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

PUBLIC NOTICE

Case No. 108/2026

Hearing of the Application under Para 3.2 of the OERC (Terms and Conditions for Determination of wheeling and retail Supply Tariff) Regulations, 2022 and in compliance with the directions of the Commission in their Vesting Order dated 25.03.2021 in Case No.9 of 2021 seeking approval of Annual Capital Investment Plan for FY 2027-28 in licensed area of supply.

The Commission, vide its interim order dated 06.10.2026, has decided to dispose of the above case through public hearing which shall be held on **10.11.2026** at 11.00 AM through hybrid mode. The petition along with all Annexures submitted by the Applicant in this regard is available in OERC website (www.orierc.org) and also in TPNODL's website www.tpnorthernodisha.com. The persons/ organizations/ stake holders/institutions/general public those who are interested to participate in the above proceeding may file their objections/suggestions/comments/ views, if any, on the aforesaid petition of Applicant on or before **27.10.2026** with a copy thereof being served on the petitioner. The Applicant is directed to file its rejoinder/respond to those objections/ suggestions/ comments/ views of the Respondents in shape of affidavit on or before 03.11.2026 with copy to the Respondents. Those who are interested to participate in the public hearing through video conferencing should also indicate their e-mail address to the Commission at OERC e-mail (oerc.vc@gmail.com) by 5.00 PM of 09.11.2026.

Dated: 08 .10.2026

By Order of the Commission

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

**BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION
PLOT NO.4, CHUNUKOLI, SAILASHREE VIHAR
BHUBANESWAR-751021**

IN THE MATTER OF: Application for approval of Capital Investment Plan for the FY 2027-28 in the licensed area of operation of TP Northern Odisha Distribution Limited as per para 3.2 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff), Regulations, 2022.

And

IN THE MATTER OF: TP Northern Odisha Distribution Limited (TPNODL), Registered & Corporate Office: Januganj, Balasore, Odisha-756019.**Applicant**

And

IN THE MATTER OF: M/s GRIDCO, OPTCL, SLDC, Department of Energy, Govt. of Odisha and All Concerned Stakeholders.**Respondents**

Affidavit verifying the submission of TPNODL

I, Malancha Ghose, aged about 49 years, D/o Mahesh Chandra Ghose working as the Additional Chief Engineer-Regulatory, residing at Balasore, do hereby solemnly affirm and state as follows: -

I am the Chief-Operation Services of TP Northern Odisha Distribution Limited-the applicant in the above matter and duly authorised to swear this affidavit on its behalf.

The statements made in the application along with the annexures annexed to this application are true to the best of my knowledge and the statements made are based on information and records and I believe them to be true.

Date: 10.09.2026

DEPONENT

**BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION
PLOT NO.4, CHUNUKOLI, SAILASHREE VIHAR
BHUBANESWAR-751021**

IN THE MATTER OF: Application for approval of Capital Investment Plan for the FY 2027-28 in the licensed area of operation of TP Northern Odisha Distribution Limited as per para 3.2 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff), Regulations, 2022.

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IN THE MATTER OF: TP Northern Odisha Distribution Limited (TPNODL), Registered & Corporate Office: Januganj, Balasore, Odisha-756019.**Applicant**

And

IN THE MATTER OF: M/s GRIDCO, OPTCL, SLDC, Department of Energy, Govt. of Odisha and All Concerned Stakeholders. **Respondents**

TPNODL, the above-named applicant, most respectfully showeth:

1. That, the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff), Regulations, 2022 (herein referred to as "Tariff Regulations, 2022") requires submission of Capital Investment Plan for each year of Control period. The relevant extract from the Tariff Regulations, 2022 is produced hereunder:

"3.2. Capital Investment

3.2.1. The Distribution Licensee shall submit detailed capital investment plan, financing plan and physical targets for each year of the Control Period for strengthening and augmentation of distribution network, meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan applicable for the entire control period and annual proposal for each year of the Control Period.



3.2.2. The Distribution Licensee shall file a separate annual Capital Investment Plan comprising of capital investment plan, financing plan and physical targets for each year of the Control Period as per the timelines specified in Annexure-I."

[Emphasis Supplied]

2. In compliance to the Tariff Regulations, 2022, TPNODL had filed its Business Plan for FY 2023-24 vide submission dated 31.12.2022 (registered as Case No. 10/2023) and Business Plan for FY 25 to FY 28 vide submission dated 31.05.2023 (registered as Case 43 /2023). The Business Plan application of TPNODL comprised of, among other component of Business Plan as per Tariff Regulation, 2022, Capital Investment Plan for the Control Period. The Business Plan application for FY 2023-24 was disposed off by the Hon'ble Commission in the Tariff Order for FY 2023-24 dated 23.03.2023. The Hon'ble Commission has issued order in the matter of Case 43/2023 on 14.09.2023 and has stipulated following with regards submission of Capital Investment Plan.

33. Capital Investment

...

j. The Commission opines that the Capital expenditure involves multidimensional aspects which undergoes changes due to rapid urbanization & industrial growth. Ensuring reliability of power supply, reducing interruptions & AT&C loss and providing electricity at an affordable tariff to the consumers etc. are major challenges. In view of such dynamism in the system, the Commission directs the DISCOMs to submit the year wise Capex plan for the control period for approval of the Commission. The Commission also observes that the DISCOMs are required to catch up in capitalization with the approval by the Commission.

(Emphasis Supplied)

In compliance to the above regulatory requirements, we are submitting this application for approval of Capital Investment Plan for FY 2027-28.

3. Total Capex approved by the Board of TPNODL for FY 2027-28

It is submitted that the Board of Directors of TPNODL in its meeting dated 18th July 2026 has accorded approval for the Capital Investment Plan of Rs. 656.22 Cr for FY 2027-28. The certified true copy of the Board Resolution is enclosed as **Annexure-5** to this submission.

4. While the detailed Capital Investment Plan for FY 2027-28 is provided in the attached **Appendix**, the summary of the proposal is provided in the below table:

Capital Investment Plan for FY 2027-28 (Hard Cost Only)

S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	Annexure
1	Statutory & Safety	1.1	Network Safety and Operational Resilience Enhancement	LS	9.56	Annexure-3 Annexure-4
		1.2	Defective cable replacement for safety /Replacement of unsafe service cable to mitigate electrical hazards/Replacement of hazardous service cable for public and operational safety	Km	To be claimed at actual in True up	
		1.3	Fencing of Distribution Substations	Nos.	8.47	Annexure-5
		1.4	Fire wall for PTR between the PTRs	Nos.	1.5	Annexure-6
		1.5	LT extension for legacy long service cable cases to improve supply reliability.	Km	8.0	Annexure-7
		1.6	Meter Testing Lab (Keonjhar)	Nos.	4.6	Annexure-8
		1.7	Overhead to Underground conversion at crossings	Km	5.0	Annexure-9
		1.8	Intermediate poles for vulnerable location	Nos.	10.0	Annexure-10
		1.9	Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	Nos.	6.5	Annexure-11
Total (1)					53.63	
2	Loss Reduction	2.1	Conversion of LT Bare cond. to AB Cable	Km	38.5	Annexure-12
		2.2	Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material	LS	1.3	Annexure-13
Total (2)					39.83	
3	Reliability	3.1	Replacement/Addition of network component in 33/11kV Primary Substation	LS	15.0	Annexure-14
		3.2	Phasing out of Vulnerable PTRs (34 Nos)	Nos.	52.3	Annexure-15
		3.3	Testing equipment for PSS	LS	1.5	Annexure-16
		3.4	Earthing system for PSS	Nos.	1.0	Annexure-17
		3.5	Construction of new control room building for PSS	Nos.	5.0	Annexure-18
		3.6	33 KV Conductor up gradation	Ckm	25.9	Annexure-19
		3.7	11 KV Conductor up gradation	Ckm	21.6	Annexure-20
		3.8	Installation of HV Protection	Nos.	16.7	Annexure-21
		3.9	Installation of LV Protection	Nos.	18.0	Annexure-22
		3.10	Installation of Auto Reclosure for 11kV	Nos.	25.0	Annexure-23A
		3.11	Installation of Auto Reclosure for 33kV	Nos.	5.0	Annexure-23B
		3.12	Installation of 33kV & 11kV RMUs	Nos.	6.0	Annexure-24
		3.13	Installation of FPIs for 11kV Lines	Nos.	3.0	Annexure-25
		3.14	Installation of Line AB Switch/Isolator for 33kV & 11kV	Nos.	4.0	Annexure-26
Total (3)					200.11	
4		4.1	Augmentation of PTRs	Nos.	18.5	Annexure-27

Mafarukh Ghose

S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	Annexure
	Network Optimisation & Load Growth	4.2	Augmentation of DTRs	Nos.	45.0	Annexure-28
		4.3	Conversion of 1Ph DTR to 3Ph DTR along with lines	Nos.	33.7	Annexure-29
		4.4	New LT Feeder for overloaded LT feeder mitigation	Km	26.43	Annexure-30
		4.5	Construction of new 33/11kV PSS	Nos.	28.0	Annexure-31
		4.6	Addition of 11 kV Lines (O/H + UG) and additional Bay	Km	41.88	Annexure-32
		4.7	Addition of 33 kV Lines (O/H + UG) and additional Bay	Km	49.89	Annexure-33
		4.8	Addition New DTRs along with Associated HT/LT lines	Nos.	32.0	Annexure-34
Total (4)					275.35	
5	Technology and Infrastructure	5.1	Automation of Non-ODSSP & SCADA Integration	LS	8.5	Annexure-35
		5.2	Surveillance of PSS through CCTV	LS	2.2	Annexure-36
		5.3	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	LS	4.5	Annexure-37
		5.4	IT Application & Software	LS	4.0	Annexure-38
		5.5	Cyber security solution	LS	10.0	Annexure-39
		5.6	Geographic information system	LS	0.6	Annexure-40
		5.7	Operation technologies	LS	10.0	Annexure-41
		5.8	Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, keonjhar	LS	6.0	Annexure-42
		5.9	Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)	LS	35.0	Annexure-43
		5.10	Office Administration	LS	6.5	Annexure-44
Total (6)					87.30	
Grand Total = 1+2+3+4+5					656.22	

5. Employee Costs and Interest during Construction to be capitalised

It is submitted that Employee cost directly associated with the projects or capex schemes would also form a part of the Capex and would eventually be capitalized with the capital expenditure scheme. We most humbly submit that the cost towards Employees working on such projects would be separate i.e. in addition to the amount that is approved by Hon'ble Commission under this petition.

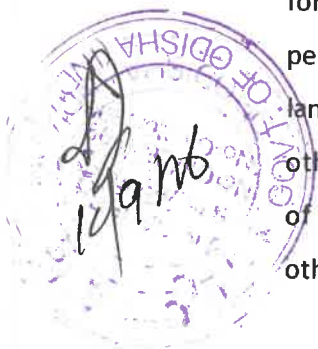
Similarly, the Interest during Construction (IDC) is required to be worked out in the Debt Component (70%) of the Capex. The same would depend on the quantum of the capital expenditure spread during the year and hence the estimation has not been made at present in the petition. However, we most humbly submit that Interest during construction amount would need to be added in addition to Hard Cost.

6. Prioritization of the proposed Investment:

The licensee has completed the analysis of its system network in line with the capital investment works already completed and under progress. Prioritization of the proposed capex works has been done on the basis of Load Flow study on CYME Dist. Software and the input received from the field operation team. The locations of prioritized schemes under each project for Capital Investment in the FY 2027-28 are furnished under location details Appendix-3 for kind consideration by Hon'ble Commission.

7. Project Timelines

The DISCOM has proposed the project completion timelines where ever applicable. While Discoms will endeavour all efforts to complete the schedules as per the mentioned timeline for each projects, however the proposed timelines are subject to timely receipt of necessary permissions, approvals and clearances from the concerned authorities/agencies, including land/Right of Way (RoW), site clearance, Forest Department/agricultural field clearances and other statutory approvals, resolution of local/site-related issues and concerns, timely receipt of materials, availability of required outages from OPTCL, suitable weather conditions, and other factors beyond the reasonable control of the DISCOM.



8. Overlapping Works under Pending Capex Petitions

Certain works proposed under the Capital Investment Plan for FY 2027-28 are critical in nature and need to be taken up on priority for improving system reliability, safety and quality of power supply to consumers. Some of these activities may overlap, either fully or partially, with activities proposed under the Licensee's various Capex Petitions, which are presently under consideration by the Hon'ble Commission and are at different stages of hearing.

Since, these activities are of high priority and are essential for the improvement of system reliability and quality of supply. Accordingly, they have also been included in the present Annual Capex Petition.

The Licensee, therefore, respectfully prays that the Hon'ble Commission may kindly take cognizance of above and consider and accord approval for FY 2027-28 either under the present Annual Capex Petition or under the respective Capex Petitions already under hearing before the Hon'ble Commission.

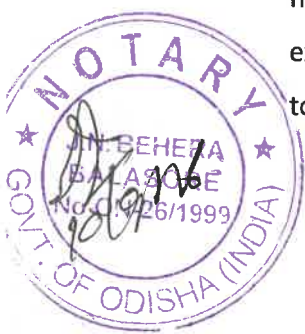
9. Capital Structure and Financing Plan:

For the purpose Capital Investment of Rs. 656.22 Crs in the financial year 2027-28, the financial plan will be furnished in the following table:

Proposed Financial Plan	Contribution in Crores
Equity (30%)	196.87
Term Loan (70%)	459.35
Total	656.22

10. Other cost

The Capital Investment Plan of Rs. 656.22 Cr as proposed by the petitioner for FY 2027-28 is hard cost only. Other Cost like employee cost, interest during construction and other cost exclusively incurred for project related work will be over and above and would be in addition to the amount that would be approved by the Hon'ble Commission under this petition.



Prayers

TPNODL prays that the Hon'ble Commission may kindly be pleased to:

- a) Approve the CAPEX plans of Rs. 656.22 Cr. for the FY 27-28.
- b) Allow actual expenditure incurred towards 'Damaged Service Cable Replacement' and 'New Connection Release' at time of Truing up in line with previous Capex Orders.
- c) Allow Employee Cost, Interest During Construction and Other Cost related to Projects based on actuals to be capitalised over and above the Capex (Hard Cost) for FY 2027-28.
- d) Permit carrying forward of the unspent CAPEX to subsequent years.
- e) That, the petitioner craves leave for submission of further /additional submission as and when required by the Hon'ble Commission.
- f) To kindly condone any inadvertent omission /errors/shortcoming and allow to make future submission as may be required in future to support this application in terms of modification /clarifications, if any.
- g) Grant any other relief as deemed fit and proper in the facts and circumstances of the case.
- h) Any other direction as the Hon'ble Commission may think appropriate.

Date: 10.09.2026



**Additional Chief Engineer-Regulatory
TP Northern Odisha Distribution Limited**



4. While the detailed Capital Investment Plan for FY 2027-28 is provided in the attached **Appendix**, the summary of the proposal is provided in the below table:

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		5.10	Office Administration	LS	6.5	Annexure-44
Total (6)					87.30	
Grand Total = 1+2+3+4+5					656.22	



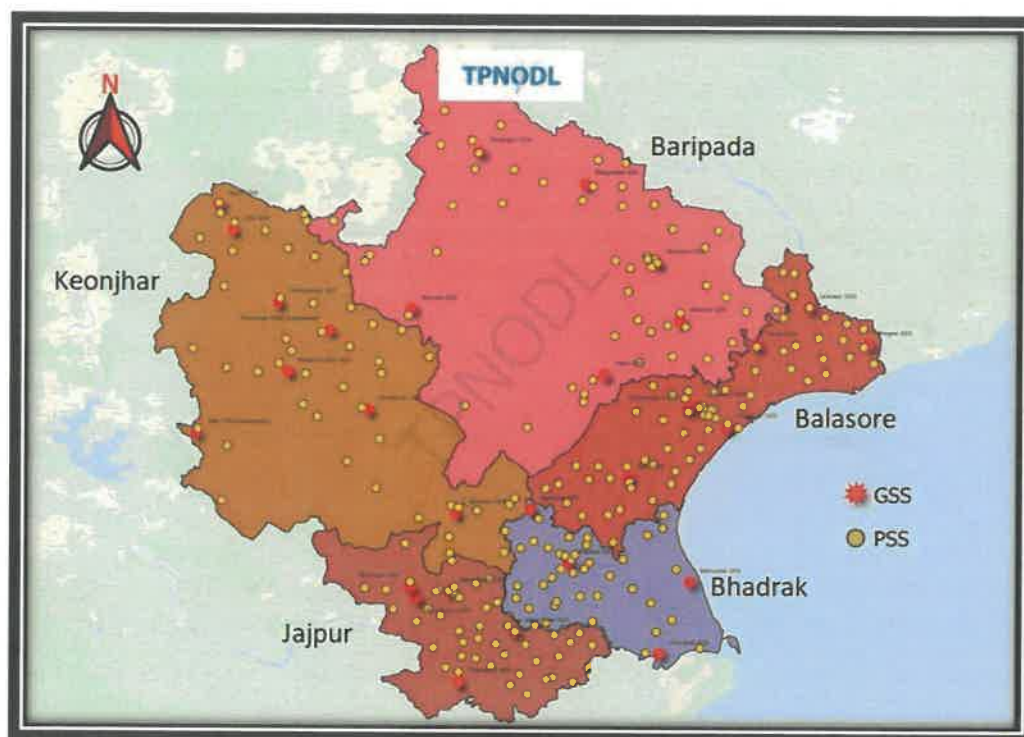
Detailed Project Report (DPR)

For

Capex Plan - FY28

Submitted By

TP Northern Odisha Distribution Ltd



TP NORTHERN ODISHA DISTRIBUTION LIMITED



APPENDIX

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Appendix 2 – Time frame of the expenditure

Appendix 3 – Location

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Appendix 5 - Board Approval Copy

Appendix 6 – Cost Benefit Analysis of Power Transformer



Detailed Project Report of Capex Plan FY28

Capital Investment Scheme Details for In-Principle Approval

Overview of the Detailed Project Report	
Index with the documents Page No.	Attached in Page No. v
Name of Applicant	TP Northern Odisha Distribution Limited
Name of the Capital Investment Work	Capital Expenditure for FY28
Nature of capex Scheme (New/ Resubmitted / revised / modified / extended)	New Capital Expenditure (Capex) scheme is being submitted as per Direction of the Hon'ble Commission
Details of the Location	Attached Location Appendix-3
Date of Approval by Competent Authority designated by the Board of Directors of the Company	Date of Approval 18-07-26. Certified True Copy attached in Appendix-5
Category of DPR	1. Statutory and Safety 2. Loss Reduction 3. Reliability 4. Network Optimisation & Load Growth 5. Technology 6. Civil & Admin Infrastructure
Objective of the Capital Investment	In line with the directions of Hon'ble Commission the proposed works aim to improve safety, statutory compliance, enable loss reduction, strengthen system reliability, availability of network as per projected load growth for upcoming summer seasons, Improve the quality of power supply to the consumers.
Need Analysis	The CAPEX works is proposed to address network reliability, safety, and load growth requirements across the distribution network; overloaded PTRs and DTRs; inadequate network infrastructure for new and growing consumers demand; reliability concerns due to vulnerable network assets and insufficient protection systems; safety issues arising from hazardous critical crossings and substation infrastructure; and the need for automation, digitalization, and technology enablement for improved monitoring and operational efficiency.



TP NORTHERN ODISHA DISTRIBUTION LIMITED



Detailed Project Report of Capex Plan FY28

Overall cost-benefit analysis	Cost benefit analysis details mentioned in respected heads in the Detailed Project Report
Brief Scope and Specifications of Work	Detail Scope of work and specifications considered under the respective heads mentioned in the DPR.
Estimated cost (Rs Cr.)	656.22
Time frame of the expenditure	Appendix-2
Benefits/Impact	Improvement in system availability & reliability, enhanced safety, better voltage regulations, and operational efficiency; reduction in network constraints, outages, and technical losses; enhanced system monitoring and asset protection; meet the load growth; and strengthening of overall distribution infrastructure.
Need of the investment	The proposed capital investment is essential for compliance with the directives of the Hon'ble Commission and to address critical requirements related to network capacity augmentation, reliability improvement, safety enhancement, loss reduction, technology enablement, and load growth management. Existing challenges such as overloaded transformers, inadequate network infrastructure for new connections, vulnerable network assets, insufficient protection systems, hazardous service cables, and increasing consumer demand are impacting reliability, safety, and quality of supply. The proposed works will strengthen the distribution network, improve system reliability and safety, optimize the losses, support future load growth, and ensure reliable, safe & quality power supply to all consumers.



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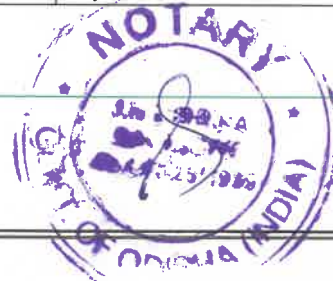


TP NORTHERN ODISHA DISTRIBUTION LIMITED



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Glossary		Glossary	
AB SWITCH	Air Break Switch	MBC	Metering Billing and Collection
AC	Alternating Current	MCC	Master Control Centre
ADMS	Advanced Distribution Management System	MCCB	Moulded Case Circuit breaker
U/G	Under Ground	MM	Material Management
AMI	Automatic Meter Infrastructure	MMG	Meter Management Group
AMR	Automated Meter Reading	MPG	Maintenance Planning Group
UPS	Uninterrupted Power Supply	MPLS	Multi-Protocol Label Switching
AT&C	Aggregate Technical and Commercial	MRT	Meter Reading & Testing
BA	Business Associate	MS	Microsoft
LTCT	Low Tension Current Transformer	MTTR	Mean Time to Repair
BO	Business Output	MU	Million Unit
BPL	Below Poverty Limit	MV	Medium Voltage
BW	Business Warehouse	MVA	Mega Volt Ampere
CAIDI	Customer Average Interruption Duration Index	MW	Mega Watt
CAPA	Corrective Action and Preventive Action	NABL	National Accreditation Board for Testing and Calibration Laboratories
CAPEX	Capital Expenditure	NCC	No Current Complaint
CC	Control Centre	NESCO	North Eastern Electricity Supply Company of Odisha Ltd.
CIS	Customer Information System	O&M	Operation & Maintenance
Ckt.KM	Circuit Kilo meters	ODSSP	Odisha Distribution System Strengthening Project
COTS	Commercial of the shelf	OEM	Original Equipment Manufacturer
GIS	Gas Insulated Sub-Station	OERC	Odisha Electricity Regulatory Commission
CPSCC	Central Power System Control Centre	OFC	Optic Fibre Cable
CRM	Customer Relationship Management	O/H	Over head
CSR	Corporate Social Responsibility	OMS	Outage Management System
CT	Current Transformer	OPEX	Operational Expenditure
CWIP	Current Work in Progress	OPGW	Optical Ground Wire



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Glossary		Glossary	
CYME DIST	Distribution System Analysis Package of CYME	OPTCL	Odisha Power Transmission Corporation Limited
DC	Direct Current	OS	Operating System
DCP	Data Collection Point	OT	Operational Technology
DD	Drop Down	PBMC	Performance Based Maintenance Contracts
DMS	Distribution Management System	PC	Personal Computer
DPR	Detailed Project Report	PGCIL	Power Grid Corporation of India Limited
DSS	Distribution Sub-Station	PoC	Proofing of Concept
DT	Distribution Transformer	LV	Low Voltage
EHT	Extra High Tension	PP	Production Planning
ELCB	Earth Leakage Circuit Breaker	PSC	Power System Control
EPC	Engineering Procurement and Construction	PT	Potential Transformer
ERP	Enterprise Resource Planning	PTR	Power Transformer
FCC	Fuse Call Centre	PTW	Permit to Work
FPI	Fault Passage Indicator	RoW	Right of Way
FY	Financial Year	R&R	Reward & Recognition
GIGO	Garbage in, garbage out	RCA	Root Cause Analysis
GIS	Geographical Information System	RMU	Ring Main Unit
GoI	Government of India	SAIDI	System Average Interruption Duration Index
GoO	Government of Odisha	SAIFI	System Average Interruption Frequency Index
GRIDCO	Grid Corporation of Odisha	SAP	System Application and Products
GSAS	Grid Station Automation System	SBM	Spot Billing Module
GSS	Grid Sub Station	SCADA	Supervisory Control and Data Acquisition
HMC	Hub Maintenance Crew	SD	Sales and Distribution
HT	High Tension	SDO	Sub Divisional Officer
HTCT	High Tension Current Transformer	SHG	Self-help Group
HVAC	Heating, Ventilation and Air Conditioning	SITC	Supply Installation Testing and Commissioning
HVDS	High Voltage Distribution System	SLA	Service Level Agreement



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Glossary		Glossary	
IEC	International Electro technical Commission	SLDC	State Load Dispatch Centre
IED	Intelligent Electronic Devices	SLMC	System Line Maintenance Crew
IEMS	Input Energy Monitoring System	SMC	Substation Maintenance Crew
IMS	Integrated Management System	SMS	Short Message Service
IPDS	Integrated Power development scheme	SOP	Standard Operating Procedure
ISU	Industry Specific Solution Utility	SSL	Secure Sockets Layer
IT	Information Technology	STS	Sub Transmission System
ITIA	IT Implementation Agency	CCTV	Closed-Circuit Television
JE	Junior Engineer	T&D	Training & Development
KM	Kilo meter	TBEM	TATA Business Excellence Model
KV	Kilo Volt	TCOC	TATA Code of Conduct
KVA	Kilo Volt Ampere	TPNODL	TP Northern Odisha Distribution Limited
LDMS	Local Data Monitoring System	LT	Low Tension



Preamble:

TPNODL continues to witness increasing consumer demand, load growth, and evolving service expectations. At the same time, there is a need to strengthen network capacity, improve reliability and quality of supply, enhance safety, and support technology enablement across the distribution system. Accordingly, a structured capital investment programme has been planned to address these requirements and support the development of a safe, reliable, and future-ready distribution network

This Detailed Project Report for the FY28 CAPEX Plan has been prepared to assess the existing distribution network, identify network gaps and constraints, evaluate future system requirements, and propose technically and economically justified investments required for sustainable network development.

The Capex Plan focuses on strengthening the distribution system through targeted investments aimed at:

- Improving network reliability and quality of supply.
- Meeting projected load growth and consumer demand.
- Reducing network constraints and technical losses.
- Improving operational flexibility and asset utilization.
- Strengthening safety and statutory compliance.
- Supporting automation, and digitalization initiatives.
- Enhancing system monitoring and operational efficiency.
- Improving consumer service and overall network resilience.

The proposed investments have been identified through detailed network studies, field assessments, analysis of asset condition and network constraints, projected load growth and reliability improvement requirements. Considering the significant requirement for network strengthening and modernization, the identified schemes have been prioritized through a systematic evaluation process to address the most critical network needs and deliver maximum consumer and system benefit. This approach ensures optimal utilization of Capex, and reduces the tariff burden on consumers while addressing critical requirements related to safety, reliability, loss reduction, network capacity enhancement, and technology enablement

The implementation of the proposed CAPEX plan during FY28 is expected to create a stronger and more resilient distribution network capable of delivering reliable, quality, and sustainable power supply while supporting the organization's strategic business objectives and consumer service commitments.

Executive Summary:

This Detailed Project Report presents the proposed Capital Expenditure Plan for FY28, developed to strengthen, augment, modernize, and future-proof the distribution network in alignment with projected demand growth, network performance requirements, safety obligations, and regulatory expectations. The report identifies critical infrastructure investments necessary to ensure reliable and efficient electricity distribution while supporting long-term operational sustainability

Background:

The distribution network continues to experience increasing load demand, expansion of consumer base, evolving service expectations, and growing operational complexity. Simultaneously, aging assets, network loading constraints, reliability concerns, network losses, and the need for improved visibility and control necessitate timely infrastructure intervention.

Accordingly, a comprehensive assessment of the existing network has been undertaken to identify infrastructure gaps, operational challenges, capacity requirements, and opportunities for reliability and efficiency improvement.

The cumulative value of assets covered under the Vesting Order and capitalized by TPNODL stands at ₹ **1690.49 Cr.** till Q1 FY27.

As a result, significant progress has been achieved in the execution of various CAPEX works against the total approved DPRs for the six-year period, amounting to ₹ **2,178.51 Cr.**, as of 30 June 2026. The progress is presented in the table below.

Table 1: Capex as per Vesting order vs. Capex Expenditure till 30th June 26.

Capex year	Vesting Order Commitment in Cr.	Approved Amount from Hon'ble OERC	Capitalization as 30 th June 26	WIP as 30 th June 26
FY22	246	258.78	258.78	0
FY23	376	326.54	326.54	0
FY24	259	433.10	431.47	1.63
FY25	247	377.52	366.34	11.18
FY26	141	382.57	305.16	77.41
FY27	0	400.00	2.20	397.8
Total	1270	2178.51	1690.49	488.02

To ensure timely execution and effective delivery, TPNODL has implemented a comprehensive project execution framework focused on enhancing execution capacity, strengthening monitoring mechanisms, and improving quality and safety standards. The utility has expanded its execution ecosystem by retaining 48 existing Business Associates (BAs) and onboarding 12



additional BAs under new rate contracts. Concurrently, capacity-building initiatives for Project Engineers and BA personnel are being undertaken through structured training programs, technical workshops, and performance reviews. Enhanced material planning, inventory management, and supplier coordination mechanisms have also been established to ensure timely availability of resources and minimize project delays.

Further, TPNODL has strengthened project governance through the formation of a dedicated Shutdown Management Team, restructuring of the Project Monitoring Unit (PMU), and implementation of the First Time Right (FTR) approach to ensure quality execution, optimum resource utilization, and adherence to technical standards. A strong emphasis has also been placed on safety through rigorous compliance with safety protocols, periodic inspections, and awareness programs. Collectively, these initiatives will improve project execution efficiency, ensure timely completion of CAPEX works, enhance quality and safety performance, and support the successful achievement of planned network development objectives.

Approach to Capex FY28:

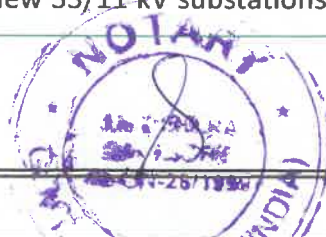
The proposed FY28 CAPEX plan has been formulated in line with the directions of the Hon'ble Commission, with a focus on improving safety, reliability, quality of supply, network capacity adequacy, and customer service across the TPNODL licence area. The investment requirements have been identified through detailed network studies with Cymedist Software (v9.4), analysis of network constraints, field assessments, reliability performance, and projected load growth.

Considering the significant requirement for network strengthening and modernization, the identified schemes have been prioritised through a systematic data-driven approach to address the most critical network needs and deliver reliable, quality & safe power supply to TPNODL consumers. This prioritised approach ensures optimal utilisation of Capex, and minimisation of the tariff burden on consumers while supporting the long-term development of a safe, reliable, and future-ready distribution network.

The FY28 Capital Investment Plan:

A total investment of ₹656.22 Cr. has been proposed which is designed to strengthen the distribution network through targeted interventions in safety, reliability, loss reduction, network capacity augmentation, digital transformation, and infrastructure development. The investment prioritizes creating a resilient, efficient, and future-ready power distribution system capable of meeting growing consumer demand while ensuring regulatory compliance, public safety, and operational excellence.

A significant share of the proposed investment is allocated towards Network Optimisation & Load Growth (₹275.35 Cr) and Reliability Improvement (₹200.11 Cr), accounting for over 72% of the total plan. Key initiatives include construction of new 33/11 kV substations, augmentation



of power transformers and distribution transformers, addition and upgradation of 33 kV and 11 kV networks, installation of auto-reclosers, RMUs, protection systems, and replacement of vulnerable transformers. These measures will address network congestion, accommodate projected load growth, improve voltage profile, enhance feeder reliability, and reduce outage frequency and duration.

The plan also emphasizes Statutory Compliance, Safety, and Loss Reduction, with investments in replacement of defective service cables, substation fencing, overhead-to-underground conversions, fire safety systems, meter testing facilities, and conversion of LT bare conductors to AB cables. These interventions are expected to improve public and employee safety, reduce equipment-related risks, curb energy theft, lower technical and commercial losses, and strengthen overall network performance.

In addition, investments under Technology and Infrastructure (₹87.30 Cr) focus on substation automation, SCADA integration, cybersecurity, GIS deployment, disaster recovery infrastructure, surveillance systems, and enhancement of operational facilities. Collectively, these initiatives will support digital transformation, improve asset visibility and monitoring, strengthen cyber resilience, enable data-driven decision-making, and provide a robust platform for sustainable and efficient utility operations in the coming years.

As per the Directions of the Hon'ble Commission in the Retail Supply Tariff Order FY27, TPNODL has submitted an investment proposal of ₹1,720 Cr under the "Additional Multiyear Capital Expenditure to Compliance Direction of the Commission (RST Order FY 2026-27)". Certain schemes proposed under Capex FY28, such as LT Bare Conductor to AB Cable Conversion, HV and LV Protection Systems, Addition of New DTRs, etc., are also covered under the Multiyear Capex Proposal. Considering the priority and criticality of these schemes, amounting to ₹92 Cr., TPNODL requests the Hon'ble Commission to accord approval of these works under this petition of Capex FY28.

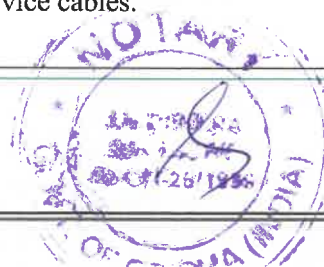
Summary of the proposed investment plan for FY28 is mentioned under below table 2:

Table 2: Impact of Capex Works proposed under each Major Category

Sr. No.	Major Category	Sr. No.	Activity	Benefit / Impact	UoM	FY28 Amount (Cr.)
1	Statutory & Safety	1.1	Network Safety and Operational Resilience Enhancement	To improve safety of employees and field staff during operation and maintenance activities.	LS	9.56
		1.2	Defective cable replacement for safety /Replacement of unsafe service cable to mitigate electrical hazards/Replacement of hazardous service cable for public and operational safety	To prevent electrical hazards and improve supply reliability by replacing aged and damaged service cables.	Km	To be claimed at actual in True up

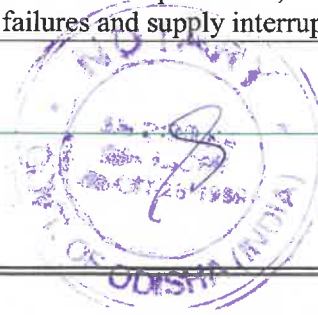


TP NORTHERN ODISHA DISTRIBUTION LIMITED



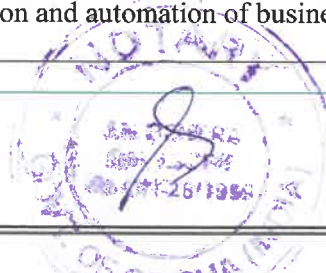
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Sr. No.	Major Category	Sr. No.	Activity	Benefit / Impact	UoM	FY28 Amount (Cr.)
		1.3	Fencing of Distribution Substations	To prevent unauthorized access and improve safety of public, employees and animals.	Nos.	8.47
		1.4	Fire wall for PTR between the PTRs	To prevent the spread of fire and protect adjacent transformers and substation assets.	Nos.	1.5
		1.5	LT extension for legacy long service cable cases to improve supply reliability.	To reduce long length service cable and improve voltage profile, safety and supply reliability.	Km	8
		1.6	Meter Testing Lab (Keonjhar)	To enhance meter testing capacity and improve metering accuracy and consumer service.	Nos.	4.6
		1.7	Overhead to Underground conversion at crossings	To improve public safety and ensure compliance with statutory clearance requirements at critical crossings.	Km	5
		1.8	Intermediate poles for vulnerable location	To reduce conductor sagging and associated safety risk.	Nos.	10
		1.9	Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	To improve drainage, mitigate waterlogging and enhance reliability of substation infrastructure.	Nos.	6.5
Total (1)						53.63
2	Loss Reduction	2.1	Conversion of LT Bare cond. to AB Cable	To reduce energy theft and AT&C losses by preventing unauthorized hooking on LT network.	Km	38.5
		2.2	Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material	To improve meter testing accuracy and strengthen energy accounting and billing reliability.	LS	1.3
Total (2)						39.83
3	Reliability	3.1	Replacement/Addition of network component in 33/11kV Primary Substation	To improve substation reliability, operational safety, and protection system performance.	LS	15
		3.2	Phasing out of Vulnerable PTRs (34 Nos)	To reduce the risk of major transformer failures and prolonged supply interruptions.	Nos.	52.3
		3.3	Testing equipment for PSS	To strengthen in-house testing, assess equipment condition and ensure preventive maintenance of substation assets.	LS	1.5
		3.4	Earthing system for PSS	To ensure personnel safety and protect equipment	Nos.	1
		3.5	Construction of new control room building for PSS	To ensure operational safety and ensure reliable functioning of protection and control systems.	Nos.	5
		3.6	33 KV Conductor up gradation	To enhance feeder capacity, mitigate overloading and under-voltage pockets.	CKm	25.9
		3.7	11 KV Conductor up gradation	To enhance feeder capacity, mitigate overloading and under-voltage pockets.	CKm	21.6
		3.8	Installation of HV Protection	To enhance transformer protection, reduce equipment failures and supply interruptions.	Nos.	16.7



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Sr. No.	Major Category	Sr. No.	Activity	Benefit / Impact	UoM	FY28 Amount (Cr.)
		3.9	Installation of LV Protection	To meet CEA Safety regulations compliance and reduce DTR failures & localization of LT outages/faults.	Nos.	18
		3.10	Installation of Auto Reclosure for 11kV	To improve SAIDI/SAIFI with quick restoration for transient faults in network	Nos.	25
		3.11	Installation of Auto Reclosure for 33kV	To improve SAIDI/SAIFI with quick restoration for transient faults in network	Nos.	5
		3.12	Installation of 33kV & 11kV RMUs	To have network flexibility and reduce outage impact through sectionalization.	Nos.	6
		3.13	Installation of FPIs for 11kV Lines	To enable faster fault location and reduce restoration time during feeder interruptions.	Nos.	3
		3.14	Installation of Line AB Switch/Isolator for 33kV & 11kV	To improve feeder sectionalization and maintenance flexibility for reliable power supply.	Nos.	4
Total (3)						200.11
4	Network Optimisation & Load Growth	4.1	Augmentation of PTRs	To mitigate overloading of PTRs and meet increasing load demand.	Nos.	18.5
		4.2	Augmentation of DTRs	To mitigate overloaded DTRs and improve transformation capacity.	Nos.	45
		4.3	Conversion of 1Ph DTR to 3Ph DTR along with lines	To adhere the directions of Hon'ble Commission & support growing three-phase load demand and improve load distribution.	Nos.	33.7
		4.4	New LT Feeder for overloaded LT feeder mitigation	To reduce LT feeder overloading and improve voltage profile and supply reliability.	Km	26.43
		4.5	Construction of new 33/11kV PSS	To cater the projected load growth and improve supply reliability in emerging load centres.	Nos.	28
		4.6	Addition of 11 kV Lines (O/H + UG) and additional Bay	To accommodate for consumer load growth, enable interconnectivity and improve feeder reliability.	Km	41.88
		4.7	Addition of 33 kV Lines (O/H + UG) and additional Bay	To ensure interconnectivity among PSS, accommodate for consumer load growth, and improve feeder reliability.	Km	49.89
		4.8	Addition New DTRs along with Associated HT/LT lines	To mitigate overloaded DTRs, and improve transformation capacity at load centre.	Nos.	32
Total (4)						275.35
5	Technology and Infrastructure	5.1	Automation of Non-ODSSP & SCADA Integration	To enable real-time monitoring and remote operation of substations for improved network reliability.	LS	8.5
		5.2	Surveillance of PSS through CCTV	To enhance security of substation assets through surveillance.	LS	2.2
		5.3	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	To strengthen business continuity and disaster recovery capabilities of critical IT systems.	LS	4.5
		5.4	IT Application & Software	To improve operational efficiency through digitalization and automation of business processes.	LS	4



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Sr. No.	Major Category	Sr. No.	Activity	Benefit / Impact	UoM	FY28 Amount (Cr.)
		5.5	Cyber security solution	To protect critical IT and OT systems against cyber threats and security vulnerabilities.	LS	10
		5.6	Geographic information system	To improve asset visibility and support data-driven planning and decision-making.	LS	0.6
		5.7	Operation technologies	To strengthen smart metering infrastructure and enhance operational monitoring and decision-making capabilities.	LS	10
		5.8	Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, Keonjhar	To improve material storage, inventory management and protection of critical assets.	LS	6
		5.9	Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)	To strengthen operational infrastructure to provide safe and efficient working facilities.	LS	35
		5.10	Office Administration	To improve workplace efficiency and support effective day-to-day business operations.	LS	6.5
Total (5)						87.3
Grand Total = 1+2+3+4+5						656.22



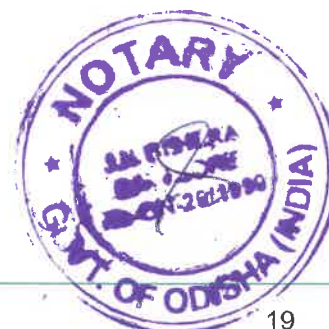
TP NORTHERN ODISHA DISTRIBUTION LIMITED



1. Introduction:

TP Northern Odisha Distribution Limited (TPNODL) was incorporated as a joint venture of The Tata Power Company (51%) and Odisha Government (49%) on the Public-Private Partnership (PPP) model. TPNODL took over the license to distribute electricity in the northern part of Odisha, which was earlier served by erstwhile NESCO, through a competitive bidding process. The business of TPNODL utility is governed by the provisions of license issued by Hon'ble Odisha Electricity Regulatory Commission (OERC) for distribution and retail supply of electricity in North Odisha. OERC regulates the working of the entire power sector of Odisha state, including determination of tariff chargeable to end consumers and establishing performance norms (mainly related to Loss reduction, Safety, Reliability of power supply and Consumer service delivery). The core business activities of TPNODL are summarized as follows:

1. Operation and maintenance of distribution network (33 kV and downstream up to customer premises).
2. Restoration of power after interruptions.
3. Meter reading, billing, and revenue collection.
4. Customer complaint resolution.
5. General customer care including provision of information on services.
6. Connection of new customers to the distribution network.
7. Expansion of distribution network.



2. Our Business Area:

TPNODL license area is spread over a geography of 27857 Sq. Km having coastal line of about 150 Km serving the registered consumer base of 2.06 million. TPNODL procures power from GRIDCO which is a state-owned company. It receives electrical power at a sub transmission voltage of 33KV from Odisha Power Transmission Corporation 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. For effective operations, license area is divided in 5 circles which is further sub divided in 16 Divisions, 50 Sub-division & 159 sections which manages the commercial and O&M activities to serve its consumer. The detail of the same is as tabulated below

Sr. No.	Circle	Division	Sub-div
1	Balasore	BED, Balasore	Supply No-I
			Supply No-II
		BTED, Basta	Basta
			Jamsuli
		JED, Jaleswar	Jaleswar S/D
			Bhograi S/D
		CED, Balasore	RE-I
			RE-II
			Nilagiri
		SED, Soro	Soro
			Bahanaga
			Markona
			Khaira
2	Bhadrak	BNED, Bhadrak	No.I Bhadrak
			No.II Bhadrak
			Basudevpur
			Dhamra
			Tihidi
		BSED, Bhadrak	Bhadrak Rural
			Dhamnagar
			Asurali S/D

Detailed Project Report of Capex Plan FY28

Sr. No.	Circle	Division	Sub-div
3	Baripada	BPED, Baripada	Baripada
			Rural S/D, Baripada
			Betnoti
			Kuliana
			Moroda
		UED, Udala	Khunta
			Udala
		RED, Rairangpur	Rairangpur-I
			Rairangpur-II
			Karanjia
4	Jajpur Road	JRED, Jajpur Road	Joshipur
			Panikoili
			Jajpur Road
		JTED, Jajpur Town	Duburi
			No.I Jajpur Town
			Dasharathpur
		KuED, Kuakhia	Binjharpur
			Bari
			Dharamasala
			Kuakhia
5	Keonjhar	KED, Keonjhar	No.I Keonjhar
			No.II Keonjhar
			Turumunga
		JoED, Joda	Joda
			Champua
			Barbil
		AED, Anandapur	Anandapur
			Ghatagaon
			Bidyadharpur



TP NORTHERN ODISHA DISTRIBUTION LIMITED



3. Existing Supply System:

TPNODL receives electrical power at 33kV level from 29 numbers of Grid Sub stations (GSS) out of which 4 nos. GSS are rated at 220/33kV and 25 nos. at 132/33kV located within the licence area of TPNODL. TPNODL distributes the power at 33kV / 11kV / 415V / 230V depending on the demand of the consumers.

Currently, there are 137 numbers of 33KV feeders with a combined route length of approximately 3821.4 KMs supplying power to 254 numbers of 33/11KV Primary Substation (Structures). The 33KV supply is stepped down to 11KV level through 576 numbers of 33/11KV power transformers. Nearly 909 numbers of 11KV feeders radiates from the 33/11KV primary substations having length of approximately 42,864.3 KMs and supply power to HT consumers connected at 11KV level and LT customers connected to 11/0.415KV distribution substation. Approximately 87,572 numbers of distribution transformers are installed in all five circles. The length of the LT feeders is 69,395.6 KMs approximately. These LT feeders supply power to three phase and single-phase consumers, right from large Industrial to BPL.

Table 3: The information (As on 31st Mar'26) is summarized in the table below:

Parameters	Balasore	Bhadrak	Jajpur	Keonjhar	Baripada	TPNODL Total
Area in Sq km	3806	2505	2888	8240	10418	27857
No. of Consumers in lakhs	5.60	3.05	3.25	3.55	5.19	20.65
No. of GSS	7	4	5	7	6	29
Total Nos of 33 kV Feeders	36	15	23	37	26	137
Nos of 33/11 kV Sub-Station	69	38	45	49	53	254
Nos of Power Transformer	154	86	100	106	130	576
Nos of 11kV Feeder	246	141	143	174	205	909
Nos of DTR	23563	12174	14991	14737	22107	87572
33 kV Line in kms	817.8	515.9	531.8	994.6	961.3	3821.4
11 kV Line in kms	9705.2	6284.4	5642.3	7453.7	13778.6	42864.3
LT Line in kms	15954.34	8432.718	10187.2	10424.54	24396.84	69395.64



TPNODL NORTHERN ODISHA DISTRIBUTION LIMITED



4. Key Challenges:

TPNODL's electrical distribution network spans a diverse and challenging geography, with a mix of urban, semi-urban, and rural areas. Over the years, several improvements have been made, but a number of technical challenges continue to affect the performance, safety, and reliability of the system. The following sections outline the key technical issues observed across various components of the network.

4.1. 33 kV Lines and Feeders:

The 33kV feeder network forms the backbone of the sub-transmission system, connecting Grid Substations (GSS) with Primary Substations (PSS) and, in certain cases, directly supplying 33/0.415 kV distribution transformers. Therefore, the reliability and structural integrity of these feeders are critical for ensuring a safe and uninterrupted power supply to the downstream network.

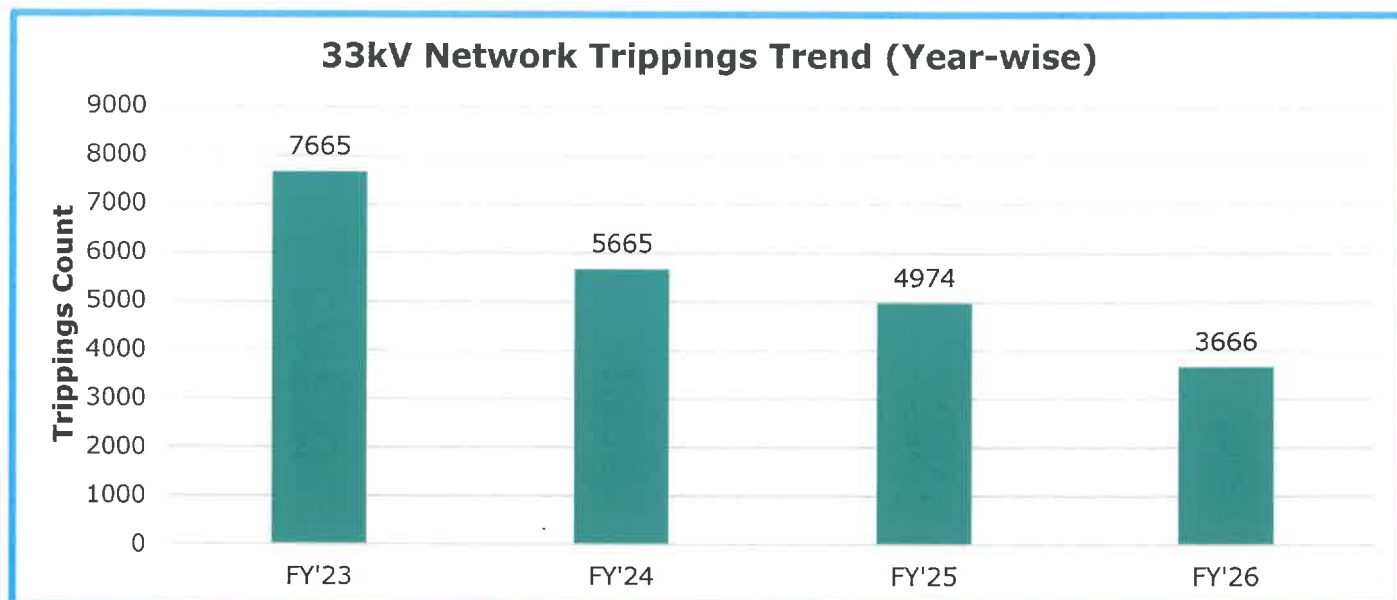
A significant number of 33 kV feeders are long and radially configured, making them more vulnerable to faults and resulting in longer fault detection and restoration times. Several sections of the network also have damaged, bent, or tilted poles, undersized or aged conductors, excessive spans, and multiple joints, leading to mechanical stress, increased failure risk, and higher technical losses.

