grid sub-station	Fencing of Distribution Substation	4.80
			Boundary wall of Primary Substation	10.00
			Gravel filling for Primary substation	1.61
			Access road for inside and outside PSS.	1.65
			Civil work for control room/other building in PSS- Repair	2.75
			provision for water supply for PSS/Offices (Watering for Earth pit)	0.50

Cost Estimate for Boundary wall and infrasturucture works at Grid substation:

Sl. No.	Works to be covered FY24	Value (Cr)	Remarks
1	Fencing	4.8	400 Nos Fencing each Rs. 1.2 Lacs each
2	Boundary wall of Primary Substation	10	Total Nos of PSS Boundary Wall = 40 Nos. Total Length of Boundary Wall = 6000 RM
3	Gravel filling for Primary substation	1.61	Total No of PSS PCC & Gravel Filling - 40 Nos. Total area of PCC & Gravel Filling = 16000 Sqm
4	Access road for inside and outside PSS.	1.65	Total Nos of PSS Road = 50 Nos. Total Length of PSS Road = 1250 RM
5	Civil work for control room/other building in PSS- Repair	2.75	5 Nos New CRB & 25 Nos Old CRB
6	provision for water supply for PSS/Offices (Watering for Earth pit)	0.5	Considered 25 nos Bore Well each Rs. 2.0 lacs
		Total= 21.31	

Annexure- 9 DPR for Energy Audit & Meter Related Activity

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
2	Loss Reduction	i) Energy Audit & Meter related activity	LT DB installation on Existing Pole	14.54
			Installation of Metering Unit, Meters and Modems at PSS Boundary Points	2.50
			DTR Smart Metering above 100 KVA above up to 250 kVA	10.00
			Installation of CT, PT, Meters & Modems for High value Industrial Consumers	1.00

Study of data elaborated that there are connections with are having Defective meters, No Meters and Electromechanical meters. These meters are leading to reduction in billing efficiency and thus are contributing to AT&C losses, increased provisional billing, billing error and complaints. Error in bills is leading to non-payment of bill and thus hampers the collection efficiency and increased dissatisfaction level in the customers.

Installation of Single-Phase Smart Meters:

- Approx 3 Lakh consumers exist in TPWODL area with consumption >200 units per month. These need to be replaced with smart meters in line with requirements of National Tariff Policy. It is estimated that a total 9 lakh consumer meters may require replacement with smart meter as India aspires to become USD 5 Trillion economy by 2028-29 with commensurate increase in power consumption by individual households.
- Govt. of India is aggressively pushing all DISCOMS for installation of Smart Meters for which GoI is also providing Budgetary support and funds to utilities under RDSS scheme. Smart meters are expected to help Utilities in providing many values addition to consumer services like control over demand/ monthly bill, reduced response time to no power complaints etc apart from timely bill generation which can further be integrated with digital payment platforms for payment and availing discounts on timely payments.

- TPWODL being a private utility is not getting any benefit under RDSS scheme which is hitting our finances. In States like Punjab, Hon'ble Commissions have allowed booking Smart meter cost under CAPEX with 30 % Equity and 70% Debt model. Similar model is requested for Odisha State also to facilitate providing the envisaged benefits to public at large.

TOTAL SMART METERS Nos	1-PH METER SMART COST Rs	INSTALLATION COST Rs	TOTAL COST TO BE TAKEN IN CAPEX
9L	3000	500	~ Rs 315 Cr

Proposal for FY 24: 1.5 L meters for 52.5 Cr

Metering of LI/ Agriculture connections by Smart Meters:

- Approx 0.79 Lakh Agriculture connections exist in TPWODL area and another 0.5 L are expected to be added over 5-year period. These connections are mostly located over large territorial geography making it a costly & difficult proposition to collect monthly energy meter readings. The average cost of meter reading is Rs 78 per case which makes it economical to use technologies like smart meter which is not only cheaper in long run but will also help in obtaining actual meter reading.

TOTAL SMART METERS	3-PH METER SMART COST	INSTALLATION COST	TOTAL COST TO BE TAKEN IN CAPEX
1.30 L	6815	1145	Rs 103.48 Cr

Proposal for FY 24: 0.20 L for Rs 15.92 Cr

Providing LT Distribution Boxes on LT Poles for shifting of service lines from conductor to LTDB:

- The consumer service lines are currently connected on pole, directly to conductor/AB Cable which leads to excessive wear & tear/damage of conductor/cable due to lose connection and increased No Current Complaints.
- Also, it leads to load unbalance as more service lines are connected to lower conductor.

- There is clustering of multiple service lines, as many as 15 to 20 on a pole which also pose safety concern to Line Man attending complaints and public as well.
- Also, it is difficult to identify illegal service line from the total bunch due to mesh created on pole.

LTDB Budget Requirement:

Sl. No.	Description	UOM	Quantity	Basic Cost (Incl GST)	Total Cost
1	Distribution Box (6 Way)	Nos.	250000	2012.00	503000000.00
2	Distribution Box (8 Way)	Nos.	250000	1515.00	378750000.00
3	Steel Strap	Mtrs	166667	30.00	5000000.00
4	Buckles for Steel Strap	Nos.	1000000	10.00	10000000.00
5	PRC	Nos.	800000	65.00	52000000.00
6	4Cx25 Sqmm Cable	Mtrs	1500000	170.00	255000000.00
7	Installation Charges	EA	500000	500.00	250000000.00
				TOTAL	**1453750000.00**

Time Span of Project: 5 Years CAPEX for FY 23-24 = Rs 14.54 Cr

Replacement of Defective consumer meters

- As per current assessment report, approx. 3.5 Lakh 1-PH consumer meters are Faulty. All these Meters are 7-10 Years old. Approx. 4.5 L meters are more than 10 years old and are likely to become faulty over a period of next 5 years as per present trends. Thus overall, 7.5 Lakh meters may require replacement over next 5 years which need CAPEX investment as consumer pays the meter rent for only 5 Years

Capex plan for FY 23-24

TOTAL FAULTY METERS over 5 years	1-PH METER COST	1-PH METER BOX COST	INSTALLATION COST	TOTAL COST TO BE TAKEN IN CAPEX
7.5L	940	170	500	~ Rs 120.75 Cr

Proposal for FY 24: 1.5 L meters for Rs 24.15 Cr

Description	Quantity(nos)	Expenditure
Installation of Metering Unit, Meters and Modems at PSS Boundary Points	51	2.5 Cr
DTR Smart Metering above 100 KVA above up to 250 kVA	8919	10 Cr
Installation of CT, PT, Meters & Modems for High value Industrial Consumers	25	1 Cr
Total		**13.5 Cr**

Annexure-10 DPR for Replacement of LT Bare Conductor with AB Cable

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
2	Loss Reduction	ii) Replacement of LT Bare conductor with AB cable	Replacement of LT Bare conductor with AB cable	31.96

Summary with work covered with proposed quantity and extimates:

SL.No.	Description of work	UOM	FY23 Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	Conversion of LT Bare with LTABC-3CX95 Sq.mm	Ckt Km	320	850933	272298560
2	Conversion of LT Bare with LTABC-3CX120 Sq.mm	Ckt Km	38	1244316	47284008
	Total				**319582568**

LT Bare with AB Cable line of 95sqmm AB Cable (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
A	**Cost of PSC Poles**				**23436000**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	6300	**3720**	23436000
B	**Cost of Transformer/Breaker/ Joist Pole**				**0**
C	**Cost of materials for line**				**178277131**
1	3CX 95sqmm AB Cable for LT line	Km.	441	301320	132882120
1	Pole Clamp for AB Cable	Pair	13860	248	3437280
2	Dead end Clamp (For ABC)	Nos.	2520	80.6	203112
3	Suspension Clamp	Nos.	11340	421.6	4780944
4	Eye Hook for AB Cable	Nos.	13860	74.4	1031184
5	Piercing Connector	Nos.	12600	99.2	1249920
6	Neutral Connector Type B	Nos.	4200	40.92	171864
7	LT Stay Set	Nos.	3360	644.8	2166528
8	7/12SWG Stay wire	Kg.	30240	93	2812320
9	LT Stay Clamp (1.40 Kg. /Pair)	Pair	3360	136.4	458304
10	LT Stay Insulator	Nos.	3360	37.2	124992
11	Earthing Coil	Nos.	8400	205.84	1729056

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
12	No.8G.I. wire for earthing	Kg.	25200	93	2343600
13	G.I. Nut & Bolts (Assorted size)	Kg.	3360	96.72	324979
14	Service Connection Distribution box (8 way)	Nos.	4200	4960	20832000
15	4C X 25sqmm LT PVC Armoured Cable	Mtr.	16800	221.96	3728928
D	**SUBTOTAL(D)**	**D=A+B+C**			**201713131**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**6051394**
F	**Sub Total (F)**	**F=D+E**			**207764525**
G	**T&P @ 2% of F**	**G**	**2%**		**4155291**
H	**Contingency @ 3% of F**	**H**	**3%**		**6232936**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**15582339**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**4827816**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**18362545**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**256925451**
N	**Cost of Civil Works**	**N**			**25976003**
1	Concrete materials for stay anchor plate.	No.	3360	1576.27	5296271
2	Padding and concreting materials for support	No.	6300	2706.98	17053993
3	Dismantalling Cost	Km.	420.00	8632.71	3625739
O	**Sub Total (O)**	**O=M+N**			**282901455**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**50922262**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**16974087**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**3055336**
S	**Sub Total (S)**	**S=O+P+Q+R**			**353853140**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**3538531**
U	**Grand Total (U)= S+T**	**U=S+T**			**357391671**
V				**or say**	**357391671**

LT Bare with AB Cable line of 120sqmm AB Cable (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
A	**Cost of PSC Poles**				**2790000**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	750	3720	2790000
B	**Cost of Transformer/Breaker/ Joist Pole**				**0**
C	**Cost of materials for line**				**33588141**
1	3CX 120 sqmm AB Cable for LT line	Km.	52.5	536138.17	28147254
1	Pole Clamp for AB Cable	Pair	1667	248	413416
2	Dead end Clamp (For ABC)	Nos.	300	80.6	24180
3	Suspension Clamp	Nos.	1367	421.6	576327
4	Eye Hook for AB Cable	Nos.	1667	74.4	124025
5	Piercing Connector	Nos.	1500	99.2	148800
6	Neutral Connector Type B	Nos.	556	40.92	22738
7	LT Stay Set	Nos.	400	644.8	257920
8	7/12SWG Stay wire	Kg.	3600	93	334800
9	LT Stay Clamp (1.40 Kg. /Pair)	Pair	400	136.4	54560
10	LT Stay Insulator	Nos.	400	37.2	14880
11	Earthing Coil	Nos.	1025	205.84	210986
12	No.8G.I. wire for earthing	Kg.	3075	93	285975
13	G.I. Nut & Bolts (Assorted size)	Kg.	500	96.72	48360
14	Service Connection Distribution box (8 way)	Nos.	500	4960	2480000
15	4C X 25sqmm LT PVC Armoured Cable	Mtr.	2000	221.96	443920
D	**SUBTOTAL(D)**	**D=A+B +C**			**36378141**
E	Stock, Storage & Insurance @ 3% of D=E	**E**	3%		1091344
F	**Sub Total (F)**	**F=D+E**			**37469485**
G	T&P @ 2% of F	G	2%		749390
H	Contingency @ 3% of F	H	3%		1124085
I	Transportation @ 7.5% of F	I	8%		2810211
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		574740
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		3459579
M	Sub Total (M)	M=F+G +H+I+J +K+L			**46187489**
N	**Cost of Civil Works**	N			**3092381**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
1	Concrete materials for stay anchor plate.	No.	400	1576.27	630508
2	Padding and concreting materials for support	No.	750	2706.98	2030237
3	Dismantalling Cost	Km.	50.00	8632.71	431636
O	**Sub Total (O)**	**O=M+N**			**49279870**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**8870377**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**2956792**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**532223**
S	**Sub Total (S)**	**S=O+P+Q+R**			**61639262**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**616393**
U	**Grand Total (U)= S+T**	**U=S+T**			**62255655**
				or say	**62255655**

Annexure- 11 DPR for Replacement/Addition of Network component in 33/11KV Primary Substation

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
3	Reliability	i) Replacement/Addition of network component in 33/11KV Primary Substation.	Refurbishment work in PSS (Structure Replacement / Yard Refurbishment)	1.96
			Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new (O/D CT-) (including civil &control cable)	4.01
			Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new (O/D CT-) (including civil &control cable)	2.21
			Replacement of Defective Relay	1
			Replacement of Indoor switchgear Protection Panel along with associated equipment	2.00
			Replacement of Sub station Transformer - 33/0.4KV 100KVA Trf.	0.49
			Replacement of Battery & Battery Charger	1.21
			Implementation of Automation/Scada	13.50
			Roof top for Office/ Building lighting	1.50
			High Mast/Lighting arrangement for PSS/Store	0.50

Capex plan for FY 23-24

Summary with work covered with proposed quantity and extimates:

S.No.	Description of work	UOM	FY23 Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	Refurbishment work in PSS (Structure replacement/ Yard Refurbishment)	EA	40	4,97,622	1,96,04,262
2	Replacement/ Segregation of Old 11 kv breaker/ Group Breaker with new CR PANEL (O/D CT-) (including civil &control cable)	EA	35	11,44,644	4,00,62,557
3	Replacement/ Segregation of Old 33 kv breaker/ Group Breaker with new CR PANLE (O/D CT-) (including civil &control cable)	EA	15	14,70,998	2,20,64,965
4	Replacement of defective relay	LS			1,00,00,000
5	Replacement of Indoor switchgear Protection panel along with associated equipment	LS	2	1,00,00,000	2,00,00,000
6	Replacement of 33/.433 KV PSS 100 KVA Transformer	EA	5	9,75,085	48,75,573
7	Replacement of Battery 24V	EA	30	54,639	16,39,179
8	Replacement of Battery Charger 24V	EA	30	2,81,640	84,49,204
9	Replacement of Battery 48V	EA	5	1,13,947	5,69,736
10	Replacement of Battery Charger 48V	EA	5	2,93,636	14,68,182
11	Implementation of Automation /Scada	EA			13,50,00,000
12	Roof top for Office / Building lighting	EA	2	75,00,000	1,50,00,000.00
13	High Mast/Lighting arrangement for PSS/Store	EA	11	4,53,070	49,83,771.00
	Total in Rs.				28,37,17,429

1. Cost & Material Estimate for Refurbishment work in PSS (Structure Replacement / Yard Refurbishment):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**12298947**
1	232 sqmm AAAC for 33 KV line	Km.	4	194060	776240
2	33KV Disc Insulator (B & S), Polymer	No.	2880	1785.6	5142528
3	33KV H/W Fitting (B & S type) for Disc Insulator	No.	960	2083.2	1999872
4	PG Clamp for 232Sqmm AAAC	No.	960	1426	1368960
5	Lightening Arrester (30KV, 10A)	Nos.	120	12834	1540080
6	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	400	1368.2034	547281
7	GI Flat 50x6mm(2.4kg/m)	Kg.	1190	93	110670
8	Aluminium Socket 70mm	Nos.	800	18.6	14880
9	G.I. Nuts, bolt & Washer	Kg.	50	96.72	4836
10	Material for manosary work for earth pit	No.	400	496	198400
11	Charcoal, Salt etc.	No.	800	558	446400
12	Fabrication & Galvanisation	Kg.	12000	12.4	148800
D	**SUBTOTAL(D)**	**D=A+B+C**			**12298947**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**368968**
F	**Sub Total (F)**	**F=D+E**			**12667916**
G	**T&P @ 2% of F**	**G**	**2%**		**253358**
H	**Contingency @ 3% of F**	**H**	**3%**		**380037**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**950094**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1266792**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**15518197**
N	**Cost of Civil Works**	**N**			**0**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
O	Sub Total (O)	O=M+N			15518197
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		2793275
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		931092
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		167597
S	Sub Total (S)	S=O+P+Q+R			19410161
T	Labour Cess @ 1% of S=T	T	1%		194102
U	Grand Total (U)= S+T	U=S+T			19604262
				or say	19604262

2. Cost & Material Estimate for Old 11 KV breaker with new CR PANEL (including civil &control cable):

Sl No.	Descriprtion of Materials	Unit	Qty	Rate	Amount
A	PSC Pole				0
B	RS Joist Pole/Transformer/Breaker				14973000
1	11KV VCB with indoor CR panel without PT, with outdoor CT (600-300-150/150-1A) for feeder protection	No	35	427800	14973000
C	Cost of Common Materials				6471017
1	11KV 1ph Oil Cooled PT	No	105	21080	2213400
2	2.5mmsq 10core Control Cable	Mtr	3500	319.92	1119720
3	2.5mmsq 4core Control Cable	Mtr	3500	138.88	486080
4	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	70	1368.20	95774
5	GI Flat 50x6mm(2.4kg/m)	Kg.	3150	93.00	292950
6	PG Clamp for 100mmsq AAA Conductor	No.	630	719.20	453096
7	100sqmm AAA Conductor	Km.	8.75	194060.00	1698025
8	Aluminium Socket 70mm	Nos.	560	18.6	10416
9	G.I. Nuts, bolt & Washer	Kg.	1050	96.72	101556
D	SUBTOTAL(D)	D=A+B+C			21444017
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		643321
F	Sub Total (F)	F=D+E			22087338
G	T&P @ 2% of F	G	2%		441747

Sl No.	Descriprtion of Materials	Unit	Qty	Rate	Amount
H	**Contingency @ 3% of F**	**H**	**3%**		**662620**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**1656550**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**771110**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**666515**
M	**Sub Total (M)**	**M=F+G+H +I+J+K+L**			**26285880**
N	**Cost of Civil Works**	**N**			**5426542**
1	Foundation of VCB with CT for 33 KV	Set	35	150000	5250000
2	Civil Work for Earth Pit	No.	70	2522	176542
O	**Sub Total (O)**	**O=M+N**			**31712422**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**5708236**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1902745**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**342494**
S	**Sub Total (S)**	**S=O+P+Q +R**			**39665898**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**396659**
U	**Grand Total (U)= S+T**	**U=S+T**			**40062557**
				or say	**40062557**

3. Cost & Material Estimate for Old 33 KV breaker with new CR PANEL (including civil &control cable):

Sl No.	Descriprtion of Materials	Unit	Qty	Rate	Amount
A	**PSC Pole**				**0**
B	**RS Joist Pole/Transformer/Breaker**				**9924960**
1	33KV VCB 1600Amp with indoor CR panel without PT, with outdoor CT (600-300-150/1-1A, 15VA) for feeder protection	No	15	661664	9924960
C	**Cost of Common Materials**				**2358978**
1	33KV 1ph Oil Cooled PT	No	45	23560	1060200
2	2.5mmsq 10core Control Cable	Mtr	1500	319.92	479880
3	2.5mmsq 4core Control Cable	Mtr	1500	138.88	208320

Sl No.	Descriprtion of Materials	Unit	Qty	Rate	Amount
4	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	30	1368.2	41046
5	GI Flat 50x6mm(2.4kg/m)	Kg.	600	93	55800
6	PG Clamp for 232mmsq AAA Conductor	No.	135	1426	192510
7	232sqmm AAA Conductor	Km.	1.5	194060	291090
8	Aluminium Socket 70mm	Nos.	60	18.6	1116
9	G.I. Nuts, bolt & Washer	Kg.	300	96.72	29016
D	**SUBTOTAL(D)**	**D=A+B+C**			**12283938**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**368518**
F	**Sub Total (F)**	**F=D+E**			**12652456**
G	**T&P @ 2% of F**	**G**	**2%**		**253049**
H	**Contingency @ 3% of F**	**H**	**3%**		**379574**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**948934**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**511135**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**242975**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**14988123**
N	**Cost of Civil Works**	**N**			**2477898**
1	Foundation of VCB with CT for 33 KV	Set	15	157627	2364407
2	Civil Work for Earth Pit	No.	45	2522	113492
O	**Sub Total (O)**	**O=M+N**			**17466022**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**3143884**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1047961**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**188633**
S	**Sub Total (S)**	**S=O+P+Q+R**			**21846500**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**218465**
U	**Grand Total (U)= S+T**	**U=S+T**			**22064965**
				or say	**22064965**

4. Cost & Material Estimate for Defective Relay:

- **Background:**

TPWODL distributes power to consumers spread across more than 48000 sq kms of western Odisha. This is ensured by electrical assets covering more than 200+ Primary Substations spread across all the five circles it operates. Apart from these PSS, the organisation also maintains the 33 kV lines with associated infrastructure and LT distribution network comprising of distribution transformers. Reliable power can only be ensured by having a healthy equipment life which forms the backbone of the entire operation.

- **Necessity and Proposal:**

The various assets which are covered under the area of operations needs to have adequate and reliable protection equipment. Electrical protection is accorded to the various systems through the action of protective relays which senses the fault and ensures operation of the circuit breakers which in turn help in preventing untoward failures.

Protection philosophy has improved over the years with technological advancements. In this area, utilities are moving ahead from electromechanical relays and static relays to the new state of the art numerical relays. These numerical relays provide all the requisite protection and help in timely isolation of faults.

TPWODL has been upgrading the protection system by replacing the erstwhile electromechanical relays and static relays with the numerical relays. The replacement has and will have the following advantages:

- **Efficient Protection:**

The numerical relays encompass multiple protection into a single relay. These relays can be easily programmed to ensure that all the requisite protection can be achieved with the minimal number. Additionally, since these relays do not have any moving parts, drifting of settings also do not arise. Hence regular checks and balances can be avoided, and reliability of the system can be improved.

- **Increased Reliability:**

The new relays provide enough scope to ensure that relay coordination can be achieved across the power system. The use of these relays will help in reducing the interruptions caused due to uncoordinated tripping thereby helping in improving the reliability indices

of the organisation.

- **Fault Analysis:**

  As compared to erstwhile relays, the numerical relays have an inbuilt function of having Fault Disturbance Recorders (FDRs) which help in capturing, storing and retrieving of critical data during fault conditions. These data help the utility to carry out root cause analysis and take preventive actions as and when required.