In addition, guard wires are not available at several critical and urban locations, creating potential public safety risks in the event of conductor snapping. Encroachments under overhead lines are also observed in both urban and rural areas, posing safety and operational challenges. In certain locations, two feeders are routed on a common pole structure, while required intermediate H-poles are not provided, affecting mechanical strength and proper jointing arrangements. Further, some existing pole structures and installations do not conform to standard engineering practices.

Considering these constraints, strengthening and standardization of the 33kV feeder network is essential to improve system reliability, enhance public and operational safety, reduce technical losses, and ensure adequate capacity for future load growth.



Tripping Trend – 33kV Feeders



4.2. 33/11 kV Primary Substations (PSS)

The Primary Substations (PSS) play a critical role in the distribution network by stepping down voltage from 33 kV to 11 kV through Power Transformers (PTRs) of various capacities, including 1.6 MVA, 3.15 MVA, 5 MVA, 8 MVA, 10 MVA, 12.5 MVA & 16 MVA. These substations are supplied through one or more 33 kV feeders and serve as key nodes for supplying the downstream 11 kV network.

Several PSS are currently operating near or beyond their designed capacity, while the projected load growth indicates further increase in loading in the coming years. This necessitates timely capacity augmentation and network strengthening to maintain reliable and quality power supply.

The outdoor switchyards at several substations also require improvement, particularly in busbar and equipment connections where improper or inadequate jointing can result in hotspots, equipment deterioration, and increased technical losses.

In certain substations, circuit breakers and CTs have been bypassed, while non-standard battery systems, including automobile batteries, are being used in place of approved DC backup systems. Such practices can adversely affect protection-system performance and operational reliability.

The historical trend of Power Transformer (PTR) failures reflects the impact of these infrastructure and protection-related constraints. However, the reduction in failures over the years also demonstrates the positive impact of systematic investments and continuous network-strengthening initiatives. Further targeted interventions are therefore required to enhance PSS reliability, safety, protection, and capacity to meet future demand.

Table 4: PTR Failure Trend:

Particulars	FY22	FY23	FY24	FY25	FY26	FY27 (till Aug'26)
Failure of Power Transformers (PTR)	27	8	10	7	2	0

4.3. 11 kV Lines /Feeders:

The 11kV feeder network plays a vital role in distributing power from Primary Substations (PSS) to Distribution Transformers (DTRs) and ultimately to consumers. However, several feeders are significantly longer than recommended engineering norms, with some extending beyond 100 circuit-km, resulting in increased technical losses, voltage drop, and greater exposure to faults.

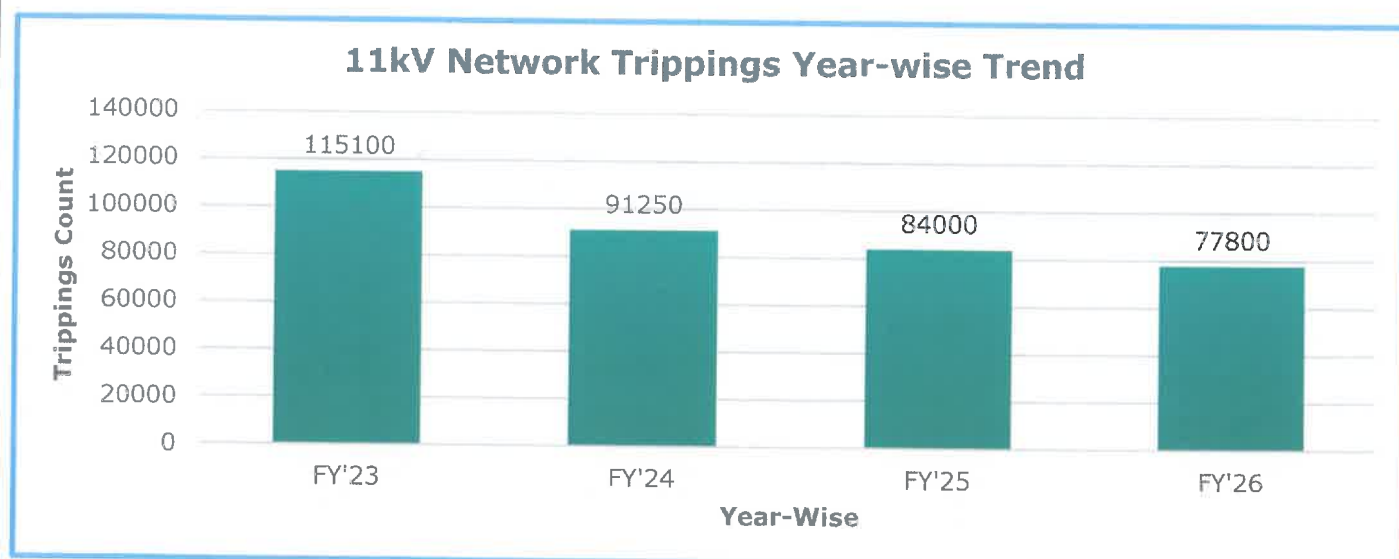
Most 11kV feeders are radially configured and serve a large number of consumers. Due to their excessive length and radial configuration, these feeders are more vulnerable to faults, while fault detection, patrolling, and supply restoration become more challenging and time-consuming.

Similar to the 33kV network, several 11kV lines are supported by damaged, tilted, or misaligned poles, while undersized and deteriorated conductors, long spans, and multiple joints further increase the risk of line failures and technical losses.

The absence of guard wires at critical and urban locations and the presence of encroachments along the line corridors create additional public safety and operational risks. Further, intermediate H-poles are generally not provided in the 11kV network, despite their importance in providing mechanical strength, supporting proper conductor jointing, and preventing the cascading failure of adjacent poles in the event of a pole failure.



Considering these constraints, strengthening and standardization of the 11kV feeder network is essential to improve reliability, reduce technical losses and voltage-related issues, enhance safety, and ensure faster restoration of supply.



4.4. Distribution Substations (DSS)

TPNODL Distribution Substations (DSS) operate at 33/0.415 kV, 11/0.415 kV, and 11/0.230 kV voltage levels and are generally installed as plinth-mounted or pole-mounted substations. These substations play a critical role in stepping down voltage for the final distribution of power to consumers.

The Drop-Out (DD) fuse serves as the primary protection for Distribution Transformers (DTRs), safeguarding the transformer the most critical and costly equipment at a DSS from faults and abnormal operating conditions. However, at several DSS locations, AB switches and DD fuses, which are essential components of the transformer protection system, have been found bypassed or rendered ineffective. This significantly compromises transformer protection and increases the risk of transformer failure, prolonged outages, and associated financial losses.

Table 5: DTR Failure

Particulars	FY22	FY23	FY24	FY25	FY26	FY27 (till Aug-26)
Failure of Distribution Transformers (DTR)	2,533	2,877	3,426	3,447	3,442	1,729

4.5. LT Network

The LT network originates from the secondary side of DTRs and delivers power directly to end consumers. As the most extensive and exposed part of the distribution system, the LT network requires robust protection and safety arrangements.

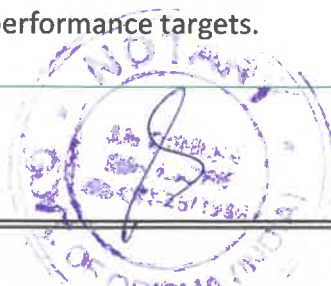
At several locations, standard LT fuse boxes, MCCBs, or other protection devices are not available. Instead, aluminium wires are being used as makeshift fuses, which do not provide reliable or coordinated protection. These arrangements are often installed at low heights and without adequate fencing, creating significant safety risks to the public and animals. In addition, fuse ratings are not always appropriately matched with the capacity of the respective transformers, increasing the risk of transformer damage, equipment failure, and prolonged supply interruptions during faults.

Strengthening and standardization of LT protection systems is therefore essential to improve equipment safety, prevent electrical accidents, and ensure reliable and safe power supply to consumers.

4.6. Ageing of Network Infrastructure

Existing network infrastructure has been in service for several decades, with a significant portion of substations, transformers, switchgear, conductors, protection systems, and communication infrastructure approaching or exceeding their intended operational life. Ageing assets are increasingly susceptible to failures, insulation deterioration, corrosion, reduced efficiency, and higher maintenance requirements. This results in frequent outages, increased technical losses, voltage fluctuations, and growing operational risks, adversely impacting network reliability and customer service levels.

Furthermore, the ageing network is not adequately equipped to address emerging utility requirements such as load growth, renewable energy integration, digitization, remote monitoring, and advanced automation. Limited asset visibility, obsolete protection schemes, and inadequate communication systems hinder efficient network operation and fault management. Without timely modernization and replacement of critical assets, the utility may face escalating maintenance costs, reduced system resilience, increased safety concerns, and challenges in meeting future reliability and regulatory performance targets.



4.7. Earthing

In an electrical installation, earthing system play important role for proper working of the power distribution system, and protection of human beings against electric shock. Metal frame of all power distribution equipment is connected with the general mass of the earth which is always at zero potential. It's worth mentioning that the general mass of the earth doesn't have any resistance.

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.

4.8. IT infrastructure scenario

TPNODL has implemented several IT systems in recent years, including enterprise applications like SAP and the establishment of IT and OT data center at Bhubaneswar and Balasore, respectively.

- GIS implementation is ongoing across circles.
- OS/DB licenses for GIS software are under consideration.
- Additional infrastructure is needed for secure communication and cybersecurity.

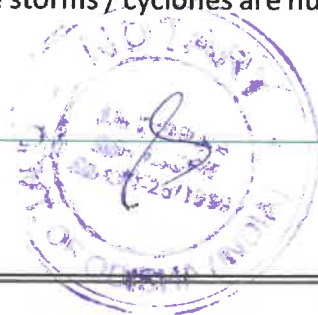
4.9. Civil infrastructure

The condition of civil infrastructure across TPNODL's offices and substations varies widely.

- Many office buildings are old and requires structural strengthening.
- Sanitation and hygiene conditions are below acceptable standards in several locations.
- There is also a need to develop or upgrade customer care centres and call centres to improve service delivery.
- While several improvements have been made since FY22, several offices, stores, and substations still require attention.

4.10. Natural Calamities

Apart from the vast geographical area, Odisha being a coastal State, it repeatedly encounters devastating storms / Cyclones. The loss due to these storms / cyclones are huge which is a major challenge for a distribution utility.



The main concern related to these natural calamities are that not only it results in disruption of power supply to consumers over extended period but also, it damages the power distribution infrastructure resulting into requirement of huge funds to refix the network infrastructure.

A permanent solution to address the issue of virtually annual disruption of supply and repeated infusion of CAPEX to restore/replace damaged infrastructure need to be developed.

Table 6: Cyclone affecting Odisha

Name	Lowest Pressure(mbar)	Year	Winds(km/hr)
Odisha Cyclone	912	1999	276
Phailin	940	2013	215
Hudhud	950	2014	185
Titli	978	2018	110
Fani	932	2019	250
Amphan	920	2020	260
YAAS	970	2021	140
Dana	984	2024	110

Source: - https://en.wikipedia.org/wiki/List_of_tropical_cyclones_that_affected_India

So, it can be seen from the history that Odisha is prone to the natural disastrous cyclones which may affect the Network and its components drastically, making it a challenge for TPNODL. Apart from this there are other natural challenges like:

1. The coastal environment accelerates corrosion of electrical assets due to high salinity
2. Rural lines passing through forest areas also face accessibility and safety challenges, especially during adverse weather conditions.

Some of the photographs depicting the existing network condition, identified deficiencies, and instances of non-compliance with applicable statutory safety requirements, posing potential safety risks to the public, employees, and animals, are enclosed in **Annexure-1**.



5. Network Analysis- Statutory Guidelines:

In TPNODL, each division has distinct network characteristics and associated challenges. However, based on the site visits conducted, several common safety concerns were observed across the distribution network, posing potential risks to employees, the public, and animals. The objective of the site visits was to identify these unsafe conditions, understand the underlying issues, and identify areas requiring corrective interventions.

The following key observations require urgent attention to make the network safe, reliable, and compliant with the applicable CEA (Measures relating to Safety and Electric Supply) Regulations, 2023:

- Inadequate horizontal and vertical clearances in 33 kV and 11 kV overhead feeders, requiring rectification as per applicable **CEA Regulations 60, 62, 63 and 67**.
- Damaged conductors, poles, stay wires, and boundary walls, requiring immediate replacement/rectification to ensure structural and operational safety.
- Inadequate earthing of poles and structures, requiring strengthening and standardization as per applicable CEA requirements, particularly **Regulation 74** for overhead lines up to 33 kV.
- Absence or inadequate guarding arrangements at critical crossings and vulnerable locations, requiring compliance with applicable CEA provisions for overhead-line guarding.
- Damaged or missing fencing at Distribution Substations and 33/11 kV Primary Substations, resulting in easy access to electrical installations by the public and animals and creating significant safety risks.

These observations highlight the need for focused safety interventions and systematic network strengthening to eliminate unsafe conditions, improve statutory compliance, protect employees and the public, and enhance the overall reliability and safety of the TPNODL distribution network. **Details are in Annexure 2**

From the analysis of last 5 years' accident data, 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. Even to operate network, necessary PPEs are also not available



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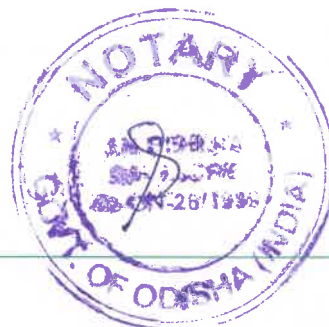
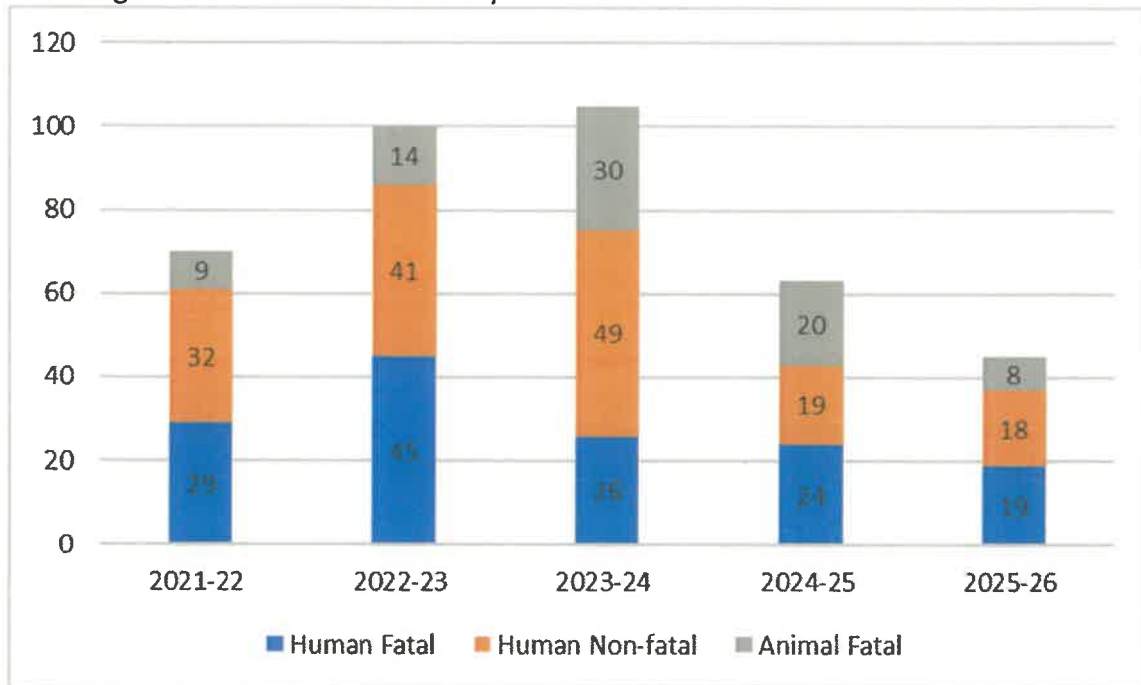
in sufficient quantity. Some of the PPEs were never procured by the erstwhile NESCO. Table below shows Year wise details of Fatal / Non-fatal Electrical accidents occurred under TPNODL operational area during Financial Year 2022 to 2026.

Table 7: Incidents Report

Sl. No.	Financial Year	Human			Animal			Total
		Fatal	Non-fatal	Total	Fatal	Non-fatal	Total	
1	2021-22	29	32	61	9	0	9	70
2	2022-23	45	41	86	14	0	14	100
3	2023-24	26	49	75	30	0	30	105
4	2024-25	24	19	43	20	0	20	63
5	2025-26	19	18	37	8	0	8	45

There has been a reduction in overall fatal or non-fatal incidents through the years.

Below figure shows the detailed analysis of accidents.



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Table below shows the Fatal and non-fatal accident happened during the last 5 Years at different voltage level.

Table 8: Voltage-wise Accident Report

Voltage Level	FY22				FY23				FY24				FY25				FY26			
	Fatal		Non-Fatal		Fatal		Non-Fatal		Fatal		Non-Fatal		Fatal		Non-Fatal		Fatal		Non-Fatal	
	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal	Human	Animal
33KV	2	0	0	0	3	0	4	0	13	14	34	0	0	1	3	0	1	0	0	0
11KV	11	7	27	0	22	5	30	0	2	0	2	0	12	15	11	0	12	7	13	0
LV	16	2	5	0	20	9	9	0	11	16	19	0	12	4	5	0	6	1	5	0
Total	29	9	32	0	45	14	43	0	26	30	55	0	24	20	19	0	19	8	18	0

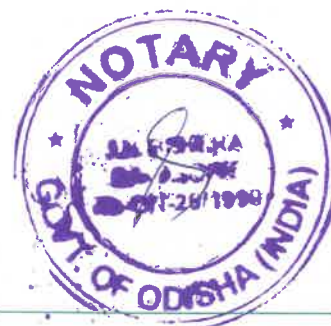
From the above table, it is observed that majority of the fatal and non-fatal accident occurred in 11kv & LV network and thus focused approach must be followed on these segments to make the network safe & secure. As a responsible distribution utility, we need to curtail it further. Hence potentially unsafe locations need to be addressed in time so as to ensure safe network for employees, Public and Animals.



6. Status of previous years approved Capex:

Table 9: Status of Previous Year Capex

Capex year	Vesting Order Commitment in Cr.	Approved Amount from Hon'ble OERC	Capitalization as 30 th June 26	WIP as 30 th June 26
FY22	246	258.78	258.78	0
FY23	376	326.54	326.54	0
FY24	259	433.10	431.47	1.63
FY25	247	377.52	366.34	11.18
FY26	141	382.57	305.16	77.41
FY27	0	400.00	2.20	397.8
Total	1270	2178.51	1690.49	488.02



➤ Glimpse of the project executed at site:



Figure 1 Installation of 11kV AA



Figure 2 Construction of 33kV New Line



Figure 3 Installation of New DTR



Figure 4 Construction of Firewall



Figure 5 Construction of 11kV New Line



Figure 6 Conversion of LT Bare to AB Cable



Figure 7 Switchyard development & Graveling works



Figure 8 Augmentation of PFR



Figure 9 Conversion of DTR from 1pH to 3pH



Figure 10 Fencing of the Transformer



Figure 11 Installation of RMUs



Figure 12 Augmentation of Transformer



Figure 13 Refurbishment of 11kV Line



Figure 14 Refurbishment of 33/11kV PSS



Figure 15 Construction of New Line



Figure 16 Construction of Boundary wall



Figure 17 Installation of New DTR



Figure 18 Installation of RMUs

7. Proposed CAPEX Plan for FY28:

As explained earlier, TPNODL has identified key challenges related to safety, 33kV/11kV/0.415kV/0.230 kV network reliability, metering infrastructure, customer services, technology adoption, and continuous load growth. To address these challenges systematically, TPNODL has formulated a need-based and optimized CAPEX investment plan aimed at strengthening the network, improving safety and reliability, reducing losses, and enhancing customer service.

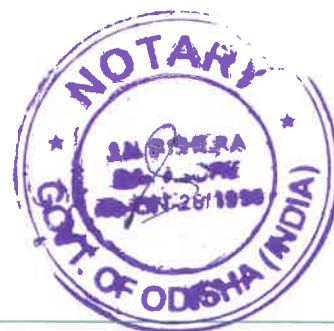
The proposed CAPEX focuses on critical interventions such as network reinforcement, reconductoring, feeder optimization, replacement of damaged poles and vulnerable equipment, provision of intermediate poles, improvement of system protection, network augmentation, and adoption of advanced technologies. These measures will reduce equipment failures and feeder tripping, improve voltage and supply reliability, and support future load growth.

Technology-led initiatives will focus on improving metering accuracy, preventing meter tampering, strengthening billing and collection efficiency, reducing AT&C losses, and enhancing customer service delivery. Business process improvements and digital solutions will further support efficient revenue-cycle management and better consumer experience.

The plan also includes improvement of existing facilities and supporting infrastructure to provide a safer and more conducive working environment for employees and better service to consumers.

Accordingly, TPNODL has structured the CAPEX plan under five major heads. These heads are detailed in subsequent sections along with budgetary requirement and activities to be performed.

- 1) Statutory & Safety
- 2) Loss Reduction
- 3) Reliability
- 4) Network Optimisation & Load Growth
- 5) Technology and Infrastructure

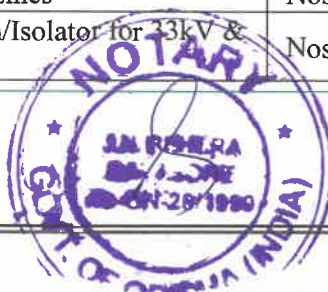


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The Company has completed detailed Network studies for all the 5 circles through Inhouse team with three-year load growth scenario. Based on the outcome of the studies, the following business imperatives have been identified to be addressed through the total Capex Investments of Rs. 656.22 during FY28 under five major categories

For each of the above major categories, the investment has been further detailed below:

S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	Annexure
1	Statutory & Safety	1.1	Network Safety and Operational Resilience Enhancement	LS	9.56	Annexure-3 Annexure-4
		1.2	Defective cable replacement for safety /Replacement of unsafe service cable to mitigate electrical hazards/Replacement of hazardous service cable for public and operational safety	Km	To be claimed at actual in True up	
		1.3	Fencing of Distribution Substations	Nos.	8.47	Annexure-5
		1.4	Fire wall for PTR between the PTRs	Nos.	1.5	Annexure-6
		1.5	LT extension for legacy long service cable cases to improve supply reliability.	Km	8.0	Annexure-7
		1.6	Meter Testing Lab (Keonjhar)	Nos.	4.6	Annexure-8
		1.7	Overhead to Underground conversion at crossings	Km	5.0	Annexure-9
		1.8	Intermediate poles for vulnerable location	Nos.	10.0	Annexure-10
		1.9	Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	Nos.	6.5	Annexure-11
Total (1)					53.63	
2	Loss Reduction	2.1	Conversion of LT Bare cond. to AB Cable	Km	38.5	Annexure-12
		2.2	Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material	LS	1.3	Annexure-13
Total (2)					39.83	
3	Reliability	3.1	Replacement/Addition of network component in 33/11kV Primary Substation	LS	15.0	Annexure-14
		3.2	Phasing out of Vulnerable PTRs (34 Nos)	Nos.	52.3	Annexure-15
		3.3	Testing equipment for PSS	LS	1.5	Annexure-16
		3.4	Earthing system for PSS	Nos.	1.0	Annexure-17
		3.5	Construction of new control room building for PSS	Nos.	5.0	Annexure-18
		3.6	33 KV Conductor up gradation	Ckm	25.9	Annexure-19
		3.7	11 KV Conductor up gradation	Ckm	21.6	Annexure-20
		3.8	Installation of HV Protection	Nos.	16.7	Annexure-21
		3.9	Installation of LV Protection	Nos.	18.0	Annexure-22
		3.10	Installation of Auto Reclosure for 11kV	Nos.	25.0	Annexure-23A
		3.11	Installation of Auto Reclosure for 33kV	Nos.	5.0	Annexure-23B
		3.12	Installation of 33kV & 11kV RMUs	Nos.	6.0	Annexure-24
		3.13	Installation of FPIs for 11kV Lines	Nos.	3.0	Annexure-25
		3.14	Installation of Line AB Switch/Isolator for 33kV & 11kV	Nos.	4.0	Annexure-26



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S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	Annexure
Total (3)					200.11	
4	Network Optimisation & Load Growth	4.1	Augmentation of PTRs	Nos.	18.5	Annexure-27
		4.2	Augmentation of DTRs	Nos.	45.0	Annexure-28
		4.3	Conversion of 1Ph DTR to 3Ph DTR along with lines	Nos.	33.7	Annexure-29
		4.4	New LT Feeder for overloaded LT feeder mitigation	Km	26.43	Annexure-30
		4.5	Construction of new 33/11kV PSS	Nos.	28.0	Annexure-31
		4.6	Addition of 11 kV Lines (O/H + UG) and additional Bay	Km	41.88	Annexure-32
		4.7	Addition of 33 kV Lines (O/H + UG) and additional Bay	Km	49.89	Annexure-33
		4.8	Addition New DTRs along with Associated HT/LT lines	Nos.	32.0	Annexure-34
Total (4)					275.35	
5	Technology and Infrastructure	5.1	Automation of Non-ODSSP & SCADA Integration	LS	8.5	Annexure-35
		5.2	Surveillance of PSS through CCTV	LS	2.2	Annexure-36
		5.3	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	LS	4.5	Annexure-37
		5.4	IT Application & Software	LS	4.0	Annexure-38
		5.5	Cyber security solution	LS	10.0	Annexure-39
		5.6	Geographic information system	LS	0.6	Annexure-40
		5.7	Operation technologies	LS	10.0	Annexure-41
		5.8	Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, keonjhar	LS	6.0	Annexure-42
		5.9	Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)	LS	35.0	Annexure-43
		5.10	Office Administration	LS	6.5	Annexure-44
Total (6)					87.30	
Grand Total = 1+2+3+4+5					656.22	

Note: The Grand Total cost is exclusive of capitalizable Project Employee Cost and calculated Interest during Construction (IDC).



7.1 Statutory & safety:

7.1.1 Network Safety and Operational Resilience Enhancement:

Background: Safety of employees, the public, and critical electrical infrastructure is a key priority for TPNODL. Considering the nature of high-voltage operations, emergency restoration requirements, fire hazards, unauthorized access, and the need for safe maintenance practices, strengthening the existing safety infrastructure is essential.

Several Primary Substations (PSS), Distribution Substations (DSS), and other operational locations require enhanced fire detection and protection, emergency response arrangements, access control, electrical safety equipment, and workforce training facilities. In addition, prolonged outages during DTR failures can significantly affect consumer supply, highlighting the need for mobile emergency restoration arrangements.

To address these gaps, TPNODL proposes a set of targeted safety and reliability initiatives covering fire detection and suppression, perimeter security, arc-flash protection, safe discharge/earthing practices, emergency restoration, specialized safety equipment, and practical training. These interventions will help minimize safety incidents, protect critical assets, improve emergency preparedness, reduce restoration time, and ensure safer and more reliable network operations.

- Mobile Substation – 400 kVA, 11/0.4 kV: Trolley-mounted mobile DTR for quick supply restoration during DTR failure or emergency conditions.
- FDA System for PSS: Fire detection and alarm system for early fire detection and timely emergency response
- Arial Tower Wagon: To enhance the safety of the staff during O&M activities at height.
- Perimeter Intrusion Detection System (PIDS): Real-time detection of unauthorized entry to enhance substation security and safety.
- FRP Stick for Discharge Clamp: Insulated FRP stick for safe operation of discharge and earthing clamps during maintenance.
- Simulation/Training Centre: Practical training facility for handling vulnerable network conditions, emergencies, and safe restoration practices.
- Arc Flash Suite: Arc-flash protection equipment to safeguard personnel during electrical operation and maintenance.
- Auto Clean-Agent Extinguisher: Automatic fire suppression system for IT/server rooms without damaging sensitive electronic equipment.
- Foldable Ladder with Platform: Safe and portable access arrangement for maintenance of elevated equipment.
- Sand Bucket with PVC Cover: Provision of covered sand buckets for immediate response to small electrical and equipment fires.



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These gaps have led to life-threatening incidents, operational inefficiencies, and compromised safety standards.

SL No.	Item Description	Proposed Quantity	Amount for FY28 (in Cr.)
1	Mobile Sub Station 400 KVA 11/0.4kV Trolley Mounted DTR	7	1.65
2	FDA system PSS.	55	1.1
3	Ariel Tower Wagon Vehicle Mounted	10	3.01
4	Perimeter Intrusion Detection System (PIDS)	20	1.94
5	FRP Stick for Discharge clamp	150	0.5
6	Simulation /Training centre for the Vulnerable Network Condition	16	0.12
7	Arc Flash Suite	16	0.08
8	Auto clean agent extinguisher for IT server room.	16	0.032
9	Foldable Ladder with Platform	5	0.02
10	Sand bucket with PVC cover	400	0.012
Total Cost in Cr.			8.47

Objective: The proposed safety and operational enhancement plan aims to:

- Deploy Trolley Mounted DTRs to enable safe and rapid restoration of power supply during transformer failures and emergency conditions.
- Procure Aerial Tower Wagons to improve safety and efficiency of maintenance activities on overhead lines and electrical structures.
- Implement Perimeter Intrusion Detection Systems (PIDS) at critical installations to enhance asset security and prevent unauthorized access.
- Install Fire Detection and Alarm (FDA) Systems at all Primary Substations (PSS), offices, and stores for early fire detection and emergency response.
- Provide FRP Discharge Clamp Sticks to strengthen electrical safety during maintenance and switching operations.
- Establish a Simulation and Training Centre for training personnel on vulnerable network conditions, emergency response, and safe operating practices.
- Procure ARC Flash Protection Suits to safeguard field personnel against arc-flash hazards during electrical operations and maintenance.
- Supply Foldable Ladders with Working Platforms to improve safety while carrying out work at height.
- Install Automatic Clean-Agent Fire Suppression Systems in IT server rooms to protect critical IT infrastructure from fire-related incidents without damaging equipment.
- Provide Sand Buckets with PVC Covers at substations and operational facilities as a basic fire-fighting and emergency safety measure.
- Strengthen overall workplace safety, emergency preparedness, asset protection, and regulatory compliance across the utility network.



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Scope of Work:

Sl. No.	Activity	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
	1	2	3	4=2-3	5	6=4-5
1	Mobile Sub Station 400 KVA 11/0.4kV Trolley Mounted DTR	32 (2 per division)	9	23	7	16
2	FDA system PSS.	250	100	150	55	95
3	Ariel Tower Wagon Vehicle Mounted	21	2	19	10	9
4	Perimeter Intrusion Detection System (PIDS)	250	0	250	20	230
5	FRP Stick for Discharge clamp	500	220	280	150	130
6	Simulation /Training centre for the field actual Network O&M practices	16	0	0	16	0
7	Arc Flash Suite	42 (2 per division) (2 per circle for 33kV Team)	0	0	16	26
8	Auto clean agent extinguisher for IT server room.	16	0	0	16	0
9	Foldable Ladder with Platform	42 (2 per division) (2 per circle for 33kV Team)	0	0	5	37
10	Sand bucket with PVC cover	500	100	400	400	0

Benefits of the Investment:

- Significant reduction in life-threatening incidents (LWDC)
- Improved fire safety and emergency preparedness
- Safer height working conditions, Reduced work-at-height violations and safer ladder usage
- Faster emergency response with centralized safety equipment
- Reduce operational risks, improve personnel safety, and foster a strong safety culture throughout the organization

Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capex Plan for FY27, an amount of Rs. 5.00 Cr was proposed towards Safety Improvement and Sustainability. Subsequently, against the disallowed amount, a provision of Rs. 3.20 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under Clause No. 1.(i) of the Review Petition are provided in the table below:

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Table-2 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Safety & Statutory	Safety Improvement and Sustainability	5	0	5	3.2

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for Safety Improvement and Sustainability based on the prevailing field requirements and safety needs of the distribution network. Accordingly, ***the requirement proposed (Rs. 5 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 3.2 Cr.) sought under the Review Petition against CAPEX FY27.***

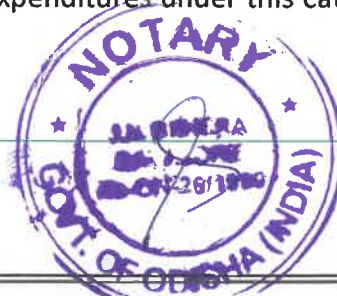
7.1.2 Defective cable replacement for safety / Replacement of unsafe service cable to mitigate electrical hazards / Replacement of hazardous service cable for public and operational safety:

Since vesting, TPNODL has been undertaking systematic replacement of damaged and very old service cables to improve safety of households, reliability and eliminate pilferage of electricity.

However, during site inspections, it has been observed that several service connections continue to operate with defective or jointed cables which not only create risks of electrocution and theft but also result in unmetered consumption and reduced billing efficiency. Such cases are primarily associated with elimination of theft, load enhancement where existing service cables are undersized, meter shifting requirements to facilitate proper installation at designated locations, and defective service cable replacement identified during field inspections. Continuation of these defective connections adversely impacts collection efficiency, increases AT&C losses and poses significant consumer safety hazards, thereby necessitating an extension of the replacement in a phased manner under the current CAPEX plan.

TPNODL is recovering such expenditure from the consumers wherever it is clearly established that the service cable has been damaged due to reasons attributable to the consumers. However, in most of the cases the reason of damage is not attributable to the consumers (e.g. service cable damage due to old age, due to outdoor harsh environmental conditions etc.) or it cannot be established, in such cases these service cables need to be replaced under by the DISCOM under CAPEX.

For the FY 26-27, Hon'ble Commission has mentioned in the CAPEX Order dated 15.05.2026 in the matter of Case No 81/2025, to cover the actual expenditures under this category, in True-up.



"The Commission is of the view that the replacement of service cables is generally recovered from consumers. However, the differential expenditure of service cables (if any) over and above the consumer contribution will be considered at the time of true up exercise based on audited expenditure after prudence check."

TPNODL proposes that the Hon'ble Commission may allow the DISCOM to consider the actual expenditure incurred during the financial year at the time of True-Up, as was allowed in the CAPEX Order for FY 2026-27 dated 15.05.2026, in Case No. 81/2025.

Replacement shall be undertaken only in specific cases such as:

- a) Elimination of Pilferage of electricity cases.
- b) Load enhancement cases.
- c) Meter shifting to easily accessible area
- d) Defective cable replacement.

7.1.3 Fencing of Distribution Substations:

Background: TPNODL operates a large number of Distribution Substations (DSS) located across public, residential and commercial areas. Due to their accessible locations, electrical equipment at these substations is exposed to potential unauthorized access and accidental contact by the public, employees and stray animals. During site inspections, TPNODL has identified several DSS locations where fencing or boundary walls are damaged, inadequate or completely absent, creating safety risks and exposing critical electrical assets.

The Distribution Transformer (DTR) is one of the most critical and high-value assets at a DSS. Its safe and reliable operation requires adequate physical protection, proper earthing and effective electrical protection systems.

Scope and Objective: TPNODL proposes strengthening and providing fencing/boundary protection at vulnerable DSS locations to prevent unauthorized access, reduce the risk of accidents, protect critical electrical assets, maintain required safety clearances, and enhance the overall safety and reliability of the distribution network.

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	55,028	3,773	51,255	773	50,482

In this proposal, TPNODL intends to carry out new fencings in phase manner. In this year around **773 Nos.** of locations are being proposed for carrying out Fencing of DSS.

Benefit of the Investment:

- Enhances safety of the public, employees and stray animals by restricting unauthorized access.
- Protects critical DTRs and other electrical assets from external interference and damage.
- Ensures required safety clearances and improves overall DSS reliability.
- Reduces the risk of electrical accidents and supports safe network operation.

7.1.4 Fire wall for PTR between the PTRs:

Background: Power Transformers are critical and high-value assets in a Primary Substation (PSS). A transformer fire, particularly in oil-filled transformers, can result in severe equipment damage, prolonged supply interruption, and significant safety risks. Where PTRs are installed in proximity, an incident in one transformer may also result in fire propagation to the adjoining transformer. Therefore, appropriate fire separation and containment arrangements are essential for protecting critical assets and maintaining system reliability.

The provision shall be implemented in accordance with the applicable requirements of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, along with relevant fire-safety and engineering standards. The final design shall be based on site-specific assessment and approved engineering practices.

Scope and Objective: TPNODL proposes the provision of fire-resistant transformer firewalls between adjacent PTRs at identified PSS locations, wherever required based on the site layout and applicable safety requirements. The firewall will act as a physical barrier to restrict the spread of flame and radiant heat from one transformer to another, thereby limiting the impact of a transformer fire.

The proposed intervention will focus on:

- **Fire Containment:** Preventing fire propagation from one PTR to an adjacent transformer and limiting the extent of damage.
- **Equipment Protection:** Protecting adjoining transformers, cables, structures, and other critical substation equipment from fire and excessive heat.
- **Personnel Safety:** Reducing the exposure of operating and maintenance personnel to fire-related hazards.
- **Supply Reliability:** Minimizing the possibility of multiple transformer failures and prolonged power interruptions following a fire incident.

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	153	58	95	18	77



TPNODL BALASORE



The firewalls shall be designed and constructed using suitable fire-resistant materials and appropriate fire-rating requirements, considering transformer capacity, oil quantity, separation distance, substation layout, and applicable statutory/technical standards.



Benefits of the Investment: Installation of transformer firewalls will reduce the risk of fire propagation, protect critical substation assets, improve personnel safety, and enhance network resilience and business continuity.

7.1.5 LT extension for legacy long service cable cases to improve supply reliability:

Background: Out of the total consumer base of 20.91 Lakh, TPNODL has approximately 18 lakh single-phase consumers from the pre-takeover period. During pre-takeover period, proper service length norms were not consistently maintained. It is estimated that approximately 3% of the total consumer base is connected to the LT network through excessively long service wires. Such long service lengths pose safety hazards and contribute to increased AT&C losses due to higher technical losses. Consumers connected through excessively long service wires may also face low-voltage issues, particularly during periods of high demand. Considering the above safety, technical and consumer service concerns, it is proposed to identify and replace excessively long service wires in a phased manner, prioritising locations with safety risks, significant voltage drops and higher technical losses.



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LT Network Ext work against Long service wire									
Status				Division wise Target in KM					
Division Name	Circle	Total No. of Consumers	% Consumer having Damaged service wire	FY28	FY29	FY30	FY31	FY32	Total in KM
BED	Balasore	60888	4%	2.91	10.00	10.00	10.00	12.60	45.50
CED		107280	5%	3.64	12.50	12.50	12.50	15.74	56.88
BTED		76012	8%	5.82	20.00	20.00	20.00	25.19	91.01
SED		146159	7%	5.09	17.50	17.50	17.50	22.04	79.63
JED		109335	8%	5.82	20.00	20.00	20.00	25.19	91.01
BPED	Baripada	205706	7%	5.09	17.50	17.50	17.50	22.04	79.63
RED		192577	8%	5.82	20.00	20.00	20.00	25.19	91.01
UED		98320	6%	4.36	15.00	15.00	15.00	18.89	68.26
BNED	Bhadrak	171057	6%	4.36	15.00	15.00	15.00	18.89	68.26
BSED		102721	5%	3.64	12.50	12.50	12.50	15.74	56.88
JTED	Jajpur	95966	4%	2.91	10.00	10.00	10.00	12.60	45.50
JRED		92644	8%	5.82	20.00	20.00	20.00	25.19	91.01
KUED		108707	6%	4.36	15.00	15.00	15.00	18.89	68.26
AED	Keonjhar	128197	6%	4.36	15.00	15.00	15.00	18.89	68.26
KED		112074	6%	4.36	15.00	15.00	15.00	18.89	68.26
JODA		88200	6%	4.36	15.00	15.00	15.00	18.89	68.26
TPNODL Total		1895843	100%	72.72	250.00	250.00	250.00	314.88	1137.6

Scope and Objective: Extension of LT network where consumer is connected through long service wire (50 Mtr and above service length)

LT extension for legacy long service cable cases											
Sl. No.	Supply & Cable Laying Cost /Meter	KM estimate cost			Total Proposal		FY wise Proposal				
		Uo M	Estimate d Cost in Cr.	Avg Span Length 40 M	Total Estimated Effected consumer count (3 % of 18.9 Lakh)	Avg no of consumer covered by a single pole is 2 (Total KM of LT ext rqd)	FY28	FY29	FY30	FY31	FY32
1	Construction of LT with 4x50+1x50+1x16 sqmm AB Cable	Km	0.11	40	56880.00	1137.6	72.7	250.0	250.0	250.0	314.9
Estimated cost for 1 KM LT network			0.11		0.11		8.0	27.5	27.5	27.5	34.6



TPNORTH ODISHA DISTRIBUTION LIMITED



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Benefits of the Investment: Ensure hazard free power distribution to single phase consumer, ensure greater safety to consumer premises from Fire, electric shock, Desire LT voltage at consumer end. in view of AT&C losses New constructed LT network will be reduced technical losses and contribution to improved AT&C losses.

Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capex Plan for FY27, an amount of Rs. 4.00 Cr was proposed towards LT Extension for Legacy Long Service Cable. Subsequently, against the disallowed amount, approval of Rs. 4.00 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Cluse No. 1.(iii) of the Review Petition are provided in the table below:

Table-4B of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Safety & Statutory	LT Extension for legacy long service cable	4	0	4	4

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for LT Extension for Legacy Long Service Cables based on the prevailing requirements. Accordingly, ***the requirement proposed (Rs. 8 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 4 Cr.) sought under the Review Petition against CAPEX FY27.***



7.1.6 Meter Testing Lab (Keonjhar):

Background: Currently, TPNODL operates across a vast geographical area of approximately 27,587 sq. km, with only one Meter Testing Laboratory located at Balasore. With the continuous growth in the consumer base and increasing meter-testing requirements, an additional Meter Testing Laboratory is proposed at Keonjhar.

Currently, 100% of three-phase meters and 5% of single-phase meters are tested in the laboratory before installation. To further strengthen metering accuracy and reliability, we propose enhancing the pre-installation testing process, considering the long transit distance from the supplier to the DISCOM store. This will enhance metering accuracy and reliability, ensuring correct energy measurement at the consumer premises.



Year	Meter Supply	Meter Tested in Lab		
		3 Phase	1 Phase	Total
FY25	2,57,655	10,000	7,000	17,000
FY26	2,53,473	14,000	10,000	24,000

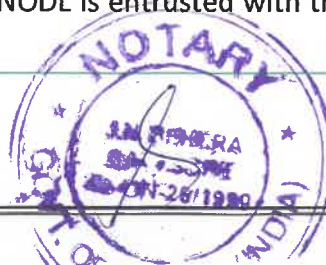
Considering the wide geographical spread of TPNODL's licensed area, establishing meter testing facilities at two opposite ends Balasore and Keonjhar will ensure better geographical coverage and easier accessibility of testing services for consumers and field teams.

The distributed testing infrastructure will enable faster meter testing, timely availability of tested meters for new connections and replacements, quicker consumer grievance redressal, and reduced transportation time and logistics costs.

The additional laboratory will also support timely compliance with regulatory service standards, strengthen operational efficiency, improve service quality, and enhance consumer confidence in meter testing and energy billing.

As per Clause No. 102(d) of the OERC Supply Code, 2019: "The licensee/supplier shall set up appropriate number of accredited testing laboratories or utilize the services of other accredited testing laboratories. The licensee/supplier shall take immediate action to get the accreditations of their existing meter testing laboratories from NABL, if not already done."

Scope and Objective: The Meter Testing Group at TPNODL is entrusted with the responsibility of carrying out the following activities:



Sample Meter Testing (Pre-Installation):

- **Pre-Installation Sample Testing:** Testing of sample meters under laboratory conditions as per applicable standards, including IS 13779, IS 14697 and IS 16444 (Part 1 & 2), before field deployment.
- **Consumer Complaint Resolution:** Testing of meters involved in consumer complaints to ensure timely and transparent resolution of metering and billing-related issues.
- **Quality Assurance:** Ensuring that only accurate, reliable, and compliant meters are installed at consumer premises.
- **Periodic Field Testing:** Testing of meters installed at Grid, HT and LT consumer locations at prescribed intervals as per applicable statutory requirements.
- **On-Site Testing:** Conducting field testing using calibrated reference/standard meters in accordance with IS 15707.
- **Infrastructure Strengthening:** Upgrading the existing laboratory and testing facilities, as the current infrastructure and equipment are inadequate to meet the growing testing requirements and statutory compliance needs.

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	3	1	2	1	1

Benefits of the Investment: A new Meter Testing Laboratory is proposed with an estimated CAPEX of ₹4.6 Cr. The detailed equipment-wise requirement is provided in **Annexure 8**. The investment will deliver the following key benefits:

- **Enhanced Testing Infrastructure:** Provision of modern equipment and facilities for accurate and reliable meter testing.
- **Improved Consumer Trust:** Faster and accurate testing will enable timely resolution of consumer complaints and billing-related disputes.
- **Quality Assurance:** Pre-installation and sample testing will ensure deployment of accurate and reliable meters in the field.
- **Operational Efficiency:** Improved laboratory and field-testing capabilities will reduce turnaround time and improve testing capacity.
- **NABL Accreditation Readiness:** The laboratory will be developed in line with NABL requirements, supporting accreditation and strengthening the credibility of TPNODL's meter testing capabilities.



Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capex Plan for FY27, an amount of Rs. 4.62 Cr was proposed towards establishment of a Meter Testing Laboratory. Subsequently, against the disallowed

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amount, approval of Rs. 4.62 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Clause No. 1.(iv) of the Review Petition are provided in the table below:

Table-4C of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Safety & Statutory	Meter Testing Lab	4.6	0	4.6	4.62

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for Meter Testing Laboratory infrastructure based on the prevailing operational and consumer service requirements.

Accordingly, ***the requirement proposed (Rs. 4.6 Cr.), under the present CAPEX FY28 Plan for a MTL at Keonjhar is over & above the amount (Rs. 4.62 Cr.) sought under the Review Petition against CAPEX FY27 for an MTL at Jajpur.***

7.1.7 Overhead to Underground conversion at crossings:

Background: Overhead (OH) lines crossing roads, highways, railway crossings, and other high-traffic locations require adequate vertical clearances to ensure public safety. Inadequate clearance, conductor sag, accidental contact, or damage to overhead lines can create serious risks to road users, the public, and the electrical network. Therefore, conversion of vulnerable OH line crossings to underground (UG) cabling is proposed as a targeted safety intervention.

Scope and Objective: TPNODL proposes to identify and convert critical OH crossings where the existing arrangement is vulnerable or difficult to maintain the required statutory clearances as per Schedule VIII A of CEA Safety Regulations, 2023. Priority will be given to:

- National/State Highways, major roads, railway crossings, market areas, and other high-traffic locations.
- Locations where required vertical clearances cannot be reliably maintained.
- Locations with frequent conductor sagging, external interference, or recurring safety concerns.

The identified OH crossing spans will be converted to suitable XLPE-insulated HT/LT underground cables, including necessary termination, jointing, protection, and associated civil works, as per approved engineering practices.



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Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	5,569	180	5,389	30	5,359

Benefits of the Investment:

- **Enhanced Public Safety:** Eliminates risks associated with low-clearance overhead conductors at critical crossings.
- **Improved Reliability:** Reduces interruptions and faults caused by vehicle movement, external interference, and conductor damage.
- **Regulatory Compliance:** Helps maintain the applicable clearance and safety requirements under the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023.
- **Reduced Maintenance Risk:** Minimizes exposure of the electrical network to external and environmental hazards at vulnerable crossings.

7.1.8 Intermediate poles for vulnerable location:

Background: Excessive spans in overhead lines can result in increased conductor sag, inadequate ground clearance, and higher mechanical stress, particularly during high wind and adverse weather conditions. Such conditions may create safety risks for the public, animals, and road users and may also increase the probability of conductor failure. Therefore, provision of intermediate poles at identified vulnerable locations is proposed to improve line safety and mechanical stability.

Scope and Objective: TPNODL proposes to provide intermediate poles at locations where existing spans are excessive or where required statutory clearances cannot be reliably maintained. The intervention will include:

- Identification of long-span sections having excessive sag or inadequate ground clearance.
- Erection of intermediate poles to reduce span length and maintain required clearances.
- Re-stringing/tensioning of conductors wherever needed to achieve the desired line profile.
- Strengthening of existing poles, stays, and structures wherever necessary to safely accommodate revised mechanical loading.



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Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	28,938	7,291	21,647	5,690	15,957

Benefits of the investment:

- **Enhanced Safety:** Maintains required clearances and reduces the risk of accidental contact with conductors.
- **CEA Compliance:** Supports compliance with applicable clearance and safety requirements under the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023.
- **Improved Network Reliability & Stability:** Reduces conductor sag, mechanical stress, and the probability of conductor snapping and associated outages. Strengthens the line structure and improves its performance under adverse weather conditions.