- **Automation:**

  The numerical relays play a crucial role in the automation front. Presence of signals in the form of DI/DO/AI/AO helps in plugging the same and communicating with the automation plan. This helps in the easier integration of the system for remote operation and monitoring.

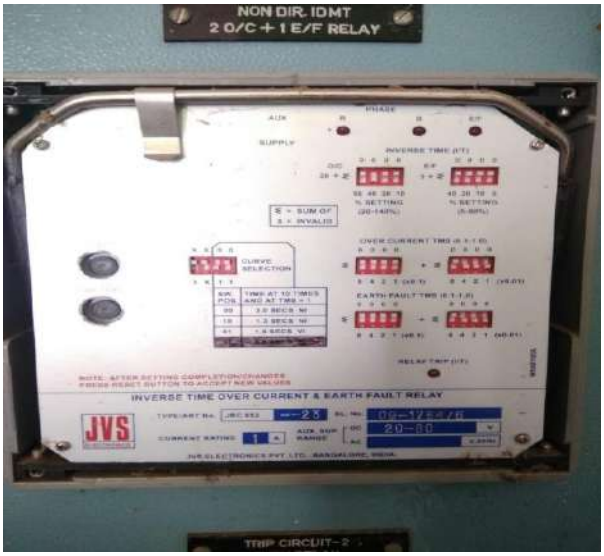
- **<u>Details of the requirement and Cost Breakup:</u>**

Kit Name	Total Cost
Numerical Relay (Overcurrent & E/F)	₹ 7500000
Transformer Differential Relay	₹ 2500000
Proposed amount	**₹ 1,00,00,000**

- **Photographs:**

  A few illustrative photographs of the relays slated for replacement under this proposal are enclosed.

Photographs of existing obsolete relays:



5. Cost & Material Estimate for Replacement of Indoor switchgear Protection Panel along with associated equipment:

S.No.	Description of work	UOM	FY24 Qty	Standard Estimate	Amount
1	Replacement of Indoor switchgear Protection Panel along with associated equipment	EA	2	1,00,00,000	2,00,00,000

Note: Tentative Amount considered for Estimate, estimated material and cost will be finalized after site visit and finalization of vendor.

6. Cost & Material Estimate for Replacement of station Transformer -33/0.4KV 100KVA:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**1993164**
(i)	**Transformer**				
1	100 KVA, 33/0.4 KV Trf.	Nos.	5	337280	1686400
(ii)	**Joist Pole**				
1	11 mtr RS Joist Pole	Nos.	10	30676.36	306764
C	**Cost of materials for Sub-Stations**	**C**			**1125480**
1	MS Channel 100x50x6mm	Kg.	966	80.6	77860
2	MS Channel 75x40x6mm	Kg.	214.2	80.6	17265
3	MS Angle 50x50x6mm	Kg.	108	80.6	8705
4	33 KV Polymer Disc Insulator B&S	Nos.	15	1785.38	26781
5	33 KVH/W fitting for Disc	Nos.	15	2082.77	31242

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
6	PG Clamp for 232 sqmm AAAC	Nos.	15	1426	21390
7	GI Flat 50x6mm	Kg	216	93.52	20201
8	GI Flat 25x6 mm	Kg	55.2	93.52	5163
9	33 KV A/B Switch (400 A,3 pole, Hz type)	Set	5	23646.16	118231
10	33 KV HG Fuse 3pole	Set	5	17062.4	85312
11	33KV Lightning Arrestor	No.	15	12834	192510
12	Conductor ACSR PVC (61.7sqmm)	Mtr.	100	73.55	7356
13	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	15	1302	19530
14	Pipe HDPE (25mm)	Mtr.	75	49.6	3720
16	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	115	1416.54	162902
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	10	260.4	2604
18	Dist Box with ACB (400A)	Nos.	5	52541.28	262706
19	Al Cable Socket 70mm	Nos.	340	18.6	6324
20	Al Cable Socket 300mm	Nos.	60	64.48	3869
21	G.I. Bolts, Nuts & Washers.	Kg.	100	96.72	9672
22	Material for masonry work for earth pit	No.	15	496	7440
23	Charcoal, Salt etc. for earthing.	No.	30	558	16740
24	GI Barbered wire for Anticlimbing	Kg.	10	99.2	992
25	Danger Plate	Nos.	10	99.2	992
26	Fabrication, Galvalisation	Kg.	1288.2	12.4	15974
D	**SUBTOTAL(D)**	**D=A+ B+C**			**3118643**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**93559**
F	**Sub Total (F)**	**F=D+ E**			**3212202**
G	**T&P @ 2% of F**	**G**	**2%**		**64244**
H	**Contingency @ 3% of F**	**H**	**3%**		**96366**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**240915**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**102648**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**115924**
M	**Sub Total (M)**	**M=F+ G+H+**			**3832300**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		I+J+K +L			
N	**Cost of Civil Works**	N			**27070**
1	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	10	2706.9831	27070
O	**Sub Total (O)**	O=M+ N			**3859370**
P	**Goods & Services Tax (GST) @18% of (O)=P**	P	**18%**		694687
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	Q	**6%**		231562
R	**Goods & Services Tax (GST) @18% of (Q)=R**	R	**18%**		41681
S	**Sub Total (S)**	S=O+ P+Q+ R			4827300
T	**Labour Cess @ 1% of S=T**	T	**1%**		48273
U	**Grand Total (U)= S+T**	U=S+ T			4875573
				or say	**4875573**

7. Cost & Material Estimate for 24V Battery:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	A			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	B			**0**
C	**Cost of Common Materials**	C			**1072117**
1	24 V Battery (2 X 12 Nos. Cells), 100 AHS (Make- Exide/Amaron)	Nos.	30	**35737**	1072117
D	**SUBTOTAL(D)**	D=A+B+C			**1072117**
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		32163
F	**Sub Total (F)**	F=D+E			1104280
G	T&P @ 2% of F	G	2%		
H	Contingency @ 3% of F	H	3%		
I	Transportation @ 7.5% of F	I	7.5%		82821
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		110428
M	Sub Total (M)	M=F+G+H+I+J+K+L			1297529
N	**Cost of Civil Works**	N			**0**
O	**Sub Total (O)**	**O=M+N**			**1297529**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		233555
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		77852
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		14013
S	**Sub Total (S)**	**S=O+P+Q+R**			1622949
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		16229
U	**Grand Total (U)= S+T**	**U=S+T**			1639179
				or say	**1639179**

8. Cost & Material Estimate for 24 V Battery Charger:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of Common Materials**	**C**			**5300700**
1	24 V, FW Control. 1 ph., 2 w Battery Booster (Make- Exide/Amaron)	Nos.	30	176690	5300700
D	**SUBTOTAL(D)**	**D=A+B+C**			**5300700**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**159021**
F	**Sub Total (F)**	**F=D+E**			**5459721**
G	**T&P @ 2% of F**	**G**	**2%**		**109194**
H	**Contingency @ 3% of F**	**H**	**3%**		**163792**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**409479**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**545972**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
M	Sub Total (M)	M=F+G+H+I+J+K+L			6688158
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			6688158
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		1203868
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		401289
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		72232
S	Sub Total (S)	S=O+P+Q+R			8365548
T	Labour Cess @ 1% of S=T	T	1%		83655
U	Grand Total (U)= S+T	U=S+T			8449204
or say					8449204

9. Cost & Material Estimate for 48V Battery:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of Common Materials	C			357430
1	48 V Battery (4 X 12 Nos. Cells), 100 AHS (Make- Exide/Amaron)	Nos.	5	71486	357430
D	SUBTOTAL(D)	D=A+B+C			357430
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		10723
F	Sub Total (F)	F=D+E			368153
G	T&P @ 2% of F	G	2%		7363
H	Contingency @ 3% of F	H	3%		11045
I	Transportation @ 7.5% of F	I	7.5 %		27611
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		36815

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
M	Sub Total (M)	M=F+G+H+I+J+K+L			450987
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			450987
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		81178
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		27059
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		4871
S	Sub Total (S)	S=O+P+Q+R			564095
T	Labour Cess @ 1% of S=T	T	1%		5641
U	Grand Total (U)= S+T	U=S+T			569736

10. Cost & Material Estimate for 48V Battery Charger:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of Common Materials	C			921080
1	48 V, FW Control. 1 ph., 2 w Battery Booster (Make- Exide/Amaron)	Nos.	5	184216	921080
D	SUBTOTAL(D)	D=A+B+C			921080
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		27632
F	Sub Total (F)	F=D+E			948712
G	T&P @ 2% of F	G	2%		18974
H	Contingency @ 3% of F	H	3%		28461
I	Transportation @ 7.5% of F	I	7.5%		71153
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		94871
M	Sub Total (M)	M=F+G+H+I+J+K+L			1162173

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			1162173
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		209191
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		69730
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		12551
S	Sub Total (S)	S=O+P+Q+R			1453646
T	Labour Cess @ 1% of S=T	T	1%		14536
U	Grand Total (U)= S+T	U=S+T			1468182
or say					1468182

11. Cost & Material Estimate for Automation/ Scada:

SCADA Automation:

TPWODL has procured SCADA and ADMS software Rs.15.3 Cr. As an inclusive solution in 3 years road map from FY 21-22, At present Main control center established in Burla and Back up control center has been established in Bhubaneswar, The SCADA solution FAT and GO Live has been completed in Mar-22 and SAT is under progress. ADMS implementation has been initiated & expected to complete in time bound manner.

FY H1 22-23, 93no's of 33/11KV PSS has been SCADA integrated and handing over process to PSCC under progress. The PSCC are monitoring and controlling 53 nos of PSS are centrally monitored and controlled from Power System Control Centre on 24*7 basis has been initiated.

Automation:

SCADA -Advanced Distribution Management System ("ADMS") and Automation

The much-awaited software Advanced Distribution Management System ("ADMS") is expected to be in services in Q4 of FY 2022-23. After implementation of SCADA-ADMS system TPWODL will set up one more benchmark towards the reliability and quality power supply to the consumers of western region of Odisha

Objectives:

- Automation of Rural PSS (Rural Digital Substation)

- Installation and integration of Fire Detection System in TPWODL PSS
- Installation and integration of WTI and OTI for power Transformers
- Implementation of Vehicle Tracking System
- Implementation of in-house Automation Lab.

a. Automation of Rural PSS (Rural Digital Substation):

Rural Digital Substation automation is a smart digital solution for the refurbishment of PSS with digital communication. In RDS Solution, very old CRP need to be replaced with small CRP which will be having all CRP functionalities and the same will be installed in Outdoor CT/CB whichever is feasible.

All these CRP will be communicating with RTU placed in Control center and the same will be communication with our Control Centre. TPWODL is planning to implement the RDS project for which order Rs. 21.94 Cr of capex commitment is expected in FY 23-24. Implementation of RDS will be done as an SITC which will include BA with micro-CRP conceptualization. This will be integrated to SCADA Control Centre for the control and monitoring of same.

We have a target to complete RDS implementation of 20 Nos. of PSS FY 23-24 and integrating the same to SCADA Control Centre and thereby fully controlling and monitoring of same.

b. Installation and integration of Fire Detection System in TPWODL PSS:

One of the most important safety factors for any PSS Substation is protection against fire. An elaborate system of fire protection shall be provided to fight as well as reduce any occurrence of fire within the Substation area. Currently all 33/11KV PSS do not have adequate fire protection and alarm system, fire detection is most important in substations, due to its dangerous nature. Traditional approach to monitor the system manually on daily basis, but with the latest technology in place it is recommended to go for preventive approach where in real time status of the system will be available centrally for monitoring.

To provide a proper fire detection and alarm system, it is proposed to implement the new system with integration to SCADA to report the status immediately to central control room.

TPWODL is planning to implement the FDS project for which order Rs. 3 Cr of Capex

commitment is expected in FY23-24 for 140 Nos. of PSS.

c. Installation and integration of WTI and OTI for power Transformers:

Oil and winding temperature are critical parameters that are measured in power and distribution transformers. Reliable and accurate temperature measurement ensures a longer life for your transformer and is crucial to maintaining the overall health of the asset.

TPWODL is planned to utilize oil and winding temperature indicators to provide alarm and control signals and integration of same will be done with SCADA system. Maintaining proper cooling controls can also extend the lifetime of the transformer past the typical life expectancy. Implementation is planned in phased manner, in FY23-24; we have considered 320 Nos of transformers.

TPWODL is planning to implement the WTI and OTI of Transformers for which order Rs. 2 Cr of Capex commitment is expected in FY23-24.

d. Implementation of Vehicle Tracking System:

A vehicle tracking system is an electronic device installed in a vehicle to enable the owner or a third party to track the vehicle's location. This project is proposed to design a vehicle tracking system that works using GPS and GSM technology, which would be the cheapest source of vehicle tracking and it would also work as anti-theft system. It is an embedded system which is used for tracking and positioning of any vehicle by using Global Positioning System (GPS) and Global system for mobile communication (GSM). This design will continuously monitor a moving Vehicle and report the status of the Vehicle on demand.

Benefits of VTS would include Improved Safety, Minimize Fuel Costs, Lower Operational Costs, Increased Productivity, Theft Recovery.

TPWODL is planning to implement Vehicle Tracking System for which order Rs. 1 Cr of Capex commitment is expected in FY23-24 for approximately 300 Nos. of Vehicle.

e. Implementation of In-House Automation Lab:

We have proposed for the implementation of In-house Automation Lab for the rectification of various equipment, operational and theoretical training to all our staff members providing easy solutions for the same. This will be of great help as well as advantages of the same will be significant. This will be helpful in also training our newly joined staff as well which would reduce conveyance cost cause the training would be

done in lab which would otherwise be done in site. We can reduce repairing cost (which was earlier repaired externally) of equipment like relays, RTU, power cards, DI/DO cards, MFMs and many more.

TPWODL is planning to construct an in-house automation lab for which order Rs. 1 Cr of Capex commitment is expected in FY23-24

Proposed Capital Expenditure Plan – FY 23-24 [13.5 Cr]

Sr. No	Item Details	Rs Cr
1	Automation of Rural PSS (Rural Digital Substation)	6.5
2	Fire Detection System (140 PSS)	3
3	WTI and OTI for Transformers (300 transformers)	2
4	Vehicle Tracking system (approx. 300 Vehicles)	1
5	Implementation of In-House Automation Lab	1
Total		**13.5**

12. Cost & Material Estimate for Roof top for Office/Building Lighting:

S.No.	Description of work	UOM	FY24 Qty	Standard Estimate	Amount
1	Construction of Roof top for Office/Building Lighting	EA	2	75,00,000	150,00,000.00

Note: Tentative Amount considered for Estimate, estimated material and cost will be finalized after site visit and finalization of vendor.

13. Cost & Material Estimate for High Mast/Lighting arrangement for PSS/Store

S.No.	Description of work	UOM	FY24 Qty	Standard Estimate	Amount
1	High Mast/Lighting arrangement for PSS/Store	EA	11	4,56,000	5,020,000.00

Note: Tentative Amount considered for Estimate, estimated material and cost will be finalized after site visit and finalization of vendor.

Annexure- 12 DPR for Replacement/ Addition of Network Component in 33KV & 11KV Line

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
3	Reliability	ii) Replacement/Addition of network component in 33KV & 11KV Line.	Refurbishment/Augmentation of old 11KV line along	17.01
			Refurbishment/Augmentation of old 33KV line	6.02
			Installation of 11KV & 33 KV FPI	0.98
			Installation of 11KV & 33 KV AB switches, Isolator & RMU	5.00
			Tower Replacement	0.98
			Railway X-ing using U/G Cable	1.03
			33KV & 11kV Auto Recloser & Sectionaliser/ AVR/Capacitor Bank/ Voltage Improvement Equipment	5.06

Summary with work covered with proposed quantity extimates:

S.No.	Description of work	UOM	FY23 Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	Refurbishment/Augmentation Line of 11 KV along 100 sqmm:	CKM	154.7	10,99,839	17,01,45,093
2	Refurbishment/Augmentation Line of 33KV along 232 sqmm:	CKM	33	18,25,470	6,02,37,995
3	33 KV FPI	EA	12	1,05,024	12,60,292
4	11 KV FPI	EA	102	83,751	85,42,646
5	11KV AB Switches	EA	200	50,023	1,00,04,671
6	33KV Isolator(1250A):	EA	73	2,26,702	1,65,49,270
7	11 KV Isolator (800 A)	EA	20	1,50,199	30,03,983
9	33 KV 4-way RMU	EA	2	48,59,516	97,19,031
10	11 KV 4-way RMU	EA	7	15,45,913	1,08,21,393

S.No.	Description of work	UOM	FY23 Qty	Standard Estimate (Rs.)	Amount (Rs.)
11	Tower Replacement	EA	3	33,00,000	98,00,000
12	33 KV line Railway Crossing Using 3CX400sqmm XLPE Cable	EA	5	11,06,921	55,34,604
13	11 KV line Railway Crossing Using 3CX400sqmm XLPE Cable	EA	5	9,66,482	48,32,410
14	11KV Auto Recloser	Nos.	7	7,72,257	54,05,799
15	11 KV Sectionaliser	Nos.	21	7,24,160	1,52,07,360
16	AVR	Nos.	2	1,25,00,000	2,50,00,000
17	Capacitor Bank	Nos.	2	25,00,000	50,00,000
	Total in Rs.				**37,10,64,547**

1. Cost & Material Estimate for Refurbishment/Augmentation Line of 11 KV along 100 sqmm:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles /Transformers**	**B**			**56935324**
1	11mtr RS Joist Pole	Nos.	1856	30676	56935324
C	**Cost of materials for line**	**C**			**45972786**
1	100 sqmm AAAC	Km.	487.305	68200	33234201
2	MS Channel 100x50x6mm	Kg	7116.20	81	573566
3	MS Channel 75x40x6mm	Kg	10519.60	81	847880
4	MS Angle 50x50x6mm	Kg	5569.20	81	448878
5	Fish Plate 50x6mm	Kg	613.00	115	70691
6	GI Flat 50x6mm	Kg	1893.53	93	176098
7	GI Flat 25x6mm	Kg	1390.50	93	129317
8	11 KV V- Cross Arm (MS) (10.2 Kg each)	No.	1547	1004	1553807
9	Back Clamp for 'V' Cross Arm (1.7kg)	No.	1547	99	153462
10	11 KV F Clamp 2.9 Kg. each	No.	1547	298	460387
11	11KV Disc Insulator (B & S), Polymer	No.	928	1426	1323328
12	11KV H/W Fitting (B & S type) for Disc Insulator	No.	928	434	402752
13	PG Clamp for 100Sqmm AAAC	No.	928	719	667418
14	11KV Pin Insulator, Polymer	No.	5105	248	1266040
15	H.T.Stay set complete	No.	928	1302	1208256
16	HT Stay Insulator	No.	928	62	57536

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
17	HT Stay Clamp	Pair	928	155	143840
18	7/10 SWG GI wire for stay	Kg.	5223	93	485739
19	7/8 SWG GI wire for earthing	Kg.	3323	93	309039
20	Earthing of support (Coil Type)	No.	1547	206	318434
21	40mm nominal bore GI Pipe earthing device	No.	309	1302	402318
22	Pipe HDPE	Mtr	927	50	45979
23	Aluminium Socket 70mm	No.	618	19	11495
24	Material for manosary work for earth pit	No.	309	496	153264
25	Charcoal, Salt etc	No.	618	558	344844
26	G.I. Nuts, bolt & Washer	Kg.	3558	97	344130
27	GI Barbered wire for anticlimbing	Kg.	3712	99	368230
28	Danger Plate	No.	1856	99	184115
29	Fabrication & Galvanisation	Kg.	23205	12	287742
D	**SUBTOTAL(D)**	**A+B+C**			**102908110**
E	Stock, Storage & Insurance @ 3% of D=E	**E**	3%		3087243
F	**Sub Total (F)**	**F=D+E**			**105995353**
G	T&P @ 2% of F	G	2%		2119907
H	Contingency @ 3% of F	H	3%		3179861
I	Transportation @ 7.5% of F	I	7.5%		7949651
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		2932169
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		4643251
M	Sub Total (M)	**M**=F+G+H+I+J+K+L			**126820193**
N	**Cost of Civil Works**	**N**			**7828156**
1	Concrete materials for stay anchor plate.	No.	928	1576	1462780
2	Cupping of pole (Including supply of materials)	No.	1856	2707	5024044
3	Cost of Dismentalling	CKm.	154.7	8671	1341333
O	**Sub Total (O)**	**O=M+N**			**134648349**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**24236703**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**8078901**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**1454202**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
S	Sub Total (S)	S=O+P+Q+R			168418155
T	Labour Cess @ 1% of S=T	T	1%		1684182
U	Grand Total (U)= S+T	U=S+T			170102336
				or say	170102336

2. Cost & Material Estimate for Refurbishment/Augmentation Line of 33KV along 232 sqmm:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				0
B	**Cost of RS Joist Poles**				12147894
1	11mtr RS Joist Pole	Nos.	396	30676.5	12147894
C	**Cost of materials for line**				24816197
1	232 sqmm AAAC for 33 KV line	Km.	103.95	194060.00	20172537
2	MS Channel 100x50x6mm	Kg	1700	80.60	137033
3	MS Channel 75x40x6mm	Kg	1257	80.60	101285
4	MS Angle 50x50x6mm	Kg	1188	80.60	95753
5	Fish Plate 50x6mm	Kg	131	115.32	15107
6	GI Flat 50x6mm	Kg	505	93.00	46965
7	GI Flat 25x6mm	Kg	297	93.00	27621
8	33 KV V- Cross Arm (MS)	No.	330	1959.20	646536
9	Back Clamp for 'V' Cross Arm	No.	330	186.00	61380
10	33 KV F Clamp	No.	330	372.00	122760
11	33KV Disc Insulator (B & S), Polymer	No.	594	1785.60	1060646
12	33KV H/W Fitting (B & S type) for Disc Insulator	No.	198	2083.20	412474
13	PG Clamp for 232Sqmm AAAC	No.	198	1426.00	282348
14	33KV Pin Insulator, Polymer	No.	1089	595.20	648173
15	H.T. Stay set complete	No.	198	1302.00	257796
16	HT Stay Insulator	No.	198	62.00	12276
17	HT Stay Clamp	Pair	198	155.00	30690
18	7/10 SWG GI wire for stay	Kg.	1114	93.00	103602
19	7/8 SWG GI wire for earthing	Kg.	710	93.00	66030
20	Earthing of support (Coil Type)	No.	330	205.84	67927
21	40mm nominal bore GI Pipe earthing device	No.	66	1302.00	85932
22	Pipe HDPE	Mtr	198	49.60	9821
23	Aluminium Socket 70mm	No.	132	18.60	2455
24	Material for manosary work for earth pit	No.	66	496.00	32736

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
25	Charcoal, Salt etc.	No.	132	558.00	73656
26	G.I. Nuts, bolt & Washer	Kg.	759	96.72	73410
27	GI Barbered wire for anticlimbing	Kg.	792	99.20	78566
28	Danger Plate	No.	396	99.20	39283
29	Fabrication & Galvanisation	Kg.	4145	12.40	51398
D	**SUBTOTAL(D)**	**D=A+B +C**			**36964091**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**1108923**
F	**Sub Total (F)**	**F=D+E**			**38073014**
G	**T&P @ 2% of F**	**G**	**2%**		**761460**
H	**Contingency @ 3% of F**	**H**	**3%**		**1142190**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**2855476**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**625617**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**2556068**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**46013825**
N	**Cost of Civil Works**	**N**			**1668922**
1	Concrete materials for stay anchor plate.	No.	198	1576.27	312102
2	Padding and concreting materials for support	No.	396	2706.92	1071940
3	**Dismantalling of Conductor**	**CKm.**	**33**	**8632.71**	**284879**
O	**Sub Total (O)**	**O=M+N**			**47682747**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**8582894**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**2860965**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**514974**
S	**Sub Total (S)**	**S=O+P +Q+R**			**59641579**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**596416**
U	**Grand Total (U)= S+T**	**U=S+T**			**60237995**
				or say	**60237995**

3. Cost & Material Estimate for 33 KV FPI:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of Common Materials	C			790658
1	FPI 33 KV	Nos.	12	65888	790658
D	SUBTOTAL(D)	D=A+B+C			790658
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		23720
F	Sub Total (F)	F=D+E			814377
G	T&P @ 2% of F	G	2%		16288
H	Contingency @ 3% of F	H	3%		24431
I	Transportation @ 7.5% of F	I	7.5%		61078
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		81438
M	Sub Total (M)	M=F+G+H+I+J+K+L			997612
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			997612
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		179570
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		59857
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		10774
S	Sub Total (S)	S=O+P+Q+R			1247813
T	Labour Cess @ 1% of S=T	T	1%		12478
U	Grand Total (U)= S+T	U=S+T			1260292
or say					1260292

4. Cost & Material Estimate for 11 KV FPI:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of Common Materials	C			5359322
1	FPI for 11 KV	Nos.	102	52542	5359322
D	SUBTOTAL(D)	D=A+B+C			5359322
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		160780
F	Sub Total (F)	F=D+E			5520102
G	T&P @ 2% of F	G	2%		110402
H	Contingency @ 3% of F	H	3%		165603
I	Transportation @ 7.5% of F	I	7.5%		414008
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		552010
M	Sub Total (M)	M=F+G+H+I+J+K+L			6762125
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			6762125
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		1217182
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		405727
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		73031
S	Sub Total (S)	S=O+P+Q+R			8458065
T	Labour Cess @ 1% of S=T	T	1%		84581
U	Grand Total (U)= S+T	U=S+T			8542646
or say					8542646

5. Cost & Material Estimate for 11KV AB Switches:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles/Transformers**	**B**			**0**
C	**Cost of materials for DP**	**C**			**6276539**
1	11KV AB Switch (400A)	Set	200	14694	2938800
2	MS Channel 75x40x6mm	Kg	19312	80.6	1556547
3	GI Flat 50x6mm	Kg	3840	93	357120
4	GI Flat 25x3mm	Kg	1200	93	111600
5	7/8 SWG GI wire for earthing	Kg.	2151	93	200043
6	40mm nominal bore GI Pipe earthing device	No.	200	1302	260400
7	Pipe HDPE	Mtr	600	49.6	29760
8	Aluminium Socket 150mm	No.	1200	37.2	44640
9	Aluminium Socket 70mm	No.	1200	18.6	22320
10	Material for manosary work for earth pit	No.	200	496	99200
11	Charcoal, Salt etc	No.	400	558	223200
12	G.I. Nuts, bolt & Washer	Kg.	2000	96.72	193440
13	Fabrication & Galvanisation	Kg.	19312	12.4	239469
D	**SUBTOTAL(D)**	**D=A+B+C**			**6276539**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**			**188296**
F	**Sub Total (F)**	**F=D+E**			**6464835**
G	**T&P @ 2% of F**	**G**			**129297**
H	**Contingency @ 3% of F**	**H**			**193945**
I	**Transportation @ 7.5% of F**	**I**			**484863**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**646484**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**7919423**
N	**Cost of Civil Works**	**N**			**0**
O	**Sub Total (O)**	**O=M+N**			**7919423**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**1425496**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**475165**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**			**85530**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
S	**Sub Total (S)**	**S=O+P+Q+R**			**9905614**
T	**Labour Cess @ 1% of S=T**	**T**			**99056**
U	**Grand Total (U)= S+T**	**U=S+T**			**10004671**
				or say	**10004671**

6. Cost & Material Estimate for 33KV Isolator(1250A):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles/Transformers**	**B**			**0**
C	**Cost of materials for DP**	**C**			**10382365**
1	33KV Isolator (1250A)	Set	73	125103.6	9132563
2	MS Channel 75x40x6mm	Kg	7446	80.6	600148
3	GI Flat 50x6mm	Kg	1402	93	130386
4	GI Flat 25x3mm	Kg	438	93	40734
5	7/8 SWG GI wire for earthing	Kg.	785	93	73005
6	40mm nominal bore GI Pipe earthing device	No.	73	1302	95046
7	Pipe HDPE	Mtr	219	49.6	10862
8	Aluminium Socket 150mm	No.	438	37.2	16294
9	Aluminium Socket 70mm	No.	146	18.6	2716
10	Material for manosary work for earth pit	No.	73	496	36208
11	Charcoal, Salt etc	No.	146	558	81468
12	G.I. Nuts, bolt & Washer	Kg.	730	96.72	70606
13	Fabrication & Galvanisation	Kg.	7446	12.4	92330
D	**SUBTOTAL(D)**	**D=A+B+C**			**10382365**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**			**311471**
F	**Sub Total (F)**	**F=D+E**			**10693836**
G	**T&P @ 2% of F**	**G**			**213877**
H	**Contingency @ 3% of F**	**H**			**320815**
I	**Transportation @ 7.5% of F**	**I**			**802038**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		1069384
M	Sub Total (M)	M=F+G+H+I+J+K+L			13099949
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			13099949
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		2357991
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		785997
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		141479
S	Sub Total (S)	S=O+P+Q+R			16385416
T	Labour Cess @ 1% of S=T	T			163854
U	Grand Total (U)= S+T	U=S+T			16549270
				or say	16549270

7. Cost & Material Estimate for 11 KV Isolator (800 A):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	A			0
B	**Cost of RS Joist Poles/Transformers**	B			0
C	**Cost of materials for DP**	C			1834610
1	11KV Isolator (800A)	Set	20.00	53617.6	1072352
2	Top Channel 100x50x6mm	Kg	1306.40	80.6	105296
3	Belting Channel 75x40x6mm	Kg	1985.60	80.6	160039
4	Bracing Angle 50x50x6mm	Kg	990.00	80.6	79794
5	Fish Plate 50x6mm	Kg	79.30	115.32	9144
6	GI Flat 50x6mm	Kg	384.00	93	35712
7	GI Flat 25x3mm	Kg	120.00	93	11160
10	PG Clamp for 100Sqmm AAAC	No.	120	719.2	86304
12	H.T. Stay set complete	No.	40.00	1302	52080
13	HT Stay Insulator	No.	40.00	62	2480
14	HT Stay Clamp	Pair	40.00	155	6200

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
15	7/10 SWG GI wire for stay	Kg.	225.00	93	20925
16	7/8 SWG GI wire for earthing	Kg.	215.00	93	19995
17	40mm nominal bore GI Pipe earthing device	No.	20.00	1302	26040
18	Pipe HDPE	Mtr	60	49.6	2976
19	Aluminium Socket 150mm	No.	120	37.2	4464
20	Aluminium Socket 70mm	No.	8.00	18.6	149
21	Material for manosary work for earth pit	No.	20.00	496	9920
22	Charcoal, Salt etc	No.	40.00	558	22320
23	G.I. Nuts, bolt & Washer	Kg.	560.00	96.72	54163
24	Fabrication & Galvanisation	Kg.	4282.00	12.4	53097
D	**SUBTOTAL(D)**	**D=A+B+C**			**1834610**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**55038**
F	**Sub Total (F)**	**F=D+E**			**1889649**
G	**T&P @ 2% of F**	**G**	**2%**		**37793**
H	**Contingency @ 3% of F**	**H**	**3%**		**56689**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**141724**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**188965**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**2314820**
N	**Cost of Civil Works**	**N**			**63051**
1	Concrete materials for stay anchor plate.	No.	40.00	1576.27	63051
O	**Sub Total (O)**	**O=M+N**			**2377871**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**428017**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**142672**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**25681**
S	**Sub Total (S)**	**S=O+P+Q+R**			**2974240**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
T	Labour Cess @ 1% of S=T	T	1%		29742
U	Grand Total (U)= S+T	U=S+T			3003983
				or say	3003983

8. Cost & Material Estimate for 33 KV 4-way RMU:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			
B	Cost of Transfomer/ Breaker/Joist Pole	B			5120000
1	33 KV RMU (4 way)	Nos.	2	2560000	5120000
(ii)	Joist Pole				
C	Cost of materials for Sub-Stations	C			1075362
1	33 KV 3Cx400 sqmm XLPE cable	Mtr	180	2520	453542
2	HDPE Pipe, 8", 10 Mtr, (Spec PE80-PN8, 200MM dia)	Mtr	40	2213.4	88536
3	33 KV O/D jointing kit for three core 400sqmm XLPE cable	Set	8	41236	329890
4	33 KV I/D jointing kit for three core 400sqmm XLPE cable	Set	8	25424	203394
D	SUBTOTAL(D)	D=A+B+C			6195362
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		185861
F	Sub Total (F)	F=D+E			6381223
G	T&P @ 2% of F	G	2%		127624
H	Contingency @ 3% of F	H	3%		191437
I	Transportation @ 7.5% of F	I	7.5%		478592
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		263680
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		110762
M	Sub Total (M)	M=F+G+H+I+J+K+L			7553319

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
N	Cost of Civil Works	N	2	70000.00	140000
O	Sub Total (O)	O=M+N			7693319
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		1384797
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		461599
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		83088
S	Sub Total (S)	S=O+P+Q+R			9622803
T	Labour Cess @ 1% of S=T	T	1%		96228
U	Grand Total (U)= S+T	U=S+T			9719031
or say					9719031

9. Cost & Material Estimate for 11 KV 3-way RMU:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of materials for Sub-Stations	C			6345091
1	11 KV RMU (3 way)	Nos.	7	732000.00	5124000
2	11 KV 3C 300 sqmm XLPE cable	Mtr	420	1481.80	622356
3	11 KV O/D jointing kit for three core 300sqmm XLPE cable	Set	21	16392.80	344249
4	11 KV I/D jointing kit for three core 300sqmm XLPE cable	Set	21	11250.37	236258
5	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	14	1302.00	18228
D	SUBTOTAL(D)	D=A+B+C			6345091
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		190353
F	Sub Total (F)	F=D+E			6535443
G	T&P @ 2% of F	G	2%		130709
H	Contingency @ 3% of F	H	3%		196063
I	Transportation @ 7.5% of F	I	7.5%		490158
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		653544
M	Sub Total (M)	M=F+G+H+I+J+K+L			8005918
N	Cost of Civil Works	N	7	80000.00	560000
O	Sub Total (O)	O=M+N			8565918
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		1541865
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		513955
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		92512
S	Sub Total (S)	S=O+P+Q+R			10714250
T	Labour Cess @ 1% of S=T	T	1%		107143
U	Grand Total (U)= S+T	U=S+T			10821393
or say					10821393

10. Cost & Material Estimate for Tower Replacement:

S.No.	Description of work	UOM	FY24 Qty	Standard Estimate	Amount
1	Construction of New Tower/Replacement of Existing Tower	EA	3	33,00,000	98,00,000.00

Note: Tentative Amount considered for Estimate, estimated material and cost will be finalized after site visit and finalization of vendor.

Defective Towers in TPWODL 33kV Network:

33kV Joda Tensa Line:

1) 33kV Joda Tensa Line emanating from OPTCL 220/132/33kV Joda Grid Sub Station is feeding 33/11kV Tensa PSS and 33/11kV Koira PSS.
2) 33kV Joda Tensa line length is approx. 45km and T of towards Koira PSS is at 38km from Joda GSS.

3) The entire 45km line is crossing through dense Reserve Forest, Ghat & Hilly mining areas.

4) This line is limelight for Koira, Tensa and other Industrial consumers in the entire mining region. As of today, there is no n-1 scheme for this line. No other 33kV line is added in this area due to dense forest, ghat & hilly area.

5) This line is feeding power supply to approx. 10,000 consumers under Koira Block and feeding power supply to Industrial consumers in Tensa & Koira Mining area.

6) Joda Tensa line was commissioned way back in 1960s (Line is in service from last 62yrs). This line consists of 136 no. of 66kV rated Transmission Towers.

Observations for 33kV Joda Tensa Line:

1) Being a very old Line, 33kV Joda Tensa Line Tower structures are getting corroded & in damaged condition. Same need to be repaired in urgent basis.

2) There is frequent theft of structural materials (Tower legs, Cross Bracings etc.) in this line by miscreants inside the dense forest & hilly areas.

3) Line Conductors & Hardware fittings are also very old & same need to be replaced.

4) Tower structural strength and civil foundation need to be analysed.

5) The entire line (136 Transmission Towers) is passing through dense reserve forest, ghat & hilly area, hence line patrolling & maintenance is getting difficult. Dedicated line team (expert in Tower maintenance) need to be allocated for this area.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Observations related to 33kV River crossing critical Towers & Lines:

In Western part of Odisha, we got many big rivers like Mahanadi, Brahmani, Eib, Ang, Tel, Suktel, Hati etc. In TPWODL network, there are 61 no. of river crossing critical towers which are feeding 33kV power supply to various locations in western part of Odisha. These river crossing towers are very critical for our 33kV network point of view. Every year flooding of these major rivers is a great concern for our 33kV network.

Observations related to 33kV River crossing critical Towers and Lines

1. Most of the river crossing Towers are very old and need urgent refurbishment & repair work.
2. At some locations of Mahanadi River at Hirakud, Jharsuguda and Sonepur area Tower strength analysis need to be done as towers are located inside the river within water.
3. We have some 33kV lines crossing big rivers in poles/DP arrangement only. These 33kV lines need to be shifted to Transmission Towers at River crossing locations.
4. In most of the old Towers structural parts are getting corroded & are in damaged condition. There is frequent theft of structural materials (Tower legs, Cross Bracings etc.)
5. Tower foundation stub setting, couping of stub and Tower Earthing is also required for most of these Towers.
6. Earth wire also required to be erected for some of big river crossing Towers.
7. Intermediate new Tower need to be constructed in some of the river crossing locations where span length of between two river crossing tower is around 900mt. In this location sag of conductors is very high.

11. Cost & Material Estimate for 33 KV line Railway Crossing Using 3CX400sqmm XLPE Cable:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				**0**
B	**Cost of RS Joist Poles**				**613527**
1	11 mtr RS Joist Pole	Nos.	20	30676.36	613527
C	**Cost of materials for DP**				**3104515**
1	HDPE Pipe, 8", 10 Mtr, (Spec PE80-PN8, 200MM dia)	Mtr	500	2213.40	1106700
2	33 KV 3C 400sqmm XLPE cable	Mtr	600	2519.68	1511808
3	33KV O/D jointing kit for three core 400sqmm XLPE cable	No.	10	41236.20	412362
4	MS Channel 100x50x6mm	Kg.	386.4	80.60	31144
5	MS Angle 50x50x6mm	Kg.	135	80.60	10881
6	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	10	1302.00	13020
7	Pipe GI (100mm)	Mtr.	30	620	18600
D	**SUBTOTAL(D)**	**D=A+B+C**			**3718042**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**111541**
F	**Sub Total (F)**	**F=D+E**			**3829583**
G	**T&P @ 2% of F**	**G**	**2%**		**76592**
H	**Contingency @ 3% of F**	**H**	**3%**		**114887**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**8617**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**31597**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**319765**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**4381041**
N	**Cost of Civil Works**	**N**			**0**
O	**Sub Total (O)**	**O=M+N**			**4381041**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		788587
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		262862
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		47315
S	Sub Total (S)	S=O+P+ Q+R			5479806
T	Labour Cess @ 1% of S=T	T	1%		54798
U	Grand Total (U)= S+T	U=S+T			5534604
				or say	5534604

12. Cost & Material Estimate for 11 KV line Railway Crossing Using 3CX400sqmm XLPE Cable:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles				0
B	Cost of RS Joist Poles				613527
1	11 mtr RS Joist Pole	Nos.	20	30676.36	613527
C	Cost of materials for DP				2636172
1	HDPE Pipe, 8", 10 Mtr, (Spec PE80-PN8, 200MM dia)	Mtr	500	2213.40	1106700
2	11 KV 3C 300sqmm XLPE cable	Mtr	600	2063.26	1237955
3	11KV O/D jointing kit for three core 300sqmm XLPE cable	No.	10	22825.33	228253
4	MS Channel 100x50x6mm	Kg.	257.6	80.60	20763
5	MS Angle 50x50x6mm	Kg.	135	80.6	10881
6	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	10	1302.00	13020
7	Pipe GI (100mm)	Mtr.	30	620	18600
D	SUBTOTAL(D)	D=A+B+C			3249699
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		97491
F	Sub Total (F)	F=D+E			3347190
G	T&P @ 2% of F	G	2%		66944
H	Contingency @ 3% of F	H	3%		100416
I	Transportation @ 7.5% of F	I	8%		7531
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		31597
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		271526
M	Sub Total (M)	M=F+G+H+I+J+K+L			3825203
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			3825203
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		688537
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		229512
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		41312
S	Sub Total (S)	S=O+P+Q+R			4784564
T	Labour Cess @ 1% of S=T	T	1%		47846
U	Grand Total (U)= S+T	U=S+T			4832410
				or say	4832410

13. Cost & Material Estimate for 11KV Auto Recloser:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of materials for Sub-Stations	C			3391387
1	11 KV Auto Reclosure	Nos.	7	476993.00	3338951
2	Pipe HDPE (25mm)	Mtr.	42	49.60	2083
3	100sqmm Covered Conductor	Km.	0.105	155000.00	16275
4	PG Clamp	Nos.	42	719.20	30206
5	Al Cable Socket 185 mm	Nos.	42	43.40	1823
6	G.I. Bolts, Nuts & Washers.	Kg.	14	96.72	1354
7	Danger Plate	Nos.	7	99.20	694
D	SUBTOTAL(D)	D=A+B+C			3391387
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		101742
F	Sub Total (F)	F=D+E			3493128
G	T&P @ 2% of F	G	2%		69863

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
H	Contingency @ 3% of F	H	3%		104794
I	Transportation @ 7.5% of F	I	7.5%		261985
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		349313
M	Sub Total (M)	M=F+G+H+I+J+K+L			4279082
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			4279082
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		770235
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		256745
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		46214
S	Sub Total (S)	S=O+P+Q+R			5352276
T	Labour Cess @ 1% of S=T	T	1%		53523
U	Grand Total (U)= S+T	U=S+T			5405799
or say					5405799

14. Cost & Material Estimate for 11 KV Sectionaliser:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			0
C	Cost of materials for Sub-Stations	C			9540503
1	11 KV Sectionaliser	Nos.	21	443728.00	9318288
2	GI Flat 50x6mm	Kg	504	93.53	47137
3	GI Flat 25x6 mm	Kg	403	93.53	37691
4	100sqmm Covered Conductor	Km.	0.315	111600.00	35154
5	PG Clamp	Nos.	126	719.20	90619
6	Al Cable Socket 185 mm	Nos.	126	43.40	5468
7	G.I. Bolts, Nuts & Washers.	Kg.	42	96.72	4062
8	Danger Plate	Nos.	21	99.20	2083
D	SUBTOTAL(D)	D=A+B+C			9540503

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		286215
F	Sub Total (F)	F=D+E			9826718
G	T&P @ 2% of F	G	2%		196534
H	Contingency @ 3% of F	H	3%		294802
I	Transportation @ 7.5% of F	I	7.5%		737004
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		0
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		982672
M	Sub Total (M)	M=F+G+H+I+J+K+L			12037729
N	Cost of Civil Works	N			0
O	Sub Total (O)	O=M+N			12037729
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		2166791
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		722264
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		130007
S	Sub Total (S)	S=O+P+Q+R			15056792
T	Labour Cess @ 1% of S=T	T	1%		150568
U	Grand Total (U)= S+T	U=S+T			15207360
or say					15207360

Installation of AVR & Capacitor Bank

S.No.	Description of work	UOM	Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	AVR	Nos.	2	1,25,00,000	2,50,00,000
2	Capacitor Bank	Nos.	2	25,00,000	50,00,000
	Total in Rs.				**3,00,00,000**

Annexure- 13 DPR for Replacement/ Addition of Network component in distribution substation

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
3	Reliability	iii) Replacement/Addition of network component in Distribution Substation.	Refurbishment of above 100 KVA DTR along with LT Protection, Earthing etc. (Other than Augmentation)	10.03

Summary with work covered with proposed quantity and extimates:

S.No.	Description of work	UOM	FY23 Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	Refurbishment of 100 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	140	2,40,000	3,36,00,068
2	Refurbishment of 250 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	70	2,73,922	1,91,74,556
3	Refurbishment of 315 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	60	3,82,259	2,29,35,562
4	Refurbishment of 500 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	50	3,90,672	1,95,33,607
5	Refurbishment of 750 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	5	4,76,990	23,84,949
6	Refurbishment of 1MVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch)	Nos.	5	5,19,467	25,97,333
	Total in Rs.				**10,02,26,075**