7.1.9 Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench:

Background: 33kV and 11kV switchyards require proper surface development, drainage, earthing, and safe working conditions for reliable operation. At several locations, inadequate gravel filling and poor drainage result in waterlogging, soil erosion, uneven surfaces, and difficult maintenance conditions. Therefore, gravel filling and switchyard development are proposed at identified locations.

Scope & Objective:

- Gravel filling and levelling to provide a stable and safe working surface.
- Improvement of drainage to prevent waterlogging around electrical equipment and cable trenches.
- Protection of equipment foundations, cable trenches, and earthing infrastructure from moisture and soil erosion.
- Improvement of accessibility and working conditions for operation and maintenance

The works shall be executed as per applicable requirements of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, with proper earthing arrangements and measures to control step and touch potential. Gravel shall be considered as a surface treatment and shall not substitute a properly designed earthing system.

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	168 PSS	65 PSS	103 PSS	18 PSS	85 PSS

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Benefits of the Investment:

- Improved personnel safety, drainage, equipment protection, maintenance accessibility, and long-term reliability of 11 kV and 33 kV switchyards.
- Reduces step and touch potential hazards
- Minimizes risk of electric shock during fault or lightning events
- Prevents soil erosion and maintains ground stability

7.1.10 CAPEX requirement for Statutory & Safety:

Considering the vast geography involved leading to very high requirement of investment to make the network fully compliant to safety and statutory standards, TPNODL has proposed to attend the deficiencies on priority basis based on criticality of locations. Table below indicates the activities to be performed along with funds required under Statutory and Safety Head.

S. No.	Major Category	Sr. No.	Activity	FY28 Amount in Cr.	Annexure
1	Statutory & Safety	1.1	Network Safety and Operational Resilience Enhancement	9.56	Annexure-3 Annexure-4
		1.2	Defective cable replacement for safety /Replacement of unsafe service cable to mitigate electrical hazards/Replacement of hazardous service cable for public and operational safety	To be claimed at actual in True up	
		1.3	Fencing of Distribution Substations	8.47	Annexure-5
		1.4	Fire wall for PTR between the PTRs	1.5	Annexure-6
		1.5	LT extension for legacy long service cable cases to improve supply reliability.	8.0	Annexure-7
		1.6	Meter Testing Lab (Keonjhar)	4.6	Annexure-8
		1.7	Overhead to Underground conversion at crossings 33kV & 11kV	5.0	Annexure-9
		1.8	Intermediate poles for vulnerable location	10.0	Annexure-10
		1.9	Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	6.5	Annexure-11
Total (1)				53.63	



7.2 Loss Reduction:

During feeder-wise analysis and site inspections, several high technical loss 11 kV feeders were identified where a significant portion of the downstream LT network comprises overhead bare conductors. These bare LT networks are highly vulnerable to direct hooking, unauthorized connections, conductor-to-conductor contact, and external interference, resulting in increased commercial losses and frequent faults.

To address the losses in a focused manner, TPNODL proposes conversion of LT bare conductors to insulated Aerial Bundled Cable (ABC) in the downstream areas of identified high-loss 11 kV feeders. The intervention will be prioritized based on feeder loss levels, theft-prone pockets, LT network condition, and concentration of unauthorized connections.

The proposed work will include replacement of LT bare conductors with ABC, provision of intermediate poles for long spans, required earthing arrangements, and systematic service connections through Distribution Boxes. The insulated ABC network will significantly restrict direct hooking and unauthorized tapping while also reducing faults caused by external interference.

Therefore, in this head, following activities are planned for execution:

- Conversion of LT Bare conductor to AB Cable.
- Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material.

7.2.1 Conversion of LT Bare conductor to AB Cable.

Background: The LT network is the most extensive part of the distribution system and is highly exposed to external interference. Existing LT bare conductors are vulnerable to tree contact, foreign objects, accidental contact, and direct hooking, resulting in frequent faults, safety risks, and significant commercial losses due to electricity theft. In theft-prone areas, direct hooking on bare conductors also leads to revenue leakage and adversely impacts AT&C losses.

To address these challenges, TPNODL proposes the conversion of LT overhead bare conductors to insulated Aerial Bundled Cable (ABC) in identified loss-prone and vulnerable areas. The initiative will improve network safety and reliability while significantly reducing opportunities for unauthorized hooking and electricity theft.



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Scope & Objective: The proposed investment aims to strengthen the LT network and reduce commercial losses by replacing vulnerable bare conductors with insulated ABC. The work will cover identified high-loss and theft-prone feeders, along with associated network improvements such as intermediate poles, required earthing arrangements, Distribution Boxes, and systematic service connections. The objective is to minimize unauthorized hooking and power theft, reduce fault incidence, improve safety, and enhance the reliability and capacity of the LT network.

- Replacement of existing LT bare conductors with insulated LT ABC.
- Installation of intermediate poles at long spans to improve conductor clearance and reduce sag.
- Provision of earthing at required poles and road crossings.
- Installation of Distribution Boxes and systematic service connections to prevent service-line jumbling.
- Priority implementation in high-loss, theft-prone, congested, and safety-sensitive areas.
- To reduce direct hooking, commercial losses and AT&C losses, while improving network safety and reliability.

Sl. No.	Total Scope across System in Ckm	Work Covered so far (upto FY27 DPR) in Ckm	Balance Requirement in Ckm	Covered under FY28 DPR in Ckm	Planned for Balance Years DPR in Ckm
1	2	3	4=2-3	5	6=4-5
1	22,096	1,481	20,615	368	20,247

Benefits of the Investment: The conversion to ABC will make unauthorized hooking significantly more difficult, thereby reducing electricity theft, commercial losses, and AT&C losses. The insulated network will also reduce faults caused by tree contact and external interference, improving supply reliability and reducing interruptions. Additionally, the initiative will enhance public and employee safety, reduce maintenance requirements, improve network aesthetics in congested areas, and strengthen revenue protection through better control of unauthorized consumption.

- Reduction in Commercial Losses: Insulated ABC significantly restricts direct hooking and unauthorized connections.



- Reduction in AT&C Losses: Lower theft and improved network performance will contribute to AT&C loss reduction.
- Improved Reliability: Reduced faults due to tree contact and external interference, resulting in fewer interruptions.
- Enhanced Safety: Reduced risk of accidental contact and electrical accidents.
- Improved Network Performance: Better voltage profile, reduced maintenance requirements, and improved service reliability.
- Revenue Protection: Reduction in unauthorized consumption will improve billing efficiency and revenue realization.

7.2.2 Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material:

Background: Meter testing equipment are required to ensure the statutory guidelines of testing of meters in field and to address the meter testing against consumer request for fast/faulty meter.

As per the guideline of OERC supply code, Clause No. 111(iii) ***"The licensee/supplier shall also conduct periodical inspection/testing of the meters at site as per the following schedule or earlier":***

- (a) Single phase meters at least once every five years
- (b) LT three phase meters at least once every three years
- (c) HT/EHT meters including MDI at least once a year

To ensure high quality in bulk supply of meters, TPNODL has estimated that meter testing lab has to be developed in Jajpur Circle. This lab will ensure the statutory requirement of meter testing in pan TPNODL.

As per the clause no. 102 (ii) (d) of OERC Supply code ***"The licensee/supplier shall set up appropriate number of accredited testing laboratories or utilize the services of other accredited testing laboratories. The licensee/supplier shall take immediate action to get the accreditations of their existing meter testing laboratories from NABL, if not already done".***

As per the guideline of OERC supply code, Clause No. 111(vii) ***"The licensee/supplier shall inspect and check the correctness of the meter within 7 working days of receiving the complaint".***

Scope and Objective: In compliance with this statutory obligation, Meter testing equipment are required to ensure accuracy testing of meters in field and to address the meter accuracy test against consumer request also.

Below mentioned testing equipment are required to be procured in addition to facilities already available.



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S No.	Item Description
1	Online Live Testing Kit
2	Leakage Current Testing Clamp on Meter
3	Digital Clamp Multimeter (0-600 A)
5	Load Box for onsite setting
6	HV Tester (MTL Scope Enhancement)
7	IR Tester (MTL Scope Enhancement)

As technology evolves rapidly, certain materials and instruments may become obsolete and be replaced by newer alternatives. Therefore, procurement will not be restricted to the items listed above, provided it remains within the allocated budget.

Benefits of the Investment: The procurement of these meters will help the TPNODL to identify accuracy of the metering system more precisely. It will also strengthen the billing process by improving energy accounting at consumer level, thereby increasing operational efficiency along with ensuring fulfilment of OERC guidelines.

The proposed plan includes procurement, testing of the meters along with metering systems to ensure reliable data for billing and consumer satisfaction. A detailed material breakdown and implementation schedule have been prepared and attached herewith for perusal.

7.2.3 CAPEX requirement for Loss Reduction

Table below indicates the activities to be performed along with funds required under Loss Reduction Head.

S. No.	Major Category	Sr. No.	Activity	FY28 Amount in Cr.	Annexure
2	Loss Reduction	2.1	Conversion of LT Bare to AB Cable	38.5	Annexure-12
		2.2	Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material	1.3	Annexure-13
Total (2)				39.83	



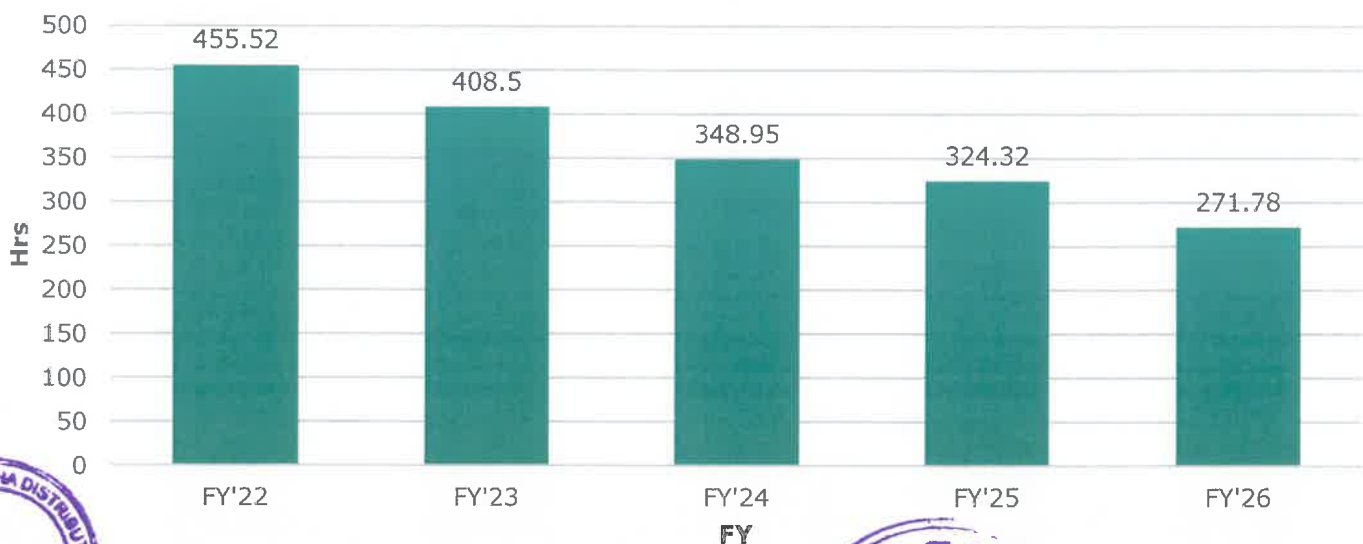
7.3 Network Reliability:

Over the years, TPNODL has invested approximately ₹423 Crore towards reliability improvement of the distribution network. The investment has focused on refurbishment of aged feeders, replacement of deteriorated equipment, strengthening of protection systems, and substation upgradation, resulting in measurable improvement in reliability indices such as SAIDI and SAIFI across various divisions.

Despite the progress achieved through these investments, substantial reliability gaps continue to exist due to the vast geographical spread of the network and the presence of long and predominantly overhead distribution feeders. A considerable portion of the network comprises aged infrastructure that remains vulnerable to external and environmental disturbances. Consequently, localized faults can often develop into prolonged and widespread interruptions, affecting a large number of consumers and increasing restoration time.

The present network conditions, therefore, necessitate a focused and prioritized reliability improvement program rather than uniform investment across the network. The proposed CAPEX has been identified based on criticality of the network, frequency and duration of interruptions, consumer impact, asset condition, feeder length, protection gaps, and the potential reliability benefit that can be achieved through each intervention. The objective is to ensure that available capital is deployed towards areas having the highest consumer benefit and maximum improvement in system reliability.

Year-wise SAIDI



Key causes of interruptions in the present system include:

- Faulty or aged equipment such as PTRs, insulators, and switches that lead to recurring tripping.
- Transient faults on overhead lines caused by lightning strikes or tree branches contacting conductors, often resulting in insulator damage where arrestors are absent or ineffective.
- Operational challenges on long feeders, where identifying the exact fault location is difficult, and unprotected branches result in widespread outages.
- Lack of LT protection at distribution substations, leading to total supply outages even for minor faults on individual LT feeders.

Year-wise SAIFI



To mitigate these issues and further enhance reliability, TPNODL proposes the following interventions under this DPR:

- 33 kV & 11 kV Network Refurbishment - Ensuring proper horizontal and vertical clearances and replacing deteriorated line sections.
- Phasing Out Vulnerable PTRs - Replacement of old/overloaded PTRs and construction of new control room buildings at Primary Substations (PSS).
- Substation Upgradation - Addition and refurbishment of network components in 33/11 kV PSS and Distribution Substations (DSS).
- Installation of LT Protection - Provision of circuit breakers on LT feeders to localize faults and minimize supply interruptions.



- Advanced Protection Devices - Installation of RMUs, Auto-Reclosers, Sectionalizers, and communicable Fault Passage Indicators (FPIs) on critical feeders to enable quicker fault isolation and faster restoration.
- Sectionalization of Long Feeders - Provision of AB switches/isolators on lengthy 33 kV and 11 kV feeders to reduce the number of consumers affected during both planned and unplanned outages.

7.3.1 Replacement/Addition of network components in 33/11kV Primary Substation (PSS):

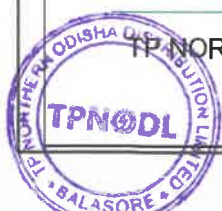
Background: TPNODL operates a large and geographically spread 33/11 kV distribution network serving a wide consumer base across Northern Odisha. Reliable health of substation equipment is essential for maintaining continuous, safe and quality power supply. Despite regular preventive maintenance and field-level corrective actions, ageing, obsolete and deteriorated equipment can lead to frequent tripping, premature failures and prolonged supply interruptions.

Condition assessment of various TPNODL substations has identified requirements related to replacement/refurbishment of aged VCBs, CTs, PTs and other critical equipment, strengthening of corroded/undersized busbars and structures, improvement of lightning protection and hotspot-prone connections, and mitigation of moisture/waterlogging-related vulnerabilities.

Reliable DC battery/N-1 battery arrangement systems are also essential for effective operation of protection, control, SCADA and breaker tripping systems. Accordingly, equipment maintenance and condition-based interventions need to consider the environmental conditions of coastal/polluted substations, in line with the **CEA (Measures relating to Safety and Electric Supply) Regulations, 2023**, which require maintenance practices to account for coastal/polluted areas and provide for more frequent maintenance to minimize tripping due to fog and salt deposits on insulators.

The proposed intervention is therefore required to address identified asset-health deficiencies, reduce equipment failure and forced outages, improve operational safety, minimize maintenance requirements and enhance the overall reliability and resilience of the TPNODL distribution network.

Scope and Objective: To strengthen the existing network, it is suggested to replace the sick equipment in the existing network. Further, this replacement will help in utilization of the



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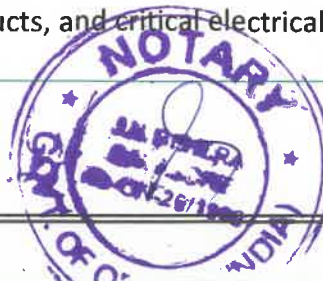
resource to the optimum level, managing the load in case of any exigency and mitigate the issue of overloading etc.

Sl. No.	Activity	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1		2	3	4=2-3	5	6=4-5
1	Replacement of Aged and Hotspot-Prone Busbars, MS Channels and Structures	153	99	54	12	42
2	Bus Coupler VCB Arrangement in Outdoor Substations	58	0	58	10	48
3	Raising of equipment foundations, control room floors, and cable trenches.	24	0	24	3	21
4	Replacement of Obsolete BHEL VM-12 Switchgear with New AIS Switchgear	4	2	2	2	0
5	N-1 redundant DC Battery system implementation	254	0	254	28	226

It is important factor to get rid off the moisture ingress in the PSS. The excessive rainwater stores under the control room cable trench, new ODSSP cable chamber & switchyards. This may cause moisture ingress to 33kV & 11kV SWBDs, cables and flashover. This flashover rate increases during rainy seasons. Sometimes, flashover occurs during long time planned shutdown, due to this settled water. More than 130 PSS have been identified for replacement/upgradation to address ageing and deteriorated equipment, enhance system reliability.

Budget is proposed for Sick equipment replacement to improve reliability of Power supply. Also, this will ensure better operation & control of the network & faster restoration of supply in case of interruptions.

- Addition/Replacement of the faulty equipment (VCB, CT/PT, CRP, Isolator, etc.) in PSS.
- Addition/Replacement / provision of AB switches.
- Replacement of Obsolete BHEL VM-12 Switchgear with New AIS Switchgear.
- Provision of new / additional earthing as per site requirement.
- Replacement of Aged and Hotspot-Prone Busbars, MS Channels and Structures.
- Raising of equipment foundations, control room floors, and cable trenches
- Waterproofing of control rooms, cable ducts, and critical electrical installations



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- Upgradation of all undersize bus bars with standard size to remove hotspot.
- Detailed technical inspection and testing of the equipment.
- Smart Moisture Ingress Mitigation and Water Evacuation System is proposed with SCADA Monitoring system.

33/11kV PSS Modernization			
Sl. No.	Item Description	UoM	Proposed Qty FY28
1	VCB 33KV O/D 1250A	EA	50
2	VCB 11KV O/D 1250A	EA	80
3	CT 33KV 1P Oil Cooled 800-400-200/1-1-1 A	EA	90
4	CT 11KV 1P O/C CTR 800-400-200/1-1-1A	EA	150
5	PT 33KV O/D Oil Filled	EA	30
6	PT 11KV 1P	EA	35
7	Isolator 33KV 1250A Double Break W/O ES	SET	50
8	Isolator 33KV 1250A Double Break W/ ES	SET	20
9	Isolator 11KV 1250A Double Break W/O ES	SET	80
10	Isolator 11KV 1250A Double Break W/ES	SET	30
11	Conductor 232 Sqmm AAA	Mtr	1000
12	Cable Control 1.1KV CU 12CX2.5 Sqmm ARM	Mtr	2000
13	Cable Control 1.1KV CU 10CX2.5 Sqmm ARM PVC	Mtr	2000
14	Cable Control 1.1KV CU 4CX2.5 Sqmm ARM	Mtr	5000
15	Cable Control 1.1KV CU 2Cx2.5 Sqmm ARM PVC	Mtr	500
16	Cable 11KV AL 3CX400 Sqmm XLPE ARM	Mtr	2000
17	Cable 33KV AL 3CX400 Sqmm XLPE ARM	Mtr	1000
18	LA 30KV 10KA Polymer Station Class CL-3	EA	100
19	LA 12KV 10KA Polymer Station Class CL-3	EA	200
20	WPB Pole 150x150 MM 11M 30.89KG/M	EA	50
21	Battery SMF Lead Acid 24V 150 AH	EA	20
22	Battery SMF Lead Acid 48V 150 AH	EA	20
23	Battery Charger Thyrstr Base 24V/40 ADCDB	EA	10
24	Battery Charger Thyrstr Base 48V/40 ADCDB	EA	10
25	Junction Box CT	EA	100
26	Junction Box PT	EA	50
27	ACDB Panel 440 V	EA	2
28	11KV Switchboard AIS	PSS	1
29	33KV Switchboard AIS	PSS	1
30	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(Outdoor type)	EA	10
31	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(indoor type)	EA	10



33/11kV PSS Modernization

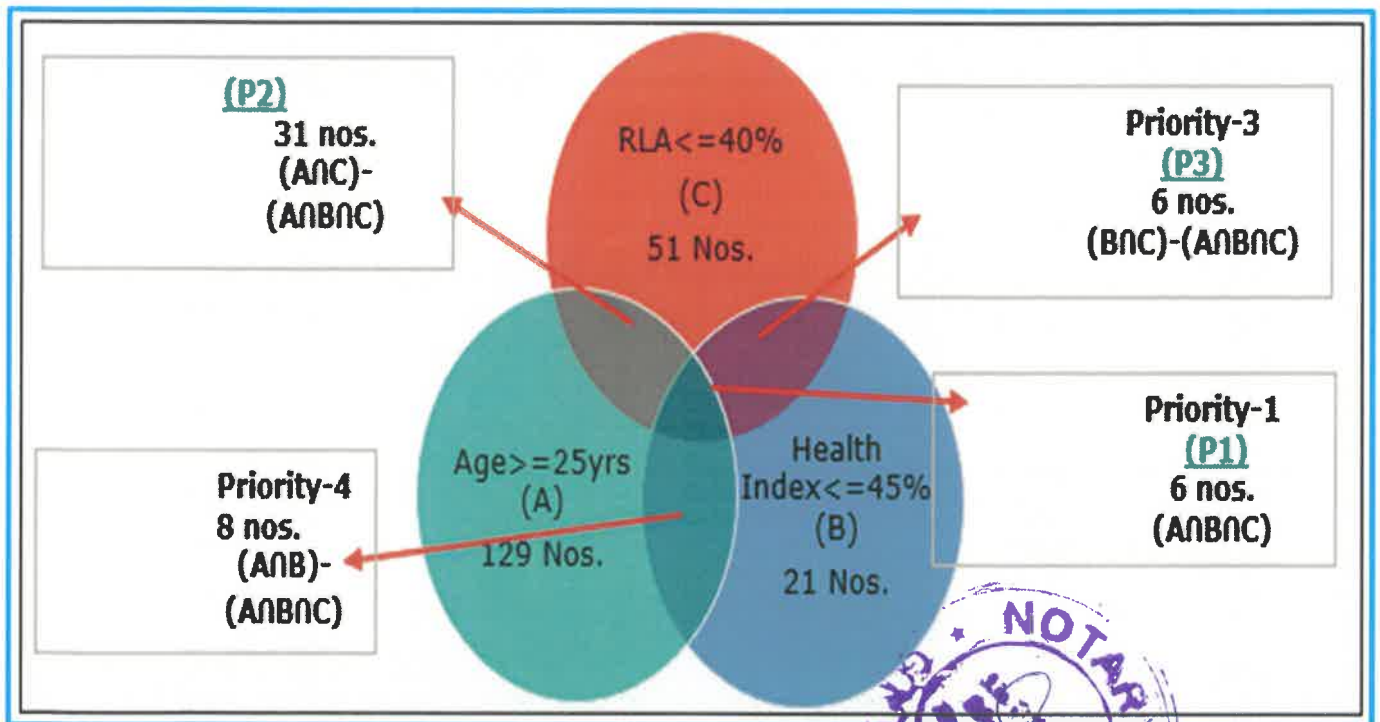
Sl. No.	Item Description	UoM	Proposed Qty FY28
32	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(Outdoor type)	EA	10
33	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(indoor type)	EA	10
34	Moisture ingress prevention in 33/11kV PSS	EA	1
35	Smart water Evacuation System	EA	20
36	Refurbishment of breaker foundation	EA	45

7.3.2 Phasing out of Vulnerable PTRs:

Background: The Board at its meeting held on January 20, 2025 had advised replacing 27 vulnerable PTRs immediately out of Total 137 Vulnerable PTRs which had been installed in PSS without adequate firm capacity.

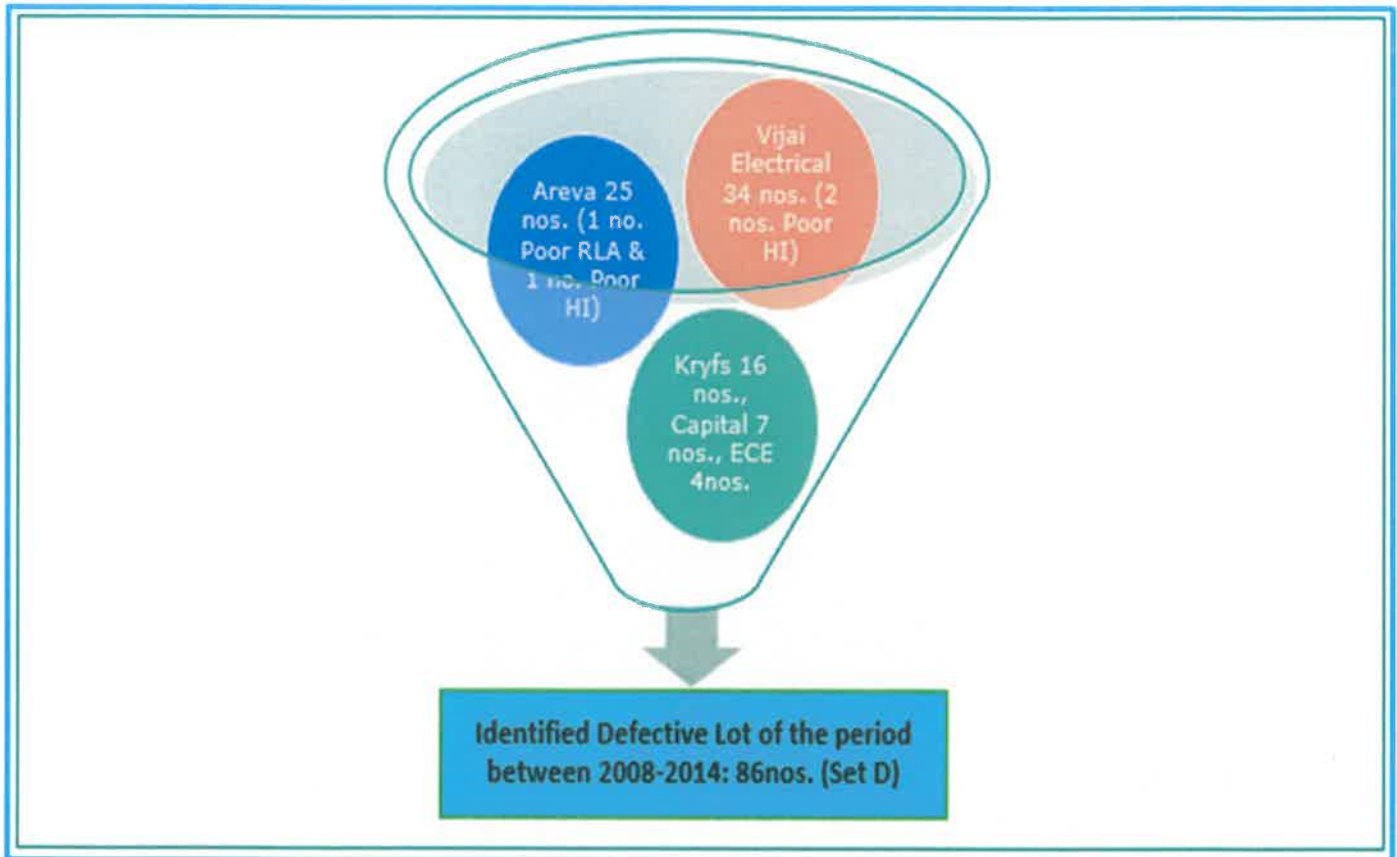
The Company had done a comprehensive evaluation of all the 576 No's of PTRs and conducted to determine their residual life and prioritize replacement. The assessment considered three key factors:

1. Transformer Age: PTRs with an age of ≥ 25 years were designated as Set- A.
2. Health Index: A detailed condition monitoring plan was implemented, including IR, PI, Tan Delta, BDV, and DGA tests. Transformers with a Health Index of $\leq 45\%$ were classified as Set- B.
3. Cellulose Paper Insulation Degradation: Furan content in transformer oil and degree of polymerization of paper insulation were analysed. Transformers with a residual life of $\leq 40\%$ were categorized as Set- C.



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The intersection of Sets A, B, and C was used to establish priority levels (1, 2, 3, and 4). This analysis identified 51 PTRs that require attention, enabling us to prioritize their replacement and ensure the reliability of our power infrastructure. Further, based on failure of PTRs over last three years, specific manufacturing batches of OEMs are identified wherein the design issues are leading to failure well within service life of PTR. The repairs carried out in such PTRs is also not fruitful as PTR is observed to have failed within two years of repairs. 86 No's of PTRs remains in service out of these specific manufacturing batches of 4 No's of OEM (Vijai, Kryfs, ECE & Areva) identified as defective for the period between 2008 to 2014. This lot designated as Set- D.

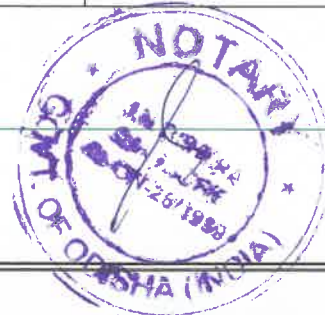


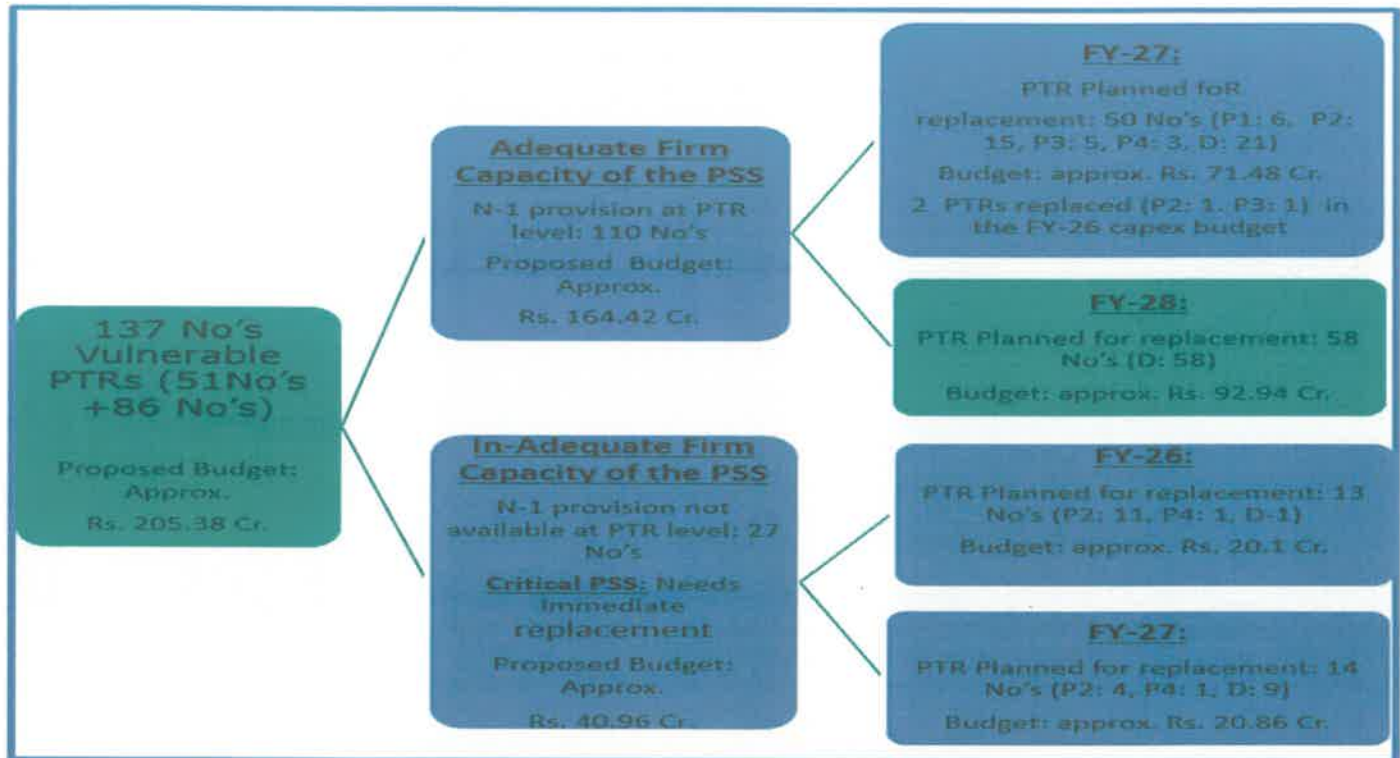
Scope and Objective: Total 137 No's of PTRs (51 No's + 86 No's) were identified as Vulnerable PTRs based on the analysis. Out of 137 No's of PTR, N-1 provision at PTR level within PSS is already available in 110 No's. and balance 27 No's N-1 is not available. These 27 vulnerable PTR will be mitigated through installation of new PTRs in terms of augmentation under Capex. Out of 27 No's vulnerable PTR, 17 No's of PTRs have completed the designated service Life (25 years).

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY'27 DPR) in nos.	Balance Requirement in nos.	Covered under FY'28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	137	32	105	34	71



TP NORTH ODISHA DISTRIBUTION LIMITED





Benefits of the Investment: The proposed investment in replacing and augmenting vulnerable Power Transformers (PTRs) will significantly enhance the reliability, safety, and efficiency of the power distribution network. By ensuring N-1 redundancy at critical substations and phasing out transformers that have exceeded their designated service life, the initiative will minimize the risk of outages, equipment failure, and potential safety hazards. New energy-efficient PTRs will reduce technical losses, improve voltage stability, and lower maintenance costs. Moreover, the investment supports regulatory compliance, strengthens asset health management, and ensures readiness for future load growth and infrastructure expansion.

7.3.3 Testing equipment for PSS:

Background: TPNODL distribution network comprises extensive 33 kV, 11 kV and LT electrical infrastructure, including transformers, cables, switchgear, overhead lines and associated equipment. Regular testing and condition assessment of these assets are essential for ensuring safe operation, early identification of defects and prevention of equipment failure. At field level, various testing and diagnostic activities require specialized instruments for electrical, mechanical and oil-quality assessment.

The current procurement plan for FY28 focuses on augmenting field-testing capabilities for PTR testing, PQ analysis, switchgear maintenance, and broader statutory safety compliance. This initiative is essential to enhance the performance and safety of the power distribution infrastructure.



Scope and Objective: The scope includes procurement of essential electrical, insulation tester, oil testing, earthing, power quality and diagnostic equipment such as SFRA, DGA Kit, PD Camera, BDV Tester, Megger, Earth Resistance Tester, Turns Ratio Meter and other field-testing instruments. The objective is to strengthen in-house testing and condition-monitoring capabilities and support preventive and condition-based maintenance. The scope includes the procurement of a wide range of equipment such as:

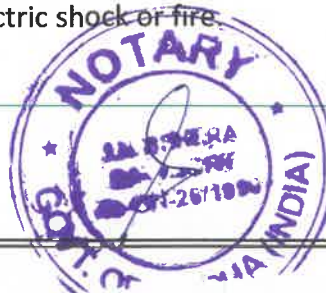
- **Electrical Testing Tools:** Insulation resistance testers, multi-meters, clamp meters, diagnostic analyzers, transformer winding analyzers.
- **Support Systems:** Portable diesel generators, battery load units, DGA kits, and PD cameras.
- **Specialized Testing Equipment:** Battery impedance testers, variacs, and advanced diagnostic tools for transformers and switchgear.
- **Upgrade Testing Infrastructure:** Provide state-of-the-art tools to enhance the diagnostic and maintenance accuracy for electrical assets.
- **Support Predictive Maintenance:** Enable condition-based monitoring (CBM) with diagnostic tools like DGA kits and PD cameras.

Benefits of the Investment: The investment will enable early detection of equipment defects, faster fault diagnosis, improved maintenance effectiveness and reduced equipment failures/outage duration. It will also improve electrical safety, asset reliability and reduce dependency on external testing agencies.

7.3.4 Earthing system of all PSS:

Background: In TPNODL area having 254 nos. of 33/11kV PSS, the earthing system is a fundamental component that ensures both the safe operation of the power distribution network and the protection of human life. By connecting the metal frames of all power equipment to the general mass of the earth which is considered to be at zero potential earthing provides a controlled path for fault currents to dissipate safely.

Although the earth itself is assumed to have negligible resistance, the effectiveness of the earthing system can degrade over time due to corrosion, mechanical damage, or poor maintenance. A weak or defective earthing connection can delay fault clearance, increase stress on connected equipment, and elevate the risk of electric shock or fire.



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Scope and Objective: The objective of strengthening and maintaining the earthing system is to:

- Ensure safe dissipation of fault currents to prevent hazardous voltage build-up.
- Maintain zero potential reference for all exposed conductive parts.
- Prevent equipment damage and reduce fault clearance time.
- Enhance overall system reliability and safety for personnel.

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	170 PSS	82 PSS	88 PSS	28 PSS	60 PSS

This initiative applies to all electrical installations across substations, switchyards, and distribution networks, with a focus on regular inspection, corrosion control, and upgrading of earthing infrastructure.

Benefits of the Investment:

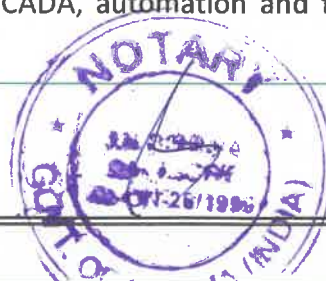
- Strong earthing minimizes the likelihood of electrical faults and short circuits.
- Faster fault clearance ensures uninterrupted and stable power distribution.
- Protects transformers, switchgear, and other assets from electrical stress and damage.
- Reduces risk of electric shock and ensures compliance with safety standards.

7.3.5 Construction of New Control Building for PSS:

Background: Primary Substations (PSS) are critical elements of the distribution network, housing protection, control, communication and automation equipment. At several PSSs across Balasore, Baripada, Bhadrak, Keonjhar and Jajpur, dedicated control buildings are either not available or existing structures are aged and inadequate. This creates limitations in safe equipment housing, maintenance, and future automation/SCADA integration. Therefore, construction of standardized control buildings is required to strengthen the safety, reliability and operational readiness of these substations.

Scope and Objective: The project covers construction of new control buildings at identified PSS locations with suitable space and infrastructure for protection, control, communication and automation systems. The key objectives are:

- To provide safe and reliable housing for critical protection and control equipment.
- To replace inadequate/aged control structures with standardized infrastructure.
- To facilitate proper cable routing, trenching and maintenance access.
- To provide infrastructure readiness for SCADA, automation and future smart-grid requirements.



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- To improve overall operational safety and reliability of PSSs

Sl. No.	Total Scope across System in nos.	Work Covered so far (upto FY27 DPR) in nos.	Balance Requirement in nos.	Covered under FY28 DPR in nos.	Planned for Balance Years DPR in nos.
1	2	3	4=2-3	5	6=4-5
1	163	150	13	7	6

Benefits of the Investment:

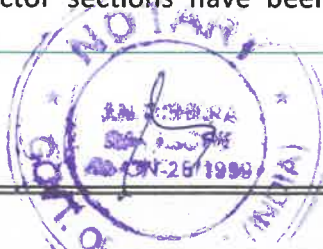
- **Improved Reliability:** Protects critical control and protection equipment from environmental and operational risks.
- **Enhanced Safety:** Provides a dedicated and properly designed facility for substation control systems.
- **Better Maintenance:** Proper layout and cable trenching improve accessibility and reduce maintenance time.
- **Future Readiness:** Provides necessary infrastructure for SCADA, automation and smart-grid integration.
- **Regulatory Compliance:** The proposed control buildings will provide safe and suitable infrastructure for housing protection, control and electrical equipment, supporting compliance with the applicable provisions of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, including requirements related to safe electrical installations, access, protection and statutory inspection.

7.3.6 33 kV Conductor upgradation:

Background: The 33 kV feeders form the backbone of TPNODL's distribution network, supplying power from OPTCL Grid Substations (GSS) to downstream Primary Substations (PSS) and HT consumers across a vast geographical area. TPNODL presently operates approximately **3,821.4 Ckt. km** of 33 kV lines through 137 nos. of 33kV feeders, feeding 254 nos. of 33/11kV PSS and several HT consumers.

Scope and Objective: These 137 feeders have been modelled in CYME Distribution Software along with their existing loading conditions. The software enables assessment of feeder loading, identification of network constraints, and evaluation of projected load growth, thereby facilitating the network planning.

Load growth has been considered in two stages within the network study. Initially, a 5-year (Summer'30) load growth scenario is simulated to assess the impact of future demand and identify potential network constraints. Subsequently, a 3-year (Summer'28) load growth scenario is evaluated to facilitate prioritisation of augmentation works. Based on the network studies and load growth simulations, feeder sections experiencing overloading (>80% loading), under-voltage conditions, and undersized conductor sections have been identified. These



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findings are further supplemented with field inputs relating to aged conductors and unsafe network conditions. Based on these study findings and field inputs, feeder sections requiring augmentation have been identified. These interventions enhance feeder load carrying capacity, address overloaded sections, improve voltage profiles, and help eliminate under-voltage pockets.

Circle	Overloading Condition	N-1 / Reliability Improvement	Under-Voltage Section / Ageing
Balasore	10	3	2
Baripada	8	5	7
Bhadrak	3	1	3
Jajpur	16	2	1
Keonjhar	7	12	3

These studies and network assessments indicate a significant requirement for refurbishment and augmentation works. Therefore, to optimise capital expenditure and minimise the burden on consumers, feeder augmentation proposals have been prioritised based on the following criteria:

- Feeders/Sections Overloading Mitigation (based on Cyme Software studies)
- Load Growth Accommodation (based on Cyme Software studies)
- Under-Voltage Pocket Mitigation
- Top 10 listed feeders under:
 - High SAIDI / SAIFI
 - High Technical Loss
 - Urban Region Long-Length Feeders
- Aged / Unsafe Network Condition

Based on the findings of the Cyme software based network studies and field assessments, only the critical augmentation works required by Summer'28 have been considered in this proposal. These works address identified loading constraints, under-voltage conditions, and aged network conditions. Non-implementation of these works may adversely affect power quality, reliability of supply, and in certain cases, network safety.

Sl. No.	Voltage Level	Total Scope across System in Ckm	Work Covered so far (upto FY27 DPR) in Ckm	Balance Requirement in Ckm	Covered under FY28 DPR in Ckm	Planned for Balance Years DPR in Ckm
1		2	3	4=2-3	5	6=4-5
1	33kV	703	234	469	111.4	357.6

Benefits of the Investment: The proposed conductor upgradation will strengthen the 33kV network by addressing capacity constraints, improving voltage performance, and enhancing the reliability of power supply to downstream substations and consumers. The investment will also



support future load growth, improve network flexibility during contingency conditions, and reduce interruptions arising from overloaded and aged conductor sections.

Key benefits are as follows:

- Mitigation of conductor overloading in critical 33 kV feeder sections.
- Enhanced Network capability to cater to projected load growth.
- Mitigation of under-voltage pockets and improvement in voltage profile.
- Enhanced N-1 capability.
- Replacement of aged and undersized conductors to improve network performance.
- Improved safety through correction of sag and clearance issues.

7.3.7 11 kV Conductor upgradation:

Background: The 11kV feeder network serves as the primary distribution system of TPNODL, supplying power from 33/11 kV Primary Substations (PSS) to Distribution Substations and consumers across the licensed area. TPNODL presently operates 909 nos. of 11kV feeders with an aggregate network length of approximately **42,864.3 Ckm** of 11kV lines.

Scope and Objective: The 909 nos. of 11kV feeders have been modelled in CYME Distribution Software along with their existing loading conditions. The software enables assessment of feeder loading, identification of network constraints, and evaluation of projected load growth, thereby facilitating the network planning.

Circle	Overloading Condition	N-1 / Reliability Improvement	Under-Voltage Section / Ageing
Balasore	19	0	7
Baripada	8	1	20
Bhadrak	17	0	15
Jajpur	28	3	6
Keonjhar	10	20	32

Load growth has been considered in two stages within the network study based on Cyme Software. Initially, a 5-year (Summer'30) load growth scenario is simulated to assess the impact of future demand and identify potential network constraints. Subsequently, a 3-year (Summer'28) load growth scenario is evaluated to facilitate prioritisation of conductor upgradation works. Based on the network studies and load growth simulations, feeder sections experiencing overloading (>80% loading), under-voltage conditions beyond the permissible voltage regulation limit, and undersized conductor sections have been identified. These findings are further supplemented with field inputs relating to aged conductors and unsafe network



conditions. Based on these study findings and field inputs, feeder sections requiring conductor upgradation have been identified. These interventions enhance feeder load carrying capacity, address overloaded sections, improve voltage profiles, and help eliminate under-voltage pockets.

These studies and network assessments indicate a significant requirement for conductor upgradation and refurbishment works. Therefore, to optimise capital expenditure and minimise the burden on consumers, conductor upgradation proposals have been prioritised based on the following criteria:

- Conductor Overloading Mitigation
- Load Growth Accommodation
- Under-Voltage Pocket Mitigation
- Top 10 listed feeders under:
 - High SAIDI / SAIFI
 - High Technical Loss
 - Urban Region Long-Length Feeders
- Aged / Unsafe Network Condition

Based on the findings of the network studies and field assessments, only the critical conductor upgradation works required by Summer'28 have been considered in this proposal. These works address identified loading constraints, under-voltage conditions, and aged network conditions. Non-implementation of these works may adversely affect power quality, reliability of supply, and in certain cases, network safety.

Sl. No.	Voltage Level	Total Scope across System in Ckm	Work Covered so far (upto FY27 DPR) in Ckm	Balance Requirement in Ckm	Covered under FY28 DPR in Ckm	Planned for Balance Years DPR in Ckm
1		2	3	4=2-3	5	6=4-5
1	11kV	1911	731	1180	129	1051

Benefits of the Investment: The proposed refurbishment is not merely an asset-replacement activity; it is a targeted network-strengthening intervention required to address ageing assets, capacity constraints, safety deficiencies and operational limitations. Prioritizing high-load and critical feeder sections will enable TPNODL to improve reliability, enhance N-1 capability, meet growing demand and ensure safe and sustainable operation of the distribution network

- Mitigation of conductor overloading in critical 11 kV feeder sections.
- Enhanced network capability to cater to consumer load growth.
- Mitigation of under-voltage pockets and improvement in voltage profile.
- Enhanced N-1 capability and operational flexibility for load transfer.



- Replacement of aged and undersized conductors to improve network performance.
- Improved safety through correction of sag and clearance issues.
- Improved reliability and quality of supply to consumers.
- Improved safety through correction of sag and clearance issues.

7.3.8 Installation of HV Protection:

Background: Distribution Substations (DSS) are critical nodes in the power distribution network, responsible for delivering electricity at appropriate voltage levels to end consumers. Each DSS comprises key components such as 11kV switching devices, HV and LV protection systems, distribution transformers, earthing arrangements, fencing, and outgoing LV feeders.

Among these, the distribution transformer is the most capital-intensive asset, and its operational life is heavily influenced by the health of associated components. In many utilities, transformers are aging or have exceeded their expected lifespan. However, TPNODL emphasizes that replacement decisions should not be based solely on age, but rather on a holistic assessment of asset health, loading conditions, and operational criticalities especially since such replacements impact capital expenditure and consumer tariffs.

Preliminary site inspections have revealed widespread deterioration in DSS infrastructure:

- Poor condition of HT/LT protection equipment.
- Improper connections with undersized lugs and lack of proper crimping.
- Unsafe fuse cut-out installations with oversized wires.
- Damaged or missing fencing and boundary walls.
- High technical losses and frequent interruptions due to faulty components.

These issues not only compromise equipment reliability but also pose serious safety hazards to the public and utility personnel.

Scope and Objective: Ensuring safety of People & equipment is very much needed for safe operation. Hence TPNODL proposes for activities under Refurbishment of Distribution Substation:

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- Replacement of damaged support structure at DSS. This includes MS / GI structure, channels etc. Dismantling of existing structure and erection of new structure at same location has been considered in scope of the work.
- Compact I-Shape Structure for 1-Way RMU Installation: Development of a space-optimized structure for installation of 1-Way RMUs in congested urban areas, ensuring effective HV protection, safe operation, easy maintenance and reliable network sectionalization.
- Installation of palm connectors at HT and LT side of Distribution Transformers and ensuring that all connections are through palm connectors.
- Replacement of all undersize conductors with standard size to remove hotspot.
- Replacement / provision of AB switch, DD Fuse units, LT ACB or MCCB (depending on Transformer ratings) and all associated cables / conductors.
- Provision of new / additional earthing in all DSS as per site requirement.
- Installation of fencing to safeguard the DSS equipment and to maintain safety clearances.
- Installation of danger boards, anti-climbing devices, stay-sets etc. to ensure safety & statutory compliance.
- Carry out civil works as per site requirement.

Activity considered under DTR refurbishment:

Sr. No	Description	UOM	Proposed Qty FY28	FY28 Amount (in Cr.)
1	Installation of HV Protection upto 100 KVA	EA	254	10.85
2	Installation of HV Protection above 100 KVA	EA	63	5.85
Total			317	16.69

Benefits of the Investment:

- Extends the life of distribution transformers by ensuring healthy support systems.
- Reduces premature failures due to thermal and mechanical stress.
- Minimizes technical losses and improves power quality.
- Reduces frequency and duration of supply interruptions.
- Enhances safety for field personnel and the public.
- Ensures statutory compliance through proper fencing and warning systems.
- Strengthens the overall reliability of the power distribution network.