1.Cost & Material Estimate for Refurbishment of 100 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**520800**
1	9 mtr long, 300 Kg PSC Pole	Nos.	140	3720	520800
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**20215696**
1	MS Channel 75x40x6mm	Kg.	25760	81	2076256
2	MS Angle 50x50x6mm	Kg.	7938	81	639803
3	PG Clamp for 100sqmm AAAC	Nos.	840	719	604128
4	GI Flat 50x6mm	Kg	6048	94	565642
5	Gl Flat 25x6 mm	Kg	1546	94	144590
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	140	14694	2057160
7	11KV DD Fuse 3pole	Set	140	5832	816504
8	DD Fuse Link Unit(10A)	Nos.	420	138	57809
9	11KV Lightning Arrestor	No.	420	4402	1848840
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	2800	74	205966
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	420	1302	546840
12	Earthing of support (Coil type)	Nos.	140	206	28818
13	Pipe HDPE (25mm)	Mtr.	2100	50	104160
14	Pipe GI (100mm)	Mtr.	420	620	260400
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	3220	1417	4561266
16	1C 300sqmm LT XLPE	Mtr.	4480	474	2122086
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	560	260	145824
18	Dist Box with TP MCCB (100KVA/160A)	Nos.	140	11664	1633017
19	Al Cable Socket 70mm	Nos.	9520	19	177072
20	Al Cable Socket 300mm	Nos.	2240	64	144435
21	G.I. Bolts, Nuts & Washers.	Kg.	3500	97	338520
22	Material for masonry work for earth pit	No.	420	496	208320
23	Charcoal, Salt etc. for earthing.	No.	840	558	468720
24	GI Barbered wire for Anticlimbing	Kg.	280	99	27776
25	Danger Plate	Nos.	140	99	13888
26	Fabrication, Galvalisation	Kg.	33698	12	417855
D	**SUBTOTAL(D)**	**D=A+ B+C**			**20736496**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**622095**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
F	**Sub Total (F)**	**F=D+E**			**21358590**
G	**T&P @ 2% of F**	**G**	**2%**		**427172**
H	**Contingency @ 3% of F**	**H**	**3%**		**640758**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**1601894**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**107285**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**2082217**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**26217916**
N	**Cost of Civil Works**	**N**			**378978**
1	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	140	2707	378978
O	**Sub Total (O)**	**O=M+N**			**26596893**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**4787441**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1595814**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**287246**
S	**Sub Total (S)**	**S=O+P+Q+R**			**33267394**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**332674**
U	**Grand Total (U)= S+T**	**U=S+T**			**33600068**
or say					**33600068**

2.Cost & Material Estimate for Refurbishment of 250 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**260400**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	70	3720	260400
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**10765353**
1	MS Channel 75x40x6mm	Kg.	12900	81	1039740
2	MS Angle 50x50x6mm	Kg.	1890	81	152334
3	PG Clamp for 100sqmm AAAC	Nos.	420	719	302064
4	GI Flat 50x6mm	Kg	3024	94	282821
5	Gl Flat 25x6 mm	Kg	772.8	94	72276
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	70	14694	1028580
7	11KV DD Fuse 3pole	Set	70	5832	408252
8	DD Fuse Link Unit(20A)	Nos.	210	138	28904
9	11KV Lightning Arrestor	No.	210	4402	924420
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	1400	74	102983
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	210	1302	273420
12	Earthing of support (Coil type)	Nos.	70	206	14409
13	Pipe HDPE (25mm)	Mtr.	1050	50	52080
14	Pipe GI (100mm)	Mtr.	210	620	130200
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	1610	1417	2280633
16	1C 400sqmm LT XPLE	Mtr.	2240	594	1330470
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	280	260	72912
18	Dist Box with MCCB, 400A	Nos.	70	20800	1455984
19	Al Cable Socket 70mm	Nos.	3360	19	62496
20	Al Cable Socket 300mm	Nos.	1120	64	72218
21	G.I. Bolts, Nuts & Washers.	Kg.	1400	97	135408
22	Material for masonry work for earth pit	No.	210	496	104160
23	Charcoal, Salt etc. for earthing.	No.	420	558	234360
24	GI Barbered wire for Anticlimbing	Kg.	140	99	13888
25	Danger Plate	Nos.	70	99	6944
26	Fabrication, Galvalisation	Kg.	14790	12	183396

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
D	**SUBTOTAL(D)**	**D=A+B+C**			**11025753**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**330773**
F	**Sub Total (F)**	**F=D+E**			**11356525**
G	**T&P @ 2% of F**	**G**	**2%**		**227131**
H	**Contingency @ 3% of F**	**H**	**3%**		**340696**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**851739**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**53642**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1108831**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**13938565**
N	**Cost of Civil Works**	**N**			**1239489**
1	Plinth Repair	No	70	15000	1050000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	70	2707	189489
O	**Sub Total (O)**	**O=M+N**			**15178054**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2732050**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**910683**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**163923**
S	**Sub Total (S)**	**S=O+P+Q+R**			**18984709**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**189847**
U	**Grand Total (U)= S+T**	**U=S+T**			**19174556**
or say					**19174556**

3.Cost & Material Estimate for Refurbishment of 315 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**223200**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	60	3720	223200
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**13305434**
1	MS Channel 75x40x6mm	Kg.	11114.8	81	895853
2	MS Angle 50x50x6mm	Kg.	1620	81	130572
3	PG Clamp for 100sqmm AAAC	Nos.	360	719	258912
4	GI Flat 50x6mm	Kg	2592	94	242418
5	Gl Flat 25x6 mm	Kg	662.4	94	61951
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	60	14694	881640
7	11KV DD Fuse 3pole	Set	60	5832	349930
8	DD Fuse Link Unit(20A)	Nos.	180	138	24775
9	11KV Lightning Arrestor	No.	180	4402	792360
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	1200	74	88271
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	300	1302	390600
12	Earthing of support (Coil type)	Nos.	60	206	12350
13	Pipe HDPE (25mm)	Mtr.	900	50	44640
14	Pipe GI (100mm)	Mtr.	360	620	223200
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	2760	1417	3909657
16	1C 630sqmm LT XPLE	Mtr.	1920	788	1513220
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	240	260	62496
18	Dist Box with TP ACB, 400A	Nos.	120	20800	2495972
19	Al Cable Socket 70mm	Nos.	4800	19	89280
20	Al Cable Socket 630mm	Nos.	960	64	61901
21	G.I. Bolts, Nuts & Washers.	Kg.	1200	97	116064
22	Material for masonry work for earth pit	No.	300	496	148800
23	Charcoal, Salt etc. for earthing.	No.	600	558	334800
24	GI Barbered wire for Anticlimbing	Kg.	120	99	11904
25	Danger Plate	Nos.	60	99	5952
26	Fabrication, Galvalisation	Kg.	12735	12	157914
D	**SUBTOTAL(D)**	**D=A+B+C**			**13528634**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**405859**
F	**Sub Total (F)**	**F=D+E**			**13934493**
G	**T&P @ 2% of F**	**G**	**2%**		**278690**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
H	**Contingency @ 3% of F**	**H**	**3%**		**418035**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**1045087**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**45979**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1370460**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**17092743**
N	**Cost of Civil Works**	**N**			**1062419**
1	Repair of Plinth	No	60	15000	900000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	60	2707	162419
O	**Sub Total (O)**	**O=M+N**			**18155162**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**3267929**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1089310**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**196076**
S	**Sub Total (S)**	**S=O+P+Q+R**			**22708477**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**227085**
U	**Grand Total (U)= S+T**	**U=S+T**			**22935562**
or say					**22935562**

4.Cost & Material Estimate for Refurbishment of 500 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**186000**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	50	3720	186000
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**11351754**

Capex plan for FY 23-24

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	MS Channel 75x40x6mm	Kg.	12100	81	975260
2	MS Angle 50x50x6mm	Kg.	1350	81	108810
3	PG Clamp for 100sqmm AAAC	Nos.	300	719	215760
4	GI Flat 50x6mm	Kg	2160	94	202015
5	GI Flat 25x6 mm	Kg	552	94	51626
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	50	14694	734700
7	11KV DD Fuse 3pole	Set	50	5832	291600
8	DD Fuse Link Unit(20A)	Nos.	150	138	20646
9	11KV Lightning Arrestor	No.	150	4402	660300
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	1000	74	73559
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	250	1302	325500
12	Earthing of support (Coil type)	Nos.	50	206	10292
13	Pipe HDPE (25mm)	Mtr.	750	50	37200
14	Pipe GI (100mm)	Mtr.	300	620	186000
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	2300	1417	3258047
16	1C 630sqmm LT XPLE	Mtr.	1600	788	1261017
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	200	260	52080
18	Dist Box with TP ACB, 400A	Nos.	100	20800	2079977
19	Al Cable Socket 70mm	Nos.	4000	19	74400
20	Al Cable Socket 630mm	Nos.	800	64	51584
21	G.I. Bolts, Nuts & Washers.	Kg.	1000	97	96720
22	Material for masonry work for earth pit	No.	250	496	124000
23	Charcoal, Salt etc. for earthing.	No.	500	558	279000
24	GI Barbered wire for Anticlimbing	Kg.	100	99	9920
25	Danger Plate	Nos.	50	99	4960
26	Fabrication, Galvalisation	Kg.	13450	12	166780
D	**SUBTOTAL(D)**	**D=A+B+C**			**11537754**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**346133**
F	**Sub Total (F)**	**F=D+E**			**11883886**
G	**T&P @ 2% of F**	**G**	**2%**		**237678**
H	**Contingency @ 3% of F**	**H**	**3%**		**356517**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**891291**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**38316**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1169231**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**14576919**
N	**Cost of Civil Works**	**N**			**885349**
1	Repair of Plinth	No	50	15000	750000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	50	2707	135349
O	**Sub Total (O)**	**O=M+N**			**15462268**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2783208**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**927736**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**166992**
S	**Sub Total (S)**	**S=O+P+Q+R**			**19340205**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**193402**
U	**Grand Total (U)= S+T**	**U=S+T**			**19533607**
or say					**19533607**

5.Cost & Material Estimate for Refurbishment of 750 KVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**37200**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	10	3720	37200
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**1375092**
1	MS Channel 75x40x6mm	Kg.	1491.4	81	120207
2	MS Angle 50x50x6mm	Kg.	135	81	10881
3	PG Clamp for 100sqmm AAAC	Nos.	30	719	21576
4	GI Flat 50x6mm	Kg	216	94	20201
5	GI Flat 25x6 mm	Kg	55.2	94	5163
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	5	14694	73470
7	11KV DD Fuse 3pole	Set	5	5832	29161
8	DD Fuse Link Unit(20A)	Nos.	15	138	2065
9	11KV Lightning Arrestor	No.	15	4402	66030

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	100	74	7356
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	25	1302	32550
12	Earthing of support (Coil type)	Nos.	10	206	2058
13	Pipe HDPE (25mm)	Mtr.	75	50	3720
14	Pipe GI (100mm)	Mtr.	45	620	27900
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	315	1417	446211
16	1C 630sqmm LT XPLE	Mtr.	250	788	197034
17	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	20	260	5208
18	Dist Box with TP ACB, 400A	Nos.	10	20800	207998
19	Al Cable Socket 70mm	Nos.	900	19	16740
20	Al Cable Socket 630mm	Nos.	100	64	6448
21	G.I. Bolts, Nuts & Washers.	Kg.	100	97	9672
22	Material for masonry work for earth pit	No.	25	496	12400
23	Charcoal, Salt etc. for earthing.	No.	50	558	27900
24	GI Barbered wire for Anticlimbing	Kg.	20	99	1984
25	Danger Plate	Nos.	10	99	992
26	Fabrication, Galvalisation	Kg.	1626.4	12	20167
D	**SUBTOTAL(D)**	**D=A+B+C**			**1412292**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**42369**
F	**Sub Total (F)**	**F=D+E**			**1454660**
G	**T&P @ 2% of F**	**G**	**2%**		**29093**
H	**Contingency @ 3% of F**	**H**	**3%**		**43640**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**109100**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**7663**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**141634**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**1785790**
N	**Cost of Civil Works**	**N**			**102070**
1	Repair of Plinth	No	5	15000	75000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	10	2707	27070
O	**Sub Total (O)**	**O=M+N**			**1887860**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**339815**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**113272**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**20389**
S	**Sub Total (S)**	**S=O+P+Q+R**			**2361336**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**23613**
U	**Grand Total (U)= S+T**	**U=S+T**			**2384949**
or say					**2384949**

6.Cost & Material Estimate for Refurbishment of 1MVA DTR along with LT Protection, Earthing etc. (All Material Included ACB, MCCB, AB Switch):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**37200**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	10	3720	37200
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**0**
C	**Cost of materials for Sub-Stations**	**C**			**1508333**
1	MS Channel 75x40x6mm	Kg.	921.4	81	74265
2	MS Angle 50x50x6mm	Kg.	135	81	10881
3	PG Clamp for 100sqmm AAAC	Nos.	30	719	21576
4	GI Flat 50x6mm	Kg	216	94	20201
5	GI Flat 25x6 mm	Kg	55.2	94	5163
6	11KV A/B Switch (400 A,3 pole, Hz type)	Set	5	14694	73470
7	11KV DD Fuse 3pole	Set	5	5832	29161
8	DD Fuse Link Unit(20A)	Nos.	15	138	2065
9	11KV Lightning Arrestor	No.	15	4402	66030
10	Conductor ACSR PVC (61.7sqmm)	Mtr.	100	74	7356
11	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	25	1302	32550
12	Earthing of support (Coil type)	Nos.	10	206	2058
13	Pipe HDPE (25mm)	Mtr.	75	50	3720
14	Pipe GI (100mm)	Mtr.	60	620	37200
15	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	415	1417	587865
16	1C 630sqmm LT XPLE	Mtr.	300	788	236441
17	Gland for arm (4Cx630sqmm XLPE Cable)	Nos.	20	260	5208
18	Dist Box with TP ACB, 400A	Nos.	10	20800	207998
19	Al Cable Socket 70mm	Nos.	350	19	6510

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.) (FY21-22)	Amount (Rs.)
20	Al Cable Socket 630mm	Nos.	120	64	7738
21	G.I. Bolts, Nuts & Washers.	Kg.	150	97	14508
22	Material for masonry work for earth pit	No.	25	496	12400
23	Charcoal, Salt etc. for earthing.	No.	50	558	27900
24	GI Barbered wire for Anticlimbing	Kg.	20	99	1984
25	Danger Plate	Nos.	10	99	992
26	Fabrication, Galvalisation	Kg.	1056	12	13094
D	**SUBTOTAL(D)**	**D=A+B+C**			**1545533**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**46366**
F	**Sub Total (F)**	**F=D+E**			**1591899**
G	**T&P @ 2% of F**	**G**	**2%**		**31838**
H	**Contingency @ 3% of F**	**H**	**3%**		**47757**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**119392**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**7663**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**155358**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**1953908**
N	**Cost of Civil Works**	**N**			**102070**
1	Repair of Plinth	No	5	15000	75000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	10	2707	27070
O	**Sub Total (O)**	**O=M+N**			**2055978**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**370076**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**123359**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**22205**
S	**Sub Total (S)**	**S=O+P+Q+R**			**2571617**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**25716**
U	**Grand Total (U)= S+T**	**U=S+T**			**2597333**
or say					**2597333**

Annexure- 14 DPR for Network enhancement/ unforeseen emergency

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
4	Load Growth	i) Network enhancement / Unforeseen emergency.	Construction of 33 KV New/Link Line	8.87
			Construction of 11KV New/ Link Line	8.16
			Construction of new PSS.	18.00
			Addition/Augmentation of PTR of various ratings	3.87
			Addition/Augmentation of DTR of various ratings	19.93
			Addition of New LT ABC Network	8.99
	Sub Total- Load Growth			**67.82**

Summary with work covered with proposed quantity and extimates:

S.No.	Description of work	UOM	Qty	Standard Estimate (Rs.)	Amount (Rs.)
1	33 KV New Line 232sqmm	CKM	24	27,30,765	6,55,38,348
2	33KV New line of 3X400sqmm XLPE cable	KM	3	77,30,142	2,31,90,425
3	11KV New Line with 100sqmm	CKM	65	17,12,959	11,13,42,347
4	11 KV Line with 3CX300sqmm	KM	3	67,42,658	2,02,27,974
5	Estimate for PSS	Nos.	2	9,00,00,000	1,800
6	5 MVA PTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	2	83,33,398	1,66,66,796
7	8 MVA PTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	2	1,09,96,114	2,19,92,228
8	63 KVA DTR, 11/0.4 KV Sub Station (New)	Nos.	10	6,91,538	69,15,381
9	25KVA DTR, 11/0.4 KV Sub Station (Augmentation from Single phase to 3 phase)	Nos.	50	4,94,630	2,47,31,478
10	63 KVA DTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	30	4,38,689	1,31,60,661
11	63 KVA DTR, 11/0.4 KV Sub Station (Augmentation from Single phase to 3 phase)	Nos.	160	6,21,186	9,93,89,796
12	250 KVA DTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	21	9,05,380	1,90,12,983

S.No.	Description of work	UOM	Qty	Standard Estimate (Rs.)	Amount (Rs.)
13	500 KVA DTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	20	15,29,505	3,05,90,106
14	750 KVA DTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	20	23,19,774	4,63,95,471
15	1 MVA DTR, 11/0.4 KV Sub Station (Augmentation)	Nos.	3	30,67,311	92,01,932
16	LT New Line with 95 sqmm cable	KM	73	10,42,202	7,57,18,814
17	LT New Line 120 sqmm cable	KM	10	14,23,931	1,42,39,307

1. Cost & Material Estimate for 33 KV New Line 232sqmm:

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of RS Joist Poles**	**B**			**19142049**
1	13mtr RS Joist Pole	Nos.	528	36253.88	19142049
C	**Cost of materials for line**	**C**			**21262910**
1	232 sqmm AAAC for 33 KV line	Km.	75.6	194060.00	14670936
2	MS Channel 100x50x6mm	Kg	2473	80.60	199324
3	MS Channel 75x40x6mm	Kg	1828	80.60	147337
4	MS Angle 50x50x6mm	Kg	1728	80.60	139277
5	Fish Plate 50x6mm	Kg	190	115.32	21911
6	GI Flat 50x6mm	Kg	734	93.00	68262
7	GI Flat 25x6mm	Kg	432	93.00	40176
8	33 KV V- Cross Arm (MS)	No.	432	1959.20	846374
9	Back Clamp for 'V' Cross Arm	No.	432	186.00	80352
10	33 KV F Clamp	No.	432	372.00	160704
11	33KV Disc Insulator (B & S), Polymer	No.	864	1785.60	1542758
12	33KV H/W Fitting (B & S type) for Disc Insulator	No.	288	2083.20	599962
13	PG Clamp for 232Sqmm AAAC	No.	288	1426.00	410688
14	33KV Pin Insulator, Polymer	No.	1440	595.20	857088
15	H.T. Stay set complete	No.	288	1302.00	374976
16	HT Stay Insulator	No.	288	62.00	17856
17	HT Stay Clamp	Pair	288	155.00	44640
18	7/10 SWG GI wire for stay	Kg.	2431.00	93.00	226083
19	7/8 SWG GI wire for earthing	Kg.	1032	93.00	95976
20	Earthing of support (Coil Type)	No.	432	205.84	88923
21	40mm nominal bore GI Pipe earthing device	No.	96	1302.00	124992
22	Pipe HDPE	Mtr	288	49.60	14285
23	Aluminium Socket 70mm	No.	192	18.60	3571
24	Material for manosary work for earth pit	No.	96	496.00	47616

Sl. No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
25	Charcoal, Salt etc.	No.	192	558.00	107136
26	G.I. Nuts, bolt & Washer	Kg.	1032	96.72	99815
27	GI Barbered wire for anticlimbing	Kg.	1056	99.20	104755
28	Danger Plate	No.	528	99.20	52378
29	Fabrication & Galvanisation	Kg.	6029.00	12.40	74760
D	**SUBTOTAL(D)**	**D=A+B+C**			**40404959**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**1212149**
F	**Sub Total (F)**	**F=D+E**			**41617107**
G	**T&P @ 2% of F**	**G**	**2%**		**832342**
H	**Contingency @ 3% of F**	**H**	**3%**		**1248513**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**3121283**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**985816**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**2190080**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**49995141**
N	**Cost of Civil Works**	**N**			**1883220**
1	Concrete materials for stay anchor plate.	No.	288	1576.27	453966
2	Padding and concreting materials for support	No.	528	2706.92	1429254
O	**Sub Total (O)**	**O=M+N**			**51878361**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**9338105**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**3112702**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**560286**
S	**Sub Total (S)**	**S=O+P+Q+R**			**64889454**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**648895**
U	**Grand Total (U)= S+T**	**U=S+T**			**65538348**
				or say	**65538348**

2. Cost & Material Estimate for 33KV New line of 3X400sqmm XLPE cable:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				**0**
B	**Cost of RS Joist Poles**				**0**
C	**Cost of materials for DP**				**15467336**
1	HDPE Pipe, 8", 10 Mtr, (Spec PE80-PN8, 200MM dia)	Mtr	3000	2213.4	6640200
2	33 KV 3C 400sqmm XLPE cable	Mtr	3000	2519.68	7559040
3	33KV O/D jointing kit for three core 400sqmm XLPE cable	No.	6	41236.2	247417
4	33KV Straight jointing kit for three core 400sqmm XLPE cable	No.	12	85056.56	1020679
D	**SUBTOTAL(D)**	**D=A+B+C**			**15467336**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**464020**
F	**Sub Total (F)**	**F=D+E**			**15931356**
G	**T&P @ 2% of F**	**G**	**2%**		**318627**
H	**Contingency @ 3% of F**	**H**	**3%**		**477941**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**35846**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1593136**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**18356905**
N	**Cost of Civil Works**	**N**			**0**
O	**Sub Total (O)**	**O=M+N**			**18356905**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**3304243**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1101414**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**198255**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
S	**Sub Total (S)**	**S=O+P +Q+R**			**22960817**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**229608**
U	**Grand Total (U)= S+T**	**U=S+T**			**23190425**
				or say	**23190425**

3. Cost & Material Estimate for 11KV New Line with 100sqmm:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			
B	**Cost of RS Joist / Transformers**	**B**			**43867195**
1	11mtr RS Joist Pole	Nos.	1430	30676.3	43867195
C	**Cost of materials for line**	**C**			**23732825**
1	100 sqmm AAAC	Km.	200.85	68200.000	13697970
2	MS Channel 100x50x6mm	Kg	5980	80.6	481988
3	MS Channel 75x40x6mm	Kg	4420	80.6	356252
4	MS Angle 50x50x6mm	Kg	4680	80.6	377208
5	Fish Plate 50x6mm	Kg	515	115.32	59390
6	GI Flat 50x6mm	Kg	1591	93.00	147963
7	GI Flat 25x6mm	Kg	1170	93.00	108810
8	11 KV V- Cross Arm (MS) (10.2 Kg each)	No.	1170	1004.40	1175148
9	Back Clamp for 'V' Cross Arm (1.7kg)	No.	1170	99.20	116064
10	11 KV F Clamp 2.9 Kg. each	No.	1170	297.60	348192
11	11KV Disc Insulator (B & S), Polymer	No.	780	1426.00	1112280
12	11KV H/W Fitting (B & S type) for Disc Insulator	No.	780	434.00	338520
13	PG Clamp for 100Sqmm AAAC	No.	780	719.20	560976
14	11KV Pin Insulator, Polymer	No.	3900	248.00	967200
15	H.T. Stay set complete	No.	780	1302.00	1015560
16	HT Stay Insulator	No.	780	62.00	48360
17	HT Stay Clamp	Pair	780	155.00	120900
18	7/10 SWG GI wire (for stay)	Kg.	5487	93.00	510291
19	7/8 SWG GI wire (for earthing)	Kg.	2796	93.00	260028
20	Earthing of support (Coil Type)	No.	1170	205.84	240833
21	40mm nominal bore GI Pipe earthing device	No.	260	1302.00	338520
22	Pipe HDPE	Mtr	780	49.60	38688
23	Aluminium Socket 70mm	No.	520	18.60	9672
24	Material for masonry work for earth pit	No.	260	496.00	128960

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
25	Charcoal, Salt etc	No.	520	558.00	290160
26	G.I. Nuts, bolt & Washer	Kg.	2795	96.72	270332
27	GI Barbered wire for anticlimbing	Kg.	2860	99.20	283712
28	Danger Plate	No.	1430	99.20	141856
29	Fabrication & Galvanisation	Kg.	15080.00	12.40	186992
D	**SUBTOTAL(D)**	**A+B+C**			**67600020**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**2028001**
F	**Sub Total (F)**	**F=D+E**			**69628020**
G	**T&P @ 2% of F**	**G**	**2%**		**1392560**
H	**Contingency @ 3% of F**	**H**	**3%**		**2088841**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**5222102**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**2259161**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**2444481**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**83035164**
N	**Cost of Civil Works**	**N**			**5100387**
1	Concrete materials for stay anchor plate.	No.	780	1576.27	1229492
2	Padding and concreting materials for support	No.	1430	2706.92	3870896
O	**Sub Total (O)**	**O=M+N**			**88135552**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**15864399**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**5288133**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**951864**
S	**Sub Total (S)**	**S=O+P +Q+R**			**110239948**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**1102399**
U	**Grand Total (U)= S+T**	**U=S+T**			**111342347**
				or say	**111342347**

4. Cost & Material Estimate for New 11 KV Line with 3CX300sqmm:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				**0**
B	**Cost of RS Joist Poles**				**0**
C	**Cost of materials for DP**				**13491468**
1	HDPE Pipe, 8", 10 Mtr, (Spec PE80-PN8, 200MM dia)	Mtr	3000	2213.4	6640200
2	11 KV 3C 300sqmm XLPE cable	Mtr	3000	2063.25	6189775
3	11KV O/D jointing kit for three core 300sqmm XLPE cable	No.	6	22825.33	136952
4	11KV Straight jointing kit for three core 300sqmm XLPE cable	No.	12	43711.72	524541
D	**SUBTOTAL(D)**	**D=A+B+C**			**13491468**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**404744**
F	**Sub Total (F)**	**F=D+E**			**13896212**
G	**T&P @ 2% of F**	**G**	**2%**		**277924**
H	**Contingency @ 3% of F**	**H**	**3%**		**416886**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**31266**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**1389621**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**16011910**
N	**Cost of Civil Works**	**N**			**0**
O	**Sub Total (O)**	**O=M+N**			**16011910**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2882144**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**960715**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**172929**
S	**Sub Total (S)**	**S=O+P+Q+R**			**20027697**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
T	Labour Cess @ 1% of S=T	T	1%		200277
U	Grand Total (U)= S+T	U=S+T			20227974
				or say	20227974

5.Cost & Material Estimate for PSS:

S.No.	Description of work	UOM	FY23 Qty	Standard Estimate	Amount
1	Construction of New Primary Substation/Replacement of existing PSS with new PSS	EA	2	9,00,00,000	1,800.00

Note: Tentative Amount considered for Estimate, estimated material and cost will be finalized after site visit and finalization of vendor.

6. Cost & Material Estimate for 5 MVA PTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			0
B	Cost of Transfomer/ Breaker/Joist Pole	B			10702440
(i)	Transformer				
1	5 MVA, 33/11 KV Trf.	Nos.	2	5351220	10702440
(ii)	Joist Pole				
C	Cost of materials	C			99242
1	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	6	1368	8209
2	GI Flat 50x6mm	Kg	150	94	14029
3	Lightening Arrester	Nos.	6	12834	77004
D	SUBTOTAL(D)	D=A+B+C			10801682
E	Stock, Storage & Insurance @ 3% of D=E	E	3%		324050
F	Sub Total (F)	F=D+E			11125732
G	T&P @ 2% of F	G	2%		222515
H	Contingency @ 3% of F	H	3%		333772

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**834430**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**551176**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**10222**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**13077847**
N	**Cost of Civil Works**	**N**			**115132**
1	Plinth for Trf. (Rennovation)	No.	2	50000	100000
2	Civil Work for Earth Pit	No.	6	2522.03	15132
O	**Sub Total (O)**	**O=M+N**			**13192979**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2374736**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**791579**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**142484**
S	**Sub Total (S)**	**S=O+P +Q+R**			**16501778**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**165018**
U	**Grand Total (U)= S+T**	**U=S+T**			**16666796**
or say					**16666796**

7. Cost & Material Estimate for 8 MVA PTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**14136000**
(i)	**Transformer**				
1	8 MVA, 33/11 KV Trf.	Nos.	2	7068000	14136000

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
C	**Cost of materials**	**C**			**99242**
1	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	6	1368.20	8209
2	GI Flat 50x6mm	Kg	150	93.53	14029
3	Lightening Arrester	Nos.	6	12834.00	77004
D	**SUBTOTAL(D)**	**D=A+B+C**			**14235242**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**427057**
F	**Sub Total (F)**	**F=D+E**			**14662299**
G	**T&P @ 2% of F**	**G**	**2%**		**293246**
H	**Contingency @ 3% of F**	**H**	**3%**		**439869**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**1099672**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**728004**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**10222**
M	**Sub Total (M)**	**M=F+G+H +I+J+K+L**			**17233313**
N	**Cost of Civil Works**	**N**			**175132**
1	Plinth for Trf. (Rennovation)	No.	2	80000	160000
2	Civil Work for Earth Pit	No.	6	2522	15132
O	**Sub Total (O)**	**O=M+N**			**17408445**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**3133520**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1044507**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**188011**
S	**Sub Total (S)**	**S=O+P+Q +R**			**21774483**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**217745**
U	**Grand Total (U)= S+T**	**U=S+T**			**21992228**

8.Cost & Material Estimate for 63 KVA DTR, 11/0.4 KV Sub Station (New):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**37200**
1	9 mtr long, 300 Kg PSC Pole	Nos.	10	3720.00	37200
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**1686127**
(i)	**Transformer**				
1	63KVA, 11/0.4 KV Trf	Nos.	10	107260.00	1072600
(ii)	**Joist Pole**				
1	11 mtr RS Joist Pole	Nos.	20	30676.36	613527
C	**Cost of materials for Sub-Stations**	**C**			**1673201**
1	MS Channel 100x50x6mm	Kg.	1027	80.60	82776
2	MS Channel 75x40x6mm	Kg.	1840	80.60	148304
3	MS Angle 50x50x6mm	Kg.	567	80.60	45700
4	11 KV Polymer Disc Insulator B&S (70 KN)	Nos.	30	1426.00	42780
5	11 KVH/W fitting for Disc (70KN)	Nos.	30	434.00	13020
6	PG Clamp for 100sqmm AAAC	Nos.	30	719.20	21576
7	GI Flat 50x6mm	Kg	432	93.53	40403
8	Gl Flat 25x6 mm	Kg	110	93.53	10288
9	11KV A/B Switch (400 A,3 pole, Hz type)	Set	10	14694.00	146940
10	11KV DD Fuse 3pole	Set	10	5832.17	58322
11	DD Fuse Link Unit(5A)	Nos.	30	126.10	3783
12	11KV Lightning Arrestor	No.	30	4402.00	132060
13	Conductor ACSR PVC (61.7sqmm)	Mtr.	200	73.56	14712
14	H.T. Stay set complete	No.	40	1302.00	52080
15	HT Stay Insulator	No.	40	62.00	2480
16	HT Stay Clamp	Pair	40	155.00	6200
17	7/10 SWG Staywire	Kg.	500	93.00	46500
18	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	50	1302.00	65100
19	Earthing of support (Coil type)	Nos.	10	205.84	2058
20	Pipe HDPE (25mm)	Mtr.	150	49.60	7440
21	Pipe GI (100mm)	Mtr.	30	620.00	18600
22	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	230	1211.17	278568
23	1C 300sqmm LT XLPE	Mtr.	320	473.68	151578
24	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	40	260.40	10416
25	Dist Box with TP MCCB (25KVA/63A)	Nos.	10	11483.05	114831

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
26	Al Cable Socket 70mm	Nos.	800	18.60	14880
27	Al Cable Socket 300mm	Nos.	160	64.48	10317
28	G.I. Bolts, Nuts & Washers.	Kg.	250	96.72	24180
29	Charcoal, Salt etc. for earthing.	No.	100	558.00	55800
30	GI Barbered wire for Anticlimbing	Kg.	60	99.20	5952
31	Danger Plate	Nos.	30	99.20	2976
32	Fabrication, Galvalisation	Kg.	3434	12.40	42582
D	**SUBTOTAL(D)**	**D=A+B+C**			**3396528**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**101896**
F	**Sub Total (F)**	**F=D+E**			**3498424**
G	**T&P @ 2% of F**	**G**	**2%**		**69968**
H	**Contingency @ 3% of F**	**H**	**3%**		**104953**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**262382**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**7663**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**86836**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**172340**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**4202566**
N	**Cost of Civil Works**	**N**			**1271460**
1	Cost of fencing		10	100000.00	1000000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	30	2706.98	81209
3	Concreting of Stay	No.	40	1576.27	63051
4	Civil Work for Earth Pit	No.	50	2544.00	127200
O	**Sub Total (O)**	**O=M+N**			**5474026**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**985325**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**328442**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**59119**
S	**Sub Total (S)**	**S=O+P+Q+R**			**6846912**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**68469**
U	**Grand Total (U)= S+T**	**U=S+T**			**6915381**
				or say	**6915381**

9. Cost & Material Estimate for 25KVA DTR, 11/0.4 KV Sub Station (Augmentation from Single phase to 3 phase):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**6403236**
(i)	**Transformer**				
1	25 KVA, 11/0.4 KV Trf.	Nos.	50	66712	3335600
(ii)	**Joist Pole**				
1	11 mtr RS Joist Pole	Nos.	100	30676.36	3067636
C	**Cost of materials for Sub-Stations**	**C**			**5864013**
1	MS Channel 100x50x6mm	Kg.	5136	80.6	413962
2	MS Channel 75x40x6mm	Kg.	9200	80.6	741520
3	MS Angle 50x50x6mm	Kg.	2835	80.6	228501
4	PG Clamp for 100sqmm AAAC	Nos.	150	719.2	107880
5	GI Flat 50x6mm	Kg	2160	93.52	202015
6	Gl Flat 25x6 mm	Kg	552	93.52	51626
7	11KV A/B Switch (400 A,3 pole, Hz type)	Set	50	14694	734700
8	11KV DD Fuse 3pole	Set	50	5832.1719	291609
9	DD Fuse Link Unit(5A)	Nos.	150	126.10169	18915
10	11KV Lightning Arrestor	No.	150	4402	660300
11	Conductor ACSR PVC (61.7sqmm)	Mtr.	1000	73.559322	73559
12	7/10 SWG Staywire	Kg.	1500	93	139500
13	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	150	1302	195300
14	Pipe HDPE (25mm)	Mtr.	750	49.6	37200
15	1C 300sqmm LT XLPE	Mtr.	1600	473.68	757888
16	Dist Box with TP MCCB (25KVA/63A)	Nos.	50	10270.279	513514
17	Al Cable Socket 70mm	Nos.	3400	18.6	63240
18	Al Cable Socket 300mm	Nos.	800	64.48	51584
19	G.I. Bolts, Nuts & Washers.	Kg.	1000	96.72	96720

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
20	Material for masonry work for earth pit	No.	150	496	74400
21	Charcoal, Salt etc. for earthing.	No.	300	558	167400
22	GI Barbered wire for Anticlimbing	Kg.	200	99.2	19840
23	Danger Plate	Nos.	100	99.2	9920
24	Fabrication, Galvalisation	Kg.	17171	12.4	212920
D	**SUBTOTAL(D)**	**D=A+B+C**			**12267249**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**368017**
F	**Sub Total (F)**	**F=D+E**			**12635267**
G	**T&P @ 2% of F**	**G**	**2%**		**252705**
H	**Contingency @ 3% of F**	**H**	**3%**		**379058**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**947645**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**0**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**329767**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**603993**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**15148435**
N	**Cost of Civil Works**	**N**			**4428325**
1	**Cost of fencing**		**50**	**80000**	**4000000**
2	**Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)**	**No.**	**100**	**2706.98**	**270698**
3	**Concreting of Stay**	**No.**	**0**	**1576.27**	**0**
4	**Cost of Dismantaling**	**No.**	**50**	**3152.54**	**157627**
O	**Sub Total (O)**	**O=M+N**		**0**	**19576760**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**3523817**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1174606**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**211429**
S	**Sub Total (S)**	**S=O+P+Q+R**			**24486612**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**244866**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
U	**Grand Total (U)= S+T**	**U=S+T**			**24731478**
or say					**24731478**

10. Cost & Material Estimate for 63 KVA DTR, 11/0.4 KV Sub Station(Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**111600**
1	9 mtr long, 300 Kg PSC Pole	Nos.	30	3720.00	111600
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**3217800**
(i)	**Transformer**				
1	63 KVA, 11/0.4 KV Trf.	Nos.	30	107260.00	3217800
C	**Cost of materials for Sub-Stations**	**C**			**2671662**
1	11KV DD Fuse 3pole	Set	30	5835.00	175050
2	DD Fuse Link Unit(10A)	Nos.	90	140.00	12600
3	11KV Lightning Arrestor	No.	90	4402.00	396180
4	GI Flat 50x6mm	Kg	1296	93.53	121209
5	Earthing of support (Coil type)	Nos.	30	206.00	6180
6	Pipe GI (100mm)	Mtr.	90	620.00	55800
7	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	690	1416.54	977414
8	1C 300sqmm LT XLPE	Mtr.	960	473.68	454733
9	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	120	260.40	31248
10	Dist Box with TP MCCB (100KVA/160A)	Nos.	30	11665.00	349950
11	Al Cable Socket 70mm	Nos.	1200	18.60	22320
12	Al Cable Socket 300mm	Nos.	480	64.48	30950
13	G.I. Bolts, Nuts & Washers.	Kg.	300	97.00	29100
14	GI Barbered wire for Anticlimbing	Kg.	60	99.20	5952
15	Danger Plate	Nos.	30	99.20	2976
D	**SUBTOTAL(D)**	**D=A+B +C**			**6001062**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**180032**
F	**Sub Total (F)**	**F=D+E**			**6181094**
G	**T&P @ 2% of F**	**G**	**2%**		**123622**
H	**Contingency @ 3% of F**	**H**	**3%**		**185433**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**463582**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**22990**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**165717**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**275181**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**7417619**
N	**Cost of Civil Works**	**N**			**3000000**
1	Cost of fencing		30	100000.00	3000000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	30	2707.00	81210
3	Cost of Dismantaling	No.	30	3152.54	94576
O	**Sub Total (O)**	**O=M+N**			**10417619**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**1875171**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**625057**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**112510**
S	**Sub Total (S)**	**S=O+P +Q+R**			**13030357**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**130304**
U	**Grand Total (U)= S+T**	**U=S+T**			**13160661**
or say					**13160661**

11. Cost & Material Estimate for 63 KVA DTR, 11/0.4 KV Sub Station (Augmentation from Single phase to 3 phase):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**0**
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**26978035**
(i)	**Transformer**				
1	63KVA, 11/0.4 KV Trf	Nos.	160	107260	17161600
(ii)	**Joist Pole**				
1	11 mtr RS Joist Pole	Nos.	320	30676.36	9816435

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
C	**Cost of materials for Sub-Stations**	**C**			**25245438**
1	MS Channel 100x50x6mm	Kg.	16435	80.6	1324661
2	MS Channel 75x40x6mm	Kg.	29440	80.6	2372864
3	MS Angle 50x50x6mm	Kg.	9072	80.6	731203
4	11 KV Polymer Disc Insulator B&S (70 KN)	Nos.	480	1426	684480
5	11 KVH/W fitting for Disc (70KN)	Nos.	480	434	208320
6	PG Clamp for 100sqmm AAAC	Nos.	480	719.2	345216
7	GI Flat 50x6mm	Kg	6912	93.525424	646448
8	GI Flat 25x6 mm	Kg	1766	93.525424	165166
9	11KV A/B Switch (400 A,3 pole, Hz type)	Set	160	14694	2351040
10	11KV DD Fuse 3pole	Set	160	5832.17	933147
11	DD Fuse Link Unit(5A)	Nos.	480	126.10	60529
12	11KV Lightning Arrestor	No.	480	4402	2112960
13	Conductor ACSR PVC (61.7sqmm)	Mtr.	3200	73.56	235390
14	7/10 SWG Staywire	Kg.	4800	93	446400
15	40mm nominal bore GI pipe (medium gauge) earthing device with	No.	480	1302	624960
16	Pipe HDPE (25mm)	Mtr.	2400	49.6	119040
17	Pipe GI (100mm)	Mtr.	480	620	297600
18	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	3680	1416.54	5212876
19	1C 300sqmm LT XLPE	Mtr.	5120	473.68	2425242
20	Dist Box with TP MCCB (63KVA/100A)	Nos.	160	10270.27	1643245
21	Al Cable Socket 70mm	Nos.	10880	18.6	202368
22	Al Cable Socket 300mm	Nos.	2560	64.48	165069
23	G.I. Bolts, Nuts & Washers.	Kg.	4000	96.72	386880
24	Material for masonry work for earth pit	No.	480	496	238080
25	Charcoal, Salt etc. for earthing.	No.	960	558	535680
26	GI Barbered wire for Anticlimbing	Kg.	640	99.2	63488
27	Danger Plate	Nos.	320	99.2	31744
28	Fabrication, Galvalisation	Kg.	54947	12.4	681343
D	**SUBTOTAL(D)**	**D=A+B+C**			**52223473**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**1566704**
F	**Sub Total (F)**	**F=D+E**			**53790177**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
G	T&P @ 2% of F	G	2%		1075804
H	Contingency @ 3% of F	H	3%		1613705
I	Transportation @ 7.5% of F	I	7.5%		4034263
J	Erection Charges for PSC Pole (20% OF (A+A*3%))	J	20%		0
K	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	K	5%		1389369
L	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		2600280
M	Sub Total (M)	M=F+G+H+I+J+K+L			64503598
N	Cost of Civil Works	N			14170641
1	Cost of fencing		160	80000	12800000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	320	2706.98	866235
3	Cost of Dismantaling	No.	160	3152.54	504407
O	Sub Total (O)	O=M+N			78674240
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		14161363
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		4720454
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		849682
S	Sub Total (S)	S=O+P+Q+R			98405739
T	Labour Cess @ 1% of S=T	T	1%		984057
U	Grand Total (U)= S+T	U=S+T			99389796
or say					99389796

12. Cost & Material Estimate for 250 KVA DTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Cost of PSC Poles	A			78120

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	9 mtr long X 300 Kg. PSC Pole	Nos.	21	3720	78120
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**6990438**
(i)	**Transformer**				
1	250 KVA, 11/0.4 KV Trf.	Nos.	21	332878	6990438
C	**Cost of materials for Sub-Stations**	**C**			**2142552**
1	GI Flat 50x6mm	Kg	907.2	93.52	84846
2	11KV DD Fuse 3pole	Set	21	5832.17	122476
3	DD Fuse Link Unit(20A)	Nos.	63	137.64	8671
4	11KV Lightning Arrestor	No.	63	4402	277326
5	Earthing of support (Coil type)	Nos.	21	205.84	4323
6	Pipe GI (100mm)	Mtr.	63	620	39060
7	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	483	1416.54	684190
8	1C 400sqmm LT XLPE	Mtr.	672	593.96	399141
9	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	84	260.4	21874
10	Dist Box with TP MCCB, 400A	Nos.	21	20799.77	436795
11	Al Cable Socket 70mm	Nos.	840	18.6	15624
12	Al Cable Socket 300mm	Nos.	336	64.48	21665
13	G.I. Bolts, Nuts & Washers.	Kg.	210	96.72	20311
14	GI Barbered wire for Anticlimbing	Kg.	42	99.2	4166
15	Danger Plate	Nos.	21	99.2	2083
D	**SUBTOTAL(D)**	**D=A+B +C**			**9211110**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**276333**
F	**Sub Total (F)**	**F=D+E**			**9487443**
G	**T&P @ 2% of F**	**G**	**2%**		**189749**
H	**Contingency @ 3% of F**	**H**	**3%**		**284623**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**711558**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**16093**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**360008**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**220683**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**11270157**
N	**Cost of Civil Works**	**N**			**3780000**
1	Plinth for Trf.	No.	21	80000	1680000