- Improves fault isolation and protection response times.

Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capital Investment Plan for FY27, an amount of Rs. 14.52 Cr was proposed towards Refurbishment of 11/0.415 kV Distribution Substations (DSS). Subsequently, against the disallowed amount, approval of Rs. 14.52 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Clause No. 2.(i) of Review Petition are provided in the table below:

Table-6 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Reliability	Refurbishment of 11KV/0.415 KV, DTRs	14.52	0	14.52	14.52

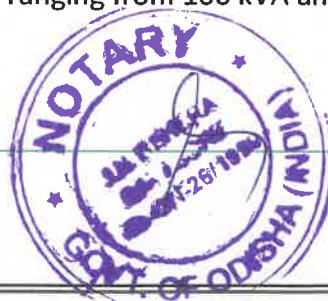
While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for refurbishment and strengthening of Distribution Substations (DSS) based on the prevailing condition of assets and network requirements.

Accordingly, ***the requirement proposed (Rs. 16.69 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 14.52 Cr.) sought under the Review Petition against CAPEX FY27.***

7.3.9 Installation of LV Protection:

Background: During recent site inspections, it was observed that LT protection is missing at the secondary side of Distribution Transformers (DTs). As a result, faults occurring in the LT network are not isolated locally and instead propagate to the 11kV system, causing frequent tripping of 11kV feeders. This cascading effect significantly impacts SAIFI and SAIDI, leading to widespread consumer outages and reduced system reliability.

The absence of LT protection not only stresses upstream equipment but also increases the fault clearance time, which can cause thermal and mechanical damage to transformers and other critical assets. This issue is particularly prevalent in Pole Mounted Substations and Plinth Mounted Substations with transformer capacities ranging from 100 kVA and above.



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Sl. No.	Total Scope across System in Nos.	Work Covered so far (upto FY27 DPR) in Nos.	Balance Requirement in Nos.	Covered under FY28 DPR in Nos.	Planned for Balance Years DPR in Nos.
1	2	3	4=2-3	5	6=4-5
1	84,841	12,638	72,203	1,116	71,087

Scope and Objective: The objective of this initiative is to enhance fault isolation capability at the LT level and protect upstream 11kV systems from unnecessary tripping due to downstream faults.

- Installation of MCCBs (Moulded Case Circuit Breakers) at the LT side of 100 kVA & below Pole Mounted Substations
- Installation of ACBs (Air Circuit Breakers) at the LT side of above 100 KVA Distribution Substations
- Integration of protection devices with existing infrastructure to ensure seamless fault isolation.

Benefits of the Investment:

- Reduces tripping of 11kV feeders due to LT faults.
- Enhances SAIFI and SAIDI performance metrics.
- Faults are contained at the LT level, preventing upstream impact.
- Faster fault clearance reduces equipment stress and downtime.
- Extends lifespan of distribution assets.
- Improved quality of power supply.
- Reduces manual fault tracing and restoration efforts.
- Supports proactive maintenance and fault management

7.3.10 Installation of Auto Recloser for 11kV:

Background: TPNODL operates a large network of 11kV overhead feeders, including several long-length feeders with multiple sections and remote load pockets. Faults on such feeders can affect a large number of consumers and may require significant time for fault patrolling, fault identification and isolation. Further, at some Primary Substations (PSS), multiple 11 kV feeders are controlled through a common breaker or AB switch, resulting in wider outage impact during feeder faults or maintenance of common switching equipment.



To address these reliability challenges, installation of Auto-Reclosers (ARs) is proposed in a phased manner. For FY28, 232 Nos. of Auto-Reclosers identified locations.

7.3.11 Installation of Auto Recloser for 33kV:

Background: TPNODL has a large 33kV overhead network with long and multi-section feeders supplying remote load pockets. Faults on these feeders can cause widespread outages and require considerable time for fault identification and isolation. Common switching arrangements at some PSSs can further increase the outage impact.

To address these reliability challenges, installation of Auto-Reclosers (ARs) is proposed in a phased manner. For FY28, 23 Nos. of Auto-Reclosers identified locations.

7.3.12 Installation of 33kV & 11kV RMUs:

Background: TPNODL has a growing 33kV & 11kV network that serves a diverse consumer base including critical and high-load consumers. Faults or maintenance on overhead 33kV & 11kV feeders can lead to prolonged interruptions and wider outage impact. Ensuring un-interrupted power supply to our consumers is a priority.

To mitigate these operational challenges and modernization of the network infrastructure, installation of Ring Main Units (RMUs) have been planned for deployment at strategically identified location in phased manner. For FY28, 21 Nos. of RMUs are proposed at identified locations.

Sl. No.	Total Scope across System in Nos. (AR & RMU)	Work Covered so far (upto FY27 DPR) in Nos.	Balance Requirement in Nos.	Covered under FY28 DPR in Nos.	Planned for Balance Years DPR in Nos.
1	2	3	4=2-3	5	6=4-5
1	2,425	474	1,951	276	1,673

7.3.13 Installation of FPIs for 11kV Lines:

Background: TPNODL operates a large 33kV and 11kV overhead network with long and multi-section feeders. During feeder faults, locating the fault point through manual patrolling takes considerable time, resulting in prolonged outages.



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To address these reliability challenges, installation of 614 sets of FPIs are proposed at identified locations.

Sl. No.	Total Scope across System in Set of 3 (FPI)	Work Covered so far (upto FY27 DPR) in Set of 3	Balance Requirement in Set of 3	Covered under FY28 DPR in Set of 3	Planned for Balance Years DPR in Set of 3
1	2	3	4=2-3	5	6=4-5
1	14,450	2,179	12,271	614	11,657

Scope and Objective for AR, RMUs & FPI: The proposed scheme includes installation of Auto-Reclosers, Sectionalizers, RMUs and Overhead FPIs at strategically identified locations on 33 kV and 11 kV networks, particularly on long-length feeders, feeders with high fault incidence, critical load areas and locations requiring improved sectionalization and switching flexibility.

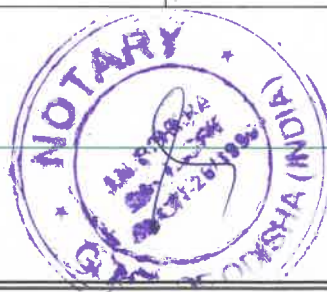
- To improve reliability of supply on long 33 kV and 11 kV feeders.
- To minimize outage duration and the number of consumers affected by feeder faults.
- To enable automatic clearing of transient faults through Auto-Reclosers.
- To isolate faulty sections and restore supply to healthy sections through sectionalization.
- To enable faster fault identification on long 11 kV feeders through O/H FPIs.
- To improve operational flexibility and facilitate faster restoration through RMUs and sectionalizing arrangements.
- To reduce the impact of faults or maintenance of common switching equipment on multiple feeders.

Sl. No.	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
1	Installation Auto Recloser for 11kV	Nos	232	25.0
2	Installation Auto Recloser for 33kV	Nos	23	5.00
3	Installation RMU 4W O/D at 11 KV	Nos	8	1.77
4	Installation RMU 3W O/D at 11 KV	Nos	8	1.62
5	Installation RMU 4W O/D at 33 KV	Nos	5	2.61
6	Installation FPI for 33KV / 11KV Lines	set of 3	614	3.0
Total				39.00

Benefits of the investment:



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- Improved SAIDI/SAIFI performance through reduction in outage frequency and duration.
- Faster fault detection, isolation and restoration, particularly on long-length feeders.
- Reduced fault-patrolling time and improved restoration response.
- Healthy sections of the feeder can remain energized even when a particular section is faulty.
- Reduced number of consumers affected during localized feeder faults.
- Improved network sectionalization, switching flexibility and operational reliability.
- Enhanced overall power supply reliability and consumer satisfaction across the TPNODL distribution network.

7.3.14 Installation of Line AB Switch/Isolator for 33kV & 11kV:

TPNODL currently has huge nos. of very long overhead feeders. It is observed that multiple 33kV & 11kV feeders are controlled through single breaker or AB switch in primary substation. During fault in any 33kV / 11kV feeder and maintenance activity in 33kV / 11kV outage to be taken from the breaker available at primary substation which affects the supply of consumers connected on all 33kV / 11kV feeders. To improve reliability of power supply at such substations, installation of Line AB switch or Isolator at different location is being proposed in phase manner.

Based on field survey, total 171 nos. GO switch at 33kv network and 1814 nos. AB switches at 11kV network requirement have been received from the field team. But to optimize the CAPEX in FY28, we have considered 115 sets which will be installed on highest SAIDI/SAIFI contributing feeders at 33kV and 11kV, for isolation of section during any planned / unplanned outages.



7.3.15 CAPEX requirement for Network Reliability:

Table below indicates the activities to be performed along with funds required under Network Reliability Head.

Sr. No.	Major Category	Sr. No.	Activity	FY28 Amount in Cr.	Annexure
3	Reliability	3.1	Replacement/Addition of network component in 33/11kV Primary Substation	15.0	Annexure-14
		3.2	Phasing out of Vulnerable PTRs (34 Nos)	52.3	Annexure-15
		3.3	Testing equipment for PSS	1.5	Annexure-16
		3.4	Earthing system for PSS	1.0	Annexure-17
		3.5	Construction of new control room building for PSS	5.0	Annexure-18
		3.6	33 KV Conductor up gradation	25.9	Annexure-19
		3.7	11 KV Conductor up gradation	21.6	Annexure-20
		3.8	Installation of HV Protection	16.7	Annexure-21
		3.9	Installation of LV Protection	18.0	Annexure-22
		3.10	Installation of Auto Reclosure for 11kV	25.0	Annexure-23A
		3.11	Installation of Auto Reclosure for 33kV	5.0	Annexure-23B
		3.12	Installation of 33kV & 11kV RMUs	6.0	Annexure-24
		3.13	Installation of FPIs for 33kV & 11kV Lines	3.0	Annexure-25
		3.14	Installation of Line AB Switch/Isolator for 33kV & 11kV Lines	4.0	Annexure-26
Total (3)				200.11	



7.4 Load Growth:

Every year, the DISCOM is required to release new electricity connections based on consumer applications and projected load growth of existing customers in its license area.

In order to meet the increasing power demand, the existing distribution network infrastructure needs to be augmented/ strengthened/ expanded to release the new connection. Network extension/ augmentation/addition is required, as some of the new connections cannot be released from the existing network and require augmentation/addition/extension before release of new connection.

The cost recovered from consumers by way of service connection charges is not adequate in certain new connection release cases, and the Hon'ble Commission has been allowing this differential cost associated with new connection release, including unrecovered cost of service cable in the capex.

In the Capex order dated 10.07.2025 in the matter of Case No-80 of 2024 under para 23 (iv), the Hon'ble Commission has stipulated that differential cost for new connection release will be allowed during Truing up at actual.

“

... However, the additional expenditure for new connection release would be considered by the Commission during the True Up exercise for the financial year on the actual basis.”

In the Capex order dated 15.05.2026 in the matter of Case No-81 of 2025 under para 29 (iv), the Hon'ble Commission has stipulated that differential cost for new connection release will be allowed during Truing up at actual.

“

... The Commission in Capex Order dated 10.07.2025 in the Case No.80/2024 has stipulated that the additional expenditure for new connection release would be considered by the Commission during the True Up exercise for the financial year on the actual basis. Following the same principle, the additional expenditure towards new connection release over and above the contribution of consumer(s) will be considered by the Commission during the Truing up exercise based on audited accounts.”

In view of the above directives, we are in this petition not proposing any amount towards 'LT Extension for New connection (Differential cost) and Network infrastructure for providing 3 ph new connection (Differential cost)' as the same will be claimed during truing up at actual.



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The associated load growth increases the demand on the existing HT and LT network, requiring network extension, augmentation, strengthening, or new infrastructure at identified locations.

To assess the impact of prospective customers, load on the existing distribution network, CYME Dist. Software (Version 9.4) is used for load flow and network capacity assessment. The study identifies feeders, transformers, and network sections that may experience overloading, voltage constraints, or inadequate capacity after considering the anticipated load growth.

Based on CYME software study results, the feeders/lines/locations requiring additional capacity are planned under appropriate augmentation, extension, or new network schemes. Thus, CYME-based load growth assessment provides a technical & data-driven approach for identifying infrastructure requirements and ensuring timely release of new connections without compromising network performance and reliability.

The following tables represent the data for consumer base:

Consumer Base in Lacs	FY-22	FY-23	FY-24	FY-25	FY-26	Q1 FY-27
	20.89	20.42	19.54	19.99	20.64	20.72

Also, with the increase in consumer base, load on existing DTRs also increased. Additional/Augmentation of Transformers will help in reducing the transformers failures.

Below table shows the details of Burnt transformers in previous years and in current FY till Aug-26.

Particulars	FY22	FY23	FY24	FY25	FY26	FY27 (till Aug'26)
Failure of Power Transformers (PTR)	27	8	10	7	2	0
Failure of Distribution Transformers (DTR)	2,533	2,877	3,426	3,447	3,442	1,729

Hence for carrying out network extension / augmentation / addition, we propose expenditure under this head to cater the projected load growth.

7.4.1 Augmentation of Power Transformers (PTRs):

Background: To cater the increasing load demand, PTR augmentation is required to avoid any overloading at Transformer & PSS level. Also, to ensure reliable power supply to our consumers,

PTRs have to be kept at optimum loading to avoid any mechanical stress on the transformers due to overloading.

Scope and Objective: The summary of overloaded PTR (based on 5 years projected load growth) is mentioned in table below, where 102 nos. Overload PTRs are required to be mitigated in next 5 years.

Table on PTR Projected Loading for Summer'28 and Summer'30:

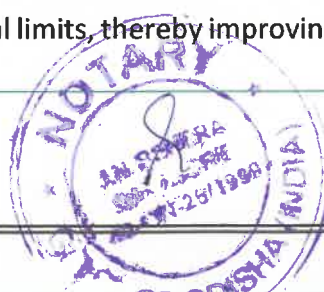
PTR Loading Range	Nos. of PTRs	
	Summer'28	Summer'30
80% - 100%	40	68
100% - 120%	15	25
>=120%	1	9
Total	56	102

As evident from the above projected loading table, 102 nos. of PTRs will be overloaded by FY31. So, to optimize the Capex, we have prioritized the mitigation for meeting the Summer'28 peak loading, by which 56 nos. of PTRs will have peak loading above 80%.

Out of these PTRs, we analysed the PTRs and prioritised the ones pertaining to high-priority locations, and critical loading. So, to optimise capex and reduce the burden on consumer, 8 nos. PTRs (6 nos. 12.5/16 MVA and 2 nos 8 MVA PT) are proposed for augmentation in CAPEX FY28 to mitigate the above mentioned 56 nos. overloaded PTRs with a plan to reutilize the dismantled PTR to mitigate the other less rating PTR in a cascading way to optimize the Capex and ensure effective utilization of the PTR installed capacity. The PTR Loading detail is attached as **Annexure-48** for the kind reference of Hon'ble Commission.

Benefits of the Investment: The continuous addition of consumers and year-on-year increase in electricity demand are progressively increasing the loading of existing PTRs. Timely augmentation and capacity addition are therefore essential to prevent overloading, avoid failures, create capacity ahead of demand and ensure reliable supply to existing as well as new consumers.

- To mitigate overloading and prevent transformer failures.
- To ensure uninterrupted and reliable power supply to consumers.
- To maintain PTRs loading within optimal limits, thereby improving asset longevity and network efficiency.



- To support future load growth and urban expansion without compromising service quality.

7.4.2 Augmentation of Distribution transformer (DTRs)

Background: With continuous new consumer additions, urbanization and increasing electricity demand, the load on the existing distribution network is increasing day by day. As a result, several Distribution Transformers (DTs) are progressively reaching higher loading levels, particularly in urban and semi-urban areas.

Summary of DTRs in TPNODL license area is as:

Circle	Total DTRs Count	Metered DTRs Count
Balasore	23,381	4,137
Baripada	22,004	2,677
Bhadrak	12,080	2,169
Jajpur	14,859	2,665
Keonjhar	14,631	2,113
Total	86,955	13,761

We have considered only metered DTRs (13,761 nos. out of total population of 86,955 DTRs) for planning analysis based on their loading data analysis.

We are thankful to Hon'ble Commission for allowing additional Rs. 20 Cr. for DT metering with Smart meters under clause 29 f(ii) (loss reduction) of CAPEX Order FY27 against the original petition request of Rs. 10 Cr. We would like to inform the Hon'ble Commission that we have planned the DT metering installation works in FY27 and FY28 against the approval under clause 29 f(ii) (loss reduction) of CAPEX Order FY27.

Through such works, we'll have more nos. of DTRs with Smart meter in the coming years and thus monitoring/mapping of overloading DTRs will increase based on the DT metering data analysis. Accordingly, TPNODL shall have to consider such OL DTRs mitigations as well.

Scope and Objective: The summary of overloaded DTR (based on 5 years & 3 years projected load growth) is mentioned in table below:

Table on DT Projected Loading for Summer'30:

Circle	DT Projected Loading in Summer'30			
	80%-90%	90%-100%	100%-120%	>=120%
Balasore	233	178	193	79



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Circle	DT Projected Loading in Summer'30			
	80%-90%	90%-100%	100%-120%	>=120%
Baripada	62	70	72	36
Bhadrak	73	48	51	24
Jajpur	120	102	59	21
Keonjhar	73	45	52	14
Total	561	443	427	174

As per load growth projection, there are around 1605 nos. DTs with more than 80% loading by Summer'30 as shown in above table.

Table on DT Projected Loading for Summer'28

Circle	DT Projected Loading in Summer'28			
	80%-90%	90%-100%	100%-120%	>=120%
Balasore	182	119	83	23
Baripada	72	46	39	12
Bhadrak	53	38	22	9
Jajpur	121	57	26	12
Keonjhar	50	36	20	6
Total	478	296	190	62

But to optimize the CAPEX, we have considered the projected loading till Summer'28 only, where 1026 nos. DTRs are having loading more than 80%.

Out of these 1026 DTRs, we analysed the DTRs and prioritised the ones pertaining to high-priority locations and critical loading, if these identified locations are not addressed in due time, there is a high probability of DTR failures during the peak summer season of June 2028 which would result in unplanned power interruptions, directly affecting consumer supply reliability.

To further optimize the capex and reduce the burden on consumer, we plan to reutilize the dismantled DTR to mitigate the other less rating DTR in a cascading way to optimize the Capex and ensure effective utilization of the DTR installed capacity. Accordingly, 355 nos. DTR proposed to augment and 188 nos. new DTR are considered in Capex FY28.

TPNODL will have more nos. of DTRs with Smart meter in the coming years as mentioned above due to more DT metering installation works and thus monitoring/mapping of overloading DTRs will increase based on the DT metering data analysis. Accordingly, TPNODL shall have to consider such overloading DTRs mitigations as well. Therefore, TPNODL shall consider DTRs with peak



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loading greater than 90% for mitigation proposal in case the number of DTRs with overloading scenario rise after installation of these smart meter DTRs.

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Augmentation of 25/63 KVA to 100 KVA DTR	Nos.	171	12.31
B	Augmentation of 100 KVA to 250 KVA DTR	Nos.	154	24.48
C	Augmentation of 200/250 KVA to 500 KVA DTR	Nos.	30	8.23
Total			355	45.0

Benefits of the Investment: The continuous addition of consumers and year-on-year increase in electricity demand are progressively increasing the loading of existing DTs. Timely augmentation and capacity addition are therefore essential to prevent overloading, avoid failures, create capacity ahead of demand and ensure reliable supply to existing as well as new consumers.

- To mitigate overloading and prevent premature transformer failures.
- To ensure uninterrupted and reliable power supply to consumers.
- To maintain DT loading within optimal limits, thereby improving asset longevity and network efficiency.
- To support future load growth and urban expansion without compromising service quality.
- Reduces voltage fluctuations and technical losses.
- Enhances DT asset life and network efficiency.
- Minimizes unplanned outages during peak-demand periods.
- Strengthens the network in urban, semi-urban and high-growth areas.
- Enables proactive capacity creation in line with increasing consumer demand.

Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capex Plan for FY27, an amount of Rs. 22.53 Cr was proposed towards Augmentation of Distribution Transformers (DTRs), against which the Hon'ble Commission approved Rs. 15.00 Cr. Subsequently, approval of the balance amount of Rs. 7.53 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Clause No. 3. (i) of the Review Petition are provided in the table below:



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Table-9 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Load Growth	Augmentation of Distribution Transformer	22.53	15	7.53	7.53

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for augmentation of Distribution Transformers based on the prevailing network loading, projected load growth, and consumer demand.

Accordingly, ***the requirement proposed (Rs. 45 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 7.53 Cr.) sought under the Review Petition against CAPEX FY27.***

7.4.3 Conversion of 1Ph DTR to 3Ph DTR along with lines:

Background: TPNODL has a large population of single-phase DTRs, around 29,813 Nos., mainly serving rural and semi-urban areas. With continuous new consumer additions and increasing domestic, agricultural and commercial load, the capacity of many existing single-phase DTRs is becoming inadequate.

Single-phase DTRs also have limited capability to cater to three-phase connections, resulting in constraints in releasing new three-phase connections in such areas. Overloading and phase imbalance further lead to voltage fluctuations, frequent faults, higher losses and premature DTR failures, affecting supply reliability and SAIFI/SAIDI performance.

Therefore, conversion of suitable single-phase DTRs to appropriately rated three-phase DTRs, along with necessary HT/LT strengthening, is essential to meet present and future load requirements.

Sl. No.	Total Scope across System in Nos.	Work Covered so far (upto FY27 DPR) in Nos.	Balance Requirement in Nos.	Covered under FY28 DPR in Nos.	Planned for Balance Years DPR in Nos.
1	2	3	4=2-3	5	6=4-5
1	29,813	1,276	28,537	477	28,060

Scope and Objective: The objective of this initiative is to enhance the distribution infrastructure by converting single-phase DTRs to three-phase systems and upgrading associated lines to support increased load and improve power quality.

- Mitigate DTR overloading and phase imbalance.
- Cater to continuous consumer addition and increasing load demand.
- Facilitate release of new three-phase connections.
- Improve voltage profile, reliability and power quality.
- Reduce DTR failures and fault-related interruptions.
- Improve SAIFI and SAIDI performance.

Benefits of the Investment: The large number of single-phase DTRs, coupled with continuous consumer additions and increasing load, is creating capacity and reliability constraints. Conversion to three-phase DTRs will remove these constraints, facilitate new three-phase connections, improve network reliability and create capacity for future demand growth.

- Improved reliability and continuity of power supply.
- Enables new three-phase connections and supports future consumer growth.
- Reduces DTR overloading, phase imbalance and premature failures.
- Reduces voltage fluctuations and technical losses.
- Minimizes LT faults and their impact on 11 kV feeders.
- Improves SAIFI/SAIDI and overall consumer satisfaction.
- Creates adequate three-phase transformation capacity for future load growth.

Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capital Investment Plan for FY27, an amount of Rs. 29.26 Cr was proposed towards Conversion of 1-Ph DTR to 3-Ph DTR along with associated lines, against which the Hon'ble Commission approved Rs. 14.63 Cr. Subsequently, approval of the balance amount of Rs. 14.63 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Clause No. 3. (ii) of the Review Petition are provided in the table below:

Table-12 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Load Growth	Conversion of 1-ph DTR to 3-Ph DTR with lines	29.26	14.63	14.63	14.63



While preparing the Capex Plan for FY28, TPNODL has independently assessed the requirement for conversion of 1-Ph DTRs to 3-Ph DTRs along with associated network augmentation works based on prevailing consumer demand, load growth requirements and network development needs.

Accordingly, the requirement proposed (Rs. 33.7 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 14.63 Cr.) sought under the Review Petition against CAPEX FY27.

7.4.4 New LT Feeder for overloaded LT feeder mitigation:

Based on the past years' trend, TPNODL expects approximately 84K-95K new connections annually. A significant number of applications are received in locations where the existing LT network is either not available, undersized or already overloaded.

Connecting additional load to such constrained feeders can lead to voltage drop, poor voltage profile, higher technical losses, frequent tripping and supply interruptions, resulting in consumer complaints and reduced satisfaction. Additionally, with DTR augmentations proposed above, new LT feeders will be required to be laid to divert the load from overloaded LT Feeders. Therefore, additional/new LT lines are proposed at identified locations to cater to new connections and relieve overloaded/underrated LT feeders by effective load redistribution.

The proposed LT augmentation will strengthen the network, improve voltage levels and reliability, reduce technical losses, and ensure reliable power supply for both existing and upcoming consumers.

- Mitigation of overloaded and undersized LT feeders.
- Reduction in voltage drop and improvement in voltage profile.
- Reduction in technical losses and feeder interruptions.
- Facilitation of new electricity connections.
- Improved supply reliability and customer satisfaction.
- Adequate capacity for future load growth

7.4.5 Construction of new 33/11kV PSS:

Background: The continuous growth in consumer demand and new load additions is resulting in progressive loading of the existing 33/11 kV substations and associated feeders. The increasing load from new domestic, commercial, industrial and other consumers, along with load growth in existing consumers, is expected to further increase the loading of the distribution network.

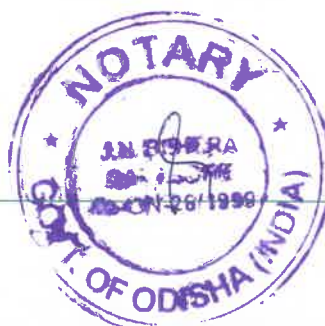
Cyme Software Load-flow studies and future load-growth assessment indicate that, at several locations, the existing transformation capacity and feeder infrastructure will not be adequate to cater to the projected peak demand and upcoming new loads within permissible loading and voltage limits. Therefore, construction of new 33/11 kV PSSs are required at strategically identified locations based on present loading, projected load growth and upcoming load requirements.

Scope & Objective: The scope includes construction of new 33/11 kV PSSs along with required PTR capacity, 33 kV incoming infrastructure, 11 kV outgoing feeders, protection, control, metering and associated civil works. As per the network studies, 7 nos. PSS requirement till Summer'30, but to optimize the CAPEX, we have considered 2 nos. PSS in CAPEX FY28 under this petition.

- Cater to projected load growth and upcoming new connections/load.
- Provide adequate transformation capacity for future demand.
- Reduce loading of existing PSSs and long 11 kV feeders.
- Maintain feeder loading and voltage within permissible limits.
- Create adequate network capacity for future industrial, commercial and residential load additions.

Sl. No.	Total Scope across System in Nos.	Work Covered so far (upto FY27 DPR) in Nos.	Balance Requirement in Nos.	Covered under FY28 DPR in Nos.	Planned for Balance Years DPR in Nos.
1	2	3	4=2-3	5	6=4-5
1	7	1	6	2	4

Benefits of the Investment: Construction of new 33/11 kV PSSs will provide additional transformation and feeder capacity to meet present as well as future load growth. It will facilitate timely release of new connections and upcoming loads, while reducing overloading of existing PSSs and feeders. The investment will also improve voltage profile, reduce technical losses, shorten feeder lengths and enhance reliability and operational flexibility of the distribution network.



7.4.6 Addition of 11 kV Lines (O/H + UG) and additional Bay:

Background: The 11kV feeder network serves as the primary distribution system of TPNODL, supplying power from 33/11 kV Primary Substations (PSS) to Distribution Substations and consumers across the licensed area. TPNODL presently operates 909 nos. of 11 kV feeders with an aggregate network length of approximately **42,864.3 Ckm** 11kV lines.

Field assessments and CYME studies have identified overloaded and predominantly radial feeders, inadequate interconnections and multiple consumers tapping points. In such configurations, a fault on one section can interrupt supply to a large consumer base, while the absence of alternate supply paths limits restoration during contingencies. This is particularly critical for hospitals, towns, government establishments and key commercial consumers.

With increasing load and reliability expectations, strengthening the 11kV network through interconnection and ring connectivity is essential to achieve N-1 reliability, improve load flexibility and minimise the impact of feeder failures

Scope & Objective: These 909 nos. 11kV feeders have been modelled in CYME Distribution Software along with their existing loading conditions. The software enables assessment of feeder loading, identification of network constraints, and evaluation of projected load growth, thereby facilitating the planning of appropriate network strengthening measures.

Circle	Overloading Condition	N-1 / Reliability Improvement	Under-Voltage Section / Ageing
Balasore	19	0	7
Baripada	8	1	20
Bhadrak	17	0	15
Jajpur	28	3	6
Keonjhar	10	20	32

Load growth has been considered in two stages within the network study. Initially, a 5-year (Summer'30) load growth scenario is simulated to assess the impact of future demand and identify potential network constraints. Subsequently, a 3-year (Summer'28) load growth scenario is evaluated to facilitate prioritisation of network strengthening works. Based on the network studies and load growth simulations, feeder sections experiencing overloading (>80% loading), under-voltage conditions, and network constraints have been identified. These findings are further supplemented with field inputs relating to feeder loading patterns, reliability



requirements, and network configuration. Based on these study findings and field inputs, locations requiring new line creation have been identified. Such works are generally required where lengthy feeders need bifurcation, where adequately sized conductors continue to experience overloading under projected load growth scenarios, and where N-1 interconnectivity is required to improve feeder reliability. These interventions reduce feeder loading, improve voltage profiles, facilitate load growth accommodation, and strengthen reliability of supply.

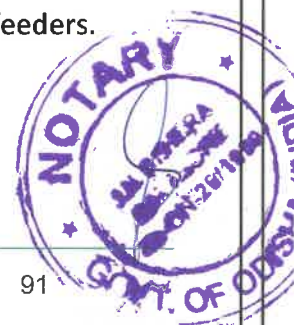
These studies and network assessments indicate a significant requirement for new line works. Therefore, to optimise capital expenditure and minimise the burden on consumers, new line proposals have been prioritised based on the following criteria:

- Feeder Overloading Mitigation
- Under-Voltage Pocket Mitigation
- N-1 Interconnectivity for Reliability Improvement
- Top 10 listed feeders under:
 - High SAIDI / SAIFI
 - High Technical Loss
 - Urban Region Long-Length Feeders
- Aged / Unsafe Network Condition

Based on the findings of the network studies and field assessments, only the critical new line works required by Summer'28 have been considered in this proposal. These works address identified loading constraints, under-voltage conditions, feeder bifurcation requirements, and reliability improvement requirements. Non-implementation of these works may adversely affect power quality, reliability of supply, and in certain cases, network safety.

Benefits of the Investment: Overall, the proposed 11kV interconnections will strengthen the existing radial network by creating a more flexible and interconnected system, thereby improving reliability, reducing outage impact and ensuring better quality of supply to consumers.

- Improved reliability and faster restoration through alternate supply routes.
- Significant reduction in the impact of individual feeder faults.
- Overload mitigation and improved load balancing across interconnected feeders.
- Improved voltage profile and reduction in technical losses.
- Reliable supply to critical consumers and important load centres.
- Enhanced operational flexibility and network resilience.



- Progress towards N-1 reliability and best practices in distribution network planning.

7.4.7 Addition of 33 kV Lines (O/H + UG) and additional Bay:

Background: The 33 kV feeders form the backbone of TPNODL's distribution network, supplying power from OPTCL Grid Substations (GSS) to downstream Primary Substations (PSS) and HT consumers across a vast geographical area. TPNODL presently operates approximately **3,821.4 Ckm** 33kV lines through 137 nos. of 33kV feeders, feeding 254 nos. of 33/11kV PSS and several HT consumers.

CYME load-flow studies and field assessments have identified overloaded and lengthy feeders, mixed/undersized conductor sections, and inadequate alternate supply arrangements. These constraints limit feeder transfer capacity, increase technical losses and, in the event of a source or feeder failure, can result in prolonged interruptions affecting a large consumer base.

With continuous load growth and increasing demand over the next five years, augmentation and strengthening of the 33kV network is essential to improve system reliability, provide network redundancy and create adequate capacity for future demand.

Scope & Objective: These 137 feeders have been modelled in CYME Distribution Software along with their existing loading conditions. The software enables assessment of feeder loading, identification of network constraints, and evaluation of projected load growth, thereby facilitating the planning of appropriate feeder augmentation measures.

Circle	Overloading Condition	N-1 / Reliability Improvement	Under-Voltage Section / Ageing
Balasore	10	3	2
Baripada	8	5	7
Bhadrak	3	1	3
Jajpur	16	2	1
Keonjhar	7	12	3

Load growth has been considered in two stages within the network study. Initially, a 5-year (Summer'30) load growth scenario is simulated to assess the impact of future demand and identify potential network constraints. Subsequently, a 3-year (Summer'28) load growth scenario is evaluated to facilitate prioritisation of network strengthening works. Based on the



network studies and load growth simulations, feeder sections experiencing overloading (>80% loading), under-voltage conditions ($\pm 6\%$ V.R.), and network constraints have been identified. These findings are further supplemented with field inputs relating to feeder loading patterns, reliability requirements, and network configuration. Based on these study findings and field inputs, locations requiring new line creation have been identified. Such works are generally required where lengthy feeders need bifurcation, where appropriately sized conductors continue to experience overloading under projected load growth scenarios, and where N-1 interconnectivity is required to improve reliability of important feeders. These interventions reduce feeder loading, improve voltage profiles, facilitate load growth accommodation, and strengthen supply reliability.

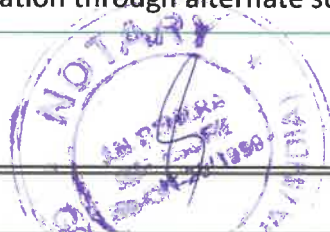
These studies and network assessments indicate a significant requirement for new line works. Therefore, to optimise capital expenditure and minimise the burden on consumers, new line proposals have been prioritised based on the following criteria:

- Feeder Overloading Mitigation
- Under-Voltage Pocket Mitigation
- GSS New Line / PSS Interconnectivity
- N-1 Interconnectivity for Reliability Improvement
- Top 10 listed feeders under:
 - High SAIDI / SAIFI
 - High Technical Loss
 - Urban Region Long-Length Feeders
- Aged / Unsafe Network Condition

Based on the findings of the network studies and field assessments, only the critical new line works required by Summer'28 have been considered in this proposal. These works address identified loading constraints, under-voltage conditions, feeder bifurcation requirements, and reliability improvement requirements. Non-implementation of these works may adversely affect power quality, reliability of supply, and in certain cases, network safety.

Benefits of the Investment: Overall, the investment will transform the existing 33 kV network from a predominantly radial system into a more interconnected and resilient backbone, enabling reliable and sustainable power supply.

- Improved reliability and faster restoration through alternate supply arrangements.



- Mitigation of feeder overloading and capacity constraints.
- Reduction in technical losses through conductor and network optimisation.
- Improved voltage profile and supply quality.
- Reduced outage impact on urban areas, industries and critical consumers.
- Enhanced network resilience and adequate capacity for future load growth.

7.4.8 Addition New DTRs along with Associated HT/LT lines:

Background: With the rapid growth in electricity demand, particularly in urban, semi-urban and developing areas, existing Distribution Transformers (DTRs) are increasingly experiencing higher loading and extended LT network lengths.

Summary of DTRs in TPNODL license area is as:

Circle	Total DTRs Count	Metered DTRs Count
Balasore	23,381	4,137
Baripada	22,004	2,677
Bhadrak	12,080	2,169
Jajpur	14,859	2,665
Keonjhar	14,631	2,113
Total	86,955	13,761

We have considered only metered DTRs (13,761 nos. out of total population of 86,955 DTRs) for planning analysis based on their loading data analysis.

We are thankful to Hon'ble Commission for allowing additional Rs. 20 Cr. for DT metering with Smart meters under clause 29 f(ii) (loss reduction) of CAPEX Order FY27 against the original petition request of Rs. 10 Cr. We would like to inform the Hon'ble Commission that we have planned the DT metering installation works in FY27 and FY28 against the approval under clause 29 f(ii) (loss reduction) of CAPEX Order FY27.

Through such works, we'll have more nos. of DTRs with Smart meter in the coming years and thus monitoring/mapping of overloading DTRs will increase based on the DT metering data analysis. Accordingly, TPNODL shall have to consider such OL DTRs mitigations as well.



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Scope and Objective: The summary of overloaded DTR (based on 5 years projected load growth) is mentioned in table below, where 1605 nos. Overload DTRs are required to be mitigated in next 5 years.

Table on DT Projected Loading for Summer'30:

Circle	DT Projected Loading in Summer'30			
	80%-90%	90%-100%	100%-120%	>=120%
Balasore	233	178	193	79
Baripada	62	70	72	36
Bhadrak	73	48	51	24
Jajpur	120	102	59	21
Keonjhar	73	45	52	14
Total	561	443	427	174

As per load growth projection, there are around 1605 nos. DTs with more than 80% loading by Summer'30 as shown in above table.

Table on DT Projected Loading for Summer'28

Circle	DT Projected Loading in Summer'28			
	80%-90%	90%-100%	100%-120%	>=120%
Balasore	182	119	83	23
Baripada	72	46	39	12
Bhadrak	53	38	22	9
Jajpur	121	57	26	12
Keonjhar	50	36	20	6
Total	478	296	190	62

But to optimize the CAPEX, we have considered the projected loading till Summer'28 only, where 1026 nos. DTRs are having loading more than 80%.

Out of these 1026 DTRs, we analysed the DTRs and prioritised the ones pertaining to high-priority locations and critical loading, if these identified locations are not addressed in due time, there is a high probability of DTR failures during the peak summer season of June 2028 which would result in unplanned power interruptions, directly affecting consumer supply reliability.

The objective of new DTR proposals is not merely to address loading of existing Distribution Transformers but also to reduce excessively long LT networks, improving voltage at consumer end, and cater to growing consumer demand.



To further optimize the capex and reduce the burden on consumer, we plan to reutilize the dismantled DTR to mitigate the other less rating DTR in a cascading way to optimize the Capex and ensure effective utilization of the DTR installed capacity. Accordingly, 355 nos. DTR proposed to augment and 188 nos. new DTR are considered in Capex FY28.

TPNODL will have more nos. of DTRs with Smart meter in the coming years as mentioned above due to more DT metering installation works and thus monitoring/mapping of overloading DTRs will increase based on the DT metering data analysis. Accordingly, TPNODL shall have to consider such overloading DTRs mitigations as well. Therefore, as per the DTR overloading analysis, TPNODL shall consider DTRs with peak loading greater than 90% for mitigation proposal in case the number of DTRs with overloading scenario rise after installation of these smart meter DTRs.

Benefits of the Investment: The proposed new DTRs are not merely capacity-addition assets; they are strategically positioned at load centres to address long LT lines and low-voltage issues, thereby improving voltage quality, reducing technical losses and ultimately enhancing customer satisfaction.

- Improvement in low-voltage conditions by installing DTRs closer to consumer load centres.
- Reduction in LT line length, resulting in lower voltage drop and improved voltage profile.
- Improved voltage availability at consumer premises, particularly during peak-load periods.
- Reduction in voltage-related consumer complaints and improvement in customer satisfaction.
- Optimal loading and load balancing of existing and new DTRs.
- Reduction in technical losses due to shorter LT network and improved network configuration.
- Reduction in faults, interruptions and supply-quality issues.
- Improved reliability and service quality of the distribution network.
- Creation of adequate capacity to accommodate future load growth without compromising supply reliability.

Treatment of Scope covered under Review Petition for Capex FY27:



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The Applicant respectfully submits that, under the Capex Plan for FY27, an amount of Rs. 23.35 Cr was proposed towards Addition of New Distribution Transformers (DTRs) along with Associated HT/LT Lines, against which the Hon'ble Commission approved Rs. 11.67 Cr. Subsequently, approval of the balance amount of Rs. 11.68 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

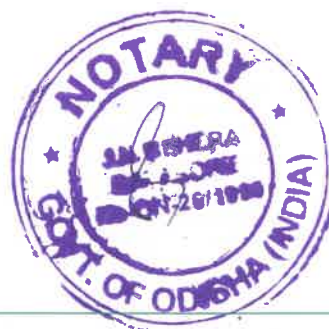
For ease of reference, the details of the amount sought under the Clause No. 3.(iii) of the Review Petition are provided in the table below:

Table-14 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Load Growth	Addition New DTRs along with Associated HT/LT lines	23.35	11.67	11.68	11.68

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for installation of new Distribution Transformers along with associated HT/LT network based on system loading, consumer growth and network development requirements.

Accordingly, ***the requirement proposed (Rs. 32 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 11.68 Cr.) sought under the Review Petition against CAPEX FY27.***



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7.4.9 Capex Summary for Network Optimisation & Load Growth:

Table below indicates the activities to be performed along with funds required under Network Optimisation & Load Growth Head.

S. No.	Major Category	Sr. No.	Activity	FY28 Amount in Cr.	Annexure
4	Network Optimisation & Load Growth	4.1	Augmentation of PTRs	18.5	Annexure-27
		4.2	Augmentation of DTRs	45.0	Annexure-28
		4.3	Conversion of 1Ph DTR to 3Ph DTR along with lines	33.7	Annexure-29
		4.4	New LT Feeder for Overloaded LT feeder mitigation	26.43	Annexure-30
		4.5	Construction of new 33/11kV PSS	28.0	Annexure-31
		4.6	Addition of 11 kV Lines O/H + UG + Additional Bay	41.88	Annexure-32
		4.7	Addition of 33 kV Lines O/H + UG + Additional Bay	49.89	Annexure-33
		4.8	Addition New DTRs along with Associated HT/LT lines	32.0	Annexure-34
Total (4)				275.35	



7.5 Technologies and Infrastructure:

Through the years, TPNODL has made significant progress in strengthening its IT and Operational Technology (OT) infrastructure, enhancing cybersecurity capabilities, and deploying critical digital applications. Major advancements have been achieved in SCADA, Advanced Distribution Management System (ADMS), Advanced Metering Infrastructure (AMI), and other enterprise and network applications, enabling improved visibility, automation, and control of distribution operations.

The organization has also strengthened its IT & OT cybersecurity framework, data centre and disaster recovery capabilities, network connectivity, and end-user infrastructure to ensure secure, reliable, and resilient operations. These initiatives have supported digital transformation, improved operational efficiency and network reliability, enhanced customer service, and established a scalable technology foundation to meet future business and distribution network requirements.

Key achievements include:

- **AMI:** Successfully implemented an integrated AMI ecosystem with dual HES, MDM, SPM and CIS, with 6.2 lakh+ smart meters integrated. Multi-network communication through Airtel, Jio and BSNL is being deployed to enhance connectivity redundancy and system availability.
- **SCADA/ADMS:** 202 PSSs, RMUs and Auto Reclosers are being monitored and controlled through SCADA from MCC, BCC and four DCCs. ADMS infrastructure has been deployed, with GIS data integration and third-party application integration in progress towards Go-Live.
- **IT Infrastructure:** Established Tier-III Data Centre and DR infrastructure with scalable compute, storage and backup capabilities. Deployed 2,200+ laptops, 700+ desktops and 839 printers/scanners, supporting field-force digitization and process automation.
- **Network & Connectivity:** Established MPLS/OFC connectivity across 200+ IT offices and 160+ OT PSS locations, enabling reliable access to critical applications including SCADA, ADMS, SAP, GIS, CIS, AMI and billing.



- **Cybersecurity & Compliance:** Implemented IMS/ISMS framework and ISO 27001:2022 certification, supported by security controls including SIEM, firewalls, endpoint protection, DDoS protection, WAF and patch management.

These initiatives have strengthened network visibility, automation, system availability, cybersecurity resilience and operational efficiency, while improved customer service and establishing a scalable foundation for future digital transformation.

7.5.1 Automation of Non-ODSSP & SCADA Integration:

Background: Many Non-ODSSP Power Substations currently operate with limited automation, ageing protection and control systems, and inadequate real-time monitoring infrastructure. This dependence on manual operations leads to delayed fault detection, longer outage restoration times, reduced asset visibility, higher O&M efforts, and lower network reliability. To address these challenges, TPNODL proposes a comprehensive substation and distribution automation program involving deployment of RTUs, FRTUs, numerical protection relays, communication systems, LT Automation, Communicable Fault Passage Indicators (FPIs), Battery Monitoring Systems, communication redundancy, cybersecurity solutions, and supporting infrastructure integrated with the existing SCADA-ADMS platform.

Scope & Objective: The primary objective of this investment is to modernize Non-ODSSP Power Substations and associated distribution network assets through automation, advanced protection, and robust communication systems. The project aims to improve network reliability, enhance operational efficiency, enable real-time monitoring and remote control, strengthen asset management, support predictive maintenance, and establish a secure, scalable, and future-ready distribution automation ecosystem aligned with TPNODL's digital transformation and Smart Grid roadmap.

Key Benefits

- Improved reliability through faster fault detection, isolation, and restoration.
- Enhanced SAIDI, SAIFI, CAIDI (Customer Average Interruption Duration Index), and overall system availability.
- Reduced manual intervention through centralized monitoring and remote operation.
- Better asset visibility, utilization, and predictive maintenance capabilities.
- Strengthened communication reliability, cybersecurity, and system resilience.
- Lower O&M costs and improved customer service.
- Support for TPNODL's long-term Distribution Automation and Digital Utility Transformation initiatives.



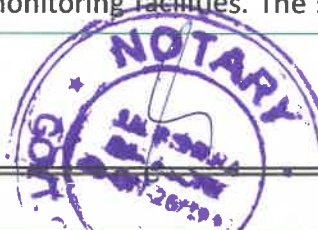
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Budgetary Details:

S No.	Item Description	Qty	Unit	Unit Price	Total Amount in Rs.
1	RTU 24-48 V with Panel (Urban) with Required Materials	8	EA	4,95,600.00	39,64,800.00
2	RTU 24-48 V without Panel (Rural)	31	EA	3,49,806.28	1,08,43,994.68
3	FRTU and allied Service for Distribution RMU automation	15	Set	4,14,062.00	62,10,930.00
4	Transducer	100	EA	26,193.19	26,19,319.00
5	MFM	30	EA	16,520.00	4,95,600.00
6	LV Automation	1	Lum	23,60,000.00	23,60,000.00
7	DC -DC converter	150	EA	23,600.00	35,40,000.00
8	Grid Level Security	1	EA	5,90,000.00	5,90,000.00
9	Automation Lab	1	Lum	11,80,000.00	11,80,000.00
10	DC SPD	150	EA	5,900.00	8,85,000.00
11	Ethernet SPD's	500	EA	4,425.00	22,12,500.00
12	Serial SPD	150	EA	4,130.00	6,19,500.00
13	Ethernet Switch (12/24 Port)	25	EA	1,59,160.76	39,79,019.00
14	Separate Earthing for RTU	72	EA	27,612.00	19,88,064.00
15	ITC cost of RTU	54	Lum	82,293.20	44,43,832.80
16	CR Panel for 11KV VCB	9	EA	5,89,690.00	53,07,210.00
17	CR Panel for 33KV/11KV VCB (Duplex)	4	EA	9,60,677.97	38,42,711.88
18	CR Panel for 33KV PTR VCB (Simplex)	4	EA	9,60,677.97	38,42,711.88
19	CR Panel for 33KV VCB (Feeder Panel)	9	EA	5,89,690.00	53,07,210.00
20	Relay Master TRIP 24V DC (E&R)	30	EA	20,056.00	6,01,680.00
21	Relay MASTER TRIP 48V DC (E&R)	10	EA	20,056.00	2,00,560.00
22	Relay Transformer Differential Numerical	10	EA	2,35,004.00	23,50,040.00
23	Relay Over Current & Earth Fault Numerical	51	EA	1,92,930.00	98,39,430.00
24	Protection and Testing Lab	1	EA	50,00,000.00	50,00,000.00
25	ITC Cost of Relays	65	EA	30,520.00	19,83,800.00
26	Revamping of Panel	10	EA	1,74,400.00	17,44,000.00
Total Cost in Rs.					8,59,51,913.00
Total Cost in Cr.					8.50

7.5.2 Surveillance of PSS through CCTV

Background: The activity involves installation and integration of a modern CCTV-based surveillance system at Power Substations (PSS), including high-definition IP cameras, Network Video Recorders (NVRs), video storage systems, communication network connectivity, monitoring workstations, and centralized monitoring facilities. The surveillance system shall be



integrated with the existing communication and control infrastructure to enable real-time monitoring, event recording, alarm generation, and remote access.

Scope & Objective: The primary objective is to enhance physical security, operational safety, and asset protection of substations through continuous real-time surveillance. The system will enable proactive monitoring of critical equipment, restricted areas, entry and exit points, and operational activities, thereby improving security management and operational oversight.

Sl. No.	Total Scope across System in Nos.	Work Covered so far (upto FY27 DPR) in Nos.	Balance Requirement in Nos.	Covered under FY28 DPR in Nos.	Planned for Balance Years DPR in Nos.
1	2	3	4=2-3	5	6=4-5
1	254	0	254	37	217

Benefits of investment:

- Enhances security of substations and critical electrical assets.
- Prevents unauthorized access, theft, vandalism, and equipment tampering.
- Enables real-time monitoring and quicker response to security incidents.
- Improves operational safety through continuous surveillance of critical areas.
- Supports incident investigation through video recording and event playback.
- Reduces operational risks and strengthens overall grid reliability.
- Contributes to regulatory compliance, asset protection, and business continuity.
- Supports TPNODL's digitalization and smart infrastructure initiatives through centralized monitoring and enhanced situational awareness.