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
2	Cost of fencing	No	21	100000	2100000
3	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	21	2706.98	56847
4	Cost of Dismantling	No.	21	5254.23	110339
O	**Sub Total (O)**	**O=M+N**			**15050157**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2709028**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**903009**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**162542**
S	**Sub Total (S)**	**S=O+P +Q+R**			**18824736**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**188247**
U	**Grand Total (U)= S+T**	**U=S+T**			**19012983**
or say					**19012983**

13. Cost & Material Estimate for 500 KVA DTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**74400**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	20	3720	74400
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**14384000**
(i)	**Transformer**				
1	500 KVA, 11/0.4 KV Trf.	Nos.	20	719200	14384000
C	**Cost of materials for Sub-Stations**	**C**			**3599840**
1	MS Channel 75x40x6mm	Kg.	2160	80.6	174096
2	MS Angle 50x50x6mm	Kg.	1440	80.6	116064
3	GI Flat 50x6mm	Kg	864	93.52	80806
4	11KV DD Fuse 3pole	Set	20	5832.17	116643
5	DD Fuse Link Unit(20A)	Nos.	60	137.64	8258
6	11KV Lightning Arrestor	No.	60	4402	264120
7	Earthing of support (Coil type)	Nos.	20	205.84	4117
8	Pipe GI (100mm)	Mtr.	120	620	74400
9	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	920	1416.54	1303219
10	1C 630sqmm LT XLPE	Mtr.	640	788.13	504407
11	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	80	260.4	20832
12	Dist Box with TP ACB (400A)	Nos.	40	20799.77	831991

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
13	Al Cable Socket 630mm	Nos.	480	64.48	30950
14	G.I. Bolts, Nuts & Washers.	Kg.	200	96.72	19344
15	GI Barbered wire for Anticlimbing	Kg.	40	99.2	3968
16	Danger Plate	Nos.	20	99.2	1984
17	Fabrication, Galvalisation	Kg.	3600	12.4	44640
D	**SUBTOTAL(D)**	**D=A+B+C**			**18058240**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**541747**
F	**Sub Total (F)**	**F=D+E**			**18599987**
G	**T&P @ 2% of F**	**G**	**2%**		**372000**
H	**Contingency @ 3% of F**	**H**	**3%**		**558000**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**1394999**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**15326**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**740776**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**370783**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**22051871**
N	**Cost of Civil Works**	**N**			**2162419**
1	Cost of fencing	No	20	100000.00	2000000
2	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	20	2706.98	54140
3	Concreting of ACB Base	No.	40	2706.98	108279
4	Cost of Dismantling	No.	20	8406.78	168136
O	**Sub Total (O)**	**O=M+N**			**24214290**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**4358572**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**1452857**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**261514**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
S	**Sub Total (S)**	**S=O+P+Q+R**			**30287234**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**302872**
U	**Grand Total (U)= S+T**	**U=S+T**			**30590106**
				or say	**30590106**

14. Cost & Material Estimate for 750 KVA DTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**148800**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	40	3720	148800
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**23312000**
(i)	**Transformer**				
1	750 KVA, 11/0.4 KV Trf.	Nos.	20	1165600	23312000
C	**Cost of materials for Sub-Stations**	**C**			**6499450**
1	MS Channel 75x40x6mm	Kg.	1000	80.6	80600
2	MS Angle 50x50x6mm	Kg.	1000	80.6	80600
3	GI Flat 50x6mm	Kg	576	93.52	53871
4	11KV DD Fuse 3pole	Set	20	5832.17	116643
5	DD Fuse Link Unit (30A)	Nos.	60	137.64	8258
6	11KV Lightning Arrestor	No.	60	4402	264120
7	Earthing of support (Coil type)	Nos.	40	205.84	8234
8	Pipe GI (100mm)	Mtr.	180	620	111600
9	1.1KV, 4Cx630sqmm XLPE Cable	Mtr.	1200	1416.54	1699851
10	1C 630sqmm LT XLPE	Mtr.	1000	788.13	788136
11	Gland for arm (4Cx630sqmm XLPE Cable)	Nos.	120	260.4	31248
12	Dist Box with ACB (400A)	Nos.	60	52541.28	3152477
13	Al Cable Socket 70mm	Nos.	800	18.6	14880
14	Al Cable Socket 630mm	Nos.	360	64.48	23213
15	G.I. Bolts, Nuts & Washers.	Kg.	300	96.72	29016
16	GI Barbered wire for Anticlimbing	Kg.	80	99.2	7936
17	Danger Plate	Nos.	40	99.2	3968
18	Fabrication, Galvalisation	Kg.	2000	12.4	24800
D	**SUBTOTAL(D)**	**D=A+B+C**			**29960250**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**898808**
F	**Sub Total (F)**	**F=D+E**			**30859058**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
G	**T&P @ 2% of F**	**G**	**2%**		**617181**
H	**Contingency @ 3% of F**	**H**	**3%**		**925772**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**2314429**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**30653**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**1200568**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**669443**
M	**Sub Total (M)**	**M=F+G+H +I+J+K+L**			**36617104**
N	**Cost of Civil Works**	**N**			**108279**
1	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	40	2706.98	108279
2	Concreting of ACB Base	No.	60	2706.98	162419
3	Cost of Dismantling	No.	20	8406.78	168136
O	**Sub Total (O)**	**O=M+N**			**36725383**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**6610569**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**2203523**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**396634**
S	**Sub Total (S)**	**S=O+P+Q +R**			**45936109**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**459361**
U	**Grand Total (U)= S+T**	**U=S+T**			**46395471**
				or say	**46395471**

15. Cost & Material Estimate for 1 MVA DTR, 11/0.4 KV Sub Station (Augmentation):

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**	**A**			**22320**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	9 mtr long X 300 Kg. PSC Pole	Nos.	6	3720	22320
B	**Cost of Transfomer/ Breaker/Joist Pole**	**B**			**4836000**
(i)	**Transformer**				
1	1000 KVA, 11/0.4 KV Trf.	Nos.	3	1612000	4836000
C	**Cost of materials for Sub-Stations**	**C**			**1097305**
1	MS Channel 75x40x6mm	Kg.	150	80.6	12090
2	MS Angle 50x50x6mm	Kg.	150	80.6	12090
3	GI Flat 50x6mm	Kg	129.6	93.52	12121
4	11KV DD Fuse 3pole	Set	3	5832.17	17497
5	DD Fuse Link Unit	Nos.	9	137.64	1239
6	11KV Lightning Arrestor	No.	9	4402	39618
7	Earthing of support (Coil type)	Nos.	6	205.84	1235
8	Pipe GI (100mm)	Mtr.	36	620	22320
9	1.1KV, 4Cx300sqmm XLPE Cable	Mtr.	240	1416.54	339970
10	Gland for arm (4Cx300sqmm XLPE Cable)	Nos.	12	260.4	3125
11	Dist Box with ACB (400A)	Nos.	12	52541.28	630495
12	GI Barbered wire for Anticlimbing	Kg.	12	99.2	1190
13	Danger Plate	Nos.	6.00	99.2	595
14	Fabrication, Galvalisation	Kg.	300	12.4	3720
D	**SUBTOTAL(D)**	**D=A+B+C**			**5955625**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**178669**
F	**Sub Total (F)**	**F=D+E**			**6134294**
G	**T&P @ 2% of F**	**G**	**2%**		**122686**
H	**Contingency @ 3% of F**	**H**	**3%**		**184029**
I	**Transportation @ 7.5% of F**	**I**	**8%**		**460072**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**4598**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**249054**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**113022**
M	**Sub Total (M)**	**M=F+G+H+I+J+K+L**			**7267755**
N	**Cost of Civil Works**	**N**			**16242**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Cupping of pole (Including supply of materials (1 M x0.5 Mx0.5 M)	No.	6	2706.98	16242
2	Concreting of ACB Base	No.	12	2706.98	32484
3	Cost of Dismantling	No.	3	10508.47	31525
O	Sub Total (O)	O=M+N			7283997
P	Goods & Services Tax (GST) @18% of (O)=P	P	18%		1311119
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		437040
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		78667
S	Sub Total (S)	S=O+P+Q+R			9110823
T	Labour Cess @ 1% of S=T	T	1%		91108
U	Grand Total (U)= S+T	U=S+T			9201932
				or say	9201932

16. Cost & Material Estimate for LT New Line with 95 sqmm cable:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				**8961480**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	2409	3720	8961480
B	**Cost of Transformer/Breaker/ Joist Pole**				**0**
C	**Cost of materials for line**				**31912102**
1	95sqmm AB Cable for LT line	Km.	76.65	301320	23096178
2	Pole Clamp for AB Cable	Pair	2409	248	597432
3	Dead end Clamp (For ABC)	Nos.	438	80.6	35303
4	Suspension Clamp	Nos.	1971	421.6	830974
5	Eye Hook for AB Cable	Nos.	2409	74.4	179230
6	Piercing Connector	Nos.	2409	99.2	238973
7	Neutral Connector Type B	Nos.	803	40.92	32859
8	LT Stay Set	Nos.	584	644.8	376563
9	7/12SWG Stay wire	Kg.	5256	93	488808
10	LT Stay Clamp (1.40 Kg./Pair)	Pair	584	136.4	79658
11	LT Stay Insulator	Nos.	584	37.2	21725
12	Earthing Coil	Nos.	2409	205.84	495869

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
13	No.8G.I. wire for earthing	Kg.	7227	93	672111
14	G.I. Nut & Bolts(Assorted size)	Kg.	730	96.72	70606
15	Service Connection Distribution box (8 way)	Nos.	803	4960	3982880
16	4C X 25sqmm LT PVC Cable	Mtr.	3212	221.96	712936
D	**SUBTOTAL(D)**	**D=A+B+C**			**40873582**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**1226207**
F	**Sub Total (F)**	**F=D+E**			**42099789**
G	**T&P @ 2% of F**	**G**	**2%**		**841996**
H	**Contingency @ 3% of F**	**H**	**3%**		**1262994**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**3157484**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**1846065**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**3286946**
M	**Sub Total (M)**	**M=F+G+H +I+J+K+L**			**52495274**
N	**Cost of Civil Works**	**N**			**7441665**
1	Concrete materials for stay anchor plate.	No.	584	1576.27	920542
2	Padding and concreting materials for support	No.	2409	2706.98	6521122
O	**Sub Total (O)**	**O=M+N**			**59936939**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**10788649**
Q	**Other Overheads (including supervision charges) @ 6% of (O)=Q**	**Q**	**6%**		**3596216**
R	**Goods & Services Tax (GST) @18% of (Q)=R**	**R**	**18%**		**647319**
S	**Sub Total (S)**	**S=O+P+Q +R**			**74969123**
T	**Labour Cess @ 1% of S=T**	**T**	**1%**		**749691**
U	**Grand Total (U)= S+T**	**U=S+T**			**75718814**
				or say	**75718814**

17. Cost & Material Estimate for LT New Line 120 sqmm cable:

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	**Cost of PSC Poles**				**1238760**
1	9 mtr long X 300 Kg. PSC Pole	Nos.	333	3720	1238760

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
B	**Cost of Transformer/Breaker/ Joist Pole**				
C	**Cost of materials for line**				**6778934**
1	120 sqmm AB Cable for LT line	Km.	10.5	536138.17	5629451
2	Pole Clamp for AB Cable	Pair	333	248	82584
3	Dead end Clamp (For ABC)	Nos.	60	80.6	4836
4	Suspension Clamp	Nos.	273	421.6	115097
5	Eye Hook for AB Cable	Nos.	333	74.4	24775
6	Piercing Connector	Nos.	300	99.2	29760
7	Neutral Connector Type B	Nos.	100	40.92	4092
8	LT Stay Set	Nos.	80	644.8	51584
9	7/12SWG Stay wire	Kg.	720	93	66960
10	LT Stay Clamp (1.40 Kg. /Pair)	Pair	80	136.4	10912
11	LT Stay Insulator	Nos.	80	37.2	2976
12	Earthing Coil	Nos.	333	205.84	68545
13	No.8G.I. wire for earthing	Kg.	999	93	92907
14	G.I. Nut & Bolts (Assorted size)	Kg.	100	96.72	9672
15	Service Connection Distribution box (8 way)	Nos.	100	4960	496000
16	4C X 25sqmm LT PVC Cable	Mtr.	400	221.96	88784
D	**SUBTOTAL(D)**	**D=A+B +C**			**8017694**
E	**Stock, Storage & Insurance @ 3% of D=E**	**E**	**3%**		**240531**
F	**Sub Total (F)**	**F=D+E**			**8258225**
G	**T&P @ 2% of F**	**G**	**2%**		**165165**
H	**Contingency @ 3% of F**	**H**	**3%**		**247747**
I	**Transportation @ 7.5% of F**	**I**	**7.5%**		**619367**
J	**Erection Charges for PSC Pole (20% OF (A+A*3%))**	**J**	**20%**		**255185**
K	**Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))**	**K**	**5%**		**0**
L	**Erection Charges for other materials for line & substations (10% of (C+C*3%))**	**L**	**10%**		**698230**
M	**Sub Total (M)**	**M=F+G +H+I+J +K+L**			**10243918**
N	**Cost of Civil Works**	**N**			**1027527**
1	Concrete materials for stay anchor plate.	No.	80	1576.27	126102
2	Padding and concreting materials for support	No.	333	2706.98	901425
O	**Sub Total (O)**	**O=M+N**			**11271445**
P	**Goods & Services Tax (GST) @18% of (O)=P**	**P**	**18%**		**2028860**

Sl. No.	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	6%		676287
R	Goods & Services Tax (GST) @18% of (Q)=R	R	18%		121732
S	Sub Total (S)	S=O+P +Q+R			14098324
T	Labour Cess @ 1% of S=T	T	1%		140983
U	Grand Total (U)= S+T	U=S+T			14239307
				or say	14239307

Annexure- 15 DPR for Technology Intervention-IT & Technology

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
5A	IT Infrastructure	i) Technology Intervention-IT & Technology.	Disaster Recovery Center - HW & SW	20.15
			DC Hardware	11.04
			DC Software & Licences	4.75
			Front End Devices and End user	12.18
			Locational Network	5.02
			DR Setup for Other DISCOMs	18.35
			Digitization of legacy documents	6.21
	SubTotal- IT Infrastructure			**77.70**

a. Background – Information Technology commenced its journey in FY 22, the very first year of TPWODL, by initiating large scale computerization & digitalization efforts in the Company. For year 2021-2022, Information Technology was given Rs 42.02 Cr towards CAPEX by honorable Commission against seven schemes namely DC Hardware, Primary Data Centre, Call Centre & Customer Care Centre, DC Software & Licenses (ERP, MBC, DB, OS), Locational Network, Communication Network, Front -End Devices & End User Licenses. Information Technology vertical implemented all the schemes successfully and achieved 100% capitalization in FY 22.

In FY 23, honorable commission has approved Rs. 48.19 Crores to Information Technology for implementation of schemes namely Data Centre at Sambalpur, Front end Devices and SW, DC Hardware, DC Software & Licenses, Locational Network, Optical Fiber Cabling which included hardware and software and IT Infrastructure for expansion and modernization of call center. TPWODL Information Technology has already initiated concrete steps towards 100% implementation of the approved schemes in FY 23.

In FY 24, this journey will continue for implementation of new technologies across TPWODL, scaling up projects being implemented in FY 23, building infrastructure and facilities to strengthen Business Continuity Planning (BCP), secured business operation with implementation of state of the art Cybersecurity technologies and ensuring adoption of the new initiatives by the end users for optimizing all round efficiency which would ultimately help reduce the AT&C levels and ensure consumer satisfaction.

b. Status of CAPEX projects in FY 23:

Capex plan for FY 23-24

Sl No	Scheme Name	Approved Amount (In Rs Cr)	Committed PR/PO/RO issued till date (Rs Cr)	Capitalization till date (Rs Cr)	Target date for 100% Capitalization
1	Data Centre at Sambalpur	1.59	0	0.67	February, 2023
2	Front end Devices and SW	9.09	3.03	4.05	March, 2023
3	DC Hardware	17.26	13.72**	0	March, 2023
4	DC Software & Licenses	13	7.69	2.5	March, 2023
5	Locational Network	7	0.84	0.61	March, 2023
6	Optical Fiber Cabling	0.25	0	0	March, 2023

**Expected delivery in December 2022

c. Five-year plan (Major initiatives):

FY 23	FY 24	FY 25	FY 26	FY 27
OCR/AI based meter reading	Commissioning Disaster Recovery Center for TPWODL at Bhubaneswar	Achieving digitalization index of >95%	Home automation	Demand Response (DR)
E-Office Implementation	Commissioning facilities including common infrastructure for Disaster Recovery Center at Sambalpur for other 3 Odisha DISCOMs	Implement predictive analysis	Blockchain technology in accounting	Covering 50% consumer base through e-bills only
Implementation of integrated contact center	Digitization of documents			CMMi-5 certification
Strengthening of DC infrastructure	Achieving digitalization index of 90%	CMMi-3 certification		
100% e-waste management	ISO 27001 certification			

d. Pillars for FY 24 – The proposed CAPEX plans for FY 24 aims to scale up, strengthen and build redundancies in the schemes which are being implemented in FY 23 with special

emphasis on business continuity, cyber security and seamless communication. The Technology CAPEX for FY 24 will have following seven pillars:

1) Build & Strengthen end user IT infrastructure
2) Strengthen Network Connectivity across TPWODL
3) Disaster Recovery Center – Hardware and Software
4) Commissioning facilities including common infrastructure for Disaster Recovery Center at Sambalpur for other 3 Odisha DISCOMs
5) Augmentation of Data Center Infrastructure-Hardware and Software
6) Digitization of Old Documents

The total estimated value of the proposal is **Rs. 77.70 Crores**

The detail proposals are as follows:

1) Build & Strengthen end user IT infrastructure:

Till date, TPWODL has procured and distributed around 1600 laptops and 1000 desktops to its officers. TPWODL is also installing around 200 heavy duty printers (Multi Functional Devices (MFD)) across all offices of TPSDOL.

With the addition of new manpower and establishments as well as roll out of more and more IT applications, it is imperative that the end users are equipped with necessary IT infrastructure for smoothly performing day to day works. Accordingly following is being proposed in FY 24:

Front End Devices and End user Licences				
S. No	**Description**	**Unit cost (INR, inclusive of tax)**	**TPWODL**	
			Qty	**Amt.**
1	Desktop with MS License and UPS	81701.64	300	2.45
2	Laptops with MS License	93486.98	500	4.67
3	High End MFP Printers	238506.03	100	2.39
4	Low End MFP Printers	86135.58	100	0.86
5	Antivirus (Client)	4410.25	700	0.31
6	IT Spares	15000000.00	1	1.50
	Total			**12.18**

** *The Unit rates taken for determining the overall CAPEX are either TPWODL rates which were discovered in FY 22/23 on competitive basis and against which orders have been placed or market rates. We have taken reasonable escalation in the unit rates to accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.*

The prices of end devices include cost of all licenses, antivirus protection and other obligatory fees associated with the end computing devices. The proposal for scheme 1 is

Build & Strengthen end user IT infrastructure	Amount in Rs Cr
End Computing devices (Laptops, desktops, MFD Printers) along with MS licenses, Autocad, Antivirus, HDD upgradation of existing laptops etc.	12.18
Total	**12.18**

Benefits

1) Enhancing the reach of computerization across the organization.
2) Build a culture of following online processes and less of paper movement
3) Availability of end user computing devices up to section level for proper use of various IT applications towards more effective and transparent execution of business processes

2) Strengthen Network Connectivity across TPWODL:

In FY 22, we established MPLS connectivity in 100% offices across TPWODL. The technology used was IP MPLS. WiFi connectivity was established in offices with more than 20 users.

In FY 23, the journey continues and we are in the process of establishing connectivity in 67 additional IT locations by taking the total tally to 282. WiFi connectivity is also being extended up to section level for ease of operations.

For all new office buildings/extension of office buildings coming up in FY 24, necessary extension of LAN connectivity and new MPLS connectivity, if required, shall also be planned. Accordingly following is being proposed in FY 24:

Locational Network

Locational Network				
			TPWODL	
S. No.	Description	Unit cost (INR inclusive of Tax)	Qty	Amt.
1	Layer -II & III Switch	151512.00	50	0.76
2	Layer- 3 Router (VPN)	87556.00	20	0.18
3	LAN Cables per node	4632.00	2500	1.16
4	2/5 kVA UPS	68595.00	20	0.14
6	WiFi Access points	87438.00	200	1.75
	VC Equipment	521166.66	20	1.04
		Total		**5.02**

*** The Unit rates taken for determining the overall CAPEX are either TPWODL rates which were discovered in FY 22/23 on competitive basis and against which orders have been placed or market rates. We have taken reasonable escalation in the unit rates to*

accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.

The proposal for scheme 2 is as follows

Strengthen Network Connectivity across TPWODL	Amount in Rs Cr
To build connectivity through MPLS network, WiFi access points between offices across TPWODL	**5.02**
Total	**5.02**

Benefits

IP-MPLS/WiFi connectivity in offices will create a reliable redundant network which can be used for IT applications across TPWODL.

3) Disaster Recovery Center – Hardware and Software:

TPWODL Data Center was commissioned successfully at Burla, Sambalpur in FY 22. Currently, SCADA, GIS and AMI applications are hosted at TPWODL Data Center.

As per best practices, it is proposed to set up Disaster Recovery Center (DR) for TPWODL Data Center at Bhubaneswar, Odisha which will ensure business continuity in the aftermath of any breakdown of the Data Center (DC) owing to a natural calamity or other unforeseeable disaster. The DR will operate at 100% capacity of the DC and the same will be equipped with latest cyber security measures. DR will also ensure 100% data protection for all data stored at DC. For setting up the DR as proposed above, all hardware and software for necessary compute, storage, networking and cyber security compliance, will have to be procured to ensure operation at full capacity in active-passive mode.