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

To meet the increasing demands of digital operations and ensure future readiness, the following IT infrastructure and hardware requirements have been proposed:

- IT Applications, Smart Meter, HES-MDM, SCADA-ADMS, Cyme and GIS- DC and DR Infrastructure along with server and storage needs augmentation to support the data processing and storage with future growth.
- Laptops and Desktops are needed for new users and replacements of aging assets.
- Different category and voltage level UPS with Battery are proposed to provide backup power and safeguard network equipment (routers and switches) from sudden outages for new users and replacements of aging assets.
- Multifunction Printers & scanners, standalone printer and scanner are required in offices for smooth document handling, printing, and scanning needs.
- VC System, along with TV and conferencing system is required in new offices for carrying out day to day meeting and conference.



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- Biometric attendance system along with Biometric door access as per Cyber security compliance is required for day to day compliance for HR and IT Team.
- Digital Signage enhance announcement and broadcasting information among offices for better transparency knowledge sharing.
- Office LAN Point Setup is essential to provide wired network access at newly created workstations/office expansions/Office shifting cases.
- Wi-Fi Access Points & Other IT Equipment are required to extend wireless coverage and support flexible work environments at TPNODL offices.
- CCTV camera is required for security purposes for Offices, Store and fire station this excludes PSS.
- Additional optical fiber is required for connecting offices and PSS for smooth and redundant internet connectivity.
- Network Equipment like Aggregation and access routers along with DC router and switches are required for IT offices and OT PSS locations to enhance connectivity.
- To cater the new requirement of enhanced data base of consumer and to accommodate new application and technology we are proposing for additional enhancement of Server, Storage, Hardware infra for CIS, GIS, Smart Meter & SCADA ADMS, Rack along with Lief & Spine switch.
- To outcome unforeseen situation we have made provision for Tape library for backup of periodic data

For FY28: Budgetary Details for IT Hardware to Build & Strengthen DC-DR Infrastructure & End-User

S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
1	Laptop for New Joinee and Buy Back laptop	Lumpsum	1	11000000	1.1
3	Desktop for Office Users	Lumpsum	5	50000	0.03
4	UPS (600 VA) for backup of Office Desktop	EA	50	4887	0.02
5	UPS (1 KVA) for Backup of Network Equipment	EA	20	19947	0.04
6	Office Printers (Stand alone)	EA	5	40245	0.02
7	Flatbet Scanner	EA	5	33033	0.02
8	Multifunction Printer, copier and Scanner	Lumpsum	1	353677	0.04
9	Digital Signage Solution	EA	5	100000	0.05
10	Biometric Attendance Device	EA	5	31113	0.02
11	Biometric Door Lock & sensor	EA	4	55662	0.02
12	VC System and TV and conferencing system	EA	4	200000	0.08
13	Ipad	Lumpsum	2	200000	0.04
14	Network DC Router for PSS Communication	AU	10	1,40,000	0.14
15	Office LAN Setup	Node	50	7,000	0.04
16	Wi-Fi Access Point and Other IT Equipment's with Wi-Fi Controller	AU	20	20,000	0.04
17	CCTV Camera for Offices, Store & Fire Station with AI and VMS software	AU	1	25,00,000	0.25
18	Optical Fiber cable laying for connectivity of offices	KM	10	2,00,000	0.2



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S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
19	2 KVA UPS with Battery	EA	5	75,000	0.04
20	Aggregation Router	AU	1	13,00,000	0.13
21	Servers for DC and DR	AU	1	50,00,000	0.5
22	Storage for DC and DR	AU	1	50,00,000	0.5
23	Augmentation/upgradation of existing Hardware for CIS dataset increase	AU	1	20,00,000	0.2
24	SAN Switches	AU	1	15,00,000	0.15
25	Spine - Lief Network Switches	EA	1	30,00,000	0.3
26	TAPE FIBER CHANNEL LIBRARY for DC & DR	EA	1	20,00,000	0.2
27	Hardware for Technology Upgradation	AU	1	20,00,000	0.2
28	42 U Network Rack and Accessories	EA	2	1,00,000	0.02
29	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	1846528	0.18
Total Estimated Cost					4.5

Benefits of the Investment:

- Augmented compute and storage capabilities along with backup tape library at DC & DR to support expansion of data base to support effective and smooth performance of IT Application and CIS, GIS, Smart Meter & SCADA ADMS.
- Provisioning of laptops, desktops, and printers along with UPS to support seamless workflows, mobility, and digital field operations.
- Deployment of routers, switches, Wi-Fi, UPS systems, LAN, VC System and OFC points to ensure uninterrupted connectivity and power for critical IT and OT operations.
- Deployment of CCTV camera ensures security in offices, customer care centers and store premises.
- Hardware for technology upgradation will support in adopting and hosting latest technology for more efficient and productive output.

7.5.4 IT Application & Software:

To support the scaling of IT Application and GIS database and enable seamless office operations, the following software solutions and associated services are required:

- For IT Application and other business application augmentation is required to support expanded database by upgradation of Windows OS, VM licenses, SQL Server & Data base, RHEL - Linux, RDS & Citrix for additional data processing and system performance improvement and sustenance.
- CIS (Consumer Information system) Solutions is proposed to automate and streamline the billing, collection, and customer account management processes.
- Office Automation Tools (e.g., MS Office, Nitro Pro, Canva, AutoCAD, MS VISIO, MS Project, AD Cal License, Visual Studio) needed to equip teams with essential productivity,



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documentation, and design tools for day-to-day operations and access across TPNODL departments.

- For enhancing productivity and quality in day to day activity we are planning of AI intervention and reports and analysis purposes.

S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
1	MS SQL License 8 Core Std Version	AU	4	8,55,240	0.34
2	Visual Studio (Enterprise Version) 2021	AU	1	1,76,392	0.02
3	Windows Server OS	AU	1	1,00,00,000	1
4	Augmentation/upgradation of CIS solution	AU	1	50,00,000	0.5
5	Oracle Database Enterprise Edition License	AU	1	99,94,836	1
6	RHEL Linux OS	AU	4	5,00,440	0.2
7	RDS License for MS Windows	AU	4	3,16,476	0.13
8	Citrix Virtual Apps and desktops on prem Advanced/ Concurrent	AU	1	10,00,000	0.1
9	Adobe Reader	EA	6	65471	0.04
10	Nitro PDF Editor	EA	6	19446	0.01
11	Ms Office	EA	6	37583	0.02
12	Ms Project	EA	6	43411	0.03
13	Ms Visio	EA	6	19790	0.01
14	Ad Cal License	EA	50	2808	0.01
15	Software for Technology Upgradation	AU	1	25,00,000	0.25
16	Process Automation and AI implementation	AU	1	25,00,000	0.25
17	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	16,51,595	0.17
Total Estimated Cost					4.0

Benefits of the Investment:

- Licensing for IT Application and GIS is to support additional database ensuring smooth integration and reliable system performance.
- Augmentation/Upgrade of CIS (MBC) solutions to streamline billing and collection workflows, reduce revenue leakage, and improve customer lifecycle management.
- Deployment of MS Office, AutoCAD, Canva, and other automation tools to improve documentation, design, and reporting capabilities on end user systems.
- Software for technology upgradation will support in implementing latest technology for more efficient and productive output.

7.5.5 Cyber security solution:

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



Proposed Cybersecurity Initiatives: The following measures are recommended to enhance cyber resilience, ensure regulatory compliance, and mitigate operational risks across both IT and OT environments:

- Deployment of Network Intrusion Prevention System (NIPS) and Network Detection and Response (NDR) for real-time threat monitoring and mitigation.
- Expansion of Patch Management and Antivirus Coverage to ensure all endpoints and servers are protected against known vulnerabilities and malware.
- Establishment of a Unified Security Operations Centre (SOC) to integrate existing SIEM systems and provide centralized visibility, threat intelligence, and coordinated incident response.

Implementation of Secure Access Technologies:

- Zero Trust Network Access (ZTNA) for granular, application-level access control.
- Virtual Private Network (VPN) for encrypted remote access.
- AC & DC Router & Switches for hosting and catering the services
- Perimeter and internal Firewall

Data Protection and Access Controls:

- Data Loss Prevention (DLP) to prevent unauthorized data exfiltration.
- URL Filtering to block access to malicious or non-compliant web content.
- Role-Based Access Controls (RBAC) to enforce least-privilege access.
- Data Leakage Prevention (Endpoint/Network/CASB)

These initiatives are designed to align with the Digital Personal Data Protection (DPDP) Act, 2023, which mandates lawful, transparent, and secure processing of personal data.

Risk Assessment and Mitigation Priorities: We have identified the following high-priority cybersecurity risks and corresponding mitigation strategies:

Risk Priority	Risk Description	Mitigation Strategy
1	Non-compliance with the DPDP Act may lead to legal penalties and reputational damage.	Implement DLP, access controls, and consent-based data processing mechanisms.
1	Lack of integration between existing SIEM and the upcoming Unified SOC for TP Odisha Discoms.	Integrate SIEM with SOC for centralized threat detection and response.
1	Traditional VPNs lack granular access control.	Deploy ZTNA for secure, application-specific access.
1	Absence of patch management exposes systems to known vulnerabilities.	Enforce automated patch management across all assets.



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Risk Priority	Risk Description	Mitigation Strategy
1	Unprotected endpoints and servers are vulnerable to malware and ransomware.	Deploy enterprise-grade antivirus and endpoint protection.
2	Lack of NDR/NIPS increases risk of undetected lateral movement and advanced threats.	Deploy NDR/NIPS for proactive

Budgetary Details for IT Cybersecurity Solutions:

S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
1	End User Anti-Virus for Laptop & Desktop	AU	1000	3920	0.39
2	Anti-Virus at Data Centre Level	AU	50	44400	0.22
3	Firewall	AU	1	5000000	0.5
4	Data Leakage Prevention (Endpoint/Network/CASB)	AU	1	60000000	6
5	Cyber Security Development	AU	1	5000000	0.5
6	Network Ethernet Switches (PoE/Non-PoE) for Offices	AU	50	1,50,000	0.75
7	Network AC Router and Core Router for IT Offices	AU	35	4,00,000	1.4
8	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	35,29,916	0.35
Total Estimated Cost					10.0

Benefits of the Investment:

- **Strengthened Cyber Resilience:** Advanced security solutions (NIPS/NDR, Unified SOC) to proactively detect, respond, and mitigate threats across IT and OT networks.
- **DPDP Act 2023 Readiness:** Deployment of VPN, ZTNA, DLP, URL Filtering, and Access Controls ensures secure data handling, remote access, and alignment with national data protection regulations.
- **Centralized Threat Visibility:** Unified SOC facilitates real-time security monitoring and faster incident response, reducing business risk and downtime.
- **Regulatory & Standards Compliance:** Ensures adherence to ISO 27001:2022, MeitY, CERT-In, and IT Act guidelines, minimizing legal and reputational risks

7.5.6 Geographic Information System:

GIS application has been implemented for pan TPNODL with 100% base map along with 100% network data and 97.7% consumer tagging which includes new consumer also. GIS has been integrated with multiple business application such as Suraksha Kawach, CYME Software, Energy Audit, New Connection.

To meet the requirement of future we will be integrating GE Smallworld GIS with other business application such as SAP, CIS, CYME along with advanced ARC GIS ESRI license. Multiple dashboards



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of area wise assets will be prepared through GIS. Enhancement will be required in GIS application along with integration and new data capturing along with project Management, Site Visit & logistics.

To cater the increased utilization of GIS additional license will be required for stabilizing the and giving access to all users.

Budgetary Details for GIS Application enhancement and integration:

S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
1	GIS Data Updating	AU	1	1000000	0.10
2	Additional Small World License	AU	1	2200000	0.22
3	GIS Data Integration with Business application for multiple report generation and automation and additional ESRI license for new development	AU	1	2500000	0.25
3	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	285000	0.03
Total Estimated Cost					0.6

Benefits of the Investment:

- Licensing for IT Application and GIS is to support additional database ensuring smooth integration and reliable system performance.
- Proper asset management and asset equalization.
- Integration of GIS with other business applications.

7.5.7 Operation Technologies:

The Operational Technology CAPEX for FY28 is proposed under the following key schemes, as a continuation of the previously approved CAPEX initiatives, to further strengthen the digital power distribution ecosystem and support future operational requirements.

OT Capex Plan: Summary (FY28)				
Sl. No.	Scheme	Description	Qty	Estimated Cost (₹ Cr)
1	OT – AMI	AMI IT Infrastructure: DC IT infrastructure for HES, MDM and SPM for 3.2 lakh additional Smart Meters (incl. software licence cost), and DR IT infrastructure for MDM and HES for a total of 12 lakh Smart Meters.	1	6.19
2	OT - NOMC Infrastructure & Monitoring tool	IT Infrastructure for NOMC (Network Operation cum Monitoring Centre): High-end desktop workstations (5 Nos.), Centralized Monitoring Tool for NOMC.	1	0.40

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3	OT DC / DR Hardware and Software	a. AI/ML Analytics Infrastructure b. Enterprise Virtualization Recovery Servers c. Backup Software License	1	1.82
4	Expansion and Renovation of the Existing OT Data Centre	Expansion and Renovation of the Existing OT Data Centre for Fire Security and High-Availability Compliance	1	1.25
5	DCC (De-centralised Control Centre/Area PSCC) Infrastructure	a. Silent-type DG Set for Area Power System Control Centre (DCC/APSCC). b. Biometric Access control system for DCC/APSCC critical infra.	1	0.30
Total Estimated Cost (Incl. of Taxes)				10.0

7.5.7.1 OT - AMI IT Infrastructure:

Background: Additional infrastructure for Data Centre (DC) and Disaster Recovery (DR) is proposed to support the growing smart meter population and ensure adequate computing capacity for the Head-End System (HES), Meter Data Management (MDM) and Smart Prepaid Metering (SPM) platforms. The proposed augmentation will maintain system scalability, application performance, and business continuity while accommodating the planned smart meter rollout.

Scope & Objective:

- Augmentation of DC infrastructure to support HES, MDM and SPM applications for an additional 3.2 lakh smart meters, including the associated software licence cost, considering the proposed installation plan.
- As there is currently no Disaster Recovery (DR) infrastructure for the AMI system, it is proposed to establish a DR facility to support the Head-End System (HES) and Meter Data Management (MDM) applications for a cumulative smart meter base of 12 lakh meters, ensuring business continuity, disaster recovery capability, and uninterrupted AMI operations during any Data Centre outage.
- Infrastructure sizing shall be periodically reviewed against the actual smart meter rollout to ensure optimum utilization of investment.

Benefit of the investment:

- Supports future smart meter expansion without degradation in application performance.
- Strengthens business continuity and disaster recovery capability.
- Ensures scalable and reliable operation of the AMI ecosystem.
- Optimizes infrastructure investment in line with the phased smart meter rollout.

7.5.7.2 OT – IT Infrastructure for Network Operation & Monitoring Centre (NOMC):



Background: The Network Operation & Monitoring Centre (NOMC) performs continuous monitoring and analysis of large volumes of AMI data across HES, MDM, SPM and CIS platforms. The increasing smart meter population has significantly increased the volume of operational data, application logs, dashboards and analytical workloads.

Scope & Objective: Five high-end desktop workstations are proposed to enable efficient processing of large datasets, SQL-based analysis, Power BI dashboards, Python-based analytics, application log analysis and simultaneous execution of multiple operational applications.

Benefits of the investment:

- Improves operational productivity of the NOMC.
- Reduces analysis and report generation time.
- Enables advanced analytics for operational decision-making.
- Supports future AI/ML-based analytical applications.

7.5.7.3 OT - Centralized Monitoring Tool for NOMC

Background: As the number of smart meters and associated applications continues to grow, manual monitoring of application health, alerts and system performance across HES, MDM, SPM and CIS has become increasingly challenging.

Scope & Objective: A centralized monitoring platform is proposed to provide real-time monitoring of application availability, infrastructure health, performance metrics, automated alerts, SLA monitoring and MIS reporting through a single operational dashboard.

Benefits of the investment:

- Enables proactive fault detection and faster incident resolution.
- Improves application availability and operational visibility.
- Reduces manual monitoring effort.
- Supports automated MIS generation and SLA compliance monitoring.

Budgetary Details for OT-AMI Capex Plan:

OT (FY28)					
S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Cost (INR Cr)
1	AMI Infrastructure				
1.1	DC IT infrastructure for HES, MDM and SPM for 3.2 lakh additional Smart Meters (incl. software licence cost), and DR IT infrastructure for MDM and HES for a total of 12 lakh Smart Meters.	AU	320000	193.44	6.19
2	IT Infrastructure for NOMC (Network Operation cum Monitoring Centre): High end desktop workstations	Nos.	5	400000	0.2

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3	Centralized Monitoring Tool for NOMC.	LS	1	200000	0.2
Total Estimated Cost					6.59

7.5.7.4 OT DC/DR Hardware & Software:

Background: The OT Data Centres at the Main Control Centre (MCC) and Backup Control Centre (BCC) host the SCADA, ADMS, Historian and associated operational applications supporting real-time monitoring and control of the distribution network. With increasing operational data volumes and growing analytical requirements, the existing compute, virtualization and backup infrastructure requires augmentation to maintain system availability, resilience and business continuity.

Scope and Objective: The proposed investment will:

- Strengthen virtualization infrastructure for critical SCADA/ADMS applications.
- Enable advanced operational analytics using AI/ML technologies.
- Enhance backup capability for all critical OT environments.
- Improve disaster recovery preparedness and operational resilience

Budgetary Details

S.No.	Line Item	UOM	Qty	Total Cost (₹ Cr)
1.1	AI/ML Analytics Infrastructure	Nos.	1	0.4
1.2	Enterprise Virtualization Recovery Servers	Nos.	2	0.8
1.3	Backup Software License	Nos. (Licenses)	17	0.6
Total Cost – Section 1				1.8

7.5.7.5 Expansion & Renovation of OT Data Centre:

Background: The existing OT Data Centre supports mission-critical SCADA/ADMS infrastructure operating on a 24x7 basis. As infrastructure continues to expand, the facility requires assessment and enhancement to meet applicable industry standards for electrical safety, environmental control, fire protection and high availability.

Scope and Objective: The proposed works include.

- Comprehensive assessment of the OT Data Centre.
- Precision Air Conditioning (PAC) systems.
- Fire-rated false flooring.
- Fire-rated false ceiling.
- Fire-rated partitioning.
- Advanced fire detection and clean-agent suppression systems.



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Benefit of the investment:

- Improves reliability and availability of critical OT infrastructure.
- Enhances environmental control and equipment life.
- Strengthens fire protection and personnel safety.
- Supports future expansion of OT infrastructure.

Budgetary Details

S.No.	Line Item	UOM	Qty	Total Cost (₹ Cr)
2.1	OT-DC at MCC — Assessment	Lot	1	0.05
2.2	Precision Air Conditioning (PAC) for OT Data Centre	Nos.	2	0.50
2.3	Fireproof False Flooring for OT Data Centre	Lot	1	0.15
2.4	Fireproof False Ceiling for OT Data Centre	Lot	1	0.15
2.5	Fire-proof Wall partitioning for OT Data Centre	Lot	1	0.15
2.6	Fire Detection & Suppression System for OT Data Centre	Lot	1	0.25
Total Cost – Section 2				1.2

7.5.7.6 Area PSCC Infrastructure:

Background: Area Power System Control Centres (APSCCs) support field-level SCADA/ADMS monitoring and control activities. Continuous availability of these facilities is essential for maintaining reliable grid operations.

Scope & Objective: The proposal includes installation of:

- Silent DG Sets to ensure uninterrupted power supply during utility outages.
- Biometric access control systems to strengthen physical security of critical OT infrastructure.

Benefit of the investment:

- Ensures uninterrupted SCADA/ADMS operations during power interruptions.
- Improves operational resilience.
- Strengthens physical security of critical OT assets.
- Supports compliance with OT security and audit requirements.

Budgetary Details

S. No.	Line Item	UOM	Qty	Total Cost (₹ Cr)
3.1	Silent-type DG Set for Area Power System Control Centre (APSCC).	Nos.	4	0.25
3.2	Biometric Access control system for APSCC critical infra.	Nos.	4	0.05
Total Cost – Section 3				0.3



Treatment of Scope covered under Review Petition for Capex FY27:

The Applicant respectfully submits that, under the Capital Investment Plan for FY27, an amount of Rs. 10.09 Cr was proposed towards Operation Technologies (AMI), against which the Hon'ble Commission approved Rs. 5.05 Cr. Subsequently, approval of the balance amount of Rs. 5.04 Cr has been sought through the Review Petition filed before the Hon'ble Commission.

For ease of reference, the details of the amount sought under the Clause No. 4(i) of the Review Petition are provided in the table below:

Table-17 of the Review Petition:

Sl. No.	Capex Head	Activity	Proposed and Approved (81/2025) in Cr.			Proposed in Review Petition (Cr.)
			Proposed	Approved	Not / Less Allowed	
1	Technologies	Operation Technologies	10.9	5.04	5.04	5.04

While preparing the Capital Investment Plan for FY28, TPNODL has independently assessed the requirement for augmentation of DC infrastructure to support the Head End System (HES), Meter Data Management (MDM) and Smart Meter Platform (SPM) applications required for the rollout of an additional 7 lakh Smart Meters. The proposal also includes establishment of Disaster Recovery (DR) infrastructure for the AMI ecosystem to ensure business continuity, data security, disaster recovery capability and uninterrupted AMI operations for a cumulative smart meter base of up to 15 lakh meters.

Accordingly, ***the requirement proposed (Rs. 10.0 Cr.), under the present CAPEX FY28 Plan is over & above the amount (Rs. 5.04 Cr.) sought under the Review Petition against CAPEX FY27.***

7.5.8 Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, Keonjhar:

Background: TPNODL currently operates 5 no. material stores at Balasore, Jajpur, Baripada, Betnoti, and Keonjhar. These facilities collectively handle materials valued at approximately ₹500 crore annually, along with maintaining 3 no. scrap stores at Balasore, Jajpur, and Ajodhya.

The existing storage infrastructure is inadequate to support efficient inventory management. In several locations, office buildings require refurbishment, storage facilities are not fully developed, and materials are stored in low-lying areas susceptible to waterlogging during the monsoon season. These limitations result in inefficient storage practices, increased risk of material damage, operational delays, and safety concerns.



Scope and Objective: The proposed CAPEX aims to modernize and strengthen the warehouse infrastructure by providing.

- Heavy-duty industrial racking systems.
- Concrete storage platforms for safe material stacking.
- Construction/renovation of store office buildings.
- Digital Warehouse Management System (WMS) with mobile application support.
- Surveillance system & Proper drainage and stormwater management.
- Scientific storage solutions for inventory management.
- Supporting civil and electrical infrastructure for efficient warehouse operations.

The objective is to establish modern, safe, organized, and technology-enabled warehouses that improve inventory visibility, optimize storage space, minimize material losses, and enhance operational efficiency

Benefits of the Investment:

- Heavy-duty industrial racking systems.
- Improved safety for employees and other stakeholders.
- Protection of materials from waterlogging, weather-related damage, and theft.
- Digitalization of warehouse operations through a Warehouse Management System with app-based inventory tracking.
- Enhanced inventory visibility and traceability across all stores.
- Robust surveillance and improved security of warehouse assets.
- Organized storage of raw materials, inventory, and equipment.
- Faster identification, retrieval, and issue of materials.
- Reduced operational downtime and improved service efficiency.
- Optimized utilization of warehouse space through heavy-duty racking systems.
- Reduced material handling losses and damage.
- Improved warehouse housekeeping and operational safety.
- Implementation of First-In-First-Out (FIFO) inventory practices for better inventory management and reduced material ageing.
- Enhanced inventory control, operational efficiency, and regulatory compliance.



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Storage solutions for Balasore, Jajpur, Keonjhar, Betnoti & Ajodhya Scrap Store.		
Central Balasore Store		
Sr. No.	Work Description	Amount (in Cr.)
1	Warehouse management system(digitalisation) of all stores	0.4
2	storage solutions (Racks and bins)	0.35
3	Flooring inside shed / warehouse	0.3
4	Levelling of Road inside central store-1	0.25
5	Misc	0.25
Jajpur Store		
1	Labour Rest Shed	0.1
2	Drainage facility	0.35
3	Record room	0.1
4	RCC for scrap yard (Mini store)	0.2
5	PCC of balance area Jajpur store	0.3
6	Flooring inside warehouse / shed	0.1
7	storage solutions (Racks and bins)	0.1
8	Surveillance system	0.3
9	Misc.	0.35
Keonjhar Store		
1	Office building (demolishing the old unsafe building)	0.7
2	Misc.	0.2
Betnoti Store		
1	Labor / security rest room with toilet and drinking water facility.	0.1
2	Office building	0.4
Ajodhya Scrap Store		
1	Construction of RCC /PCC platform	0.6
2	Office building	0.3
3	Drainage facility	0.25
Total Costing (In Cr.)		6.0

7.5.9 Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office, and others):

Background: In continuation of our efforts towards upgrading existing infrastructure and creating new facilities, including shifting from rented offices to our own premises, TPNODL has achieved considerable milestones in providing decent, clean, and hygienic workplaces for employees and supporting operational needs. Going forward, the proposed infrastructure is planned for execution in FY28 in a phased manner. This initiative is aimed at ensuring that employees feel comfortable and motivated in their workplaces, thereby enhancing their



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efficiency and contributing to the success of the organization as well as the welfare of the customers we serve.

Scope and Objective: During this year, the organization plans to construct and upgrade a wide range of facilities that are critical for smooth operations and employee welfare. The plan includes completion of 2 Circle Office, 3 Division Office Buildings, 12 New SDO Offices, 15 Section Offices, 1 DT Workshop, and Auditorium Building. In addition, construction of 7 new PSS Control Room Buildings, 4 Cafeteria/Canteens, Enforcement Office at Jajpur, 2 STS Offices, and 1 Meter Testing Lab are included in the scope. While these works will address a substantial portion of the balance scope, certain infrastructure requirements will continue beyond FY28, to be taken up in subsequent years as part of the phased development plan.

SL No.	Particulars	Unit	Proposed Qty
1	Circle Office	EA	2
2	Division Office	EA	3
3	New SDO OFFICE	EA	12
4	New Section office	EA	15
5	DT Workshop	EA	1
6	HOTT Centre	EA	2
7	MRT Office cum Store (Bhadrak)	EA	1
8	Area Development/ Approach Road for above mentioned offices	AU	1
9	Enforcement Office at Jajpur	EA	1
10	Meter Testing Lab Building	EA	1
11	Auditorium Building	EA	1
12	Store Shed/Storeroom	EA	20

Benefits of the Investment: The proposed investment will result in substantial benefits for both employees and customers. Establishing modern, well-maintained office buildings will provide employees with a better workplace environment, enhancing their motivation, job satisfaction, and overall productivity. Customers will benefit from clean, aesthetically designed offices that improve their service experience and provide professional touchpoints. Furthermore, the development of safe and sound workplaces with essential amenities will address gaps currently seen in rented offices and temporary facilities. Operational efficiency will also be significantly improved through infrastructure such as Meter Testing Labs, new Control Room Buildings, and upgraded Store facilities, which will streamline operations and strengthen service reliability. Collectively, these investments will support organizational growth while ensuring long-term sustainability and customer satisfaction.

7.5.10 Office Administration:

Background: Through the years, a lot of work has been done to provide a great working environment, but the vast area and several numbers of offices require regular investments for keep-up. Currently, some offices are company-owned, while others operate from rented premises, creating inconsistency in infrastructure standards. The existing setup poses challenges in accommodating the growing workforce and in providing a hygienic, well-ventilated, and safe working environment.

To maintain efficiency and deliver best-in-class services to consumers, an upgrade of office infrastructure is essential.

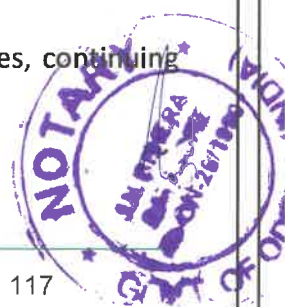
Scope and Objective: The objective of this initiative is to improve the working environment by modernizing office infrastructure, enhancing employee comfort, and ensuring operational efficiency. This will directly support better service delivery to consumers and improve satisfaction among stakeholders.

Benefits of the Investments:

- Ensures a comfortable working environment by maintaining temperature, air quality, and humidity levels.
- Supports energy efficiency and keeps business-critical equipment at optimal operating conditions.
- Provides clean drinking water to employees, ensuring proper hydration and health.
- Improves attentiveness, efficiency, and reduces health-related downtime.
- Supports healthy posture and comfort during long working hours.
- Enhances productivity and reduces healthcare expenses related to musculoskeletal issues.

7.5.11 CAPEX Summary Technology and Infrastructure:

The Technology CAPEX for FY28 is proposed under the following key schemes, continuing from the prior approved CAPEX heads. The detail proposals are as follows:



Detailed Project Report of Capex Plan FY28

S. No.	Major Category	Sr. No.	Activity	FY28 amount in Cr.	Annexure
5	Technology and Infrastructure	5.1	Automation of Non-ODSSP & SCADA Integration	8.5	Annexure-35
		5.2	Surveillance of PSS through CCTV	2.2	Annexure-36
		5.3	Build & Strengthen DC–DR Infrastructure & End-User IT Hardware	4.5	Annexure-37
		5.4	IT Application & Software	4.0	Annexure-38
		5.5	Cyber security solution	10.0	Annexure-39
		5.6	Geographic Information System	0.6	Annexure-40
		5.7	Operation Technologies	10.0	Annexure-41
		5.8	Storage solutions for Balasore, Jajpur & Betnoti, Keonjhar	6.0	Annexure-42
		5.9	Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office/Lab, Cafeteria Canteen and others)	35.0	Annexure-43
		5.10	Office Administration	6.5	Annexure-44
Total (5)				87.3	



Detailed Project Report of Capex Plan FY28

Appendix-2: Project Timelines:

The DISCOM has proposed the project completion timelines where ever applicable. While Discoms TPNODL will endeavour all efforts to complete the schedules as per the mentioned timeline for each projects, however the proposed timelines are subject to timely receipt of necessary permissions, approvals and clearances from the concerned authorities/agencies, including land/Right of Way (RoW), site clearance, Forest Department/agricultural field clearances and other statutory approvals, resolution of local/site-related issues and concerns, timely receipt of materials, availability of required outages from OPTCL, suitable weather conditions, and other factors beyond the reasonable control of the DISCOM.

Time frame of the Expenditure Plan						Expenditure Plan	
S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	FY 28 Plan Amount (in Cr.)	Q1 FY 29 Plan Amount (in Cr.)
1	Statutory & Safety	1.1	Network Safety and Operational Resilience Enhancement	LS	9.56	7.56	2
		1.2	Defective cable replacement for safety /Replacement of unsafe service cable to mitigate electrical hazards/Replacement of hazardous service cable for public and operational safety	Km	To be claimed at actual in True up		
		1.3	Fencing of Distribution Substations	Nos.	8.47	8.47	-
		1.4	Fire wall for PTR between the PTRs	Nos.	1.5	1.5	-
		1.5	LT extension for legacy long service cable cases to improve supply reliability.	Km	8	4	4
		1.6	Meter Testing Lab (Keonjhar)	Nos.	4.63	4.63	-
		1.7	Overhead to Underground conversion at crossings	Km	5	5	-
		1.8	Intermediate poles for vulnerable location	Nos.	10	8	2
		1.9	Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	Nos.	6.5	5.5	1
Total (1)					53.63	44.63	9
2	Loss Reduction	2.1	Conversion of LT Bare cond. to AB Cable	Km	38.5	38.5	-
		2.2	Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material	LS	1.33	1.33	-
Total (2)					39.83	39.83	0
3	Reliability	3.1	Replacement/Addition of network component in 33/11kV Primary Substation	LS	15	12	3
		3.2	Phasing out of Vulnerable PTRs (34 Nos)	Nos.	52.34	38.34	14
		3.3	Testing equipment for PSS	LS	1.5	1.5	-
		3.4	Earthing system for PSS	Nos.	1.06	1.06	-
		3.5	Construction of new control room building for PSS	Nos.	5	3	2
		3.6	33 KV Conductor up gradation	CKm	25.94	16.9	9.1

Detailed Project Report of Capex Plan FY28

Time frame of the Expenditure Plan						Expenditure Plan	
S. No.	Major Category	Sr. No.	Activity	UoM	FY28 Amount (in Cr.)	FY 28 Plan Amount (in Cr.)	Q1 FY 29 Plan Amount (in Cr.)
		3.7	11 KV Conductor up gradation	CKm	21.58	14.0	7.6
		3.8	Installation of HV Protection	Nos.	16.69	12.69	4
		3.9	Installation of LV Protection	Nos.	18	15	3
		3.10	Installation of Auto Reclosure for 11kV	Nos.	25	25	-
		3.11	Installation of Auto Reclosure for 33kV	Nos.	5	5	-
		3.12	Installation of 33kV & 11kV RMUs	Nos.	6	6	-
		3.13	Installation of FPIs for 11kV Lines	Nos.	3	3	-
		3.14	Installation of Line AB Switch/Isolator for 33kV & 11kV	Nos.	4	4	-
Total (3)					200.11	157.48	42.63
4	Network Optimisation & Load Growth	4.1	Augmentation of PTRs	Nos.	18.5	13.5	5
		4.2	Augmentation of DTRs	Nos.	45	43.8	1.2
		4.3	Conversion of 1Ph DTR to 3Ph DTR along with lines	Nos.	33.65	20.65	13
		4.4	New LT Feeder for overloaded LT feeder mitigation	Km	26.43	18.50	7.93
		4.5	Construction of new 33/11kV PSS	Nos.	28	14	14
		4.6	Addition of 11 kV Lines (O/H + UG) and additional Bay	Km	41.88	29.32	12.56
		4.7	Addition of 33 kV Lines (O/H + UG) and additional Bay	Km	49.89	34.92	14.97
		4.8	Addition New DTRs along with Associated HT/LT lines	Nos.	32	30	2
Total (4)					275.35	204.69	70.66
5	Technology and Infrastructure	5.1	Automation of Non-ODSSP & SCADA Interigation	LS	8.5	6.5	2
		5.2	Surveillance of PSS through CCTV	LS	2.2	2.2	-
		5.3	Build & Strengthen DC-DR Infrastructure & End-User IT Hardware	LS	4.5	4.5	-
		5.4	IT Application & Software	LS	4	4	-
		5.5	Cyber security solution	LS	10	10	-
		5.6	Geographic information system	LS	0.6	0.6	-
		5.7	Operation technologies	LS	10	10	-
		5.8	Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, keonjhar	LS	6	6	-
		5.9	Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)	LS	35	28	7
		5.10	Office Administration	LS	6.5	6.5	-
Total (5)					87.3	78.3	9
Grand Total = 1+2+3+4+5					656.22	524.93	131.29

Appendix-3:
**List of Locations for Proposed Capex Plan of TPNODL
for FY28**

Summary : Locations List for Porposed Capex Plan of TPNODL for FY28			
S. No.	Major Category	Activity	Reference
1	Statutory & Safety	Fencing of Distribution Substations	Annexure-A
		Fire wall for PTR between the PTRs	Annexure-B
		LT extension for legacy long service cable cases /to reduce technical losses and improve supply reliability.	Annexure-C
		Meter Testing Lab (Keonjhar)	Annexure-D
		Overhead to Underground conversion at crossings	Annexure-E
		Intermediate poles for vulnerable location	Annexure-F
		Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench	Annexure-G
Total (1)			
2	Loss Reduction	Conversion of LT Bare cond. to AB Cable	Annexure-H
Total (2)			
3	Reliability	Replacement/Addition of network component in 33/11kV Primary Substation	Annexure-I
		Phasing out of Vulnerable PTRs (34 Nos)	Annexure-J
		Earthing system for PSS	Annexure-K
		Construction of new control room building for PSS	Annexure-L
		33 KV Conductor up gradation	Annexure-M
		11 KV Conductor up gradation	Annexure-N
		Installation of HV Protection	Annexure-O
		Installation of LV Protection	Annexure-P
		Installation of Auto Reclosure for 11kV	Annexure-Q
		Installation of Auto Reclosure for 33kV	Annexure-R
		Installation of 33kV & 11kV RMUs	Annexure-S
		Installation of FPIs for 11kV Lines	Annexure-T
		Installation of Line AB Switch/Isolator for 33kV & 11kV	Annexure-U
Total (3)			
4	Network Optimisation & Load Growth	Augmentation of PTRs	Annexure-V
		Augmentation of DTRs	Annexure-W
		Conversion of 1Ph DTR to 3Ph DTR along with lines	Annexure-X
		Addition of 11 kV Lines (O/H + UG) and additional Bay	Annexure-Y
		Addition of 33 kV Lines (O/H + UG) and additional Bay	Annexure-Z
		Addition New DTRs along with Associated HT/LT lines	Annexure-AA
Total (4)			
5	Technology and Infrastructure	Surveillance of PSS through CCTV	Annexure-AB
		Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, keonjhar	Annexure-AC
		Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)	Annexure-AD
Total (5)			

Note: Some locations mentioned in the above Annexures may be changed due to any unforeseen event at the time of execution of approved capex works.

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
1	Keonjhar	JOED	BARBIL NO 2	VETNARY GOLI (100KVA)	1	P1
2	Keonjhar	JOED	BARBIL NO 2	BALAGODA 100 KVA	1	P1
3	Keonjhar	JOED	BARBIL NO 2	ARATI HOSPITAL (250 KVA)	1	P1
4	Keonjhar	JOED	BARBIL NO 2	BADJAL (100 KVA)	1	P1
5	Keonjhar	JOED	BARBIL NO 2	ALHUWALIA (100 KVA)	1	P1
6	Keonjhar	JOED	BARBIL NO 2	DERBY CHAWK (100 KVA)	1	P1
7	Keonjhar	JOED	BHADRASAH	BHUYANBASTI (100 KVA)	1	P1
8	Keonjhar	JOED	BHADRASAH	TAPADIHI NEW CAMP (100 KVA)	1	P1
9	Keonjhar	JOED	BHADRASAH	LAIDAPADA SHIVA TEMPLE (100 KVA)	1	P1
10	Keonjhar	JOED	BHADRASAH	LOIDAPADA ROAD SIDE (100 KVA)	1	P1
11	Keonjhar	JOED	Joda	100 kva dtr at DR. Pattanayak	1	P1
12	Keonjhar	JOED	Joda	250 kva	1	P1
13	Keonjhar	JOED	Joda	100 kva dtr at Camp hatting	1	P1
14	Keonjhar	JOED	CHAMPUA	BHALIADHIPA 100KVA	1	P1
15	Keonjhar	JOED	CHAMPUA	GODHULI 100KVA	1	P1
16	Keonjhar	JOED	CHAMPUA	PANCHPOKHARIYA NEAR SHIV TEMPLE 100KVA	1	P1
17	Keonjhar	JOED	CHAMPUA	ADHANGAPAL 100KVA	1	P1
18	Keonjhar	JOED	CHAMPUA	JAGANNATHPUR 100KVA	1	P1
19	Keonjhar	JOED	CHAMPUA	PURASATTAMPUR 100KVA	1	P1
20	Keonjhar	JOED	CHAMPUA	JUGULIDHAR 100KVA	1	P1
21	Keonjhar	JOED	CHAMPUA	SANDIYAMARA 100KVA	1	P1
22	Keonjhar	JOED	CHAMPUA	KAINTA 100KVA	1	P1
23	Keonjhar	JOED	CHAMPUA	RAJIA 100KVA	1	P1
24	Keonjhar	JOED	CHAMPUA	DOLITA 100KVA	1	P1
25	Keonjhar	JOED	CHAMPUA	DOLITA 100KVA 2	1	P1
26	Keonjhar	JOED	CHAMPUA	MAHESWARPUR100KVA	1	P1
27	Keonjhar	JOED	CHAMPUA	PATALA100KVA	1	P1
28	Balasore	JED	NAMPO	Sahadapad(100kva)	1	P1
29	Balasore	JED	NAMPO	Arjuni(100kva)	1	P1
30	Balasore	JED	NAMPO	Nangudisahi(100kva)	1	P1
31	Balasore	JED	NAMPO	Deula(2nos of 100kva)	1	P1
32	Balasore	JED	NAMPO	Sugo Market (2nos of 100kva)	1	P1
33	Balasore	JED	NAMPO	Netua (2nos of 100kva)	1	P1
34	Balasore	JED	NAMPO	Adinaga (2nos of 100kva) & 25Kva(LI)	1	P1
35	Balasore	JED	NAMPO	Sahapur(100kva,25kva & 25Kva 2nos(LI)	1	P1
36	Balasore	JED	NAMPO	Kamarsalia 100Kva & 25 Kva 2nos (PP/RWSS)	1	P1
37	Balasore	JED	NAMPO	Baunsabani 100kva & 25 Kva(LI)	1	P1
38	Balasore	JED	NAMPO	Kapasusa 100Kva & 25 Kva(LI)	1	P1
39	Balasore	JED	NAMPO	Jalakapadia 100Kva & 25Kva(LI)	1	P1
40	Balasore	JED	NAMPO	Dhansimilia 100kva 3nos & 25Kva 20nos(LI)	1	P1
41	Balasore	JED	NAMPO	Tilapata/100kva	1	P1
42	Balasore	JED	NAMPO	Basuli/100kva	1	P1
43	Balasore	JED	NAMPO	Medical/100kva	1	P1
44	Balasore	JED	NAMPO	Padima/100kva 1&2	1	P1
45	Balasore	JED	NAMPO	Amdiha 100Kva/63Kva/25Kva	1	P1
46	Balasore	JED	NAMPO	Sarisa 100Kva and 25Kva	1	P1
47	Balasore	JED	NAMPO	Demuria 100Kva 2nos	1	P1
48	Balasore	JED	NAMPO	Sampatia 100Kva and 25Kva 3nos	1	P1
49	Balasore	JED	NAMPO	Sarkatia 100Kva and 25Kva	1	P1
50	Balasore	JED	NAMPO	Bagpunji 100Kva and 25Kva 3nos	1	P1
51	Balasore	JED	Chandaneswar	Barbatia (100 kva)	1	P1
52	Balasore	JED	Chandaneswar	Bagard (100 kva)	1	P1
53	Balasore	JED	Chandaneswar	Mandari (100 kva)	1	P1
54	Balasore	JED	Chandaneswar	Gopalsahu (100 kva)	1	P1
55	Balasore	JED	Chandaneswar	Bahalia (100 kva)	1	P1
56	Balasore	JED	Chandaneswar	Badal Satpathi (100 kva)	1	P1
57	Balasore	SED	ADABAZAR	SABANGA 250 KVA	1	P1
58	Balasore	SED	ADABAZAR	BEGUNIA 100 KVA	1	P1
59	Balasore	SED	BAHANAGA	KANPUR -I , 100 KVA	1	P1
60	Balasore	SED	BAHANAGA	KANPUR -II , 100 KVA	1	P1
61	Balasore	SED	BAHANAGA	SANTARAGADIA 250 KVA	1	P1
62	Balasore	SED	BAHANAGA	SHYAMSUNDAR PUR 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
63	Balasore	SED	BAHANAGA	ASIMILA 100 KVA	1	P1
64	Balasore	SED	BAHANAGA	KRUSHNAPUR 100 KVA	1	P1
65	Balasore	SED	BAHANAGA	PITALAPADA 100 KVA	1	P1
66	Balasore	SED	BAHANAGA	DANDAHARIPUR 100 KVA	1	P1
67	Balasore	SED	BAHANAGA	BAHABALPUR 100 KVA	1	P1
68	Balasore	SED	BAHANAGA	MARDARAJPUR 100 KVA	1	P1
69	Balasore	SED	BAHANAGA	NIMNIGADIA 100 KVA	1	P1
70	Balasore	SED	BAHANAGA	PANCHAYAT 100 KVA	1	P1
71	Balasore	SED	OUPADA	PRATAPPUR 100 KVA	1	P1
72	Balasore	SED	OUPADA	DUKHANDA KHAIRA 100 KVA	1	P1
73	Balasore	SED	OUPADA	NARAMA 100 KVA	1	P1
74	Balasore	SED	OUPADA	RAMCHANDRAPUR 100 KVA	1	P1
75	Balasore	SED	OUPADA	PALASPUR 100 KVA	1	P1
76	Balasore	SED	OUPADA	MAHULAGADIA 100 KVA	1	P1
77	Balasore	SED	OUPADA	CHANPUR(MATIASAHI) 100 KVA	1	P1
78	Balasore	SED	OUPADA	NUAPADA 100 KVA	1	P1
79	Balasore	SED	OUPADA	PANDUA 100 KVA	1	P1
80	Balasore	SED	OUPADA	JANIKAPAL 100 KVA	1	P1
81	Balasore	SED	OUPADA	AGHIRAPADA 100 KVA	1	P1
82	Balasore	SED	OUPADA	AGHIRAPADA PATRASAH 100 KVA	1	P1
83	Baripada	RED	KANTABANI	BADRA 100 KVA	1	P1
84	Baripada	RED	KANTABANI	JAMBANI 100 KVA	1	P1
85	Baripada	RED	BAHALDA	SOSO 100KVA	1	P1
86	Baripada	RED	BAHALDA	PAHADPUR 100KVA	1	P1
87	Baripada	RED	BAHALDA	BARGIDIHI 100KVA	1	P1
88	Baripada	RED	BAHALDA	BRAMANBOSE 100KVA	1	P1
89	Baripada	RED	BAHALDA	GAMBHARIA 100KVA	1	P1
90	Baripada	RED	BAHALDA	GIDHIGHATY 100KVA	1	P1
91	Baripada	RED	BAHALDA	MAJHIGHAN 100KVA	1	P1
92	Baripada	RED	BAHALDA	JHARADIHI MARKET 100KVA 2-NOS	1	P1
93	Baripada	RED	Tiring	Baliasahi Bistapit-100 KVA	1	P1
94	Baripada	RED	Tiring	Bad dalima -100 KVA	1	P1
95	Baripada	RED	Tiring	Bad dalima-100 KVA	1	P1
96	Baripada	RED	Tiring	Badbhundu-1-100 KVA	1	P1
97	Baripada	RED	Tiring	Badbhundu-2-100 KVA	1	P1
98	Baripada	RED	Tiring	Sanbhundu-100 KVA	1	P1
99	Baripada	RED	Tiring	Bankati-100 KVA	1	P1
100	Baripada	RED	Tiring	Talsa-100 KVA	1	P1
101	Baripada	RED	Tiring	Changua-100 KVA	1	P1
102	Baripada	RED	Tiring	Maghua-100 KVA	1	P1
103	Baripada	RED	Tiring	Pokharia-100 KVA	1	P1
104	Baripada	RED	Tiring	Sidadihi-100 KVA	1	P1
105	Baripada	RED	Tiring	Poda chakdi-100 KVA	1	P1
106	Baripada	RED	KARANJIA SECTION- II	BATATAINSIRA-100 KVA	1	P1
107	Baripada	RED	KARANJIA SECTION- II	BARAKAMLA-100 KVA	1	P1
108	Baripada	RED	KARANJIA SECTION- II	TIKASIL- 100 KVA	1	P1
109	Baripada	RED	KARANJIA SECTION- II	SHYAMCHANDRAPUR- 100 KVA	1	P1
110	Baripada	RED	SUKRULI	SUKRULI 100KVA	1	P1
111	Baripada	RED	SUKRULI	MANIKACHAKKA 100KVA	1	P1
112	Baripada	RED	SUKRULI	PANDARSILI 100KVA	1	P1
113	Baripada	RED	SUKRULI	PANDARSILI 100KVA	1	P1
114	Baripada	RED	SUKRULI	NAUPANA 100KVA	1	P1
115	Baripada	RED	SUKRULI	NUABEDA 100KVA	1	P1
116	Baripada	RED	SUKRULI	JAMUNALIA 100KVA	1	P1
117	Balasore	BED	NO-1	BALASORE SAWMILL 100 KVA (IPDS)	1	P1
118	Balasore	BED	NO-1	BALASORE SAWMILL 100 KVA	1	P1
119	Balasore	BED	NO-1	MARWADI 630 KVA	1	P1
120	Balasore	BED	NO-1	MARWADI 100 KVA (IPDS)	1	P1
121	Balasore	BED	NO-1	CONGRESS GALI 100 KVA (IPDS)	1	P1
122	Balasore	BED	NO-1	CHAMPA GACHHA 100 KVA (IPDS)	1	P1
123	Balasore	BED	NO-III	BHARTA MALIK(100 KVA)	1	P1
124	Balasore	BED	NO-III	BANGALISAH(100KVA)	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
125	Balasore	BED	NO-III	BUDDHAM OFFICE(100KVA)	1	P1
126	Balasore	BED	NO-III	GOSALPADA(250KVA)	1	P1
127	Balasore	BED	NO-III	HARIPUR(100KVA)	1	P1
128	Balasore	BED	NO-III	ANAD BAZAR (250 KVA)	1	P1
129	Balasore	BED	NO-III	HOUSING BOARD COLONY(250 KVA)	1	P1
130	Balasore	BED	NO-III	DWARIKA NAGAR (100 KVA)	1	P1
131	Balasore	BED	NO-III	DIVISION FRONT(250 KVA/200 KVA)	1	P1
132	Balasore	BED	NO-III	TARAKANTA 100 KVA	1	P1
133	Balasore	BED	NO-III	BARAGACHA (250 KVA)	1	P1
134	Balasore	BED	NO-III	SAMBIT BABU100KVA	1	P1
135	Balasore	BED	NO-III	VIGILANCE OFFICE 250KVA	1	P1
136	Balasore	BED	NO-III	SUDARSANA JENA100KVA	1	P1
137	Balasore	BED	NO-III	GOSWAMI 250KVA	1	P1
138	Balasore	BED	NO-III	FIRINGIPATNA 200& 100KVA	1	P1
139	Balasore	BED	NO-III	VELORA CLINIC 100KVA	1	P1
140	Balasore	BED	NO-III	SAMALPUR ATM100 KVA	1	P1
141	Balasore	BED	NO-III	SAMALPUR SIVA MANDIR 100KVA	1	P1
142	Balasore	BED	NO-III	GANPATINAGAR100KVA	1	P1
143	Bhadrak	BSED	BHANDARIPOKHARI-I	AKHUAPADA 100 KVA JENA SAHI	1	P1
144	Bhadrak	BSED	BHANDARIPOKHARI-I	SANKHULA 100 KVA	1	P1
145	Bhadrak	BSED	BHANDARIPOKHARI-I	PURIPADA 100 KVA	1	P1
146	Bhadrak	BSED	BHANDARIPOKHARI-I	AKHUAPADA JENA SAHI 100 KVA	1	P1
147	Bhadrak	BSED	BHANDARIPOKHARI-I	BAGALA 100KVA	1	P1
148	Bhadrak	BSED	BHANDARIPOKHARI-I	NERADA JENA SAHI 100KVA	1	P1
149	Bhadrak	BSED	BHANDARIPOKHARI-I	JASOTIKIRI NHAI 100KVA	1	P1
150	Bhadrak	BSED	BP-II	BARAPADI(100)	1	P1
151	Bhadrak	BSED	BP-II	SORISHADIHA(100)	1	P1
152	Bhadrak	BSED	BP-II	BARHMAPUR(100)	1	P1
153	Bhadrak	BSED	BP-II	RAJENDRAPUR(100)	1	P1
154	Bhadrak	BSED	BP-II	CHUDAKUTI (100)	1	P1
155	Bhadrak	BSED	BP-II	BADARAMPUR(100)	1	P1
156	Bhadrak	BSED	BP-II	JORAGADIA(100)	1	P1
157	Bhadrak	BSED	BP-II	BELAMALA(100)	1	P1
158	Bhadrak	BSED	BP-II	BARIKPUR(100)	1	P1
159	Bhadrak	BSED	BP-II	BARIKPUR(100)-2	1	P1
160	Bhadrak	BSED	BP-II	BADARAMPUR(100)	1	P1
161	Bhadrak	BSED	BP-II	SASANA(100)	1	P1
162	Bhadrak	BSED	BP-II	KENDUAPADA(100)	1	P1
163	Bhadrak	BSED	BP-II	DANDO(100)	1	P1
164	Bhadrak	BSED	BP-II	CHINAMALI(100)	1	P1
165	Bhadrak	BSED	BP-II	AMPORE(100)	1	P1
166	Bhadrak	BSED	Agarpada	Randia 100 station side	1	P1
167	Bhadrak	BSED	Agarpada	KORANTA 100 KVA	1	P1
168	Bhadrak	BSED	Agarpada	RANIDA BISWAL SAHI 100 KVA	1	P1
169	Bhadrak	BNED	BDK-1	BANKASAHIPDS 100 KVA	1	P1
170	Bhadrak	BNED	BDK-1	THANA BACK 100 KVA	1	P1
171	Bhadrak	BNED	BDK-1	OLD BJP 100 KVA	1	P1
172	Bhadrak	BNED	BDK-1	SUTHA AGA IPDS 100 KVA	1	P1
173	Bhadrak	BNED	BDK-1	PUNJAB SINDH BANK 100 KVA	1	P1
174	Bhadrak	BNED	BDK-1	PUNJAB SINDH BANK-2 100 KVA	1	P1
175	Bhadrak	BNED	BDK-1	SAHAPUR MASJID 100 KVA	1	P1
176	Bhadrak	BNED	BDK-1	MOTELCHOK SB ETERPRICE. 100 KVA	1	P1
177	Bhadrak	BNED	BDK-1	DHOBASAHIPDS 100 KVA	1	P1
178	Bhadrak	BNED	BDK-1	SALANDI HOSPITAL 100 KVA	1	P1
179	Bhadrak	BNED	BDK-1	SALANDI HOSPITAL BACK 100 KVA	1	P1
180	Bhadrak	BNED	BDK-1	PADIASAHIPDS 100 KVA	1	P1
181	Bhadrak	BNED	BDK-1	KARUNAMARGA 1000 KVA	1	P1
182	Bhadrak	BNED	BDK-1	FACOR 500 KVA	1	P1
183	Bhadrak	BNED	BDK-1	KADAMBEDA 100 KVA * 2 NOS	1	P1
184	Bhadrak	BNED	BDK-1	OMFED 100	1	P1
185	Bhadrak	BNED	BDK-1	MATHAPADIASHAL 100 KVA	1	P1
186	Bhadrak	BNED	BDK-1	PRAFULLANAGAR 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
187	Bhadrak	BNED	BHADRAK NO 2	KATHAGOLA 100KVA	1	P1
188	Bhadrak	BNED	BHADRAK NO 2	PATANA SAHI 100KVA	1	P1
189	Bhadrak	BNED	BHADRAK NO 2	MALIKMAIDAN 100KVA	1	P1
190	Bhadrak	BNED	BHADRAK NO 2	SANTHIA 250 KVA	1	P1
191	Bhadrak	BNED	BHADRAK NO 2	SAROSARDAR 100 KVA	1	P1
192	Bhadrak	BNED	BHADRAK NO 2	UTTARBAHNI 100 KVA	1	P1
193	Bhadrak	BNED	BHADRAK NO 2	SAROSARDAR 100 KVA	1	P1
194	Bhadrak	BNED	BHADRAK NO 2	DARJIPATI 250 KVA	1	P1
195	Bhadrak	BNED	BHADRAK NO 2	DARJIPATI 100 KVA	1	P1
196	Bhadrak	BNED	BHADRAK NO 2	PANABARTA CHAK100 KVAA	1	P1
197	Bhadrak	BNED	BHADRAK NO 2	KAJIMOHALA250 KVA	1	P1
198	Bhadrak	BNED	BHADRAK NO 2	DHOBASAH 100 KVA	1	P1
199	Bhadrak	BNED	BHADRAK NO 2	SAKOSUNI 100 KVA	1	P1
200	Bhadrak	BNED	BHADRAK NO 2	SAKOSUNI 100 KVA	1	P1
201	Balasore	BTED	Basta-2	Nargoda near school side 100kva	1	P1
202	Balasore	BTED	Basta-2	Gobaraghoti 100kva	1	P1
203	Balasore	BTED	Basta-2	Gobaraghoti Hanuman mandir 100kva	1	P1
204	Balasore	BTED	Basta-2	Chakrada Pani 100kva	1	P1
205	Balasore	BTED	Basta-2	Kuchuli 100kva	1	P1
206	Balasore	BTED	Basta-2	Ekdalia 100kva	1	P1
207	Balasore	BTED	Basta-2	Dubulia 100 kva	1	P1
208	Balasore	BTED	Basta-2	SAHADA BAZAR 100KVA	1	P1
209	Balasore	BTED	Basta-2	GAMHALUNDI NO2--100KVA	1	P1
210	Balasore	BTED	Basta-2	NARGODA NO2-near school side-100kva	1	P1
211	Balasore	BTED	Basta-2	Nargoda no2--100kva	1	P1
212	Balasore	BTED	BASTA-I	Bhagaban pur 100kva S/S	1	P1
213	Balasore	BTED	BASTA-I	Bramanada 2 100kva	1	P1
214	Balasore	BTED	BASTA-I	Padapada100 kva	1	P1
215	Balasore	BTED	BASTA-I	100kva S/S sadanandapur	1	P1
216	Balasore	BTED	BASTA-I	Ranamunduli 100kva	1	P1
217	Balasore	BTED	BASTA-I	Madhubhanda 100kva Dp tilted	1	P1
218	Balasore	BTED	BASTA-I	Mulida 100kva s/s	1	P1
219	Balasore	BTED	BASTA-I	Haladiapada 100 s/s	1	P1
220	Balasore	BTED	BASTA-I	Kundupur 100kva	1	P1
221	Balasore	BTED	BASTA-I	Tikirapada 100kva	1	P1
222	Balasore	BTED	BASTA-I	Chenabasa 100kva	1	P1
223	Balasore	BTED	BASTA-I	Gothagadia 100 kvq	1	P1
224	Balasore	BTED	BASTA-I	Bidyadhar pur 100kva	1	P1
225	Balasore	BTED	BASTA-I	Tula 100kva	1	P1
226	Balasore	BTED	BASTA-I	Saradhaia 100kva	1	P1
227	Balasore	BTED	BASTA-I	Oladi 100 kva	1	P1
228	Balasore	BTED	BASTA-I	Baincha 100kva	1	P1
229	Balasore	BTED	BASTA-I	Kusudhaia 100kva	1	P1
230	Balasore	BTED	Rajghat	Bada ujuda 100kva	1	P1
231	Balasore	BTED	Rajghat	Padima 100 kva	1	P1
232	Balasore	BTED	Rajghat	Jagannathpur 100 kva S/s	1	P1
233	Balasore	BTED	Rajghat	Odiaada100kva	1	P1
234	Balasore	BTED	Rajghat	Dhitpura100kva	1	P1
235	Balasore	BTED	Rajghat	badapadhiaripur 100kva	1	P1
236	Jajpur	JTED	TOWN NO-I	100 KVA SUKUPUR	1	P1
237	Jajpur	JTED	TOWN NO-I	100 KVA GANAPATIPUR	1	P1
238	Jajpur	JTED	TOWN NO-I	100 KVA PATAPUR	1	P1
239	Jajpur	JTED	TOWN NO-I	3*100 KVA NAYAKSAHI	1	P1
240	Jajpur	JTED	TOWN NO-I	100 KVA PRAHARAJPUR	1	P1
241	Jajpur	JTED	TOWN NO-I	100 KVA BAHABALPUR	1	P1
242	Jajpur	JTED	TOWN NO-I	100 KVA NARAHARIPUR	1	P1
243	Jajpur	JTED	TOWN NO-I	100 KVA, ANIRUDDHAPUR SASAN	1	P1
244	Jajpur	JTED	TOWN NO-I	100 KVA NAHARPADA	1	P1
245	Jajpur	JTED	TOWN NO-I	100 KVA GODHANESWAR	1	P1
246	Jajpur	JTED	TOWN NO-I	100 KVA SIRIAPUR	1	P1
247	Jajpur	JTED	TOWN NO-I	100 KVA BILUASAH 1	1	P1
248	Jajpur	JTED	TOWN NO-I	100 KVA BHAGABATPUR	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
249	Jajpur	JTED	TOWN NO-I	100 KVA BHAGABATPUR-2	1	P1
250	Jajpur	JTED	TOWN NO-I	100 KVA LALITESWAR NAGAR	1	P1
251	Jajpur	JTED	TOWN NO-I	LALITESWAR 100 KVA	1	P1
252	Jajpur	JTED	TOWN NO-I	LALITESWAR 100 KVA	1	P1
253	Jajpur	JTED	TOWN NO-I	SANTHESWARPUR 500KVA	1	P1
254	Jajpur	JTED	TOWN NO-I	JODIKUA 500KVA	1	P1
255	Jajpur	JTED	TOWN NO-I	TRIMUTI HALL 500KVA	1	P1
256	Jajpur	JTED	TOWN NO-I	AMBIKAI 100KVA	1	P1
257	Jajpur	JTED	TOWN NO-I	RAGHUNATHPUR 100 KVA	1	P1
258	Jajpur	JTED	TOWN NO-I	SIBA STATUE 100 KVA, 11/0.4 KV	1	P1
259	Jajpur	JTED	TOWN NO-I	BARAHANATH 100 KVA, 11/0.4 KV	1	P1
260	Jajpur	JTED	TOWN NO-I	GANAPATIPUR 100 KVA	1	P1
261	Jajpur	JTED	TOWN NO-I	NARSINGHPUR 100 KVA	1	P1
262	Keonjhar	AED	ANANDAPUR	BAITARANI BIHAR SHAW MIL GALI 100KVA	1	P1
263	Keonjhar	AED	ANANDAPUR	BJD OFFICE 100KVA	1	P1
264	Keonjhar	AED	ANANDAPUR	BADA MALLICK SAHI 100KVA	1	P1
265	Keonjhar	AED	ANANDAPUR	BADA MALLICK SAHI KHUSI PRINTER 100KVA	1	P1
266	Keonjhar	AED	ANANDAPUR	BADADANDA 100KVA	1	P1
267	Keonjhar	AED	ANANDAPUR	B.N HIGH SCHOOL FIELD FRONT 100KVA	1	P1
268	Keonjhar	AED	ANANDAPUR	B.N. HIGHSCHOOL HOSTEL BACK SIDE 100KVA	1	P1
269	Keonjhar	AED	ANANDAPUR	KANCHA SAHI 100KVA	1	P1
270	Keonjhar	AED	ANANDAPUR	PADAMPUR NUA SAAHI 100KVA	1	P1
271	Keonjhar	AED	ANANDAPUR	PADAMPUR NUA SAAHI 100KVA	1	P1
272	Keonjhar	AED	ANANDAPUR	DEHURI SAHI 100KVA	1	P1
273	Keonjhar	AED	GHASIPURA	SATSANG BIHAR 100 KVA	1	P1
274	Keonjhar	AED	GHASIPURA	SAILONG SMASAN 100 KVA	1	P1
275	Keonjhar	AED	GHASIPURA	DHANEISALA 100 KVA	1	P1
276	Keonjhar	AED	GHASIPURA	HANUMAN CHHAKA SAILONG 100 KVA	1	P1
277	Keonjhar	AED	GHASIPURA	PODAKHAMAN VILLAGE 100 KVA	1	P1
278	Keonjhar	AED	GHASIPURA	SARAGODAM 100 KVA	1	P1
279	Keonjhar	AED	GHASIPURA	SDPO RESIDENCY 100 KVA	1	P1
280	Keonjhar	AED	GHASIPURA	SAREIN 100 KVA	1	P1
281	Keonjhar	AED	GHASIPURA	SUDUSUDIA NEAR SCHOOL 100 KVA	1	P1
282	Keonjhar	AED	GHASIPURA	SALAPADA 100 KVA	1	P1
283	Keonjhar	AED	GHASIPURA	BARIGAON GOLDEN SAHI 100 KVA	1	P1
284	Keonjhar	AED	GHASIPURA	BELABAHALI KUNDULEI 100 KVA	1	P1
285	Keonjhar	AED	GHASIPURA	PURUNIA 100KVA	1	P1
286	Keonjhar	AED	GHASIPURA	TOLANKAPADA 100 KVA	1	P1
287	Baripada	UED	UDALA	Near padu house 100 kva nuasahi	1	P1
288	Baripada	UED	UDALA	Madavati gadani 100 kva	1	P1
289	Baripada	UED	UDALA	Debi nana 100 kva Mendhakhai	1	P1
290	Baripada	UED	UDALA	Near tulasi kalyan mandap100 kva	1	P1
291	Baripada	UED	UDALA	Reliance side 100 kva	1	P1
292	Baripada	UED	UDALA	Rita jena 100 kva	1	P1
293	Baripada	UED	UDALA	Lashkhana 250 kva	1	P1
294	Baripada	UED	UDALA	Satsangha front 100 kva	1	P1
295	Baripada	UED	UDALA	jagannath temple 100 kva	1	P1
296	Baripada	UED	UDALA	Balia gas 100 kva	1	P1
297	Baripada	UED	UDALA	Mahadev pokahri 100 kva	1	P1
298	Baripada	UED	UDALA	Abi contractor 100 kva	1	P1
299	Baripada	UED	UDALA	Athangan pani 100 kva	1	P1
300	Baripada	UED	UDALA	Athanagan field 100 kva	1	P1
301	Baripada	UED	UDALA	Bausapal-1 100 kva	1	P1
302	Baripada	UED	UDALA	Bausapal-2 100 kva	1	P1
303	Baripada	UED	BADASAH	TIKARAPADA(25KVA,100KVA)	1	P1
304	Baripada	UED	BADASAH	UTHANINUAGAN(100KVA)	1	P1
305	Baripada	UED	BADASAH	SINGTIA POKHARI ADI (100KVA)	1	P1
306	Baripada	UED	KHUNTA	DHANGHERA 100 KVA	1	P1
307	Baripada	UED	KHUNTA	BADFENI 100 KVA	1	P1
308	Baripada	UED	KHUNTA	DIGINUMASAH 100 KVA	1	P1
309	Baripada	UED	BADASAH	SINGTIA POKHARI ADI (100KVA)	1	P1
310	Baripada	UED	BADASAH	BADASAH BLOCK (100KVA)	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
311	Baripada	UED	BADASAH	BADKERKO(100KVA)	1	P1
312	Baripada	UED	BADASAH	TIKARAPADA(100KVA)	1	P1
313	Jajpur	JRED	CHORDA	HOME SWEETS 100 KVA	1	P1
314	Jajpur	JRED	CHORDA	VYASA VIHAR LANE 100 KVA	1	P1
315	Jajpur	JRED	CHORDA	DTR 250 KVA	1	P1
316	Jajpur	JRED	CHORDA	KALI MELANA FIELD 100 KVA	1	P1
317	Jajpur	JRED	CHORDA	SIVAMANDIR LANE 1 100/25/16 KVA	1	P1
318	Jajpur	JRED	CHORDA	NURCERY 100 KVA	1	P1
319	Jajpur	JRED	CHORDA	PRIYA HOTEL LANE 100 KVA	1	P1
320	Jajpur	JRED	CHORDA	S/R OFFICE 100 KVA	1	P1
321	Jajpur	JRED	CHORDA	NEAR STADIUM 2NOS 100 KVA	1	P1
322	Jajpur	JRED	CHORDA	BY PASS 250 KVA	1	P1
323	Jajpur	JRED	CHORDA	TASHIL OFFICE 100,500	1	P1
324	Jajpur	JRED	CHORDA	MAPATA 250/100	1	P1
325	Jajpur	JRED	DANAGADI	DANAGADI LIQUOR SHOP-100KVA	1	P1
326	Jajpur	JRED	DANAGADI	NUAGAAN SCHOOL NEAR-100KVA	1	P1
327	Jajpur	JRED	DANAGADI	BALUNGABANDI-100KVA	1	P1
328	Jajpur	JRED	KORAI	MALARIA100KV	1	P1
329	Jajpur	JRED	KORAI	UPARAGADA100KV	1	P1
330	Jajpur	JRED	KORAI	ALLIA100KVA	1	P1
331	Jajpur	JRED	KORAI	DHANAPUR 100KVA	1	P1
332	Jajpur	JRED	KORAI	TALUNGA 100KVA	1	P1
333	Jajpur	JRED	KORAI	KURUPADA100KVA	1	P1
334	Jajpur	JRED	KORAI	KURUPADA100KVA	1	P1
335	Jajpur	JRED	KORAI	JUGALA 100KVA	1	P1
336	Jajpur	JRED	KORAI	JALANDA 100KVA	1	P1
337	Jajpur	JRED	KORAI	TALAGADIA 100KVA	1	P1
338	Jajpur	JRED	PANIKOILI	Kankala 100 KvA	1	P1
339	Jajpur	JRED	PANIKOILI	Mahadev Sahi 100 KvA	1	P1
340	Jajpur	JRED	PANIKOILI	Balidanda Sahi 100 KvA	1	P1
341	Jajpur	JRED	PANIKOILI	Dhal Sahi 100 KvA	1	P1
342	Jajpur	JRED	PANIKOILI	Patharapada 100 KvA	1	P1
343	Jajpur	JRED	PANIKOILI	Ganaesh Bazar 250 KvA	1	P1
344	Jajpur	JRED	PANIKOILI	Purustommpur 100 KV	1	P1
345	Jajpur	KUED	KABATABANDHA	GAHANA, 100KVA	1	P1
346	Jajpur	KUED	KABATABANDHA	SHYAMSUNDARPUR, 100KVA	1	P1
347	Jajpur	KUED	KABATABANDHA	CHARAGOTHA, 100KVA	1	P1
348	Jajpur	KUED	KABATABANDHA	MADHUSUDANPUR 100KVA	1	P1
349	Jajpur	KUED	KABATABANDHA	Paridasahi 100kva	1	P1
350	Jajpur	KUED	KABATABANDHA	Nuasahi 100kva	1	P1
351	Jajpur	KUED	KABATABANDHA	Mandapsahi 100kva	1	P1
352	Jajpur	KUED	KABATABANDHA	Natilo 100kva	1	P1
353	Jajpur	KUED	KABATABANDHA	Rekhideipur 100kva	1	P1
354	Jajpur	KUED	KABATABANDHA	Talagada 100kva	1	P1
355	Jajpur	KUED	KABATABANDHA	endalaba 100kva	1	P1
356	Jajpur	KUED	KABATABANDHA	talajanga 100kva	1	P1
357	Jajpur	KUED	KABATABANDHA	Balabhadrapur 100kva	1	P1
358	Jajpur	KUED	KABATABANDHA	Taras 100kva	1	P1
359	Jajpur	KUED	KABATABANDHA	Sorai 100kva	1	P1
360	Jajpur	KUED	KABATABANDHA	Arimula 100kva	1	P1
361	Jajpur	KUED	KABATABANDHA	Durgapadia 100kva	1	P1
362	Jajpur	KUED	KABATABANDHA	Sendapur 100kva	1	P1
363	Jajpur	KUED	KABATABANDHA	Harichandanpur 100kva	1	P1
364	Jajpur	KUED	KABATABANDHA	Baralasahi 100kva	1	P1
365	Jajpur	KUED	KABATABANDHA	Durgapadia 100kva near school	1	P1
366	Jajpur	KUED	KABATABANDHA	Brundadeipur 100kva	1	P1
367	Jajpur	KUED	KABATABANDHA	Dahipur 100kva	1	P1
368	Jajpur	KUED	JARAKA	SANKHARIDHIA 100KVA	1	P1
369	Jajpur	KUED	JARAKA	NUAGAON 100KVA	1	P1
370	Jajpur	KUED	JARAKA	CHAHATA MOHANTYSAHI 100KVA	1	P1
371	Baripada	BPED	SARASKANA	MALKUNDA 100 KVA	1	P1
372	Baripada	BPED	SARASKANA	BAGBUDA PANCHAYAT 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
373	Baripada	BPED	JOKA	KAIRAKOCHA 100 KVA	1	P1
374	Baripada	BPED	JOKA	POKHARIA 100 KVA	1	P1
375	Baripada	BPED	joka	joka 100 kva	1	P1
376	Baripada	BPED	RAGHUNATHPUR	BAIDIPUR 100KVA	1	P1
377	Baripada	BPED	RAGHUNATHPUR	MAHARAJPUR 100 KVA	1	P1
378	Baripada	BPED	RAGHUNATHPUR	KALIA CHAKA 100 KVA	1	P1
379	Baripada	BPED	RAGHUNATHPUR	KUKUDAJODI 100 KVA	1	P1
380	Baripada	BPED	RAGHUNATHPUR	CHANDUA 100 KVA	1	P1
381	Baripada	BPED	RAGHUNATHPUR	JITBHOLE 100 KVA	1	P1
382	Baripada	BPED	RAGHUNATHPUR	BHUDRUBANI 100 KVA	1	P1
383	Baripada	BPED	No-II	Majhi Sahi 100 KVA	1	P1
384	Baripada	BPED	No-II	Mohanta Sahi 100 kva	1	P1
385	Baripada	BPED	No-II	Nath Goli 100 Kva	1	P1
386	Baripada	BPED	No-II	Tulasi Mandap 100 kva	1	P1
387	Baripada	BPED	NO-1	SATO VOUNI 100KVA	1	P1
388	Baripada	BPED	NO-1	PINTU MAITY FRONT 100KVA	1	P1
389	Baripada	BPED	NO-1	YAMAH FRONT 100KVA	1	P1
390	Baripada	BPED	NO-1	YAMAH SIDE 100KVA	1	P1
391	Baripada	BPED	NO-1	RANISATI 250KVA	1	P1
392	Baripada	BPED	NO-1	BALIBUHA 100KVA	1	P1
393	Baripada	BPED	NO-1	KABARKHANA 100KVA	1	P1
394	Baripada	BPED	NO-1	RAKHALGOPE 100KVA	1	P1
395	Baripada	BPED	NO-1	Madan Saree 100 KVA	1	P1
396	Baripada	BPED	Rasgobindpur	Judpada, 100 kva,11/0.4 kv	1	P1
397	Keonjhar	KED	TURUMUNGA	UCHABALI 100KVA	1	P1
398	Keonjhar	KED	TURUMUNGA	KERI 100 KVA	1	P1
399	Keonjhar	KED	TURUMUNGA	MAIDANKEL 100 KVA	1	P1
400	Keonjhar	KED	TURUMUNGA	KERI BADAPASI 100 KVA	1	P1
401	Keonjhar	KED	TURUMUNGA	DALANGA 100 KVA	1	P1
402	Keonjhar	KED	TURUMUNGA	TURUMUNGA PRUSTY SAHI 100 KVA	1	P1
403	Keonjhar	KED	TURUMUNGA	TURUMUNGA 100 KVA	1	P1
404	Keonjhar	KED	TURUMUNGA	BARKHANDA 100 KVA	1	P1
405	Keonjhar	KED	TURUMUNGA	DENUA 100 KVA	1	P1
406	Keonjhar	KED	TURUMUNGA	CHANGUAPADA 100 KVA	1	P1
407	Keonjhar	KED	TURUMUNGA	PATNALI 100 KVA	1	P1
408	Keonjhar	KED	TURUMUNGA	RAJNAGAR 100KVA	1	P1
409	Keonjhar	KED	TURUMUNGA	MURUSUAN 100 KVA	1	P1
410	Keonjhar	KED	TURUMUNGA	MURUSUAN 100 KVA	1	P1
411	Keonjhar	KED	TURUMUNGA	PADAMAPUR 100 KVA	1	P1
412	Keonjhar	KED	TURUMUNGA	RAJNAGAR MARKET 100 KVA	1	P1
413	Keonjhar	KED	PATNA	MIRIGIKHOJI(100KVA)	1	P1
414	Keonjhar	KED	PATNA	JHATIPADA(100KVA)	1	P1
415	Keonjhar	KED	PATNA	GULDIPOSI(100KVA)	1	P1
416	Keonjhar	KED	SAHARPADA	MACHHAGARH OLD 100 KVA MARKET DTR	1	P1
417	Keonjhar	KED	SAHARPADA	KAMARMARA 100 KVA	1	P1
418	Keonjhar	KED	SAHARPADA	BELASARI 100 KVA	1	P1
419	Keonjhar	KED	SAHARPADA	UDAYPUR PARIDA SAHI 100 KVA	1	P1
420	Keonjhar	KED	SAHARPADA	UDAYPUR DEULA SAHI 100 KVA	1	P1
421	Keonjhar	KED	SAHARPADA	GOJAPATHAR 100 KVA	1	P1
422	Keonjhar	KED	SAHARPADA	BAIKALA 100 KVA	1	P1
423	Keonjhar	KED	SAHARPADA	SILIPADA OLIC 100 KVA	1	P1
424	Keonjhar	KED	SAHARPADA	BEGUNAPOSI 100 KVA	1	P1
425	Keonjhar	KED	SAHARPADA	KHUNTAPINGU 100 KVA	1	P1
426	Keonjhar	KED	SAHARPADA	JAMUDA 100 KVA	1	P1
427	Balasore	CED	SERGARGH	BAGUDAPADA 100KVA	1	P1
428	Balasore	CED	SERGARGH	BALERI NEW 100KVA	1	P1
429	Balasore	CED	SERGARGH	BELERI OLD 100 KVA	1	P1
430	Balasore	CED	SERGARGH	SANIMANDIR 100KVA	1	P1
431	Balasore	CED	SERGARGH	KUAUMSTUDIA 100KVA	1	P1
432	Balasore	CED	SERGARGH	HULIPADA 100KVA	1	P1
433	Balasore	CED	SERGARGH	KHAPRAPADA 100KVA	1	P1
434	Balasore	CED	SERGARGH	PANCHAGARH 100KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
435	Balasore	CED	SERGARGH	BANSAMUHA 100KVA	1	P1
436	Balasore	CED	SERGARGH	HARAPADA 100KVA	1	P1
437	Balasore	CED	SERGARGH	BARPADA 100KVA	1	P1
438	Balasore	CED	SERGARGH	PARAHATA 100KVAY	1	P1
439	Balasore	CED	SERGARGH	SERGARGH VILLAGE 100KVA	1	P1
440	Balasore	CED	SERGARGH	PATRA 100 KVA	1	P1
441	Balasore	CED	SERGARGH	BARUNSINGH 100KVA	1	P1
442	Balasore	CED	SERGARGH	GADAPADA 100KVA	1	P1
443	Balasore	CED	SERGARGH	KHANAGAR 100KVA	1	P1
444	Balasore	CED	SERGARGH	BAMPADA NEW COLONY 100 KVA	1	P1
445	Balasore	CED	SERGARGH	BAMPADA 100 KVA	1	P1
446	Balasore	CED	SERGARGH	SARASWATIPUR 2NOS 100 KVA	1	P1
447	Balasore	CED	SERGARGH	SARASWATIPUR PANCHYAT OFC 100 KVAS	1	P1
448	Balasore	CED	SERGARGH	SARASWATIPUR 100 KVA	1	P1
449	Balasore	CED	SERGARGH	GAOLABOIL 100 KVA	1	P1
450	Balasore	CED	SERGARGH	KURUDA VIOLLAGE 100 KVA	1	P1
451	Balasore	CED	SERGARGH	SUMAPACKEGING 100 KVA	1	P1
452	Balasore	CED	SERGARGH	SAHU ICE FACTERY 100 KVA	1	P1
453	Balasore	CED	SERGARGH	SRIBANTAPUR 100 KVA	1	P1
454	Balasore	CED	SERGARGH	CHANPUR 3 100 KVA	1	P1
455	Balasore	CED	SERGARGH	CHANPUR 2 100 KVA	1	P1
456	Balasore	CED	SERGARGH	BILPARIA 100 KVA (2NOS)	1	P1
457	Balasore	CED	SERGARGH	KURKURA 100 KVA	1	P1
458	Balasore	JED	NAMPO	Ambliatha (2nos of 100kva)	1	P1
459	Balasore	JED	NAMPO	Kasidia 100kva	1	P1
460	Balasore	JED	NAMPO	Beligopinathapur (2nos of 100kva)	1	P1
461	Balasore	JED	NAMPO	Ambliatha (100kva)	1	P1
462	Balasore	JED	NAMPO	Swapneswar(2nos of 100kva)	1	P1
463	Balasore	JED	NAMPO	Nachimpur(100kva)	1	P1
464	Balasore	JED	NAMPO	Nachimpur(100kva & 63Kva)	1	P1
465	Balasore	JED	Chandaneswar	Akendi (100 Kva)	1	P1
466	Balasore	JED	Chandaneswar	Dumaipur (100 Kva)	1	P1
467	Balasore	JED	Chandaneswar	Gochidateghari(100 kva)	1	P1
468	Balasore	JED	Chandaneswar	BadsarisaPs (100 kva)	1	P1
469	Balasore	JED	Chandaneswar	Border (100 kva)	1	P1
470	Balasore	JED	Chandaneswar	Udaypur (100 kva)	1	P1
471	Balasore	JED	Chandaneswar	Padmapur (100 kva)	1	P1
472	Balasore	JED	Chandaneswar	Sita hotel (100 kva)	1	P1
473	Balasore	JED	Chandaneswar	Karanjasul (100 kva)	1	P1
474	Balasore	JED	Chandaneswar	Chandipur (100 kva)	1	P1
475	Balasore	JED	Chandaneswar	Mundhabania (100 kva)	1	P1
476	Balasore	JED	Chandaneswar	Kumbhariasahi (100 kva)	1	P1
477	Balasore	JED	Chandaneswar	Ambachua (100 kva)	1	P1
478	Balasore	JED	Chandaneswar	Kochiladangar (100 kva)	1	P1
479	Balasore	JED	Chandaneswar	Kochiladangor Tarapur School (100 kva)	1	P1
480	Balasore	JED	Chandaneswar	Nimatpur Hata (100 kva)	1	P1
481	Balasore	JED	Chandaneswar	Dihakakhada (100 Kva)	1	P1
482	Balasore	JED	Chandaneswar	Nimatpur Hospital(100 kva)	1	P1
483	Balasore	JED	Chandaneswar	Musadpur (100 kva)	1	P1
484	Balasore	JED	Chandaneswar	Pasarbindha A (100 kva)	1	P1
485	Balasore	JED	Chandaneswar	Pasarbindha B (100 kva)	1	P1
486	Balasore	SED	ANANTAPUR	PATIMUNDA 100KVA (URGENT)	1	P1
487	Balasore	SED	ADABAZAR	BEGUNIA 100KVA	1	P1
488	Balasore	SED	ADABAZAR	KUNDI 100KVA	1	P1
489	Balasore	SED	OUPADA	AGHASUL 100 KVA	1	P1
490	Balasore	SED	OUPADA	NUAGAN 100 KVA	1	P1
491	Balasore	SED	OUPADA	BUDAKHUNTA 100 KVA	1	P1
492	Balasore	SED	OUPADA	KAMARPAL 100 KVA (NOS)	1	P1
493	Balasore	SED	OUPADA	GARUDAHATA 100 KVA	1	P1
494	Balasore	SED	OUPADA	DARIPOKHARI 100 KVA	1	P1
495	Balasore	SED	OUPADA	BADAPOKARI OLD 100 KVA	1	P1
496	Balasore	SED	SORO NO II	BARTANA 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
497	Balasure	SED	SORO NO II	TENTULIGACHI 100 KVA	1	P1
498	Balasure	SED	SORO NO II	BARTANA 100 KVA	1	P1
499	Balasure	SED	SORO NO II	JUNAGADIA SASANA 100 KVA	1	P1
500	Balasure	SED	SORO NO II	SADHUAPADA 100 KVA	1	P1
501	Balasure	SED	SORO NO II	TALAMULISINGH 100 KVA	1	P1
502	Balasure	SED	SORO NO II	CHARIGHARIA SAHI 100 KVA	1	P1
503	Balasure	SED	SORO NO II	NUAGAN ME SCHOOL 100 KVA	1	P1
504	Balasure	SED	SORO NO II	SULTANPUR 100 KVA	1	P1
505	Balasure	SED	SORO NO II	MAHAPATRA SAHI 100 KVA	1	P1
506	Balasure	SED	SORO NO II	MULISINGH CHAKA 100 KVA	1	P1
507	Balasure	SED	SORO NO II	KHANDA SAHI (1) 100 KVA	1	P1
508	Balasure	SED	SORO NO II	KHANDASAH (2) 100 KVA	1	P1
509	Balasure	SED	SORO NO II	MEGHAMADHABA (1) 100 KVA	1	P1
510	Balasure	SED	SORO NO II	MEGHAMADHABA (2) 100 KVA	1	P1
511	Balasure	SED	SORO NO II	MADHUSUDANPUR (2) 100 KVA	1	P1
512	Balasure	SED	SORO NO II	MADHUSUDANPUR (3) 100 KVA	1	P1
513	Balasure	SED	SORO NO II	EKSAYA 100 KVA	1	P1
514	Baripada	RED	KANTABANI	BADAMTALIA MANDIR SAHI 100 KVA	1	P1
515	Baripada	RED	KANTABANI	BADAMTALIA CHOKE 100 KVA	1	P1
516	Baripada	RED	KANTABANI	TIKAHIA 100 KVA	1	P1
517	Baripada	RED	KANTABANI	KHEJURIA 100 KVA	1	P1
518	Baripada	RED	Tiring	Bad dalima -100 KVA	1	P1
519	Baripada	RED	KARANJIA NO-I	KARADIA SISU MANDIR-100KVA	1	P1
520	Baripada	RED	KARANJIA NO-I	SARUBALI MUNDASAH-100KVA	1	P1
521	Baripada	RED	KARANJIA NO-I	SIMILIPAL SCHOOL-100KVA	1	P1
522	Baripada	RED	KARANJIA NO-I	NEAR BHUJABAL HOUSE-100KVA	1	P1
523	Baripada	RED	KARANJIA NO-I	BACK SIDE OF FOREST OFFICE-100KVA	1	P1
524	Baripada	RED	KARANJIA NO-I	PAKUTSAHI-100KVA	1	P1
525	Baripada	RED	KARANJIA NO-I	SAHARPADA BYPASS-100KVA	1	P1
526	Baripada	RED	KARANJIA NO-I	VIVEKANANDA SCHOOL-1-100KVA	1	P1
527	Baripada	RED	KARANJIA NO-I	AMBIKA COLONY-1-100KVA	1	P1
528	Baripada	RED	KARANJIA NO-I	AMBIKA COLONY-2-100KVA	1	P1
529	Baripada	RED	KARANJIA NO-I	GIRIMA SCHOOL BACK SIDE-100KVA	1	P1
530	Baripada	RED	KARANJIA NO-I	GHODAGHAGURI 100KVA	1	P1
531	Baripada	RED	KARANJIA NO-I	SARASPOSI 100KVA	1	P1
532	Baripada	RED	KARANJIA NO-I	SARASPOSI 100KVA	1	P1
533	Baripada	RED	KARANJIA NO-I	JHADDUMURIA 100KVA	1	P1
534	Baripada	RED	KARANJIA NO-I	DIAJODI 100KVA	1	P1
535	Baripada	RED	KARANJIA NO-I	KALYANI MANDAP-200KVA/100KVA	1	P1
536	Balasure	BED	NO-1	BALASURE SAWMILL 100 KVA (IPDS)	1	P1
537	Balasure	BED	NO-1	BALASURE SAWMILL 100 KVA	1	P1
538	Balasure	BED	NO-1	MARWADI 100 KVA (IPDS)	1	P1
539	Balasure	BED	NO-1	CONGRESS GALI 100 KVA (IPDS)	1	P1
540	Balasure	BED	NO-III	FIRINGIPATNA 200& 100KVA	1	P1
541	Balasure	BED	NO-III	BRUNDABATIBIHAR100 KVA	1	P1
542	Balasure	BED	NO-III	KALIDASPUR 100 KVA	1	P1
543	Balasure	BED	NO-III	BALIA SCHOOL100KVA	1	P1
544	Balasure	BED	NO-III	SADANGI CONTRACTOR 100KVA	1	P1
545	Balasure	BED	NO-III	BIJAYNAGAR100 KVA	1	P1
546	Balasure	BED	NO-III	BIJAYNAGAR100 KVA	1	P1
547	Balasure	BED	NO-III	10TH BOARD OFFICE100 KVA	1	P1
548	Balasure	BED	NO-III	SIJUBADI100KVA	1	P1
549	Balasure	BED	NO-III	CHANDANPOKHARI100KVA	1	P1
550	Balasure	BED	NO-III	SAHADEVKHUNTA HANUMAN MANDIR100KVA	1	P1
551	Balasure	BED	Ganeswarpur	Bhimpura Chhaka 100kva	1	P1
552	Balasure	BED	Ganeswarpur	Rameswarpur PSS 100kva	1	P1
553	Balasure	BED	Ganeswarpur	Panjha 100kva IPDS	1	P1
554	Balasure	BED	Ganeswarpur	Bhimpura Village 100kva DTR	1	P1
555	Bhadrak	BSED	ASURALI	PATRI SAHI 100KVA	1	P1
556	Bhadrak	BSED	BHANDARIPOKHARI-I	TESINGA 100 KVA	1	P1
557	Bhadrak	BSED	BHANDARIPOKHARI-I	SARO BANGALI SAHI 100 KVA	1	P1
558	Bhadrak	BSED	BHANDARIPOKHARI-I	SAO BHARTI SAHI 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
559	Bhadrak	BSED	BHANDARIPOKHARI-I	JHUTUNA 100 KVA JENA SAHI	1	P1
560	Bhadrak	BSED	Agarpada	OLANGA CHAKKA 100 KVA	1	P1
561	Bhadrak	BSED	Agarpada	OLANGA SASAN 100 KVA	1	P1
562	Bhadrak	BSED	Agarpada	GOBINDPUR 100 KVA	1	P1
563	Bhadrak	BSED	Agarpada	GOPIBALLAVPUR 100 KVA	1	P1
564	Bhadrak	BSED	Agarpada	Ogalpur 100 kva	1	P1
565	Bhadrak	BSED	Agarpada	Geltua 100 KVA	1	P1
566	Bhadrak	BSED	Agarpada	Jalanga 100 KVA	1	P1
567	Bhadrak	BSED	AGARPADA	BARPADA VILLAGE 100 KVA	1	P1
568	Bhadrak	BSED	AGARPADA	BARPADA MARKET 100 KVA	1	P1
569	Bhadrak	BSED	AGARPADA	MEDICAL 100 KVA	1	P1
570	Bhadrak	BSED	AGARPADA	HALDIPANI 100KVA	1	P1
571	Bhadrak	BSED	AGARPADA	KUSUN NAGAR 100KVA	1	P1
572	Bhadrak	BSED	AGARPADA	CHADHEYA 100KVA	1	P1
573	Bhadrak	BSED	AGARPADA	SIRAPUR 100 KVA	1	P1
574	Bhadrak	BSED	AGARPADA	SARTULA 100KVA	1	P1
575	Bhadrak	BSED	AGARPADA	KUNDULA 100KVA	1	P1
576	Bhadrak	BSED	AGARPADA	aluati 100KVA	1	P1
577	Bhadrak	BNED	BDK-1	MAYURIKA 100 KVA	1	P1
578	Bhadrak	BNED	BDK-1	MASTER BABU 100 KVA	1	P1
579	Bhadrak	BNED	BDK-1	KARA SAHI 100 KVA	1	P1
580	Bhadrak	BNED	BHADRAK NO 2	BABUSAH1 100 KVA	1	P1
581	Bhadrak	BNED	BHADRAK NO 2	PANDAGALI 100 KVA	1	P1
582	Bhadrak	BNED	BHADRAK NO 2	THANAPATI 100 KVA	1	P1
583	Bhadrak	BNED	BHADRAK NO 2	THANAPATI 100 KVA	1	P1
584	Bhadrak	BNED	BHADRAK NO 2	SALIPUR 100KVA	1	P1
585	Bhadrak	BNED	BHADRAK NO 2	DURGAPUR 100 KVA	1	P1
586	Bhadrak	BNED	BHADRAK NO 2	DURGAPUR 100 KVA	1	P1
587	Bhadrak	BNED	BHADRAK NO 2	DURGAPUR 100 KVA	1	P1
588	Bhadrak	BNED	BHADRAK NO 2	MUKTISAH1 100 KVA	1	P1
589	Bhadrak	BNED	BHADRAK NO 2	GOUSIYSNAGAR 100KVA	1	P1
590	Bhadrak	BNED	BHADRAK NO 2	RADIO BULBUL 100 KVA	1	P1
591	Bhadrak	BNED	BHADRAK NO 2	BABA MANDAP100KVA	1	P1
592	Bhadrak	BNED	BHADRAK NO 2	YUSUFPUR 100KVA	1	P1
593	Bhadrak	BNED	BHADRAK NO 2	HAMIRBINDHA 100 KVA	1	P1
594	Bhadrak	BNED	BHADRAK NO 2	HAMIRBINDHA 100 KVA	1	P1
595	Bhadrak	BNED	BHADRAK NO 2	MOTIBNAGAR 100 KVA	1	P1
596	Balasore	BTED	Basta-2	Dandi 100kva	1	P1
597	Balasore	BTED	Basta-2	Indipada 100kva	1	P1
598	Balasore	BTED	Basta-2	Sankhua pada100 kva	1	P1
599	Balasore	BTED	Basta-2	Kunduli 100kva	1	P1
600	Balasore	BTED	Basta-2	Sankhua 100kva near school	1	P1
601	Balasore	BTED	Basta-2	Palasia 100kv	1	P1
602	Balasore	BTED	Basta-2	Kundali 2 100 kva	1	P1
603	Balasore	BTED	Basta-2	Gamhalundi no-1 100kva	1	P1
604	Balasore	BTED	BASTA-I	Bramanada 2 100kva	1	P1
605	Balasore	BTED	BASTA-I	Madhubhanda 100kva Dp tilted	1	P1
606	Balasore	BTED	Rajghat	matha 100kva	1	P1
607	Balasore	BTED	JAMSULI	100 KVA DTR DONDKOT	1	P1
608	Balasore	BTED	JAMSULI	100 KVA DTR BELUHA	1	P1
609	Balasore	BTED	JAMSULI	100 KVA DTR PAUNSKULI	1	P1
610	Balasore	BTED	Langaleswar	Bolang 100kva	1	P1
611	Balasore	BTED	Langaleswar	Saudi 100kva	1	P1
612	Balasore	BTED	Langaleswar	D.mohabala 100kva	1	P1
613	Balasore	BTED	Langaleswar	Nuagan 100kva	1	P1
614	Balasore	BTED	Langaleswar	Dangapita 100kva	1	P1
615	Jajpur	JTED	TOWN NO-I	LALBAG 100 KVA	1	P1
616	Jajpur	JTED	TOWN NO-I	100 KVA BELAMPUR	1	P1
617	Jajpur	JTED	TOWN NO-I	100 KVA BEPARIBERHAMPUR	1	P1
618	Jajpur	JTED	TOWN NO-I	GOBARDHANPUR 100 KVA	1	P1
619	Jajpur	JTED	TOWN NO-I	SUNDARIMUHAN CHHAKA 1*100 KVA+2*16 KVA	1	P1
620	Jajpur	JTED	TOWN NO-I	BEPARIBERHAMPUR 100 KVA NEAR KALIMEGHA	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
621	Jajpur	JTED	TOWN NO-I	KUSUMA SWIMMING POOL 100 KVA	1	P1
622	Jajpur	JTED	TOWN NO-III	Collage square 100 kva	1	P1
623	Jajpur	JTED	TOWN NO-III	Gokhana school 100 kva	1	P1
624	Jajpur	JTED	TOWN NO-III	Mallikapur 100 kva	1	P1
625	Jajpur	JTED	TOWN NO-III	Fakirtakia 100 kva	1	P1
626	Jajpur	JTED	TOWN NO-III	Gokhana goudasahi 100 kva	1	P1
627	Jajpur	JTED	TOWN NO-III	Bichitrapur 100 kva	1	P1
628	Jajpur	JTED	TOWN NO-III	Ganeswarpur 100 kva	1	P1
629	Jajpur	JTED	TOWN NO-III	Chainpur 100kva	1	P1
630	Jajpur	JTED	TOWN NO-III	Mirzapur 100 kva	1	P1
631	Jajpur	JTED	TOWN NO-III	Bidyadharpur 100 kva	1	P1
632	Jajpur	JTED	TOWN NO-III	Similia 100 kva	1	P1
633	Keonjhar	AED	GHASIPURA	BELABAHALI KUNDULEI 100 KVA	1	P1
634	Keonjhar	AED	GHASIPURA	CHATRA 100 KVA	1	P1
635	Keonjhar	AED	GHASIPURA	HATIBANDHA 100 KVA	1	P1
636	Keonjhar	AED	GHASIPURA	PADANPUR 100 KVA	1	P1
637	Keonjhar	AED	GHASIPURA	BHANDARIDIHA 100 KVA	1	P1
638	Keonjhar	AED	GHASIPURA	BHANDARIDIHA 100 KVA	1	P1
639	Keonjhar	AED	GHASIPURA	ATTASAH PATANA 100 KVA	1	P1
640	Keonjhar	AED	GHASIPURA	BALARAMPUR NEAR WATER SUPPLY 100 KVA	1	P1
641	Keonjhar	AED	GHASIPURA	DHAUDIDIHA 100 KVA	1	P1
642	Keonjhar	AED	GHASIPURA	BHOLANUAGAON 100 KVA	1	P1
643	Keonjhar	AED	GHASIPURA	JHARKHUNDI 100 KVA	1	P1
644	Keonjhar	AED	GHASIPURA	BADAEKTALI 100 KVA	1	P1
645	Keonjhar	AED	GHASIPURA	KUNDAKOTE 100 KVA	1	P1
646	Keonjhar	AED	GHASIPURA	JALINANADA 100 KVA	1	P1
647	Keonjhar	AED	GHASIPURA	BHALUKUMA NEAR GIRLS HIGH SCHOOL 100 KVA	1	P1
648	Keonjhar	AED	GHASIPURA	GOHIRA 100 KVA	1	P1
649	Keonjhar	AED	GHASIPURA	ARJUN BANIA 100 KVA	1	P1
650	Keonjhar	AED	RAMACHANDRAPUR	MACHHALO CHHAKA(100KVA)YES	1	P1
651	Keonjhar	AED	RAMACHANDRAPUR	ALATI G.BGODA(100KVA)	1	P1
652	Baripada	UED	UDALA	Rita jena 100 kva	1	P1
653	Baripada	UED	UDALA	Balia gas 100 kva	1	P1
654	Baripada	UED	UDALA	Athanagan field 100 kva	1	P1
655	Jajpur	JRED	CHORDA	CHANDAMA 100	1	P1
656	Jajpur	JRED	CHORDA	CHANDAMA NUA SAHI 100 KVA	1	P1
657	Jajpur	JRED	CHORDA	CHANDAMA 100 KVA FIELD	1	P1
658	Jajpur	JRED	PANIKOILI	Balikuda Double 100 KV	1	P1
659	Jajpur	JRED	PANIKOILI	Badatrilochanpur 100 KV	1	P1
660	Jajpur	JRED	PANIKOILI	Badatrilochanpur / Nuapatna 100 KV	1	P1
661	Jajpur	JRED	PANIKOILI	Sahipur -3 100 KV	1	P1
662	Jajpur	JRED	PANIKOILI	Sanatrilochanpur 100 KV	1	P1
663	Jajpur	JRED	PANIKOILI	Abadalpur Bania Sahi 100 KV	1	P1
664	Jajpur	JRED	PANIKOILI	Abdalpur Barik Sahi 100 KV	1	P1
665	Jajpur	JRED	PANIKOILI	Jafarpur 100 KV	1	P1
666	Jajpur	JRED	PANIKOILI	Ochinda 100 KvA	1	P1
667	Jajpur	JRED	PANIKOILI	Sarata Sahoo 100 KvA	1	P1
668	Jajpur	JRED	PANIKOILI	Nekursuni 100 KvA	1	P1
669	Jajpur	JRED	PANIKOILI	Chandapur 100 KvA	1	P1
670	Jajpur	JRED	PANIKOILI	Chandapur 100 KvA Mangala Temple	1	P1
671	Jajpur	JRED	SUKINDA	PIMPUDIA(GANDHAPAL 100KV)	1	P1
672	Jajpur	JRED	SUKINDA	PIMPUDIA(KUHIKA 100KV)	1	P1
673	Jajpur	JRED	SUKINDA	PIMPUDIA(NUADIHI 100KV)	1	P1
674	Jajpur	JRED	SUKINDA	PIMPUDIA(NUADIHI 100KV)	1	P1
675	Jajpur	JRED	SUKINDA	KANKADPAL(100KV)	1	P1
676	Jajpur	JRED	SUKINDA	GARAMIA(100KV)	1	P1
677	Jajpur	KUED	KABATABANDHA	SATHUAPATANA TELI SAHI 100KVA AND 50KVA	1	P1
678	Jajpur	KUED	KABATABANDHA	GODIPATIA, 100KVA	1	P1
679	Jajpur	KUED	KABATABANDHA	VEJIGOTHA, 100KVA	1	P1
680	Jajpur	KUED	KABATABANDHA	MAKUNDAPUR, 100KVA	1	P1
681	Jajpur	KUED	JARAKA	CHAHATA MOHANTYSAHI100KVA	1	P1
682	Jajpur	KUED	JARAKA	GOPANAGAR100KV	1	P1

Annexure-A Fencing of Distribution Substations						
Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
683	Jajpur	KUED	JARAKA	KAIMA NO-1 100KVA	1	P1
684	Jajpur	KUED	JARAKA	KAIMA NO-2 100KVA	1	P1
685	Jajpur	KUED	JARAKA	KHARDASAH 100KVA	1	P1
686	Jajpur	KUED	JARAKA	BADABARISAH 100KVA	1	P1
687	Jajpur	KUED	JARAKA	MP BADI 100KVA	1	P1
688	Jajpur	KUED	JARAKA	SEBATIPUR 100KVA	1	P1
689	Jajpur	KUED	JARAKA	PAHADTALI 100KVA	1	P1
690	Jajpur	KUED	JARAKA	NAUPAL 100KVA	1	P1
691	Jajpur	KUED	JARAKA	DIGAMBARPUR 100KVA	1	P1
692	Jajpur	KUED	JARAKA	PATAPUR 100KVA	1	P1
693	Jajpur	KUED	JARAKA	DERABAR 100KVA	1	P1
694	Jajpur	KUED	JARAKA	BAMPHU NO-1 100KVA	1	P1
695	Baripada	BPED	SARASKANA	NUAGOAN 100 KVA	1	P1
696	Baripada	BPED	SARASKANA	MUNDHAKATA 100 KVA	1	P1
697	Baripada	BPED	SARASKANA	KHERNA 100 KVA	1	P1
698	Baripada	BPED	SARASKANA	SARASKANA 100 KVA	1	P1
699	Baripada	BPED	Rasgobindpur	Kanthi, 100 kva, 11/0.4 kv	1	P1
700	Baripada	BPED	Rasgobindpur	Majnadiha, 100 kva, 11/0.4 kv	1	P1
701	Baripada	BPED	Rasgobindpur	Panchmania, 100 kva, 11/0.4 kv	1	P1
702	Baripada	BPED	Rasgobindpur	Bainchanuagaon, 100 kva, 11/0.4 kv	1	P1
703	Baripada	BPED	Rasgobindpur	Badampur, 100 kva, 11/0.4 kv	1	P1
704	Baripada	BPED	Rasgobindpur	Angargadia, 100 kva, 11/0.4 kv	1	P1
705	Baripada	BPED	BHANJPUR	100KVA KALIMANDIR, DAMODARPUR	1	P1
706	Baripada	BPED	BHANJPUR	100KVA BHUGULAKOTA RIVER SIDE	1	P1
707	Baripada	BPED	BHANJPUR	100 KVA CHANDAN MARBLE S/S	1	P1
708	Baripada	BPED	BHANJPUR	100KVA, 11/0.4KV S/S AT DI CHAKA	1	P1
709	Baripada	BPED	BHANJPUR	100KVA, 11/0.4KV S/S OF JAMUNADEIPUR	1	P1
710	Baripada	BPED	BHANJPUR	100KVA, 11/0.4KV S/S OF NEAR SATSANG	1	P1
711	Baripada	BPED	BHANJPUR	2 X 100KVA, 11/0.4KV S/S AT CHIPATASTHIA CHHAKA	1	P1
712	Baripada	BPED	BHANJPUR	100KVA, 11/0.4KV S/S OF GANGRAJ	1	P1
713	Baripada	BPED	BHANJPUR	100KVA, 11/0.4KV S/S OF TUMUDA	1	P1
714	Keonjhar	KED	TURUMUNGA	NANDAPUR 100KVA	1	P1
715	Keonjhar	KED	TURUMUNGA	SADANGI 100KVA	1	P1
716	Keonjhar	KED	SAHARPADA	MALLARPADA 100 KVA	1	P1
717	Keonjhar	KED	NO-1	Tikargumura 100kva	1	P1
718	Keonjhar	KED	NO-1	Pabitradiha 100kva	1	P1
719	Keonjhar	KED	NO-1	mandua 100kva	1	P1
720	Keonjhar	KED	No-2, Keonjhar	GOUDUNIBEDA 100 KVA -2	1	P1
721	Keonjhar	KED	No-2, Keonjhar	DHURPADA 100 KVA Munda Sahi	1	P1
722	Keonjhar	KED	No-2, Keonjhar	Hudco Colony 100 KVA	1	P1
723	Keonjhar	KED	No-2, Keonjhar	Thakur patna 100 KVA-2	1	P1
724	Keonjhar	KED	No-2, Keonjhar	Ranki 100 KVA-2	1	P1
725	Keonjhar	KED	No-2, Keonjhar	Sirispal 100 KVA-1	1	P1
726	Keonjhar	KED	No-2, Keonjhar	Sirispal 100 KVA-2	1	P1
727	Keonjhar	KED	No-2, Keonjhar	Ghatur Radiocenter Periphery 100 KVA	1	P1
728	Keonjhar	KED	No-2, Keonjhar	Ghatur Masanipada 100	1	P1
729	Keonjhar	KED	No-2, Keonjhar	SANKARPUR Barik Sahi 100 KVA	1	P1
730	Keonjhar	KED	No-2, Keonjhar	SANKARPUR Hata Padia 100 KVA	1	P1
731	Keonjhar	KED	No-2, Keonjhar	Nelung Rana sahi 100 KVA	1	P1
732	Keonjhar	KED	No-2, Keonjhar	Nelung Naik Sahi 100 KVA	1	P1
733	Balasore	CED	SRIJUNG	RAMPUR 100KVA	1	P1
734	Balasore	CED	SRIJUNG	BEDIPUR 100KVA	1	P1
735	Balasore	CED	SRIJUNG	HATA POKHARI 100KVA	1	P1
736	Balasore	CED	SRIJUNG	LIBRARY CHHAK 100 KVA	1	P1
737	Balasore	CED	SERGARGH	SASANPADA 100KVA	1	P1
738	Balasore	CED	SERGARGH	TELIBADI 100KVA	1	P1
739	Balasore	CED	SERGARGH	BAHALA 100 KVA	1	P1
740	Balasore	CED	SERGARGH	HARIDA 100 KVA&25 KVA	1	P1
741	Balasore	CED	SERGARGH	JYOTINAGAR 100 KVA	1	P1
742	Balasore	CED	SERGARGH	SUTAI 100 KVA	1	P1
743	Balasore	CED	SERGARGH	SUTAI NEAR POKHARI 100 KVA	1	P1
744	Balasore	CED	SERGARGH	SUTAI VILLAGE 1 100 KVA	1	P1

Annexure-A Fencing of Distribution Substations

Sl. No	Circle	Division	Section	Feeder name	Fencing Required in No.	Priority
745	Balasore	CED	SERGARGH	SUTAI VILLAGE 2 100 KVA	1	P1
746	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
747	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
748	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
749	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
750	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
751	Balasore	CED	NILAGIRI	PANCHALINGESWAR - 100 KVA	1	P1
752	Baripada	UED	UDALA	Bimtali chamara sahi 63 kva	1	P1
753	Baripada	UED	UDALA	alda 63 kva	1	P1
754	Baripada	UED	UDALA	Ambadiha 63 kva	1	P1
755	Baripada	UED	UDALA	sunapal 63KVA	1	P1
756	Baripada	UED	UDALA	kuanrapal 63KVA	1	P1
757	Baripada	UED	BADASAH	BINDHANI SAHI (63 KVA)	1	P1
758	Baripada	UED	BADASAH	KHUNTAPAL (63KVA)	1	P1
759	Baripada	UED	BADASAH	CHAMPAGODI (63KVA)	1	P1
760	Baripada	UED	KHUNTA	HATISAH 63 KVA	1	P1
761	Baripada	UED	KHUNTA	BRUNDAGADI 63 KVA	1	P1
762	Baripada	UED	KHUNTA	HATISAH 63 KVA	1	P1
763	Baripada	UED	KHUNTA	BELPAL 63 KVA	1	P1
764	Baripada	UED	KAPTIPADA	TI 63,LAXMI BUSSTOP 25,BLOCK 25KV,JMART25KV,SUNO COL	1	P1
765	Baripada	UED	BADASAH	BINDHANI SAHI (63 KVA)	1	P1
766	Baripada	UED	BADASAH	BELPAL ROAD SIDE (63KVA)	1	P1
767	Baripada	UED	BADASAH	KHUNTAPAL (63KVA)	1	P1
768	Baripada	UED	BADASAH	CHAMPAGODI (63KVA)	1	P1
769	Baripada	UED	BADASAH	NARANKHUNTA(63KVA)	1	P1
770	Baripada	UED	BADASAH	NARANKHUNTA SCHOOL(63KVA)	1	P1
771	Baripada	UED	BADASAH	GOUDSHOLE(63KVA)	1	P1
772	Baripada	UED	BADASAH	SALPATLA(63KVA)	1	P1
773	Baripada	UED	BADASAH	SATPAUTIA(63KVA)	1	P1

Annexure-B Fire wall for PTR between the PTRs

Sr No	Circle	Division	Location	Required in Nos.	Priority
1	Balasore	BTED	Sitadiha Substation	1	P1
2	Balasore	BTED	Kalipada Substation	1	P1
3	Balasore	JED	Shyamnagar Substation	1	P1
4	Baripada	BPED	Barkand Substation	1	P1
5	Baripada	BPED	Sirsa Substation	1	P1
6	Balasore	JED	Gujadiha Substation	1	P1
7	Bhadrak	BSED	Malda Substation	1	P1
8	Bhadrak	BSED	Manjuri Road Substation	1	P1
9	Bhadrak	BNED	Padampur Substation	1	P1
10	Bhadrak	BNED	Basudevpur Substation	1	P1
11	Keonjhar	AED	Anandapur Substation	1	P1
12	Keonjhar	AED	Chenapadi Substation	1	P1
13	Keonjhar	AED	Dhenka Substation	1	P1
14	Keonjhar	AED	Dhenkikote Substation	1	P1
15	Keonjhar	JOED	Kanjiasole Substation	1	P1
16	Jajpur	JRED	Salakana Substation	1	P1
17	Jajpur	JRED	Ragadi Substation	1	P1
18	Jajpur	JRED	Damodarpur Substation	1	P1

Annexure-C LT extension for legacy long service cable cases

Sr No	Circle	Division	Total No. of Consumers	% Consumer for LT extension	LT Extension Required in Ckm	Priority
1	Balasore	BED	60888	4%	2.91	P1
2	Balasore	CED	107280	5%	3.64	P1
3	Balasore	BtED	76012	8%	5.82	P1
4	Balasore	SED	146159	7%	5.09	P1
5	Balasore	JED	109335	8%	5.82	P1
6	Baripada	BPED	205706	7%	5.09	P1
7	Baripada	RED	192577	8%	5.82	P1
8	Baripada	CED	98320	6%	4.36	P1
9	Bhadrak	BNED	171057	6%	4.36	P1
10	Bhadrak	BSER	102721	5%	3.64	P1
11	Jajpur	JTED	95966	4%	2.91	P1
12	Jajpur	JRED	92644	8%	5.82	P1
13	Jajpur	KuED	108707	6%	4.36	P1
14	Keonjhar	AED	128197	6%	4.36	P1
15	Keonjhar	KED	112074	6%	4.36	P1
16	Keonjhar	JoED	88200	6%	4.36	P1

Annexure-D New Meter Testing Lab

Sr No	Circle	Division	Location	Required in No.	Priority
1	Keonjhar	KED	Keonjhar	1	P1

Annexure-E Overhead to Underground conversion at crossings

S.No.	Circle	Division	Voltage Level	Feeder Name	Total required length in KM	Justification for requirement	Priority
1	Baleshwar	BtED	33 kV	Balipal	0.12	NH 60 crossing	P1
2	Baleshwar	CED	33 kV	ODANGI	0.12	NH Crossing	P1
3	Baleshwar	SED	33 kV	BAHANAGA	0.12	132 kv, 220 kv crossing	P1
4	Baleshwar	SED	33 kV	33KV GOPINATHPUR	0.12	REMOVE DANGER POSITION INSIDE MARKET AREA	P1
5	Keonjhar	JoED	33 kV	Joda	0.12	Road Crossing	P1
6	Keonjhar	KED	33 kV	DDMCH-33KV 1	0.12	OH Road Crossing	P1
7	Keonjhar	KED	33 kV	DDMCH-33KV 2	0.12	OH Road Crossing	P1
8	Bhadrak	BNED	33 kV	Gopinathpur	0.12	OH Road Crossing	P1
9	Baripada	RED	33 kV	KUSUMI FEEDER	0.12	NH Crossing	P1
10	Baripada	UED	33 kV	33 kV Sarat Ckt.	0.12	11 kV Crossing and Bamboo	P1
11	Baleshwar	BED	11 kV	BALARAMGADI	0.12	REMOVE DANGER POSITION INSIDE TOURIST AREA	P1
12	Baleshwar	BED	11 kV	Ranipatna,Chunbhati Petrol Pump	0.12	REMOVE DANGER POSITION INSIDE MARKET AREA	P1
13	Baleshwar	BtED	11 kV	VELLORA	0.12	NH60 CROSS NEAR TOLL PLAZA	P1
14	Baleshwar	BtED	11 kV	Sartha	0.12	NH 60 crossing	P1
15	Baleshwar	SED	11 kV	Uttareshwar	0.12	132kV Crossing	P1
16	KEONJHAR	JODA	11 kV	Palaspanga	0.12	NH crossing	P1
17	KEONJHAR	JODA	11 kV	Jhumpura	0.12	NH crossing	P1
18	Keonjhar	Joda	11 kV	BALIBANDHA	0.12	REMOVE DANGER POSITION ON NH CROSSING	P1
19	Keonjhar	Joda	11 kV	BASUDEVPUR	0.12	REMOVE DANGER POSITION ON NH CROSSING	P1
20	Keonjhar	Joda	11 kV	BASUDEVPUR	0.12	REMOVE DANGER POSITION ON NH CROSSING	P1
21	KEONJHAR	KED	11 kV	CHINAMALIPOSI	0.12	OH Road Crossing	P1
22	KEONJHAR	KED	11 kV	RE	0.12	OH Road Crossing	P1
23	BARIPADA	RAIRANGPUR	11 kV	KARANJIA-II	0.12	NH CROSSING	P1
24	BARIPADA	RAIRANGPUR	11 kV	MANADA	0.12	NH CROSSING	P1
25	BARIPADA	RAIRANGPUR	11 kV	SAN MANADA	0.12	NH CROSSING	P1
26	BARIPADA	RAIRANGPUR	11 kV	THAKURMUNDA	0.12	REMOVE DANGER POSITION INSIDE MARKET AREA	P1
27	BARIPADA	RAIRANGPUR	11 kV	KENDUJIANI	0.12	CROSS OF THAKURMUNDA FEEDER	P1
28	BARIPADA	RAIRANGPUR	11 kV	Tahasil	0.12	NH-49 CROSSING	P1
29	JAJPUR	JTED	11 kV	Ankula	0.12	REMOVE DANGER POSITION INSIDE MARKET AREA	P1
30	JAJPUR	JTED	11 kV	SUNDARIMUHAN	0.12	DUE TO 33 KV CROSSING	P1

Annexure-F Intermediate poles for vulnerable location

SL No.	Circle	Division	Loctaion	Pole Required in Nos.	Priority
1	Baleshwar	BED	ALUPUR	18	P1
2	Baleshwar	BED	Bamul	10	P1
3	Baleshwar	BED	FISHERY	19	P1
4	Baleshwar	BED	GABAGAON	45	P1
5	Baleshwar	BED	Industrial No - II	80	P1
6	Baleshwar	BED	Januganj	45	P1
7	Baleshwar	BED	kuruda	30	P1
8	Baleshwar	BED	Puruna Balasore	30	P1
9	Baleshwar	BED	SAMALPUR	47	P1
10	Baleshwar	BED	Sunhat	9	P1
11	Baleshwar	BED	Town	20	P1
12	Baleshwar	BtED	AMARDA	40	P1
13	Baleshwar	BtED	CHASIPADA	50	P1
14	Baleshwar	BtED	Chhada	45	P1
15	Baleshwar	BtED	Kaparapada	50	P1
16	Baleshwar	BtED	KUSHUDIHA	47	P1
17	Baleshwar	BtED	Kusudiha	75	P1
18	Baleshwar	BtED	MACHHARANKA	50	P1
19	Baleshwar	CED	AMBUDIA	75	P1
20	Baleshwar	CED	Bardhanpur	30	P1
21	Baleshwar	CED	BHIMPUR	40	P1
22	Baleshwar	CED	FULADI	30	P1
23	Baleshwar	CED	GANDARDA	56	P1
24	Baleshwar	CED	INDUSTRIAL	30	P1
25	Baleshwar	CED	KASHIMPUR	35	P1
26	Baleshwar	CED	Remuna	45	P1
27	Baleshwar	CED	SAJNAGARH	35	P1
28	Baleshwar	SED	ANANTAPUR	15	P1
29	Baleshwar	SED	BARI	10	P1
30	Baleshwar	SED	Begunia	15	P1
31	Baleshwar	SED	BIRANCHIPUR	10	P1
32	Baleshwar	SED	JAMUJHADI BAZAR	10	P1
33	Baleshwar	SED	KHANTAPADA	55	P1
34	Baleshwar	SED	Mangalpur	70	P1
35	Baleshwar	SED	PANAPANA	40	P1
36	Baleshwar	SED	PURAN	50	P1
37	Baleshwar	SED	Ramakrushnapur	18	P1
38	Baleshwar	SED	RAPEYA	28	P1
39	Baleshwar	SED	SABANGA	18	P1
40	Baleshwar	JED	Amliatha	30	P1
41	Baleshwar	JED	Balim	30	P1
42	Baleshwar	JED	Banida	30	P1
43	Baleshwar	JED	Cawki	20	P1
44	Baleshwar	JED	Dehurda Town	25	P1
45	Baleshwar	JED	Deula	61	P1
46	Baleshwar	JED	Jayrampur	30	P1
47	Baleshwar	JED	Kusuda	30	P1
48	Baleshwar	JED	Mohagab	30	P1
49	Baleshwar	JED	Putina	30	P1
50	Baleshwar	JED	Sugo	40	P1

Annexure-F Intermediate poles for vulnerable location

SL No.	Circle	Division	Loctaion	Pole Required in Nos.	Priority
51	Baripada	RED	BIJATALA	19	P1
52	Baripada	RED	CHAMPAJHAR	22	P1
53	Baripada	RED	DANDBOSE	15	P1
54	Baripada	RED	DUBLABEDA	0	P1
55	Baripada	RED	Jamda feeder	30	P1
56	Baripada	RED	KENDUJIANI	40	P1
57	Baripada	RED	KULIPOSI	10	P1
58	Baripada	RED	MAHULDIHA	63	P1
59	Baripada	RED	MANADA	50	P1
60	Baripada	RED	PADHIA	22	P1
61	Baripada	RED	RARUAN	34	P1
62	Baripada	RED	SULEIPAT	25	P1
63	Baripada	RED	Town	35	P1
64	Baripada	UED	BADASAH	30	P1
65	Baripada	UED	BAIDPUR	45	P1
66	Baripada	UED	BELAM	30	P1
67	Baripada	UED	BELDANGRI	30	P1
68	Baripada	UED	BHIMDA 11 KV FEEDER	50	P1
69	Baripada	UED	CHANDIDIHA	30	P1
70	Baripada	UED	DEULIA 11 KV FEEDER	60	P1
71	Baripada	UED	KUSHALADA	55	P1
72	Baripada	UED	OLD SARAT	50	P1
73	Baripada	UED	SANIKULA 11KVFEEDER	52	P1
74	Baripada	UED	SINGTIA	40	P1
75	Baripada	BPED	BACHURIPADA	30	P1
76	Baripada	BPED	CHITRADA	42	P1
77	Baripada	BPED	RURAL	44	P1
78	Baripada	BPED	BETNOTI TOWN	40	P1
79	Baripada	BPED	DAHIKOTI	56	P1
80	Baripada	BPED	KULIANA	35	P1
81	Bhadrak	BNED	Balimunda	175	P1
82	Bhadrak	BNED	BARANGA	50	P1
83	Bhadrak	BNED	BILANA	58	P1
84	Bhadrak	BNED	CHANDAN BAZAR	45	P1
85	Bhadrak	BNED	COLLEGE	100	P1
86	Bhadrak	BNED	DOLASAH	33	P1
87	Bhadrak	BNED	KARANJADIA	20	P1
88	Bhadrak	BNED	NOONDOR	17	P1
89	Bhadrak	BNED	MAA BHADRAKALI	15	P1
90	Bhadrak	BNED	NARSHINGH PUR NO-I	60	P1
91	Bhadrak	BNED	PADMAPUR	80	P1
92	Bhadrak	BNED	TALANGA	21	P1
93	Bhadrak	BSED	Andabajar	35	P1
94	Bhadrak	BSED	Arnapal	25	P1
95	Bhadrak	BSED	Dhusuri	90	P1
96	Bhadrak	BSED	Naamai	100	P1
97	Bhadrak	BSED	Nadigaon	50	P1
98	Bhadrak	BSED	Sarsada	50	P1
99	Jajpur	JRED	AMPOLABA	20	P1
100	Jajpur	JRED	DHEI SAHI TO BHAGANA	30	P1

Annexure-F Intermediate poles for vulnerable location

SL No.	Circle	Division	Loctaion	Pole Required in Nos.	Priority
101	Jajpur	JRED	HARIPUR	20	P1
102	Jajpur	JRED	HATIBARI	25	P1
103	Jajpur	JRED	KABATA	43	P1
104	Jajpur	JRED	Mangalpur	18	P1
105	Jajpur	JRED	MANPUR	25	P1
106	Jajpur	JRED	MARTHAPUR	15	P1
107	Jajpur	JRED	NATHASAH	30	P1
108	Jajpur	JRED	OSTAPAL	25	P1
109	Jajpur	JRED	PANKAPAL	15	P1
110	Jajpur	JRED	RANSOL	14	P1
111	Jajpur	JRED	RUDHIA	35	P1
112	Jajpur	JRED	TALAGADA	15	P1
113	Jajpur	JRED	TELEPHON EXCHANGE	25	P1
114	Jajpur	JTED	AHIYAS	30	P1
115	Jajpur	JTED	BARAHATA	32	P1
116	Jajpur	JTED	BITANA	50	P1
117	Jajpur	JTED	HALADIDIHA	50	P1
118	Jajpur	JTED	KAPILA	45	P1
119	Jajpur	JTED	MARKANDPUR	31	P1
120	Jajpur	JTED	NARIGAON	40	P1
121	Jajpur	JTED	RANGAPUR	30	P1
122	Jajpur	JTED	Simulia	40	P1
123	Jajpur	KUED	BAGHUA	20	P1
124	Jajpur	KUED	Bandhadiha	20	P1
125	Jajpur	KUED	BARABATI	30	P1
126	Jajpur	KUED	Bazarghat	20	P1
127	Jajpur	KUED	Brahmabarada	45	P1
128	Jajpur	KUED	DIPANCHAL	20	P1
129	Jajpur	KUED	JENAPUR	60	P1
130	Jajpur	KUED	KACHERIGOAN	20	P1
131	Jajpur	KUED	KHANDITAR	30	P1
132	Jajpur	KUED	MADHUBAN	20	P1
133	Jajpur	KUED	Sankhamatha	40	P1
134	Jajpur	KUED	SINGAPUR	30	P1
135	Keonjhar	KED	BEGUNAPOSI	22	P1
136	Keonjhar	KED	BONAJODI	30	P1
137	Keonjhar	KED	BUDHIKAPUDI	22	P1
138	Keonjhar	KED	DENUA	10	P1
139	Keonjhar	KED	Express	20	P1
140	Keonjhar	KED	Fuljhar	15	P1
141	Keonjhar	KED	JAGAMOHANPUR	8	P1
142	Keonjhar	KED	JANGHIRA	10	P1
143	Keonjhar	KED	Kaliahota	10	P1
144	Keonjhar	KED	Kanjipani	25	P1
145	Keonjhar	KED	KENDUAPADA	37	P1
146	Keonjhar	KED	Krushnapur	20	P1
147	Keonjhar	KED	MAIDANKHEL	8	P1
148	Keonjhar	KED	NO-3	9	P1
149	Keonjhar	KED	NO-02	10	P1
150	Keonjhar	KED	No-1	8	P1

Annexure-F Intermediate poles for vulnerable location

SL No.	Circle	Division	Loctaion	Pole Required in Nos.	Priority
151	Keonjhar	KED	NO-3	8	P1
152	Keonjhar	KED	OLD TOWN	8	P1
153	Keonjhar	KED	UDAYPUR	20	P1
154	Keonjhar	AED	ANANDAPUR	35	P1
155	Keonjhar	AED	BAIGANPAL	40	P1
156	Keonjhar	AED	GHASIPURA	23	P1
157	Keonjhar	AED	junga	30	P1
158	Keonjhar	AED	KANTIPAL	45	P1
159	Keonjhar	AED	KESHADURAPAL	30	P1
160	Keonjhar	AED	MAA TARINI	10	P1
161	Keonjhar	AED	MUGUPUR	40	P1
162	Keonjhar	AED	PANDAPADA	30	P1
163	Keonjhar	AED	Saladei	30	P1
164	Keonjhar	AED	Soso	40	P1
165	Keonjhar	JOED	ADHANGAPAL	30	P1
166	Keonjhar	JOED	ASANPAT	20	P1
167	Keonjhar	JOED	BALAJARI	20	P1
168	Keonjhar	JOED	BALIBANDHA	25	P1
169	Keonjhar	JOED	Bamebari	30	P1
170	Keonjhar	JOED	Belkundi	15	P1
171	Keonjhar	JOED	BHANDA	20	P1
172	Keonjhar	JOED	BOLAN 1	20	P1
173	Keonjhar	JOED	BOLANI 2	15	P1
174	Keonjhar	JOED	CHAUTHIA	20	P1
175	Keonjhar	JOED	CHIMILA	10	P1
176	Keonjhar	JOED	Handibhanga	20	P1
177	Keonjhar	JOED	INDUSTRIAL	25	P1
178	Keonjhar	JOED	Jajang	20	P1
179	Keonjhar	JOED	jhumpura	10	P1
180	Keonjhar	JOED	KASHIPUR	25	P1
181	Keonjhar	JOED	Palaspanga	20	P1
182	Keonjhar	JOED	RUGUDI	15	P1