Accordingly following is being proposed in FY 24:

Disaster Recovery Center - Hardware / Software				
			TPWODL	
S. No.	**Description**	**Unit cost (INR inclusive of Tax)**	**Qty**	**Amt.**
1	SAN Switch & SAN Storage 100 TB	23564915.06	1	2.95
2	Server with OS	1708750.31	25	5.34
3	Back Up data domain along with software	22553423.00	1	2.82
4	Windows OS (Data Center Edition)	561050.68	4	0.28
5	Oracle 8 Core	18790292.06	1	2.35

6	SQL Server 8 Core	10012573.76	1	1.25
7	Linux	9999870.00	1	1.25
8	Virtualization (Per Processer/CPU)	318635.44	50	1.99
9	Antivirus (Server Edition)	46526.22	25	0.15
10	KVM Switch	338042.13	8	0.34
11	Rack & Accessories (Lum sum)	1500000.00	1	0.19
12	Other Software	10000000.00	1	1.25
	Total			**20.15**

** *The Unit rates taken for determining the overall CAPEX are either TPWODL rates which were discovered in FY 22/23 on competitive basis and against which orders have been placed or market rates. We have taken reasonable escalation in the unit rates to accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.*

The proposal for scheme 3 is as follows

Disaster Recovery Center-Hardware and Software	**Amount in Rs Cr**
Necessary compute, storage, networking and cyber security measures for Disaster Recovery Centre (DR)	**20.15**
Total	**20.15**

Benefits

- Disaster Recovery Center shall ensure business continuity in case of breakdown of Data Center
- Disaster Recovery Center shall ensure recovery of data in case of any data loss at Data Center

4) Augmentation of Data Center Infrastructure – Hardware and Software:

Augmentation of TPWODL Data Center (DC) infrastructure (both hardware and software) is required in order to cater to extended GIS and AMI implementation, ADMS implementation as well as compliance to cyber security guidelines. For catering to third phase of GIS implementation to be undertaken in FY 24, the DC infra shall have to be suitably augmented. In case of extension of smart metering landscape in TPWODL, further augmentation of DC infrastructure will be required.MBC and ERP solutions of all utilities of Odisha are hosted at IPDS Datacenter at Bhubaneswar along with key bespoke applications. In order to enable 360-degree visibility to TPWODL management across the entire business spectrum, it is essential to build a robust, scalable and sustainable reporting system. Consequently, TPWODL shall have to procure necessary appliances in FY 24, required for building business intelligence enabled reporting tools as mentioned above, to be hosted at IPDS Data Center at Bhubaneswar.For augmenting existing cyber security measures at TPWODL Data Center, additional infrastructure is proposed to be procured in the in FY 24.

Accordingly following is being proposed in FY 24:

Augmentation of Data Center Infrastructure-Hardware and Software:

DC Hardware

			TPWODL	
S. No.	**Description**	**Unit cost (INR inclusive of Tax)**	**Qty**	**Amt.**
1	Server	1708750.31	10	1.71
2	SAP S4 Hana Appliance (6 TB)	32323687.00	1	3.23
3	DC Accessories (Lum sum)	1000000.00	1	0.10
4	WAF + SLB	30000000.00	1	3.00
5	LLB	30000000.00	1	3.00
	Total			**11.04**

Augmentation of DC Software & Licenses:

Software and Applications				
S. No	**Description**	**Unit cost (INR, inclusive of tax)**	**TPWODL**	
			Qty	**Amt.**
1	Windows OS (Data Center Edition)	561050.68	4	0.22
2	Linux OS	1698369.28	2	0.34
3	Virtualization (Per Processer/CPU)	318635.44	20	0.64
4	Antivirus (Server Edition)	46526.22	10	0.05
5	NMS	15000000.00	1	1.50
6	Other applications (Autocad, Adobe Acrobat etc.)	20000000.00	1	2.00
	Total			**4.75**

** *The Unit rates taken for determining the overall CAPEX are either TPWODL rates which were discovered in FY 22/23 on competitive basis and against which orders have been placed or market rates. We have taken reasonable escalation in the unit rates to accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.*

The proposal for scheme 4 is as follows:

Augmentation of Data Center infrastructure – Hardware and Software	**Amount in Rs Cr**
Data Center Hardware and Software and implementation of cyber security measures	15.79
Total	**15.79**

Benefits

- Augmentation of TPWODL Data Center infrastructure will enable extension of GIS and AMI landscape leading to better asset and outage management as well as reduction of AT&C loss.
- Up to date software & cyber security measures will ensure safety of IT/OT applications and data.

5) Disaster Recovery Services for TPCODL, TPNODL & TPSODL:

Capex plan for FY 23-24

TPWODL Data Center was commissioned successfully at Burla, Sambalpur in FY 22. Currently, SCADA, GIS and AMI applications are hosted at TPWODL Data Center.

Sambalpur district comes under low damaged risk zone (Zone-II) is considered as best seismic zone for DC/DR Setup. Considering above, it is proposed to set up Disaster Recovery Center (DR) for **TPCODL, TPNODL & TPSODL at Burla Sambalpur**, Odisha which will ensure business continuity in the aftermath of any breakdown of the Data Center (DC) owing to a natural calamity or other unforeseeable disaster. The DR will operate at 100% capacity of the DC and the same will be equipped with latest cyber security measures. DR will also ensure 100% data protection for all data stored at DC. For setting up the DR Services as proposed above, all hardware and software for necessary compute, storage, networking and cyber security compliance, will have to be procured to ensure operation at full capacity in active-passive mode.

Accordingly following is being proposed in FY 24:

DR Services for other DISCOM				
			TPWODL	
S. No.	**Description**	**Unit cost (INR inclusive of Tax)**	**Qty**	**Amt.**
1	Electrical System	37189015.13	1	3.72
2	Air Conditioning System	11978702.66	1	1.20
3	Safety Security Surveillance and Monitoring System	9313986.30	1	0.93
4	Rack and Accessories	105156.25	32	0.34
5	Routers	1900000.00	4	0.76
6	Switches	1735395.73	32	5.55
7	KVM Switch	338042.13	32	1.08
8	DC Accessories	10000000.00	1	1.00
9	Firewall	18850000.00	2	3.77
	Total			**18.35**

** *The Unit rates taken for determining the overall CAPEX are either TPWODL rates which were discovered in FY 22/23 on competitive basis and against which orders have been placed or market rates. We have taken reasonable escalation in the unit rates to accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.*

The proposal for scheme 5 is as follows:

Disaster Recovery Center-Hardware and Software	**Amount in Rs Cr**
Necessary Infrastructure & networking including and cyber security arrangement to setup Disaster Recovery Services	18.35
Total	**18.35**

Benefits

- Disaster Recovery Center shall ensure business continuity in case of breakdown of Primary Data Center of TPCODL, TPNODL & TPSODL
- Disaster Recovery Center shall ensure recovery of data in case of any data loss at Primary Data Center of TPCODL, TPNODL & TPSODL

6) Digitization of Old Documents:

In FY 23, e-office application shall be implemented for digitizing the document and workflow management at all offices across TPWODL. In near future, once the application is implemented, each and every document which are part of the concerned workflow shall be automatically digitized.

However, in order to reap complete benefit of this massive digitization exercise, hard copies of all old documents (i.e., documents collected/generated before Go Live of e-office application) shall have to be digitized, Majority of these documents are related to electricity connections provided to consumers. This exercise will ensure safekeeping of legacy data which can be cross referenced at any point of time on need basis. Accordingly following is being proposed in FY 24:

Digitization of Old documents

S. No	Description	Unit cost	Qty	Total Cost (Rs. In Cr.)
1	Digitization of legacy documents	2.25	27,600,000	6.21
	Total			**6.21**

** *The Unit rates taken for determining the overall CAPEX are market rates. We have taken reasonable escalation in the unit rates to accommodate the unknown developments and semi-conductor crisis that is affecting the industry currently.*

The proposal for scheme 5 is as follows:

Digitization of old documents	Amount in Rs Cr
Digitization of all legacy documents at TPWODL offices	6.21
Total	**6.21**

Benefits:

- Digitization of legacy documents shall ensure safekeeping of data
- Digitization of legacy documents shall ensure necessary audit trail and transparency.

Summary of Proposals by Technology:

IT Capex Plan: Summary		
S. No.	**Description**	**Total Rs. In Cr**

1	Disaster Recovery Center - HW & SW	20.15
2	DC Hardware	11.04
2	DC Software & Licences	4.75
3	Front End Devices and End user	12.18
5	Locational Network	5.02
6	DR Setup for Other DISCOMs	18.35
7	Digitization of legacy documents	6.21
	Total	**77.70**

e. Cost Benefit Analysis:

Scheme 1: Build & Strengthen end user IT infrastructure:

Particular	Value	Quantity	Annual benefit (Rs Crore)	Scheme Proposal (Rs Crore)
Annual Benefit due to reduction in AT&C losses via increase in billing and collection efficiencies	Increase of 0.3% yearly billing efficiency due to enhanced use of end user IT infrastructure and 100% collection against the same	Increase of 0.3% yearly billing efficiency i.e., 8.99 MU and 100% collection efficiency against the increased billing. (Basis: total billed unit for FY 22 is 2998 MU, and ABR for FY 22 is Rs. 5.38)	4.84	6.09
Total			**4.84**	**6.09**
Payback period (in years)			**1.26**	

Scheme 2: Strengthen network connectivity across TPWODL:

Particular	Value	Quantity	Annual benefit (Rs Crore)	Scheme Proposal (Rs Crore)
Annual Benefit due to reduction in AT&C losses via increase in billing and collection efficiencies	Increase of 0.2% yearly billing efficiency due to enhanced use of end user IT infrastructure and 100% collection against the same	Increase of 0.2% yearly billing efficiency i.e., 5.99 MU and 100% collection efficiency against the increased billing. (Basis: total billed unit for FY 22 is 2998 MU, and ABR for FY 22 is Rs. 5.38)	3.22	4.70
Annual Benefit due to increase in MU billed consequent to increase in input energy via higher reliability	Increase of 0.05% yearly MU billed consequent to increase in input energy due to higher reliability and 100% collection against the same	Increase of 0.05% yearly billing efficiency i.e., 1.5 MU and 100% collection efficiency against the increased billing. (Basis: total billed unit for FY 22 is 2998 MU, and ABR for FY 22 is Rs. 5.38)	0.81	
Total			**4.03**	**4.70**
Payback period (in years)			**1.17**	

Scheme 3: Disaster Recovery Center-Hardware and Software:

Particular	Value	Quantity	Annual benefit (Rs Crore)	Scheme Proposal (Rs Crore)
Annual Benefit due to business continuity in case of breakdown of data center for a period of 10 days	Automated meter reading of 80000 consumers with smart meters for one billing cycle resulting in completion of their billing and 100% collection against the same	Automated meter reading of 80000 consumers with smart meters for one billing cycle resulting in billing of 24 MU and 100% collection against the same (Basis: Average monthly billing 300 kWh for smart consumers and ABR for FY 22 is Rs. 5.38)	12.91	24.89
Total			**12.91**	**24.89**
Payback period (in years)			**1.93**	

Scheme 4: Augmentation of Data Center Infrastructure-Hardware and Software:

Particular	Value	Quantity	Annual benefit (Rs Crore)	Scheme Proposal (Rs Crore)
Annual Benefit due to reduction in AT&C losses via increase in billing and collection efficiencies	Increase of 0.5% yearly billing efficiency due to implementation of AMI in additional areas as well as deployment of GIS application for better network planning	Increase of 0.5% yearly billing efficiency i.e., 14.99 MU and 100% collection efficiency against the increased billing. (Basis: total billed unit for FY 22 is 2998 MU, and ABR for FY 22 is Rs. 5.38)	8.06	13.11
Total			**8.06**	**13.11**
Payback period (in years)			**1.63**	

Scheme 5: Digitization of old documents:

Particular	Value	Quantity	Annual benefit (Rs Crore)	Scheme Proposal (Rs Crore)
Annual Benefit due to faster resolution of old billing disputes consequent to availability of all documents in soft form within an integrated e-office system	Increase of 0.1% yearly collection due to faster resolution of old billing disputes consequent to availability of all documents in soft form within an integrated e-office system	Increase of 0.1% yearly collection i.e., Rs. 1.44 Crores due to faster resolution of old billing disputes consequent to availability of all documents in soft form within an integrated e-office system (Basis: total collection in FY 22 is Rs. 1437.57 Crores)	1.44	6.21
Total			**1.44**	**6.21**
Payback period (in years)			**4.31**	

Annexure- 16 DPR for Technology Intervention- GIS, Communication & Others

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
5B	OT Infrastructure	ii) Technology Intervention- GIS, Communication & Others Implementation.	Implementation of GIS	38.60
			Communication Infrastructure	11.00
			Smart meter Backend Infra	11.81
			Procurement of Drones	0.80
	SubTotal- OT Infrastructure			**62.21**

Operation Technology:

In order to improve the reliability and reduce the losses and to improve the overall performance, effective implementation of technologies is required. TPWODL is in the midst of technology transformation to provide quality customer services and to deliver highly reliable and improved quality supply in safe manner to its consumers by meeting various standards of operation. To bring the various latest technology, systematic investment is planned by TPWODL as given below in Operation Technology

Last year by viz. 2021-22 has been very challenging in terms of unprecedented and prolonged Pandemic of Covid second wave, Despite of every odds, TPWODL has attained many achievements such as establishment of 24*7 & Operational Power System Control Centre (PSCC) and provided mobile applications to all 33/11KV Primary Sub-Station to collect the operational information, Planned Outages monitoring and information pass on to consumers regarding the outages in their area before 48 hrs, every major breakdown and planned outages informed to centralized Call Centre and consumers get benefitted through it.

During the first-year of journey, Operation Technology has played a critical role in transforming the organization and has yielded superlative results in terms of bringing efficiency into the system and enhancing customer experience. Key Operational Technology initiatives includes automation of substations through Supervisory Control and Data Acquisition (SCADA), Consumer and asset mapping through Geographical Information System (GIS), Integrated Communication Technology (ICT) & Smart meter backend infra.

Geographical Information System ("GIS"):

In the FY 2021-22, TPWODL has initiated pilot of Enterprise GIS in RSED division of Rourkela Circle. IT infra for development & system requirement has been initiated and 25% survey & digitalization of pilot area has been completed. Under this head, a lump sum amount of Rs. 5.00 Cr was approved by the Commission in the FY 2021-22 against the proposed amount of Rs. 74.72 Cr. spread over four years. In the FY 2022-23, TPWODL under GIS has purchased: (a) high-end systems, printers & plotters for QC and survey purpose; (b) supply, install and commission the production environment with network and storage components; (c) purchase high-resolution image for digitization of rest of the divisions of Rourkela and Bargarh circles; (d) conduct asset sequence generation and painting for remaining Rourkela and Bargarh circles; and (e) purchase analysis and map publishing tools. Considering the need to leverage technology for improving the quality of supply and better consumer experience. Moving far a sustenance process for SLD has been rolled out. Through EGIS 100% visibility of TPWODL has been created. as this will be in phase manner and the compilation target will be in FY 24 in PAN TPWODL area.

Grid Substation Automation System (GSAS):

Multi-protocol label switching (MPLS):

As TPWODL is a front runner in technology deployment hence this is prudent to have robust communication infrastructure design that can support various technology and digitalization seamlessly across demography of TPWODL. In view of the same integrated communication technology (ICT) has been framed as a road map. To provide immediate business support multi-protocol label switching (MPLS) technology has been deployed and presently SCADA and office location are connected over this. In addition to this Router, switches and LAN cabling is required to make the PSS ready.

- Out of 625 locations MPLS Communication was established in 170 numbers of IT (Information technology) & OT (Operational Technology) locations in FY22.
- Deployed MPLS communication system to coordinate with the entire substation in FY-23

There are 15 nos of substation under IPDS, DDUG wherein retro fitting will be possible to make them SCADA compatible therefore remote terminal unit (RTU) order has been place to make them SCADA ready.

Capex plan for FY 23-24

The below table represent the Capex approval and capitalization completed in FY 21-22

Description	Year	Approved by commision (In Crore)	Capitalized (In Crore)	Capex for Work-In-Progress (WIP) (In Crore)	Remark
SCADA Implementation	FY 21-22	₹ 15.30	₹ 10.84	₹ 4.46	Expected to close by FY 22-23
GIS Implementation	FY 21-22	₹ 5.00	₹ 2.43	₹ 2.57	Expected to close by FY 22-23
GSAS Implementation	FY 21-22	₹ 9.2	₹ 0.29	₹ 8.91	Rs.5.04 Cr order has already placed but Due to semiconductor crises Router and ethernet supply has impacted .Rs 3.87 Crore work order under progress.

Similar to FY 21-22, TPWODL has submitted detail capex plan for FY 22-23 the detailed progress is given below

Description	Year	Approved by commision (In Crore)	Remark
GIS	FY 22-23	₹ 21.45	In H1 FY 22-23 ,Rs. 21.45 Cr.order has been placed & expected to capitalize by Mar-23
Communication Infrastructure	FY 22-23	₹ 18.65	Rs.10 Cr. order has been placed and Rs. 8.5 Cr.Order expected to place by 10th Dec 2022
Automation	FY 22-23	₹ 21.10	Rs.11 Cr. order has been placed and Rs.10.10 Cr. order will be place by Dec-22

Total OT Capital Expenditure FY 23-24 [75.71 Cr]

Sr. No	Communication	GIS	Smart Meter Backend infra	Drone
1	11 Cr	38.6 Cr	11.81Cr	0.8 Cr
Total - 62.21 Cr				

Communication Technology:

Benefits:

- Communication Technology Guarantee the end user, the uninterrupted power supply by reducing the faults.
- Timely Fault rectification by knowing about fault at real time.
- Communications technology is crucial for the integration of renewables because data can help in optimizing operational and capital expenditures
- Upgrade distribution infrastructure to improve power quality and cope with the integration of IP based devices in the grids and PSS,
- Increase billing efficiency via digital intervention (Smart Metering)

- Improve asset (Transformers etc.) health for predictive maintenance

Objectives:

- Band Optimization by virtue of execution of Passive Network.
- CCTV Installation at high revenue PSS.
- Network Monitoring and Fault rectification
- Very High frequency (VHF)Communication System

IT Network

MPLS Network comprises of all office locations like Circle Offices, Division Offices, Sub Division Offices, Section Offices, MRT Offices, Stores, Customer Care, Collection Counters, GRF etc. In this type of network huge bandwidth is required based on number of users availing service in that particular office. There are approximately 317 No of locations under IT Network.

OT Network

MPLS Network comprises of all Sub Stations where network should have low latency and low jitters as remote operations and monitoring of substations using the network will be done from central control centre located at Burla. There are approximately 308 No of locations under IT Network.

Passive Network:

Based on the network survey that was executed can reduce the total MPLS Links from approximately 625 Locations to 322 Locations however this count might vary to a small extent based on issues faced during execution phase like geographic difficulties, non-availability of permission to lay UG/OH cables, access issues, critical road crossing, railway crossings, river, Nullah, Canals etc.

CCTV Installation at high revenue PSS

We emphasize to install 1 No 360◦ High Resolution CCTV Camera with night vision and motion sensors in Each Substation for seamless monitoring of the Substations from a single point.

In first phase we envisage to cover 150 locations. This will be beneficial to ease the operation and maintenance of PSS and will provide additional benefits as follows:

- Keep a Check upon internal and external theft.
- Crime prevention
- Evidence collection

- Staff security
- Private and sensitive area surveillance
- Substantially reduce Turn-Around-Time (TAT).

NETWORK MONITORING AND FAULT RECTIFICATION TEAM:

Five Nos. of teams for each Circle. These teams comprise of 4+1 Set OF NETWORK MONITORING ENGINEERS. Teams will be responsible for near 100 % up time for every node and will raise an alarm with cellular network Service provider if any service goes down. Also, the responsibility of the team will be to generate the down time register and the same will be helpful for us to ask ISP to improve their services.

As and when site or services go down, the team will reach the location and will fix the problem at first level, i.e., SFP cleaning, Patch chords cleaning etc.

In All 5 circles, the on-call services will be arranged to provide reliable communication for IT and OT location.

Very High frequency (VHF)Communication System.

Very high frequency (VHF) refers to the radio frequency electromagnetic waves ranging from 30 to 300 MHz with corresponding wavelengths ranging from 1 m to tens of meters.
In TPWODL Few of the Primary substation locations area out of coverage from cellular networks so it creating difficulties during pass on the operational messages from control room, it creates hinderance during any remote operation. So, we proposed VHF for the particular primary substation.

Proposed Capital Expenditure Plan – FY 23-24 [11 Cr]

Sr. No	Item Details	Rs Cr
1	Passive Network Execution	4
2	CCTV Camera	4
3	Network monitoring and rectification Team	2
4	VHF	1
Total		11

Geographical Information System (“GIS”)

Geographical Information System is an enterprise software application that maintains the locational and physical attributes of electric infrastructure and to use by the Discoms as the source of infrastructure information.

To implement enterprise GIS in TPWODL area, four years plan is in place.

Proposed Capital Expenditure Plan – FY 23-24 [38.6 Cr]

- Pay out of Installation & Commissioning rest amount (5% of line-item value) of development environment
- Purchase of High-resolution image for digitization of Sambalpur and Kalahandi circle.