Annexure-G Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench

Sr No	Circle	Division	Location	Required in Nos.	Priority
1	Balasore	BTED	Sitadiha Substation	1	P1
2	Balasore	BTED	Kalipada Substation	1	P1
3	Balasore	JED	Shyamnagar Substation	1	P1
4	Baripada	BPED	Barkand Substation	1	P1
5	Baripada	BPED	Sirsa Substation	1	P1
6	Balasore	JED	Gujadiha Substation	1	P1
7	Bhadrak	BSED	Malda Substation	1	P1
8	Bhadrak	BSED	Manjuri Road Substation	1	P1
9	Bhadrak	BNED	Padampur Substation	1	P1
10	Bhadrak	BNED	Basudevpur Substation	1	P1
11	Keonjhar	AED	Anandapur Substation	1	P1
12	Keonjhar	AED	Chenapadi Substation	1	P1
13	Keonjhar	AED	Dhenka Substation	1	P1
14	Keonjhar	AED	Dhenkikote Substation	1	P1
15	Keonjhar	JOED	Kanjiasole Substation	1	P1
16	Jajpur	JRED	Salakana Substation	1	P1
17	Jajpur	JRED	Ragadi Substation	1	P1
18	Jajpur	JRED	Damodarpur Substation	1	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
1	Baleshwar	BTED	BASTA	BASTA-I	BAIGANDIHA	BAIGANDIHA	63	2	0.12	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
2	Baleshwar	BED	SUPPLY-II	Ganeswarpur	Satagiri	Near Rajasthan Marbal	500	2	0.12	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
3	Baleshwar	JED	Jaleswar	Jaleswar No-II	SARSHIDACHANDO POKHARI	SARSHIDACHANDO POKHARI	100	1	0.12	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
4	Baleshwar	JED	Jaleswar	Jaleswar No-II	KASIDA	KASIDA	100	1	0.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
5	Baleshwar	JED	Jaleswar	Jaleswar No-II	KALYANPUR OLD T/F	KALYANPUR OLD T/F	100	1	0.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
6	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	SUNDHAL SHIV MANDIR	SUNDHAL SHIV MANDIR	100	1	0.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
7	JAIPUR	JRED	JAIPUR ROAD	CHORDA	LAXMINAGAR	LAXMINAGAR	250	1	0.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
8	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR	JALAPANKA CHHAKA	25	1	0.12	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
9	Baleshwar	BED	SUPPLY-I	No-I	TB Hospital 200 KVA	TB Hospital to Cinema Chhak	200	1	0.12	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
10	BARIPADA	RED	KARANJIA	THAKURMUNDA	SATKOSIA	SATKOSIA DASA SAHI	25	2	0.13	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
11	Baleshwar	BED	SUPPLY-I	No-I	Azimabad 250 KVA	Azimabad Petrol Pump Gali	250	3	0.14	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
12	Baleshwar	JED	Jaleswar	Jaleswar No-II	KISMAT PASCHIMBAD-2	KISMAT PASCHIMBAD-2	100	1	0.14	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
13	Baleshwar	BED	SUPPLY-II	Ganeswarpur	Near Torento	Back side of Gupta Distributer	500	3	0.15	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
14	Baleshwar	JED	Jaleswar	Jaleswar No-II	ARUHA	ARUHA	100	1	0.15	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
15	Baleshwar	BTED	Jamsuli	Langaleswar	Sunaruhi	sunaruhi	63	2	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
16	Baleshwar	BTED	BASTA	BASTA-I	AMARDA	AMARDA	200	2	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
17	Baleshwar	BTED	BASTA	BASTA-I	BRAMHANDA	BRAMHANDA	100	1	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
18	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR	MAJHISAH	63	1	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
19	Baleshwar	BED	SUPPLY-I	CHANDIPUR	KANDAR HOUSE	JHAMPURA	25	1	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
20	Baleshwar	JED	Jaleswar	Jaleswar No-II	ARUHA	ARUHA	100	1	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
21	BARIPADA	RED	KARANJIA	THAKURMUNDA	HANDIFUTA	HANDIFUTA	100	2	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
22	Bhadrak	BSED	RE Bhadrak	Bonth	post office	post office	100	1	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
23	Bhadrak	BSED	RE Bhadrak	Bonth	korina	korina	100	1	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
24	Jajpur	JTED	JAIPUR TOWN-I	NO-3	KUSHI	KUSHI	100	1	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
25	Jajpur	JTED	JAIPUR TOWN-I	NO-3	MAKEIPUR	MAKEIPUR	100	1	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
26	Jajpur	JTED	JAIPUR TOWN-I	NO-3	NUAKULA	NUAKULA	63	1	0.2	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
27	Jajpur	JTED	JAIPUR TOWN-I	NO-3	SAMANTA SAHI	SAMANTA SAHI	100	1	0.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
28	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR	KUMBHAR SAHI	63	1	0.25	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
29	Baleshwar	CED	RE-1	Remuna	Diha Remuna	Remuna	100	1	0.25	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
30	Baleshwar	JED	Jaleswar	Jaleswar No-II	ARUHA	ARUHA	100	1	0.25	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
31	Baleshwar	JED	Jaleswar	Jaleswar No-II	KALYANPUR OLD T/F	KALYANPUR OLD T/F	100	1	0.25	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
32	JAIPUR	JRED	JAIPUR ROAD	CHORDA	UMAPADA HARIJAN SAHI	UMAPADA HARIJAN SAHI	100	1	0.25	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
33	JAIPUR	JRED	JAIPUR ROAD	CHORDA	CHORDA VILLAGE	CHORDA VILLAGE	100	1	0.25	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
34	JAIPUR	JRED	JAIPUR ROAD	CHORDA	KAPILESWAR COLONY	KAPILESWAR COLONY	100	1	0.25	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
35	Keonjhar	KED	No-I	NO-03	DHENKAPUR	TRUPTI GALI	250	1	0.25	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
36	Baleshwar	BTED	Jamsuli	Baliapal	Nayabali	Nayabali	100	1	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
37	Baleshwar	BTED	Basta	Basta no-2	Dandipada	Dandipada	100	2	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
38	Baleshwar	BTED	Basta	Basta no-2	Vanupur	Vanupur	63	2	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
39	Baleshwar	BTED	BASTA	BASTA-I	KATULIDIHA	KATULIDIHA	63	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
40	Baleshwar	BTED	BASTA	BASTA-I	PARIVILLA	PARIVILLA	100	3	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
41	Baleshwar	BTED	BASTA	BASTA-I	DHAPAKAND	DHAPAKAND	100	2	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
42	Baleshwar	BTED	BASTA	BASTA-I	BASTA-I	NALABAHAR	25	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
43	Baleshwar	CED	RE-I	RUPSA	CHHANUA	CHHANUA	100	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
44	Baleshwar	JED	Jaleswar	Jaleswar No-II	BADNAGAR	BADNAGAR	100	1	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
45	Baleshwar	JED	Jaleswar	Jaleswar No-II	NAMKANA	NAMKANA	100	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
46	Baleshwar	JED	Jaleswar	Jaleswar No-II	ARUHA	ARUHA	100	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
47	Baleshwar	JED	Jaleswar	Jaleswar No-II	CHAKABISHNU	CHAKABISHNU	100	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
48	BARIPADA	RED	RAIRANGPUR II	KUSUMI	NISCHITPUR 16 KVA	NISCHITPUR	16	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
49	BARIPADA	RED	KARANJIA	THAKURMUNDA	CHAMPAJHAR	CHAMPAJHAR	100	2	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
50	BARIPADA	RED	KARANJIA	THAKURMUNDA	SATKOSIA	SATKOSIA	25	3	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
51	BARIPADA	RED	JASHIPUR	JASHIPUR	KASIPAL	KASIPAL	25	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
52	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	KULESILA	KULESILA	100	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
53	JAIPUR	JRED	JAIPUR ROAD	CHORDA	DURGA COLONY	DURGA COLONY	100	1	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
54	Jajpur	JTED	JAIPUR TOWN-I	NO-3	BEHERAPTNA	BEHERAPTNA	100	1	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
55	Keonjhar	KED	No-I	NO-03	PATRA SAHI	PATRA SAHI	100	1	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
56	Keonjhar	AED	ANANDAPUR	GHASIPURA	TOLANKAPADA NUA SAHI	TOLANKAPADA NUA SAHI	100	2	0.3	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
57	Keonjhar	KED	No-II	RE-1	JAMUNALIA	NEAR JAMUNALIA UP SCHOOL	25	1	0.3	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
58	Baleshwar	JED	Jaleswar	Jaleswar No-II	CHAKABISHNU	CHAKABISHNU	100	1	0.35	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
59	Baleshwar	BTED	BASTA	BASTA-I	BADACHARANESWARPUR	BADACHARANESWARPUR	25	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
60	Baleshwar	BTED	BASTA	BASTA-I	GUDIKHAL	GUDIKHAL	100	2	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
61	Baleshwar	BTED	BASTA	BASTA-I	MULIDA	MULIDA	25	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
62	Baleshwar	BTED	BASTA	BASTA-I	MADHUBHANDA	MADHUBHANDA	100	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
63	Baleshwar	CED	NILGIRI	BERHAMPUR	DHARAMPUR	DHARAMPUR	100	1	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
64	Baleshwar	CED	RE-II	SARAGAN	Bikram kasaba	Near kasaba Fandi	100	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
65	Baleshwar	CED	RE-1	Remuna	Jodigohari	Armala	100	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
66	Baleshwar	CED	RE-1	Remuna	Tuta	Mukhura	100	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
67	Baleshwar	CED	RE-1	Remuna	Udamber-2	Udamber	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
68	Baleshwar	CED	RE-1	RUPSA	MALISAH GAON	MALISAH	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
69	Baleshwar	CED	RE-1	RUPSA	POKHARISAH	POKHARISAH	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
70	Baleshwar	CED	RE-1	RUPSA	Parthra Bag	Parthra Bag	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
71	Baleshwar	BED	SUPPLY-I	CHANDIPUR	GIRI SAHI	NAUPALGADI	63	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
72	Baleshwar	BED	SUPPLY-I	CHANDIPUR	SAMBHU SHOP	NIDHIPADA	63	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
73	Baleshwar	BED	SUPPLY-I	MATHASAH	SAINAGAR	SAINAGAR	250	2	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
74	Baleshwar	BED	SUPPLY-I	MATHASAH	GANDHINAGAR	GANDHINAGAR	100	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
75	Baleshwar	BED	SUPPLY-II	NO-III	TARINI MANDIR	BALIA	250	2	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
76	Baleshwar	JED	Jaleswar	Jaleswar No-II	ARUHA	ARUHA	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
77	Baleshwar	JED	Jaleswar	Jaleswar No-II	KALYANPUR OLD T/F	KALYANPUR OLD T/F	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
78	BARIPADA	RED	KARANJIA	KARANJIA-I	VIVEKANANDA SCHOOL	DAILY MARKET	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
79	Baripada	BPED	Betnoti	Betnoti	Dangripura	Baitarani Gramya Bank	25	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
80	BARIPADA	BPED	KULIANA	JHARPOKHARIA	GANDIPANI	GANDIPANI	25	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
81	BARIPADA	BPED	KULIANA	JHARPOKHARIA	BAGJHAMP	BAGJHAMP	25	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
82	BARIPADA	BPED	RE-BARIPADA	RAGHUNATHPUR	ORACHANDABILA DSS	ORACHANDABILA NERA ORA SQUIRE	25	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
83	JAIPUR	JRED	JAIPUR ROAD	CHORDA	PANASIA	PANASIA	100	1	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
84	JAIPUR	JRED	JAIPUR ROAD	CHORDA	COURT CHHAKA	COURT CHHAKA	100	1	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
85	JAIPUR	JRED	DUBURI	SUKINDA	PATPUR	PATPUR	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
86	JAIPUR	JRED	DUBURI	SUKINDA	RAITIKARA	RAITIKARA	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
87	Jaipur	JTED	DASARATHPUR	AHIYAS	HOSENPUR	HOSENPUR	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
88	Jaipur	JTED	BINJHARPUR	MADHUSUDANPUR	KAHARAGANDA SETHISAH	KAHARAGANDA	25	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
89	Jaipur	JTED	JAIPUR TOWN-I	NO-3	KUSHI 63KVA	KUSHI	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
90	Jaipur	JTED	JAIPUR TOWN-I	NO-3	HAZARA SAHI	GOKHANA	100	1	0.4	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
91	Jaipur	KUED	Dharmasala	KABATABANDHA	SHYAMSUNDARPUR	SHYAMSUNDARPUR	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
92	Jaipur	KUED	Kuakhia	Kuakhia	GOURSHYAMPATANAI00KVA	GOURSHYAMPATANANA	100	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
93	Keonjhar	AED	ANANDAPUR	Ramachandrapur	Taruan Majhi sahi	Taruan Majhi sahi	63	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
94	Keonjhar	AED	BIDYADHARPUR	HATADIHI	NANDIPADA	NANDIPADA	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
95	Keonjhar	AED	BIDYADHARPUR	HATADIHI	BALIPADA	BALIPADA	63	1	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
96	Keonjhar	JoED	Champua	jhumpura	Bankmaruni	Bankamaruni	25	2	0.4	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
97	Baleshwar	CED	RE-1	Remuna	Agria	Agria	63	1	0.45	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
98	Baleshwar	CED	RE-1	Remuna	kundasahi	Armla	100	2	0.45	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
99	Baleshwar	JED	Jaleswar	Jaleswar No-II	PAIKASIDA-1	PAIKASIDA-1	100	1	0.45	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
100	Baleshwar	JED	Jaleswar	Jaleswar No-II	PAIKASIDA-2	PAIKASIDA-2	100	1	0.45	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
101	Baleshwar	JED	Jaleswar	Jaleswar No-II	KHULUDA	KHULUDA	100	1	0.45	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
102	JAIPUR	JRED	JAIPUR ROAD	CHORDA	BALADIAMATHA	BALADIAMATHA	100	1	0.45	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
103	Baleshwar	JED	Jaleswar	Jaleswar No-II	KISMAT PASCHIMBAD-3	KISMAT PASCHIMBAD-3	100	1	0.48	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
104	Baleshwar	BTED	Jamsuli	Baliapal	Tapandia(Jatapradha Sahi)	Tapandia	100	3	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
105	Baleshwar	BTED	Jamsuli	Baliapal	Nayabali	Nayabali	25	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
106	Baleshwar	BTED	Basta	Basta no-2	Khadapada gali	Sartha khadapada	100	2	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
107	Baleshwar	BTED	Basta	Basta no-2	Darada sethisahi	Darada sethisahi	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
108	Baleshwar	BTED	Basta	Basta no-2	Sahada Khati	Sahada Khati	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
109	Baleshwar	BTED	BASTA	BASTA-I	BADADHANADI	BADADHANADI	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
110	Baleshwar	CED	NILGIRI	BERHAMPUR	TOKIPADA	TOKIPADA	63	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
111	Baleshwar	CED	NILGIRI	BERHAMPUR	DARKHOLI	DARKHOLI	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
112	Baleshwar	CED	NILGIRI	BERHAMPUR	BADBIL	BADBIL	63	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
113	Baleshwar	CED	RE-II	SARAGAN	PACHHODIA	PACHHODIA	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
114	Baleshwar	CED	RE-II	SARAGAN	BANGARA	BANGARA	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
115	Baleshwar	CED	RE-II	SARAGAN	Namile	Namile	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
116	Baleshwar	CED	RE-II	SRIJUNG	DAS SAHI, TALPADA	DAS SAHI, TALPADA	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
117	Baleshwar	CED	RE-II	ODANGI	TALA AMARA 100KVA	TALA AMARA	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
118	Baleshwar	CED	RE-II	ODANGI	BORDHIA 63KVA	BORDHIA	63	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
119	Baleshwar	CED	RE-1	Remuna	Haraspur	Haraspur	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
120	Baleshwar	CED	RE-I	RUPSA	PANCHUPADA	PANCHUPADA	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
121	Baleshwar	CED	RE-I	RUPSA	Kasafal Market	Kasafal	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
122	Baleshwar	CED	RE-I	RUPSA	Tarabdhia	Tarabdhia	63	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
123	Baleshwar	SED	SORO	ANANTAPUR	AINRI MALLICK SAHI 100 KVA	ANIRI	100	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
124	Baleshwar	SED	SORO	ANANTAPUR	LENKATOTA 100 KVA	LENKATOTA	100	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
125	Baleshwar	SED	SORO	ANANTAPUR	DIHAPAH 63 KVA	DIHAPAH	63	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
126	Baleshwar	SED	SORO	ANANTAPUR	JANHIA 63 KVA	JANHIA	63	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
127	Baleshwar	SED	MARKONA	MARKONA	RASIDPUR	RASIDPUR	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
128	Baleshwar	BED	SUPPLY-I	CHANDIPUR	SUSHIL PATTANAIK CHHAKA	GAS TANKI CHHAKA	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
129	Baleshwar	BED	SUPPLY-I	MATHASAH	GADGADIA	GADGADIA	400	4	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
130	Baleshwar	BED	SUPPLY-I	MATHASAH	RADHAGADIA	GHANASHYAM NAGAR	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
131	Baleshwar	BED	SUPPLY-II	NO-III	SAMALPUR SHIVA MANDIR	SAMALPUR	100	2	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
132	Baleshwar	BED	SUPPLY-II	NO-III	CITY CLINIC	BALIA	250	2	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity (KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
133	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	BAIDAPOSI	NEAR MATCHES FACTORY	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
134	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	BAIDAPOSI	STADIUM	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
135	BARIPADA	RED	RAIRANGPUR II	KUSUMI	MURUMDI 25 KVA	MURUMDI	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
136	BARIPADA	RED	Rairangpur-II	JAMDA	Dumadhi 25kva	Dumadhi	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
137	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	GORUMAHISANI CAMP	GORUMAHISANI	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
138	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	KULEISILA		100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
139	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	BADADA HEALTH CENTER TO DOM SAHI	BADADA HEALTH CENTER TO DOM SAHI	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
140	BARIPADA	RED	KARANJIA	KARANJIA-I	SMASAN GHAT	SMASAN GHAT	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
141	BARIPADA	UED	KHUNTA	Badasahi	chelia A		25	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
142	BARIPADA	UED	KHUNTA	Badasahi	ABCpur	ABCpur	100	2	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
143	Baripada	BPED	Betnoti	Betnoti	Ambajoda	Ambajoda Chhaka to High School	63	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
144	Baripada	BPED	Kuliana	Kuliana	Tomkiasole 25kva 11/0.4kv	Tomkisoile	25	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
145	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Mainsipur	Mainsipur	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
146	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Bansta	Bansta	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
147	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Maninathpur	Maninathpur	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
148	Jajpur	JTED	BINJHARPUR	BINJHARPUR-II	DAMODARPUR	DAMODARPUR	63	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
149	Jajpur	JTED	JAJPUR TOWN-I	NO-3	SIMILIA 100KVA	SIMILIA	100	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
150	Jajpur	KUED	Dharmasala	KABATABANDHA	SHYAMSUNDARPUR TANTI SAHI	SHYAMSUNDARPUR TANTI SAHI	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
151	Jajpur	KUED	Dharmasala	KABATABANDHA	BARAMUNDULI	BARAMUNDULI	25	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
152	Jajpur	KUED	Kuakhia	Kuakhia	kabirpur 100 kva	kabirpur	100	1	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
153	Keonjhar	JoED	BARBIL	BARBIL- 2	TN THACKER	TN THACKER	500	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
154	Keonjhar	JoED	CHAMPUA	CHAMPUA	BASIRA		100	3	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
155	Keonjhar	JoED	CHAMPUA	CHAMPUA	MUSLIM BASTI	MUSLIM BASTI	100	1	0.5	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
156	Keonjhar	KED	Turmunga	PATNA	MUSAKHORI	BADJAMPOSI	25	2	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
157	Keonjhar	AED	GHATAGAON	DHENKIKOTE	BRUNDABANPUR TALA SAHI	BRUNDABANPUR TALA SAHI	25	4	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
158	Keonjhar	AED	GHATAGAON	DHENKIKOTE	Jajopasi	Jajopasi	25	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
159	Keonjhar	AED	GHATAGAON	DHENKIKOTE	Katrabeda Jhalia Sahi	Katrabeda Jhalia Sahi	25	3	0.5	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
160	Baleshwar	JED	Jaleswar	Jaleswar No-II	KALYANPUR	KALYANPUR	100	1	0.55	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
161	BARIPADA	RED	KARANJIA	THAKURMUNDA	KALIAPOSI	KALIAPOSI	25	2	0.55	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
162	Baleshwar	BTED	Jamsuli	Baliapal	Ekidapal	Ekidapal	100	2	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
163	Baleshwar	BTED	BASTA	BASTA-I	BASANTPUR-2	BASANTPUR-2	100	2	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
164	Baleshwar	BTED	BASTA	BASTA-I	TIKIRAPADA	TIKIRAPADA	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
165	Baleshwar	CED	RE-II	SRIJUNG	KULIGAN,MAHISASURI	MAHISASURI 1	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
166	Baleshwar	CED	RE-II	ODANGI	NARSINGHPUR 100KVA	NARSINGHPUR	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
167	Baleshwar	CED	RE-I	RUPSA	TAHARPUR	TAHARPUR	63	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
168	Baleshwar	CED	RE-I	RUPSA	RUPSA SAMIL HASANPUR 33/.4	RUPSA GAN	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
169	Baleshwar	CED	RE-I	RUPSA	GADAPADA	GADAPADA	250	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
170	Baleshwar	SED	SORO	ANANTAPUR	BIRI GADIA 100 KVA	BIRI GADIA	100	3	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
171	Baleshwar	SED	SORO	ANANTAPUR	RAGHUNATHPUR SCHOOL 25KVA	RAGHUNATHPUR SCHOOL	25	3	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
172	Baleshwar	SED	Markona	Balikhanda	Matlapada	Matlapada	16	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
173	Baleshwar	SED		Balikhanda	Manaspada	Manaspada	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
174	Baleshwar	BED	SUPPLY-I	CHANDIPUR	SAKTIPADA GALI	JHAMPURA	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
175	Baleshwar	BED	SUPPLY-I	CHANDIPUR	BHAYAPOKHARI	BHAYAPOKHARI	100	3	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
176	Baleshwar	BED	SUPPLY-I	CHANDIPUR	ANTIA SAHI	KHANDAKALI	25	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
177	Baleshwar	BED	SUPPLY-I	CHANDIPUR	DANDPAT SAHI	BASULI CHHAKA	25	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
178	Baleshwar	JED	Jaleswar	Jaleswar No-II	UTTARPADA-2	UTTARPADA-2	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
179	BARIPADA	RED	KARANJIA	THAKURMUNDA	TARAMARA	TARAMARA	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
180	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	GORUMAHISANI CAMP	GORUMAHISANI	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
181	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	JADAMAHL	JADAMAHL	63	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
182	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	SUNDHAL UGAL SAHI	SUNDHAL UGAL SAHI	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
183	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	KASHIPUR	KASHIPUR	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
184	BARIPADA	UED	KHUNTA	Badasahi	SATAPAUTIA	SATAPAUTIA	16	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
185	BARIPADA	BPED	BARIPADA	NO.II	SUBHADRA PUMP HOUSE	SUBHADRA PUMP HOUSE	100	2	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
186	BARIPADA	BPED	BARIPADA	NO.II	BAITARANI(ODISHA) GRAMYA BANK	MPC AUTONOUAMN BACK SIDE	100	2	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
187	Baripada	BPED	KULIANA	BANGRIPOSI	Asua 100 kva	Asua	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
188	BARIPADA	BPED	KULIANA	JHARPOKHARIA	ROUTARA VILLAGE	RAUTARA	25	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
189	Baripada	BPED	Kuliana	Kuliana	Kalabadia, 25kva 11/0.4kv	Kalabadia	25	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
190	Baripada	BPED	Kuliana	Kuliana	Kalabadia, 63kva 11/0.4kv	Kalabadia PSS	63	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
191	BARIPADA	BPED	RE-BARIPADA	RAGHUNATHPUR	BHAGBAT CH PUR	NEAR HIGH SCHOOL	25	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
192	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Boiti Sahi	Boiti Sahi	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
193	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Bindhana		100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
194	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Saro Panda Sahi	Saro Panda Sahi	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
195	Bhadrak	BSED	RE Bhadrak	Bonth	Malatira Durga Sahi	Malatira Durga Sahi	63	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
196	Bhadrak	BSED	RE Bhadrak	Bonth	Malatira Durga Sahi-2	Malatira Durga Sahi-2	63	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
197	JAJPUR	JRED	JAJPUR ROAD	CHORDA	SANTARA PUR	SANTARAPUR	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
198	Jajpur	JTED	BINJHARPUR	MADHUSUDANPUR	MALLIPUR 100KVA	MALLIPUR	100	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
199	Jajpur	JTED	JAJPUR TOWN-I	NO-3	ANKULA	ANKULA	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
200	Jajpur	JTED	JAJPUR TOWN-I	NO-3	BARABATI	BARABATI	100	1	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
201	Jajpur	KUED	Kuakhia	MATHASAH	GOPINATHPUR	NIHARISAH	100	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
202	Jajpur	KUED	Dharmasala	KABATABANDHA	RAGHUNATHAPUR	RAGHUNATHAPUR	25	1	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
203	Keonjhar	JoED	CHAMPUA	CHAMPUA	tunutuna	tunutuna	100	3	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
204	Keonjhar	JoED	CHAMPUA	CHAMPUA	RAMALA	RAMALA	100	2	0.6	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
205	Keonjhar	KED	Turmunga	SAHARPADA	KHAJURDIHA	KHAJURDIHA	25	2	0.6	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
206	Baleshwar	JED	Jaleswar	Jaleswar No-II	UTTARPADA	UTTARPADA	100	1	0.65	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
207	JAJPUR	JRED	JAJPUR ROAD	CHORDA	SAPAGADIA CHHAKA	SAPAGADIA CHHAKA	250	1	0.65	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
208	JAJPUR	JRED	JAJPUR ROAD	CHORDA	COLLEGE INSIDE	COLLEGE INSIDE	100	1	0.65	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
209	Baleshwar	BTED	Jamsuli	Baliapal	Jhalajalia	Jhalajalia	25	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
210	Baleshwar	BTED	Jamsuli	Baliapal	Madhupura pokhali	Madhupura pokhali	100	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
211	Baleshwar	BTED	Jamsuli	Langaleswar	Katishai	Neglabadi	100	3	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
212	Baleshwar	CED	RE-II	SRIJUNG	DURGA MANDAP	DURGA MANDAP	63	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
213	Baleshwar	CED	RE-II	ODANGI	BHANDESWAR 63KVA	BHANDESWAR	63	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
214	Baleshwar	CED	RE-II	ODANGI	BALISUAN 100KVA	BALISUAN	100	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
215	Baleshwar	CED	NILAGIRI	MITRAPUR	KARADIA	KARADIA	100	3	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
216	Baleshwar	CED	RE-1	Remuna	Ganapati Bhandara	Remuna	63	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
217	Baleshwar	BED	SUPPLY-I	MATHASAH	ARATIGARDEN	KASIMABAD	100	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
218	Baleshwar	BED	SUPPLY-I	MATHASAH	DAS ITI	DAS ITI	250	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
219	Baleshwar	BED	SUPPLY-II	NO-III	ANGARGADIA	CHUDAKUTA SAHI	250	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
220	Baleshwar	JED	Jaleswar	Jaleswar No-II	CHITMISHRA	CHITMISHRA	100	1	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
221	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MOHANTA SAHI	ANLADUBA MOHANTA SAHI	100	1	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
222	BARIPADA	UED	KHUNTA	Badasahi	PC Pur	PC Pur	25	2	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
223	Bhadrak	BNED	Basudevpur	Basudevpur No-1	Chaura Chakka	Chaura Chakka	100	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
224	JAJPUR	JRED	DUBURI	SUKINDA	HATIBARI DURGAMANDAP	HATIBARI	100	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
225	Jajpur	JTED	BINJHARPUR	BINJHARPUR-II	BARAKOTI	BARAKOTI	63	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
226	Jajpur	KUED	Kuakhia	MATHASAH	KALHAN	NEAR ICE CREAM FACTORY	100	1	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
227	Keonjhar	AED	ANANDAPUR	GHASIPURA	MANGALPUR VILLAGE	MANGALPUR VILLAGE	100	2	0.7	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
228	Keonjhar	AED	ANANDAPUR	ANANDAPUR	BALIPOSHI,TIKAR SAHI	BALIPOSHI,TIKAR SAHI	16	2	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
229	Keonjhar	AED	GHATAGAON	DHENKIKOTE	Khudputuli	Khudputuli	25	3	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
230	Keonjhar	AED	GHATAGAON	DHENKIKOTE	PIPIIA BAGHIAMANI SAHI	PIPIIA BAGHIAMANI SAHI	63	4	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
231	Keonjhar	AED	GHATAGAON	DHENKIKOTE	BHOLABEDA GARANDI SAHI	BHOLABEDA GARANDI SAHI	16	2	0.7	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
232	Baleshwar	JED	Jaleswar	Jaleswar No-II	RELLA	RELLA	63	1	0.72	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
233	Baleshwar	SED	Bahanaga	Khantapada	NAICHHANPUR	NAICHHANPUR	100	1	0.75	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
234	Baleshwar	JED	Jaleswar	Jaleswar No-II	KASIDA-2	KASIDA-2	100	1	0.75	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
235	Baleshwar	BTED	Jamsuli	Baliapal	Badhapal	Badhapal	25	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
236	Baleshwar	CED	NILGIRI	BERHAMPUR	ASANBANI	ASANBANI	100	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
237	Baleshwar	CED	RE-II	SRIJUNG	GHUDASALPADA	GHUDASALPADA	100	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
238	Baleshwar	CED	RE-II	ODANGI	TELAGADIA 63KVA	TELAGADIA	63	1	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
239	Baleshwar	CED	RE-I	RUPSA	BAMADA 33/4	BAMADA 2	100	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
240	Baleshwar	CED	RE-I	RUPSA	MIRIGIMUNDI 33/4	MIRIGIMUNDI	100	3	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
241	Baleshwar	CED	RE-I	RUPSA	ANKO	ANKO	100	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
242	Baleshwar	SED	Soro	Soro No II	Junagadia	Junagadia	63	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
243	Baleshwar	BED	SUPPLY-II	NO-III	BALANGA	BALIA	400	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
244	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ROUTHKHAMAR	ROUTHKHAMAR	100	1	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
245	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	NIMDIHI NEAR NM CENTER	NIMDIHI	63	1	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
246	BARIPADA	UED	KHUNTA	Badasahi	SANANUAGAON	SANANUAGAON	63	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
247	BARIPADA	BPED	RE-BARIPADA	RAGHUNATHPUR	GARUDONESHA	GARUDONESHA NEAR UP SCHOOL	25	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
248	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Bhndari Pokhari Market	Bhndari Pokhari Market	315	1	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
249	Bhadrak	BSED	RE Bhadrak	Bonth	Aranji	Aranji	100	1	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
250	Bhadrak	BSED	RE Bhadrak	Bonth	Tikiria	Tikiria	63	1	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
251	Bhadrak	BNED	Basudevpur	Basudevpur No-1	Gaganbabu Chakka Papu badi	Gaganbabu Chakka Papu badi	100	1	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
252	JAJPUR	JRED	JAJPUR ROAD	DALA	SAROBAR	SARAVOR CHAKA -Khandahata chaka	250	1	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
253	Jajpur	KUED	Kuakhia	MATHASAH	ARTIA KUSUNPUR	NEAR KHELA PADIA	100	1	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
254	Keonjhar	AED	BIDYADHARPUR	HATADIHI	Jamitira	Jamitira	100	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
255	Keonjhar	AED	ANANDAPUR	Ramachandrapur	Batto	Batto	100	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
256	Keonjhar	JoED	Champua	Jhumpura	Putulia	Putulia	100	3	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
257	Keonjhar	JoED	BARBIL	BARBIL- 2	BOLANI MARKET	BOLANI	250	2	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
258	Keonjhar	JoED	BARBIL	BARBIL- 2	BOLANI GURUDWARA	BOLANI	250	1	0.8	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
259	Keonjhar	KED	No-II	TELKOI	Siriabahal	Siriabahal Puruna Sahi	25	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
260	Keonjhar	KED	Turmunga	PATNA	KHAJIRAPOSI	KHAJIRAPOSI	63	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
261	Keonjhar	AED	ANANDAPUR	GHASIPURA	KAINIPURA (AUROBINDA SCHOOL)	KAINIPURA (AUROBINDA SCHOOL)	63	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
262	Keonjhar	AED	GHATAGAON	Harichandampur	Pitapiti	Pitapiti	63	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
263	Keonjhar	AED	ANANDAPUR	Ramachandrapur	Saladei	Saladei	63	2	0.8	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
264	Baleshwar	BTED	Basta	Basta no-2	Guthanapada	Guthanapada	63	1	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
265	Baleshwar	CED	NILGIRI	BERHAMPUR	SATHI BALBALIA	SATHI BALBALIA	63	1	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
266	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR	RUHULA	100	1	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
267	Baleshwar	CED	RE-1	Remuna	Basukhunta	Basukhunta	100	2	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
268	Baleshwar	SED		Balikhanda	Balikhanda Bazar	Balikhanda Bazar	100	1	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
269	BARIPADA	RED	KARANJIA	THAKURMUNDA	TARAMA	TARAMARA	100	2	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
270	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-1	Kulana		100	1	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
271	JAIPUR	JRED	PANIKOILI	PANIKOILI	BALIDANDA 100 KVA	BALIDANDA	100	2	0.9	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
272	Keonjhar	JoED	Champua	Jhumpura	Jodichatar	Jodichatar	100	3	0.9	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
273	Baleshwar	BTED	Jamsuli	Jamsuli	Sitadiha		100	1		4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
274	Baleshwar	BTED	Jamsuli	Baliapal	Kudmanshing	Kudmanshing	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
275	Baleshwar	BTED	Jamsuli	Baliapal	Kalaruhi	Kalaruhi	25	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
276	Baleshwar	BTED	Jamsuli	Langaleswar	Badanpur	Badanpur	25	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
277	Baleshwar	BTED	BASTA	RAJGHAT	gilajodi 100kva	gilajodi 100kva	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
278	Baleshwar	BTED	BASTA	RAJGHAT	UJUDA 100KVA	UJUDA 100KVA	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
279	Baleshwar	BTED	BASTA	RAJGHAT	BINJIPURA 100KVA	BINJIPURA	100	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
280	Baleshwar	BTED	Basta	Basta no-2	Jalisahi sartha	Jalisahi sartha	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
281	Baleshwar	BTED	Basta	Basta no-2	Gobaragoti	Gobaragoti	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
282	Baleshwar	BTED	Basta	Basta no-2	Kunduli new	Kunduli	100	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
283	Baleshwar	BTED	Basta	Basta no-2	Sendapada	Sendapada	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
284	Baleshwar	BTED	Basta	Basta no-2	Nagadasahi	Nagadasahi	16	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
285	Baleshwar	BTED	Basta	Basta no-2	Beguia		100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
286	Baleshwar	BTED	BASTA	BASTA-I	MATHANI CHHAKA	MATHANI CHHAKA	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
287	Baleshwar	CED	NILGIRI	BERHAMPUR	ISHANENDI	ISHANENDI	250	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
288	Baleshwar	CED	NILGIRI	BERHAMPUR	SALDAHAR		100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
289	Baleshwar	CED	NILGIRI	BERHAMPUR	DALIMPAL	DALIMPAL	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
290	Baleshwar	CED	NILGIRI	BERHAMPUR	PITHAHOTA	PITHAHOTA	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
291	Baleshwar	CED	NILGIRI	BERHAMPUR	BISWALSAHI	BISWALSAHI	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
292	Baleshwar	CED	RE-II	SRIJUNG	TINA, UDAPADA	TINA, UDAPADA	100	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
293	Baleshwar	CED	NILAGIRI	MITRAPUR	KANSA 100 KVA	MANGALASAH	100	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
294	Baleshwar	CED	NILAGIRI	MITRAPUR	RADHABALLVPUR	RADHABALLBPUR	100	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
295	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	BANGALI COLONY	100	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
296	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	SANSAPAL	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
297	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	SANSAPAL	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
298	Baleshwar	CED	NILAGIRI	MITRAPUR	MITRAPUR	MITRAPUR COLONEY	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
299	Baleshwar	CED	RE-1	Remuna	Dubeiti	dubeiti	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
300	Baleshwar	CED	RE-1	Remuna	Udamber-1	Udamber	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
301	Baleshwar	CED	RE-1	Remuna	Patnaraipur	patnaraipur	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
302	Baleshwar	CED	RE-I	RUPSA	RUPSA SAMIL HASANPUR	RUPSA GAN	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
303	Baleshwar	CED	RE-I	RUPSA	PADABADAGAN 33/4	PADABADAGAN	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
304	Baleshwar	CED	RE-I	RUPSA	NAYAPADA	NAYAPADA	63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
305	Baleshwar	SED	Soro	Soro No-I	Kesharipur	Kesharipur	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
306	Baleshwar	SED	Soro	Soro No II	Bartana	Bartana	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
307	Baleshwar	SED	Soro	Soro No II	Dhanbarkhunta	Dhanbarkhunta	63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
308	Baleshwar	SED	SORO	ANANTAPUR	ANANTAPUR MARKET 500 KVA	ANANTAPUR MARKET	500	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
309	Baleshwar	SED	SORO	ANANTAPUR	RAHA PADA 100 KVA	RAHA PADA	100	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
310	Baleshwar	SED	SORO	ANANTAPUR	KARANJAGOHIRI 100 KVA	KARANJAGOHIRI	100	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
311	Baleshwar	SED	Khaira	Gandibed	Gandibed 400KVA	Gandibed Market	400	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
312	Baleshwar	SED	Khaira	Gandibed	Rafayetpur 100KVA	Rafayetpur	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
313	Baleshwar	SED	Bahanaga	Gopalpur	Bishnupur(Baligulim)		2*25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
314	Baleshwar	SED	MARKONA	MARKONA	KHIRKONA	KHIRKONA	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
315	Baleshwar	SED	MARKONA	MARKONA	MARKONA	MARKONA	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
316	Baleshwar	SED	MARKONA	MARKONA	SALMA GADIYA	SALMA GADIYA	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
317	Baleshwar	SED	MARKONA	MARKONA	BATI	BATI	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
318	Baleshwar	SED	MARKONA	MARKONA	BEDPUR	BEDPUR	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
319	Baleshwar	JED	Jaleswar	Jaleswar No-II	BALIKBAD		100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
320	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ICHINDA	INDISE SALSEED	250	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
321	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MAHULDIHA	MAHULDIHA -PRESIDENT HOUSE	250	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
322	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	PANPOSI	KANTABANI TO PANPOSI	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
323	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MURMUCHHAKA	MURMUCHHAKA	100	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
324	BARIPADA	RED	RAIRANGPUR-II	BISOI	SAN MANADA	SAN MANADA	63	3	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
325	BARIPADA	RED	RAIRANGPUR-II	BISOI	MAJHI SAHI	JAMUJHARI	63	3	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
326	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	POKHARIA	POKHARIA	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
327	BARIPADA	RED	JASHIPUR	JASHIPUR	TULASIBANI	TULASIBANI GATE	25	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
328	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	SANMAUDA		63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
329	BARIPADA	RED	RAIRANGPUR-I	KANTABANI	BADAMTALIA	KHANDA DEULI	100	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
330	BARIPADA	UED	KHUNTA	MANATRI	DEULIA MAHAKUDUSAHI 16 KVA	MAHAKUDUSAHI	16	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity (KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
331	BARIPADA	UED	KHUNTA	MANATRI	BANICHA 63 KVA	BANCH	63	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
332	BARIPADA	UED	KHUNTA	MANATRI	CHAKRADHARAPUR 100KVA	CHAKRADHARPUR	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
333	BARIPADA	UED	KHUNTA	MANATRI	MALIHATI 25KVA	MALIAHATI	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
334	BARIPADA	UED	KHUNTA	MANATRI	UPARAKADADA 25 KVA	UPARAKADA	25	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
335	BARIPADA	UED	KHUNTA	Badasahi	KHADISOLE JAMUNA	KHADISOLE JAMUNA	25	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
336	BARIPADA	UED	KHUNTA	Badasahi	GOUDAMUNDALI	GOUDAMUNDALI	25	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
337	BARIPADA	UED	KHUNTA	Badasahi	Badashi PSS	Badashi PSS	25	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
338	BARIPADA	UED	KHUNTA	Badasahi	BARGADI	BARGADI	16	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
339	BARIPADA	UED	KHUNTA	Badasahi	MADHAPANDA	MADHAPANDA	16	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
340	Baripada	BPED	Betnoti	Betnoti	TVS Show Room	TVS Show room to Dwibedi nana DTR	250	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
341	BARIPADA	BPED	BETNOTI	BAISINGA	ANGARUA	ANGARUA	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
342	BARIPADA	BPED	BETNOTI	BAISINGA	BAUSABAGAN	BAUNSBAGAN	25	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
343	Baripada	BPED	KULIANA	BANGRIPOSI	hijili 63 kva	hijili	63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
344	Baripada	BPED	Moroda	Gaon Amarda	HARINASOLE BARUDIHA	BARUDIHA	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
345	Baripada	BPED	Kuliana	Kuliana	Makdiahudi Kamta 63KVA 11/0.4KV	Makdiahudi Kamta	63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
346	Bhadrak	BSED	RE Bhadrak	Agarpada	Kadabaranga	Kadabaranga	100	1	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
347	Bhadrak	BSED	RE Bhadrak	Bonth	manguli Rout Sahi	manguli Rout Sahi	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
348	Bhadrak	BSED	RE Bhadrak	Bonth	Gharapada	Gharapada	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
349	Jajpur	KUED	BARI	SUJANPUR	SAHASPUR 100 KVA	SAHASPUR	100	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
350	Jajpur	KUED	Dharmasala	KABATABANDHA	ARIMUL HATA SAHI	ARIMUL HATA SAHI	63	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
351	Keonjhar	KED	Turmunga	TURUMUNGA	PURUNIA	PURUNIA	100	2	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
352	Keonjhar	AED	GHATAGAON	DHENKIKOTE	BASANTPUR	BASANTPUR	100	4	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
353	Keonjhar	AED	GHATAGAON	DHENKIKOTE	NUDURPADA	NUDURPADA	100	4	1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
354	Keonjhar	KED	No-II	TELKOI	Binjabahal	Binjabahal Mandira sahi	63	3	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
355	Keonjhar	KED	Turmunga	PATNA	ANALADIHA	ANALADIHA	63	2	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
356	Keonjhar	JoED	CHAMPUA	REMULI	TALKBAHAL	TALKBAHAL	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
357	Keonjhar	JoED	CHAMPUA	REMULI	RAMACHANDPUR	RAMACHANDPUR	25	1	1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
358	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MAHULDIHA	MAHULDIHA -KANYASHRAM	250	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
359	JAIPUR	JRED	PANIKOILI	PANIKOILI	BARTAMANA -63 KVA	BARTAMANA	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
360	Baleshwar	CED	RE-1	Remuna	Mendra	Mendra	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
361	Baleshwar	CED	RE-I	RUPSA	BAMADA 33/ 4	BAMADA	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
362	JAIPUR	JRED	JAIPUR ROAD	DANAGADI	hingula sahi jakhpura	jakhpura	250	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
363	Baleshwar	BTED	BASTA	RAJGHAT	MATHA 100KVA	MATHA 100KVA	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
364	Baleshwar	BTED	BASTA	RAJGHAT	KUNDULI 100KVA	KUNDULI 100KVA	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
365	Baleshwar	BTED	BASTA	RAJGHAT	gilajodi 100kva	gilajodi	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
366	Baleshwar	CED	NILGIRI	BERHAMPUR	BEDHA SAHI	BEDHA SAHI	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
367	Baleshwar	CED	NILGIRI	BERHAMPUR	PITHAHOTA	PITHAHOTA	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
368	Baleshwar	CED	RE-II	FULADI	Nijampur 100KVA	Nijampur	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
369	Baleshwar	CED	RE-II	FULADI	Dhuipal 63KVA	Dhuipal	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
370	Baleshwar	CED	RE-II	FULADI	Olipur 63KVA	Olipur	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
371	Baleshwar	CED	NILAGIRI	SERGARH	sribantpur	sribantpur	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
372	Baleshwar	CED	RE-II	SARAGAN	Tarinibasa	Tarinibasa	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
373	Baleshwar	CED	RE-II	SRIJUNG	KULIGAN,NEAR HANUMAN MANDIR	NEAR HANUMAN MANDIR	100	3	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
374	Baleshwar	CED	NILAGIRI	MITRAPUR	TENTULIA	MATIALI	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
375	Baleshwar	CED	NILAGIRI	MITRAPUR	KANSA	TINDESH	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
376	Baleshwar	CED	NILAGIRI	MITRAPUR	MITRAPUR	CHANDIPUR ADIBASISAH	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
377	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	DUMAGANDIRA	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
378	Baleshwar	CED	NILAGIRI	NILAGIRI	GHATAGHARASAH	GHATAGHARASAH	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
379	Baleshwar	CED	RE-1	Remuna	Maliksahi	Armala	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
380	Baleshwar	CED	RE-1	Remuna	Asuragadia	Govindaspur	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
381	Baleshwar	CED	RE-1	Remuna	Ranipokhari	Gourapur	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
382	Baleshwar	CED	RE-1	Remuna	Mendra	Mendra	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
383	Baleshwar	CED	RE-1	Remuna	Dalagahira	Dalagahira	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
384	Baleshwar	SED	Soro	Soro No-I	Angula	Angula	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
385	Baleshwar	SED	Soro	Soro No II	Raghunathpur Ganja	Raghunathpur Ganja	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
386	Baleshwar	SED	Khaira	Gandibed	Nizorus 250KVA	Nizorus	250	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
387	Baleshwar	SED	Khaira	Khaira	Arjunpur	Arjunpur	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
388	Baleshwar	SED	Khaira	Khaira	Kupari	Kupari Market	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
389	Baleshwar	SED	Bahanaga	Bahanaga	DNSS TEMPLE	BAHANAGA	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
390	Baleshwar	SED	Bahanaga	Bahanaga	NAYAK BANDHA	NAYAK BANDHA	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
391	Baleshwar	SED	Bahanaga	Gopalpur	Bishnupur	Near Hanuman Mandir	50	1.5	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
392	Baleshwar	SED	MARKONA	ADABAZAR	ANANDAPUR	ANANDPUR	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
393	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	BAIDAPOSI	MATCHES FACTORY	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
394	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	NADIAPOSI	HALDA	25	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
395	BARIPADA	UED	KHUNTA	Badasahi	chauliasole	chauliasole	25	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
396	Baripada	BPED	Kuliana	Kuliana	Kuabuda 100KVA,11/0.4KV	Kuabuda	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
397	Bhadrak	BSED	RE Bhadrak	Bonth	Mahililagadia	Mahililagadia	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
398	JAIPUR	JRED	PANIKOILI	PANIKOILI	DAIDASAPATNA 63 KVA	DAIDASAPATNA	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
399	Jajpur	KUED	Dharmasala	JARAKA	ARAKHAPADA	ARAKHAPADA	63	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
400	Keonjhar	KED	Turmunga	TURUMUNGA	BALANIPOSI	BALANIPOSI	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
401	Keonjhar	JoED	CHAMPUA	REMLU	Baria		63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
402	Baleshwar	BTED	BASTA	RAJGHAT	PANINAGAR 100KVA	PANINAGAR	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
403	Baleshwar	CED	RE-II	SRIJUNG	KULIGAN,MANDAGAN	MANDAGAN	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
404	Baleshwar	SED	Khaira	Khaira	Gopalabedha	Gopalabedha	63	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
405	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	HALDA	HALDA	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
406	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	BADBAIKALA	HALDA	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
407	BARIPADA	RED	RAIRANGPUR-II	BISOI	MOHANTA SAHI	GUNDURIA	100	3	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
408	BARIPADA	RED	RAIRANGPUR-II	BISOI	MOHANTA SAHI	BONEIKALA	100	3	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
409	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	KULGI	KULGI	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
410	Baleshwar	BTED	BASTA	BASTA-I	PUNSITA	PUNSITA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
411	Baleshwar	CED	RE-II	SARAGAN	Luna Pahi	Luna Pahi	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
412	Baleshwar	CED	RE-II	SRIJUNG	SRIJUNG, SRIRAMPUR	SRIRAMPUR(PLINTH)	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
413	Baleshwar	SED	Soro	Soro No-I	Gujabhati		63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
414	Baleshwar	SED	Khaira	Khaira	Naranapur	Naranapur	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
415	Baleshwar	SED	Khaira	Khaira	Ratina Ichhapur	Ratina Ichhapur	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
416	Baleshwar	SED	Khaira	Khaira	Sarata	Sarata	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
417	Baleshwar	SED	Markona	Balikhanda	Dalagadia	Dalagadia	16	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
418	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	SINGLE SAHI	SINGLE SAHI	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
419	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MAHULDIHA	PANPOSI	25	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
420	BARIPADA	UED	KHUNTA	KHUNTA	100KVA KATHAPAL	KATHAPAL	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
421	BARIPADA	BPED	BARIPADA	NO.II	MAJHI SAHI	KUMHAR SAHI	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
422	JAIPUR	JRED	JAIPUR ROAD	DANAGADI	jugadihi	jugadihi	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
423	JAIPUR	JRED	PANIKOILI	PANIKOILI	DHANATRI 100 KVA	DHANATRI	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
424	Jajpur	JTED	BINJHARPUR	BINJHARPUR-II	MATIAKANA	MATIAKANA	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
425	Jajpur	KUED	BARI	BARI-I	KHEMESWAR 1	KHEMESWAR	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
426	Jajpur	KUED	Kuakhia	Brahmabarada	Shapada		100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
427	Jajpur	KUED	Dharmasala	KABATABANDHA	SENDHAPUR	SENDHAPUR	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
428	Jajpur	KUED	Kuakhia	Kuakhia	GOPALPUR GADHA BAZAR 100kva	GOPALPUR GADHA BAZAR	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
429	Keonjhar	AED	BIDYADHARPUR	HATADIHI	Antira		100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
430	Keonjhar	KED	Turmunga	PATNA	Tangerpada Kumdabahali	Tangerpada Kumdabahali	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
431	Baleshwar	CED	NILAGIRI	SERGARH	BIRUAN	BIRUAN	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
432	Baleshwar	CED	NILAGIRI	SERGARH	PATARA-2	PATARA-2	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
433	Baleshwar	CED	NILAGIRI	SERGARH	BIRUAN -2	BIRUAN -2	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
434	Baleshwar	CED	NILAGIRI	SERGARH	HIRATIKIRI	HIRATIKIRI	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
435	Baleshwar	CED	NILAGIRI	SERGARH	BAUNSAMUHA	BAUNSAMUHA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
436	Baleshwar	CED	RE-II	SARAGAN	PADMAPUR	UPPER SAHI	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
437	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	MILAN CHHAK	BINJHUA	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
438	BARIPADA	UED	KHUNTA	MANATRI	MANATRI MARKET 100 KVA	MANATRI	100	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
439	Baleshwar	CED	RE-II	SARAGAN	BADAKIA	BADAKIA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
440	Baleshwar	CED	RE-1	Remuna	Matha s/s	Basukhunta	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
441	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	BHURSHA		25	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
442	Baleshwar	CED	NILGIRI	BERHAMPUR	BHALKUPOSI	BHALKUPOSI	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
443	Baleshwar	CED	RE-II	FULADI	Kasmila 100KVA	Kasmila	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
444	Baleshwar	CED	RE-II	FULADI	Udapada 100KVA	Udapada	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
445	Baleshwar	CED	NILAGIRI	SERGARH	PATARA-1	PATARA-1	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
446	Baleshwar	CED	NILAGIRI	SERGARH	SERGARH	SERGARH	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
447	Baleshwar	CED	NILAGIRI	SERGARH	TELIBADI	TELIBADI	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
448	Baleshwar	CED	NILAGIRI	SERGARH	KILA	KILA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
449	Baleshwar	CED	NILAGIRI	SERGARH	SASANPADA	SASANPADA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
450	Baleshwar	CED	RE-II	SARAGAN	BIDEI	BIDEI	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
451	Baleshwar	CED	RE-II	SARAGAN	SARANGABAG	SARANGABAG	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
452	Baleshwar	CED	NILAGIRI	MITRAPUR	BALISAH,	BALIPAL	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
453	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	KALYANI	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
454	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	DUBATTY	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
455	Baleshwar	CED	NILAGIRI	MITRAPUR	MITRAPUR	KARADIA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
456	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	BEGUNIA SAMBHSUSINGSAHI	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
457	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	KALYANI	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
458	Baleshwar	CED	NILAGIRI	NILAGIRI	MARKET	HATACHAKKA	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
459	Baleshwar	CED	RE-1	Remuna	Badua		100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
460	Baleshwar	CED	RE-1	Remuna	Halupatna	Halupatna	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
461	Baleshwar	CED	RE-I	RUPSA	KHANDAHAR	KHANDAHAR	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-H Conversion of LT Bare cond. to AB Cable												
Sr No	Circle	Division	Sub-division	Section	Name of DTR	Location	Exisiting DTR Capacity(KVA)	No. of outgonig Ckt	Length of AB cable Req(KM).	Cable Size	Justification for the Requirement	Priority
462	BARIPADA	RED	RAIRANGPUR-II	BISOI	MANADA	MANADA	100	9	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
463	BARIPADA	RED	RAIRANGPUR-II	BISOI	BANKI	BANKI	63	1	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
464	BARIPADA	RED	KARANJIA	KARANJIA-I	VIVEKANANDA SCHOOL	DAILY MARKET	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
465	BARIPADA	UED	KHUNTA	KHUNTA	BADFENI 100KVA	BADFENI	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
466	Baripada	BPED	Betnoti	Betnoti	Chitadihi	Chitadihi village	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
467	Bhadrak	BSED	RE Bhadrak	Bonth	Uparpalasa	Uparpalasa	63	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
468	JAJPUR	JRED	JAJPUR ROAD	DALA	JALAKA -1	JALAKA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
469	Jajpur	JTED	BINJHARPUR	BALAMUKILI	BACHHOLA CHHAKA 100KVA	BACHHOLA	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
470	Keonjhar	KED	Turmunga	TURUMUNGA	NEAR PRIMARY SCHOOL 63	JAMANALIA	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
471	Baleshwar	CED	NILAGIRI	MITRAPUR	DURGAPUR	DURGAPUR,NIMPAL	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
472	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	GAPUBARI	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
473	Baleshwar	CED	NILAGIRI	MITRAPUR	MITRAPUR	GOBARDHANPUR	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
474	Baleshwar	CED	NILAGIRI	MITRAPUR	MACHHUA	SINGIRI	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
475	Baleshwar	CED	NILAGIRI	MITRAPUR	BEGUNIA	BEGUNIA GOPABADIA	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
476	BARIPADA	RED	RAIRANGPUR-I	BAHALDA	KACHANDA	KACHANDA NEAR UP SCHOOL	25	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
477	Baripada	BPED	Kuliana	Kuliana	Tilkachaka 100KVA,11/0.4KV	Tilkachaka	100	3	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
478	Keonjhar	AED	GHATAGAON	Harichandanpur	kadudiha	kadudiha	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
479	Baleshwar	CED	RE-1	Remuna	Kathasangada	Kathasangada	100	1	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
480	Baleshwar	SED	Khaira	Khaira	Mathanuagaon	Mathanuagaon	100	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
481	Baleshwar	SED	Khaira	Khaira	Faguna	Faguna	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
482	Baleshwar	SED	Khaira	Khaira	Kantapada Sasana	Kantapada Sasana	63	3	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
483	Baleshwar	BED	SUPPLY-II	NO-III	RLY STR (SHAKTI NAGAR)	SHAKTI NAGAR	500	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
484	BARIPADA	BPED	BARIPADA	NO.II	KENAL AADI(IPDS)	DEBENDRAPUR	100	2	1.1	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
485	JAJPUR	JRED	JAJPUR ROAD	DANAGADI	paikraypur	pikraypur	100	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
486	JAJPUR	JRED	PANIKOILI	PANIKOILI	DAMDARPUR 63 KVA	DAMDARPUR	63	2	1.1	4x50+1x50+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
487	JAJPUR	JRED	JAJPUR ROAD	DANAGADI	samal sahi jakhpura	jakhapura	100	2	1.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1
488	Baleshwar	JED	Jaleswar	Jaleswar No-II	KASIDA-1	KASIDA-1	100	1	1.2	4x95+1x95+1x16 sqmm	For Safety & To Avoid Theft /Danger	P1

Annexure-I Replacement/Addition of network component in 33/11kV Primary Substation																				
Sr No	Circle	Division	Location	Battery SMF Acid 24V 150 AH	Battery SMF Lead Acid 48V 150 AH	Battery Charger Thyrstr Base 24V/40A DCDB	Battery Charger Thyrstr Base 48v/40A DCDB	CT 11kV 1P O/C CTR 800-400-200/1-1-1A	CT 33kV 1P Oil Cooled 800-400-200/1-1-1A	Isolator 33kV 1250A Double Break W/O ES	Isolator 33kV 1250A Double Break W/ES	Isolator 11kV 1250A Double Break W/O ES	Isolator 11kV 1250A Double Break W/ES	Isolator 11kV 1250A Mot Double Break W/O ES	Isolator 11kV 1250A Mot Double Break W/ES	Isolator 11kV Manual 630A 3P DBCR W/ES	PT 11kV 1P	PT 33kV O/D Oil Filled	VCB 33kV O/D 1250A	VCB 11kV O/D 1250A
1	Balasore	CED	Rupsa Substation	1	-	1	-	-	-	1	1	-	1	-	-	-	-	-	0	-
2	Balasore	CED	Remuna Substation	-	-	-	-	-	3	1	-	1	-	-	-	-	-	1	-	-
3	Balasore	CED	Saragan Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
4	Balasore	CED	Srijung Substation	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
5	Balasore	CED	Sergarh Substation	-	-	-	-	3	-	-	-	-	1	-	-	-	-	-	-	-
6	Balasore	CED	Nilgiri Substation	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-
7	Balasore	CED	Bhalukasuni Substation	-	-	-	-	3	-	1	-	-	-	-	-	-	-	-	-	-
8	Balasore	CED	Mitrapur Substation	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
9	Balasore	CED	Somanathpur Substation	-	-	-	-	3	-	-	-	-	1	-	-	-	-	-	-	-
10	Balasore	BTED	Basta Substation	-	-	-	1	-	-	1	-	-	-	-	-	-	-	1	-	-
11	Balasore	BTED	Jamsuli Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
12	Balasore	BTED	Langaleswar Substation	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
13	Balasore	BTED	Ballapal Substation	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
14	Balasore	JED	Jaleswar Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
15	Balasore	JED	Hatigarh Substation	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
16	Balasore	JED	Teghori Substation	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
17	Balasore	BTED	Rajghat Substation	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
18	Balasore	JED	Shyamnagar Substation	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
19	Balasore	JED	Nampo Substation	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
20	Balasore	JED	Kamarda Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
21	Balasore	JED	Dehurda Substation	-	-	-	-	-	3	-	1	-	1	-	-	-	-	-	-	-
22	Balasore	JED	Bhograi Substation	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
23	Balasore	JED	Jagannathpur Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
24	Balasore	SED	Collegechhaka Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	Balasore	SED	Gopinathpur Substation	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
26	Balasore	SED	Anantapur Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	Balasore	SED	Gopalpur Substation	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
28	Balasore	SED	Bahanaga Substation	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-
29	Balasore	SED	Gandibed Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	Balasore	SED	Oupada Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
31	Balasore	SED	Khaira Substation	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
32	Balasore	SED	Dungura Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	Balasore	SED	Kupari Substation	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
34	Balasore	SED	Markona Substation	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Baripada	BPED	Takatpur Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	Baripada	BPED	Stadium Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	Baripada	BPED	Chhancha Substation	-	-	-	-	3	-	2	-	4	-	-	-	-	-	-	2	1
38	Baripada	BPED	Samakhunta Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
39	Baripada	BPED	Kostha Substation	-	-	-	-	3	-	1	-	-	-	-	-	-	-	-	-	1
40	Baripada	BPED	Barkand Substation	-	-	-	-	6	-	-	-	4	-	-	-	-	-	-	-	1
41	Baripada	BPED	Rasagobindpur Substation	-	1	-	-	6	-	-	-	4	-	-	-	-	-	-	-	2
42	Baripada	BPED	Kochilakhunta Substation	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
43	Baripada	BPED	Betnoti Substation	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	1	1
44	Baripada	BPED	Dhangridsole Substation	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	2
45	Baripada	BPED	Bangriposi Substation	-	1	-	-	6	-	-	-	2	-	-	-	-	-	-	-	-
46	Baripada	BPED	Kalabadia Substation	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
47	Baripada	BPED	Baisinga Substation	-	-	-	-	3	-	1	-	6	-	-	-	-	-	-	1	1
48	Baripada	UED	Manitri Substation	-	-	-	-	3	-	1	-	3	-	-	-	-	-	-	3	6
49	Baripada	UED	Badasahi Substation	-	-	-	-	2	3	2	-	4	-	-	-	-	-	-	3	9
50	Baripada	UED	Purunabaripada Substation	-	-	-	-	3	-	2	-	3	-	-	-	-	-	-	-	-
51	Baripada	UED	Khunta Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	Baripada	UED	Kerko Substation	-	-	-	-	6	-	2	-	2	-	-	-	-	-	-	2	6
53	Baripada	UED	Udala Substation	-	1	-	1	-	3	-	-	-	-	-	-	-	-	-	-	-
54	Baripada	UED	Kaptipada Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annexure-I Replacement/Addition of network component in 33/11kV Primary Substation																				
Sr No	Circle	Division	Location	Battery SMF Lead Acid 24V 150 AH	Battery SMF Lead Acid 48V 150 AH	Battery Charger Thyrstr Base 24V/40A DCDB	Battery Charger Thyrstr Base 48v/40A DCDB	CT 11kV 1P O/C CTR 800-400-200/1-1-1A	CT 33kV 1P Oil Cooled 800-400-200/1-1-1A	Isolator 33kV/ 1250A Double Break W/O ES	Isolator 33kV 1250A Double Break W/ES	Isolator 11kV 1250A Double Break W/O ES	Isolator 11kV 1250A Double Break W/ES	Isolator 11kV 1250A Mot Double Break W/O ES	Isolator 11kV 1250A Mot Double Break W/ES	Isolator 11kV Manual 630A 3P DBCR W/ES	PT 11kV 1P	PT 33kV O/D Oil Filled	VCB 33kV O/D 1250A	VCB 11kV O/D 1250A
55	Baripada	RED	Kantabani Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	Baripada	RED	Jamda Substation	-	-	-	-	2	3	-	-	-	-	-	-	-	-	-	2	1
57	Baripada	RED	Bahalda Substation	-	-	-	-	3	-	-	-	3	-	-	-	-	-	-	2	2
58	Baripada	RED	Tiring Substation	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	2	1
59	Baripada	RED	Kuldiha Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	Baripada	RED	Bisoi Substation	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
61	Baripada	RED	Bijatola Substation	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Baripada	RED	Asanbani Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Baripada	RED	Badampahad Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64	Baripada	RED	Jasipur Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	Baripada	RED	Sukruli Substation/Khiching	-	-	-	-	3	-	3	-	1	-	-	-	-	-	-	3	1
66	Baripada	RED	Ghagarbeda Substation	-	-	-	-	2	-	3	-	1	-	-	-	-	-	-	3	4
67	Baripada	RED	Karanja Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
68	Baripada	RED	Thakurmunda Substation	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
69	Bhadrak	BNED	Eram Substation	1	-	1	-	4	3	1	-	2	-	-	-	3	-	-	1	1
70	Bhadrak	BNED	Dhamara Substation	1	-	-	-	2	3	-	-	2	3	-	-	-	-	-	1	2
71	Bhadrak	BNED	Bideipur Substation	1	-	1	-	3	3	1	-	1	-	-	-	-	-	-	-	1
72	Bhadrak	BNED	Powerhouse Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	Bhadrak	BNED	Tihidi Substation/Nandapur	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
74	Bhadrak	BNED	Rahanj Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	Bhadrak	BNED	Chandabali Substation	1	-	1	-	-	3	1	-	-	-	-	-	-	-	-	1	-
76	Bhadrak	BNED	Jashipur Substation	-	-	-	-	2	3	1	-	1	-	-	-	-	-	-	1	1
77	Bhadrak	BSED	Satabhauni Substation	-	-	-	-	3	3	1	-	-	-	-	-	-	3	-	1	1
78	Bhadrak	BSED	Asurali Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79	Bhadrak	BSED	Betaligaon Substation	-	-	-	-	1	3	-	-	-	-	-	-	-	3	-	1	-
80	Bhadrak	BSED	Nalanga Substation	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	Bhadrak	BSED	Bahudarada Substation	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
82	Bhadrak	BSED	Dhamnagar Chhak Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	Bhadrak	BSED	Dhamnagar Substation	-	-	-	-	2	3	-	-	-	-	-	-	-	-	-	1	1
84	Bhadrak	BSED	Barapada Substation	-	1	-	-	1	-	1	-	-	-	-	-	1	-	-	-	1
85	Bhadrak	BSED	Randia Substation/Rahandia	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
86	Bhadrak	BSED	Bisalpata Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
87	Bhadrak	BSED	Chhayalsingh Substation	-	-	-	-	3	-	-	-	2	-	-	-	-	3	-	-	1
88	Keonjhar	KED	Gambharia Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	Keonjhar	JOED	Jhumpura Substation	1	-	1	-	-	-	-	-	-	2	-	-	-	-	-	2	-
90	Keonjhar	JOED	Rimuli Substation	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	1	1
91	Keonjhar	JOED	Champua Substation	-	-	-	-	-	-	1	-	3	-	-	-	-	-	-	-	1
92	Keonjhar	KED	Turumunga Substation	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
93	Keonjhar	KED	Patna Substation	-	-	-	-	3	-	-	3	-	-	-	-	-	-	-	2	-
94	Keonjhar	KED	Banspal Substation	-	-	-	-	-	-	2	-	-	4	-	-	-	-	-	-	1
95	Keonjhar	KED	Saharpada Substation	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
96	Keonjhar	AED	Ghasipura Substation	-	-	-	-	3	3	2	3	-	2	-	-	-	-	-	2	-
97	Keonjhar	AED	Ramachandrapur Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
98	Keonjhar	AED	Bidyadharpur Substation	-	1	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-
99	Keonjhar	AED	Orali Substation	-	-	-	-	-	3	-	-	4	-	-	-	-	-	-	2	-
100	Keonjhar	AED	Dhenkikote Substation	-	-	-	-	3	-	-	3	-	-	-	-	-	-	-	-	1
101	Keonjhar	AED	Harichandanpur Substation	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	2	-
102	Keonjhar	JOED	Jurudi Substation	-	-	-	-	6	-	1	-	-	-	-	-	-	-	-	-	-
103	Keonjhar	JOED	Rugudi Substation	-	-	-	-	-	3	-	1	-	-	-	-	-	-	-	-	1
104	Keonjhar	JOED	Sundara Substation/Barbil	-	1	-	-	3	-	-	1	-	-	-	-	-	-	-	3	-
105	Keonjhar	KED	Judia Substation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
106	Jajpur	KUED	Kuakhia Substation	-	-	-	-	9	-	1	-	-	-	3	-	-	-	-	-	-
107	Jajpur	KUED	Mathasahi Substation	-	1	-	-	-	3	-	1	3	-	-	-	-	3	1	1	3
108	Jajpur	KUED	Sujanpur Substation	1	-	1	-	3	-	1	-	2	-	-	-	-	3	1	-	2

Annexure-I Replacement/Addition of network component in 33/11kV Primary Substation

[illegible]

Annexure-J Phasing out of Vulnerable PTRs (34 Nos)

Sr No	Circle	Division	Location	Existing PTR Capacity	Proposed PTR Capacity	Priority
1	Baripada	RED	Bahalda Substation	3.15 MVA	8 MVA	P1
2	Baripada	RED	Jasipur Substation	3.15 MVA	8 MVA	P1
3	Jajpur	KUED	Jaraka Substation	5 MVA	8 MVA	P1
4	Balasore	SED	Oupada Substation	1.6 MVA	5 MVA	P1
5	Jajpur	KUED	Kabatbandh Substation	5 MVA	8 MVA	P1
6	Jajpur	KUED	Kuakhia Substation	5 MVA	8 MVA	P1
7	Jajpur	KUED	Sujanpur Substation	5 MVA	8 MVA	P1
8	Jajpur	JTED	Dhamdhada Substation	5 MVA	8 MVA	P1
9	Jajpur	JTED	Mainda Substation	3.15 MVA	5 MVA	P1
10	Jajpur	JRED	Duburi Substation	5 MVA	8 MVA	P1
11	Keonjhar	KED	Telkoi Substation	3.15 MVA	5 MVA	P1
12	Keonjhar	KED	Judia Substation	3.15 MVA	8 MVA	P1
13	Baripada	BPED	Samakhunta Substation	1.6 MVA	5 MVA	P1
14	Bhadrak	BNED	Eram Substation	3.15 MVA	5 MVA	P1
15	Bhadrak	BNED	Rahanj Substation	5 MVA	8 MVA	P1
16	Balasore	JED	Nampo Substation	3.15 MVA	5 MVA	P1
17	Baripada	UED	Khunta Substation	5 MVA	8 MVA	P1
18	Baripada	BPED	Barkand Substation	5 MVA	8 MVA	P1
19	Baripada	BPED	Betnoti Substation	5 MVA	8 MVA	P1
20	Baripada	RED	Karanjia Substation	5 MVA	8 MVA	P1
21	Keonjhar	KED	Banspal Substation	3.15 MVA	5 MVA	P1
22	Keonjhar	KED	Patna Substation	3.15 MVA	5 MVA	P1
23	Keonjhar	JOED	Ukhunda Substation	5 MVA	8 MVA	P1
24	Keonjhar	AED	Bidyadharpur Substation	3.15 MVA	5 MVA	P1
25	Keonjhar	AED	Dhenkikote Substation	3.15 MVA	5 MVA	P1
26	Keonjhar	AED	Orali Substation	5 MVA	8 MVA