- Consumer indexing & base map creation of Sambalpur and Kalahandi circle.
- Asset Sequence generation and painting Sambalpur and Kalahandi circle.
- Purchase of Analysis and Map publishing tool.
- Purchase of Staggered license lot of 5 for data editing and lot of 50 for concurrent web user (Optional)
- Completion of Integration of GIS with other IT/OT System

Capital Expenditure FY 21-22 to FY 24-25:

CAPEX								
Sl. No.	Description	FY 21-22 Amount (Rourkela)	FY 22-23 Amount (Bargarh & Rourkela)	FY 23-24 Amount (Sambalpur, Bolangir & Bhawanipatna)	FY 24-25 Amount (Bhawanipatna)	FY 25-26 Amount	FY 26-27 Amount	Total
1	Software Licenses	₹ 2,85,02,921.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 2,85,02,921.00
2	Installation, Commissioning of GIS System and other work as per scope of work	₹ 0.00	₹ 3,34,47,286.80	₹ 18,58,182.60	₹ 18,58,182.60	₹ 0.00	₹ 0.00	₹ 3,71,63,652.00
3	Network Component for Development	₹ 80,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 80,00,000.00
4	Highend PC,Printer,Plotter,& Mobile Devices	₹ 0.00	₹ 27,00,000.00	₹ 20,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 47,00,000.00
5	Production HW	₹ 25,00,000.00	₹ 25,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 50,00,000.00
6	Network Component for production	₹ 0.00	₹ 20,00,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 20,00,000.00
7	Image procurement (As per Annexure-6: Imagery requirement and considerations)	₹ 0.00	₹ 1,06,20,000.00	₹ 1,94,70,000.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 3,00,90,000.00
8	Base Map creation, Data survey, digitization, QC for pilot area (As per Annexure-6)	₹ 1,17,68,446.90	₹ 14,86,03,955.10	₹ 31,73,68,520.00	₹ 6,30,64,217.00	₹ 0.00	₹ 0.00	₹ 54,08,05,139.00
9	Asset Sequence generation and painting	₹ 0.00	₹ 1,76,06,718.20	₹ 3,80,78,232.00	₹ 2,52,31,292.00	₹ 0.00	₹ 0.00	₹ 8,09,16,242.20
10	Auto Cad Licesnse & SLD digitization	₹ 10,76,160.00	₹ 5,21,256.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 15,97,416.00
11	Analysis and Map publishing tool	₹ 0.00	₹ 34,30,057.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 34,30,057.00
12	Staggered license (lot of 5 for Data editing and lot of 50 for concurrent web user) **(Optional)**	₹ 0.00	₹ 0.00	₹ 72,47,769.00	₹ 0.00	₹ 0.00	₹ 0.00	₹ 72,47,769.00
TOTAL		**₹ 5,18,47,527.90**	**₹ 22,14,29,273.10**	**₹ 38,60,22,703.60**	**₹ 9,01,53,691.60**	**₹ 0.00**	**₹ 0.00**	**₹ 74,94,53,196.20**

Advanced Metering Infrastructure ("AMI"):

Background

Proposal for Smart Meter Roadmap:

The Smart meters are a smart choice for both the consumers and Discoms. While Smart Meters provide complete transparency regarding billing and consumption pattern to the utilities, consumers are also empowered to rationalize their use and save significantly. As Government of India vide Ministry of Power Gazette notification (F.No. 23/35/2019-R&R) dated 17th August, 2021 had announced to make it mandatory for all States to change all conventional meters to the more advanced prepaid smart meter within next 3 years. With this initiative, India is ushering in the biggest digital transition, witnessed by the industry.

The Company is ushering in digital transition by undertaking digital initiatives for continual up-gradation and enhancing the Technology landscape. Inline to the Company's focus towards maximizing sustainable value to all stakeholders through IT/OT enabled solutions and smart technology, Company is undertaking various technology intervention initiatives

and to address the need of digital enabled solutions and smart technology for implementation of ongoing/envisaged projects. The objective of this proposal is to elucidate the need for the Company to embark on smart metering.

Development of Smart Meters at the Company during Q2 - Q3 of Fy 22-23:

- The Company has established back-end infrastructure at Burla as the Main data center.
- The Company has arranged a dual-network facility from Airtel and Jio for establishing reliable smart meter communication infrastructure.
- The meter installation activities have started from June 2022 onwards and till 30th October total 12112 Nos. of 3-phase smart meters were installed.
- These 3-phase aforesaid meters have completed all functionality tests, therefore reading and billing are being generated digitally.
- To promote smart meter, priority has been given to the Government connections for upgradation with the present metering system. However, the Company will install meter for all categories of consumers.
- Presently, Smart meters have post-paid functionalities however, the Company will convert all the smart meters with pre-paid functionalities in FY23.

Smart Meter Roadmap by the Company:

The Company intends to roll out smart meters to accomplish metering of feeders and consumers together with Smart Metering in order to curtail the commercial loss. Furthermore, it would allow energy accounting and audit to identify the sources of the loss so that the same can be plugged effectively. The Company intends to surmount the Discom's challenges such as impacting adversely billing & operational efficiency and strive to improve its organizational efficiency & effectiveness through adoption of smart meter rollout.

Key Driver of Smart Meter Rollout in the Company:

The Company is in the process of deploying Advance Metering Infrastructure (AMI) throughout its territory. The scope of work includes to supply and installation of smart meters along with head end system that has the ability to communicate with all cellular network platform that can support AMI system over a single communications platform.

These meters will be installed over a span of the next three years. Smart meter project includes the installation of complete IT backend infrastructure and the year-wise installation plan is given under Meter Management Group Plan.

Loss Reduction:

During limited site inspections, the energy meters were observed missing at the consumer's premises. There were many non-functional energy meters comprising obsolete technology-based energy meters, burnt, rusted and faulty energy meters. These issues are resulting into reduction in billing efficiency, high AT&C losses and caused an increase in making provisional billing, defective billing and substantial consumer complaints leading to customer dissatisfaction. The errors in the bills lead to non-payment of bills and thus, hampers the collection efficiency.

Further, it was also observed that meters are not installed on all Distribution Transformers (DT) leading to no energy accounting at DT level. As a result, it is not possible to determine the level of energy input and hence unable to measure AT&C losses at DT level. Energy accounting provides the means to identify areas of leakages, wastage and inefficient energy usage.

To reduce the techno-commercial losses, the following key activities are planned for execution:

- Replacement of burnt / faulty / electromechanical meters
- Installation of smart meters along with back-end IT infrastructure
- Upgradation of the existing metering system for 3-Phase all categories and 1- phase having consumption more than 200 Units per month.

Detailed break-up of the proposed Capex:

The detailed break-up of the proposed Capex for the upgradation of back-end infrastructure and installation of consumer meters during FY23, FY24, and FY25 are as given as under:

Proposed Capital Expenditure Plan – FY 23-24 [11.81 Cr]

Smart Meters Back-end Infrastructure:

Sl. No.	Particulars	Unit	Unit Rate (In Rs.)	IT Infra Installation Plan			Year wise Budget Requirement (in Crore)		
				FY22	FY23	FY24	FY23	FY24	FY25
IT Infrastructure Hardware									
1	Server and Networking Infra. For MDM	Ea	2,95,00,000	1	1	-	2.95	2.95	-
2	SAN storage (Expansion	Ea	1,77,00,000	1	1	-	1.77	1.77	-

Sl. No.	Particulars	Unit	Unit Rate (In Rs.)	IT Infra Installation Plan			Year wise Budget Requirement (in Crore)		
				FY22	FY23	FY24	FY23	FY24	FY25
	of 50TB)								
Sub-Total for IT Hardware at DC							**4.72**	**4.72**	**0.00**
IT Infrastructure Software									
1	HES system - License for 0.2 million Meters with 5-year warranty	Ea	2,33,43,940	1	1	-	2.33	2.33	-
2	Implementation & Integration Charges HES	Ea	1,75,07,955	1	1	-	1.75	1.75	-
3	Data Analytics Module	EA	3,00,00,000			1		3	
Sub-Total for IT Software at DC							**4.09**	**7.08**	-
						Total IT (A)	**8.81**	**11.81**	-

Note: For FY24, Back-end infrastructure cost included redundancy provisioning at Bhubaneswar.

Procurement of Drones:

TPWODL has vast area approx. 48,000 sq. km and 22 lakhs consumers. We are having less amount of data for GIS integration, also we are facing lot of theft cases which are already there before our takeover, we are facing losses from this type of cases right now. Odisha Distribution network is old, need inspection and maintenance for this we need accurate data as per field condition.

TPWODL is planning to purchase a Drone for reducing survey time, survey at Remote locations, Theft detection & Enhancing accuracy for GIS.

TPWODL facing challenges like could not capture accurate data from remote locations or vast field land base. Line tempering cannot be detected by using conventional method of surveying. Take more man power and man hours for GIS survey.

GIS survey needs too much man hours for a single circuit with less accuracy, also there are challenges on field to excess locations like forest areas, river crossing, consumer residences and agriculture fields too.

Theft detection cannot that effective through conventional methods, as consumer get hint of team is there, they destroy all the evidence before team could reach.

Land base capturing is very time consuming as well as cost consuming task, as many data & images including latitude and longitude to be capture from field.

For line surveying and inspection man power as well as resources are utilized, still due to some reasons could not attend all the problems.

To evaluate its viz a viz benefits against the orthodox GIS Mapping methodology and inspection processes, TPWODL has done several POCs (proof of concept) in-house as well as Vendor (like M/s GARUDA UAV, M/s Dronexia), which help us getting data faster and accurately in lower cost as well as lesser time.

From getting benefits from drone, we plan do in-house survey using our own drone with skilled pilots trained from recognise institution of India.

Benefit:

- Remote area's Data capturing.
- Theft detection.
- GIS Survey.
- Line maintenance could easily do without risk to human life.
- Vegetation can be detected.
- Enhanced Operational safety.
- Faster operation / Reduction in Manhours.
- Safety of citizen, equipment, BA associate, Animal.
- Analysis of fault in fastest time which will be a guiding factor for network
- modification, updating.

Proposed Capital Expenditure Plan – FY 23-24 [0.8 Cr]

S.No.	Items	Rs. Cr
1	Purchase of Drone two numbers	0.40
2	Drone accessories	0.1
3	Software license.	0.25
4	Pilot training	0.05
	Total	**0.80**

Annexure-17 DPR for Improvement of Civil & Store Infrastructure and Ready to use assets for offices

Activity Cost Summary:

S. No	Major Category	Activity	Works to be covered	Proposed Capex FY 23-24 (Rs. Cr)
5C	Civil, Admin and Other Infrastructure	iii) Improvement of Civil Infrastructure	New wash room	2.00
			Additional Material Storage area	2.00
			New store building	0.60
			New Scrap Yard, Pole Storage location	0.30
			New Building for Division/ Subdivision Section/Commercial Office.	7.00
			Refurbishment of old building for office at various location	3.00
			Infrastructure for fuse call center	0.75
		iv) store infrastructure	store infrastructure, Secutity System and fire Hydrant System in Store	4.35
		v) Ready to Use assets for Offices	Purchase of EV vehicles & other vehicles for employees	1.00
			Ready to Use assets for Offices	1.50
	Sub Total- Civil & Admin Infrastructure			**22.50**

Details Related to Improvement of Civil Infrastructure along with Tentative Estimation:

Sl. No.	Works to be covered FY24	Responsibility	Value (Cr)	Remarks
1	New wash room	Civil	2	Considered New Wash Room - 50 nos & Renovation - 50 Nos
2	Additional Material Storage area	Civil	2	Considered 8000 Sqm area for yard development.
3	New store building	Civil	0.6	Considered Store Shed Building at Burla Store
4	New Scrap Yard, Pole Storage location	Civil	0.3	Considered 5 Scrap Yard Location one in each circle cost Rs. 6.0 Lacs each
5	New Building for Division/ Subdivision Section/Commercial Office.	Civil	8	Considered New Building - Balnce Part of Division Office of Sonepur, Rajganjpur, Dewgarh. SDO Office - 5 Nos & Section Office - 18 nos
6	Refurbishment of old building for office at various location	Civil	3	5 Nos SDO office & 30 Nos Section Office
7	Infrastructure for fuse call center	Civil	0.75	Considered 30 nos Fuse Call Centre @ Rs. 2.5 lacs each
		TOTAL	**16.65**	

Details Related to Stores Estimation:

BUDGET PROPOSAL FOR FY 2023-24				
SL. No.	**Particulars**	**Amount (Rs.)**	**INR**	**Purpose**
1	Racking System in three floored New Storage Building	80	Lakhs	Racking system & Lift arrangement has been planned for New Three-Floored Storage Shed going to be built next year
2	Lift Arrangement in three floored New Storage buliding	30	Lakhs	
3	Oil Tank (MS) 20KL Capacity 1 each at Rajganpur/Balangir/Kesinga	15	Lakhs	Power Oil Storage Tank is required to store burnt oil recovered from the returned Trf. # From site perpetually, till its proper disposal. Imminet as per storage license obtained as it is classified as hazardous items.
4	Tool & Tackles-Safety Measure (Implements for Cable/Conductor Drums Lifting for Loading & Unloading, Unlaying the drums for issue etc., and Jacks.	10	Lakhs	Jacks and centre rods are required to rest the drums for unlaying the cable without damage and at ease. Tackels are the devise for lifting the drums during shifting, loading & unloading from the trucks safely.
5	CCTV Survielence for remaining part, new sheds and reclaimed land at Burla,	75	Lakhs	Establishing total survielence across the place of opertion.
6	Intrusion detection system	50	Lakhs	System that monitors network traffic for suspicious activity and issues alerts when such activity is discovered at our Storage Yards. Intrusion prevention systems also monitor network packets inbound the system to check the malicious activities involved in it and at once send the warning notifications.

7	Storage Racks-Outdoor matrial Storages for varticle storage system	75	Lakhs	Certain Outdoor items stored on the ground occupying lot of storage space and getting immersed in the water during rainy season, needs racking system to protect the items from getting damaged and save the storage space immencely. Nevertheless, Physical Inventory Check/Count becomes easy.
8	Fire Hydrant System	100	Lakhs	Protecting the Companies Assets from fire hazards.
	TOTAL	**435**	**Lakhs**	

Admin: Ready to Use assets for Offices:

In TPWODL, the office space is currently crowded and haphazardly planned for seating arrangements, moreover, most of the circulation area has been occupied with files, documents etc.

In order to provide best in class services to consumers, earn consumer delight and improve satisfaction among other stakeholders and maintaining a clean & safe working environment, following infrastructures are required.

a. **Office air conditioning systems** are required to provide a comfortable working environment to bring and control Energy Efficiency, Humidity, Air Quality, and Reduction in Noise & Keeping Business Critical Equipment at the Right Temperature.

b. **Water cooler & Purifiers** are required for proper hydration employees and to ensure good health and improve overall efficiency. An employee should drink at least eight glasses of water a day to be properly hydrated as Water increases the amount of blood flow and oxygen to the brain and other body parts which in turn increases brain activity and attentiveness

c. **Ergonomic office chairs** for sitting long periods with ease. This naturally helps employees work more efficiently and productively. Another benefit is reduction in healthcare expenses related to poor posture from unsuitable office chairs.

d. **Photocopier machines** to offer a fast and easy way of getting single or multiple copies

of documents & Improves Functionality of businesses.

e. **Vehicles** to provide car pool facility to the company staff as well as car facility to the sr. management team.

f.**File cabinets** are basic requirements to keep office space organized and tip-top. It helps store important papers, documents, photographs, magazines and training materials in one single place for easy and immediate access besides offering secure storage, it offers instant access to files of thousands of customers and employees.

g. Canteen facilities are the necessity of satisfying employees with a better range of foods and healthy options."

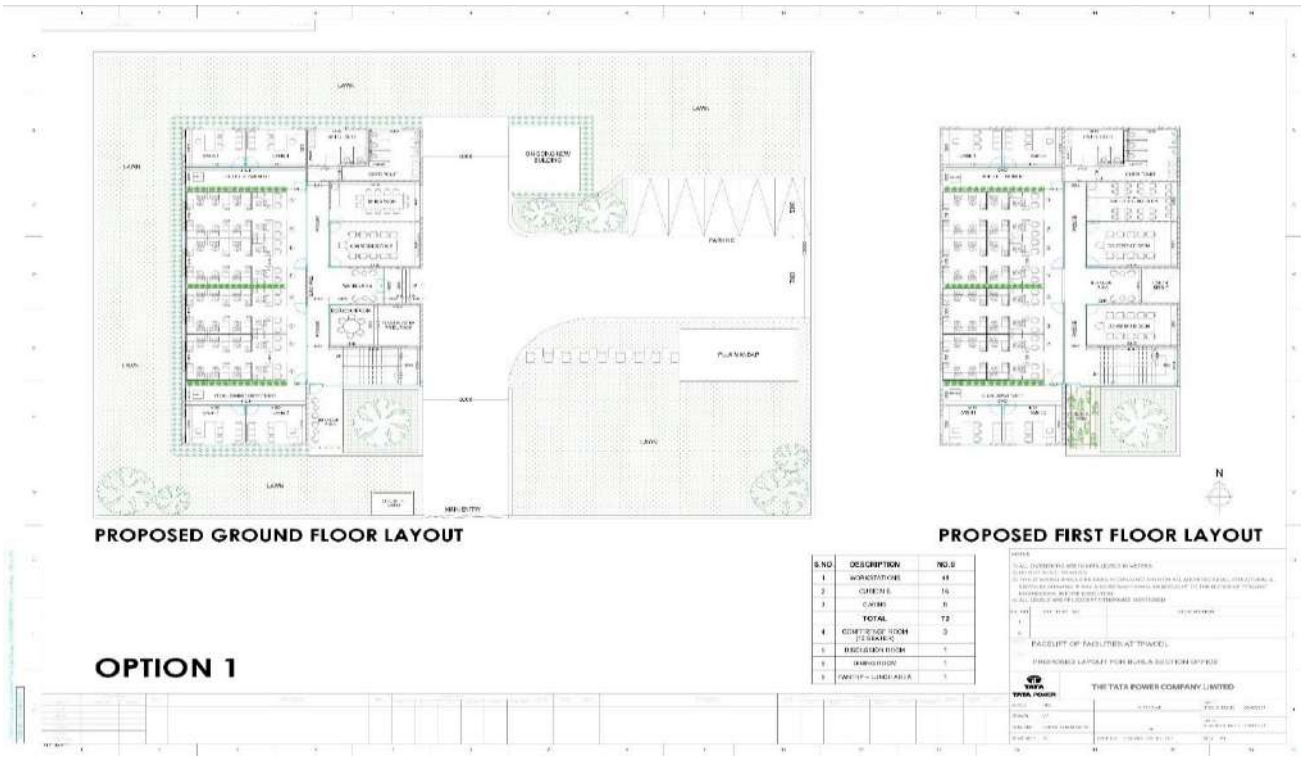
"Workplace canteens need to provide with options to cater for lunch with meals or light breakfast items and fruit or snacks for mid-afternoon along with tea/ cold drinks/ coffee in order to promote healthy eating & refreshments for employees and stakeholders

Plan for Office infrastructure:

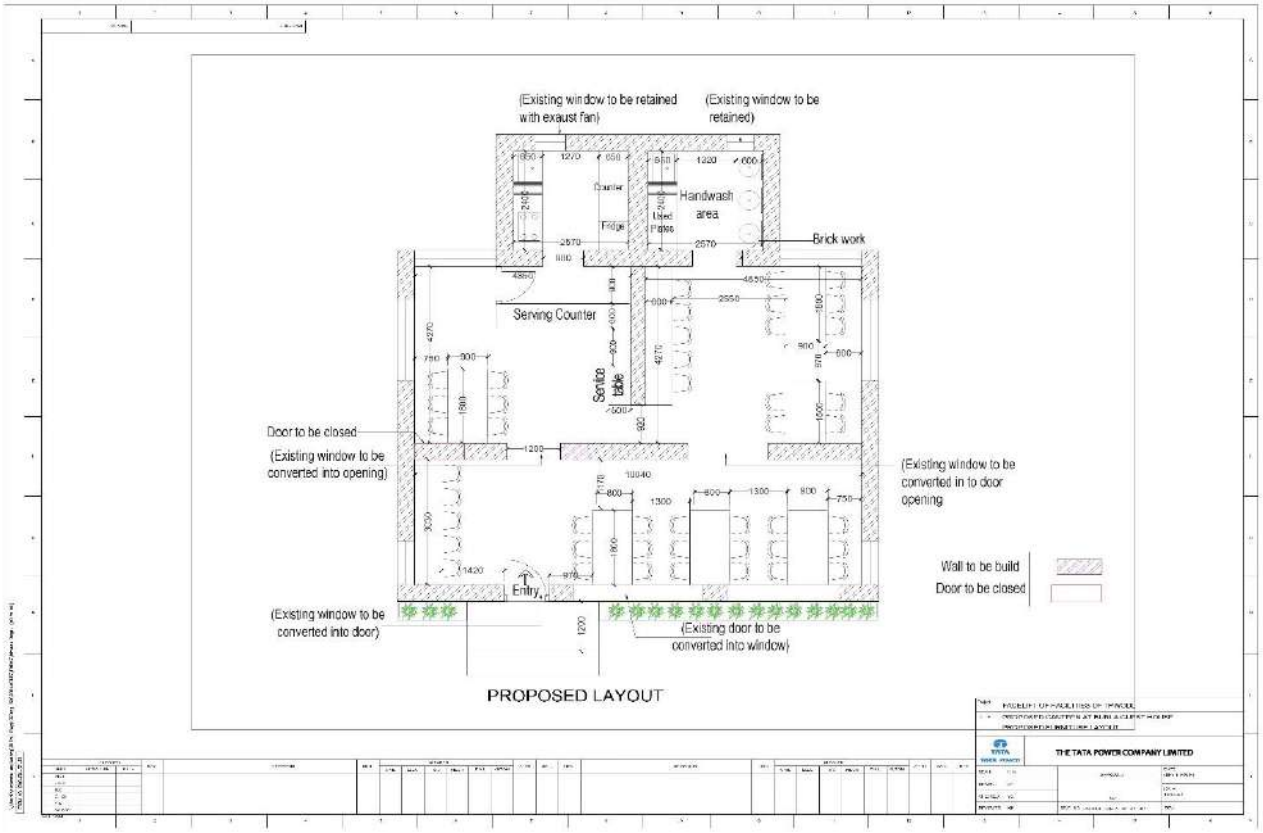
1. Plan for Jharsuguda sub-division office:

Description	Nos.
Cabin	04
Cubicles	02
Workstation	36
Conference Room 18 Seater	01
Discussion Room	01

2.Plan for Burla Section office:



3.Plan for Canteen at Burla Guest House & Furniture Layout:



4.Proposed New Commercial Buildingat Ainthapali Side Plan: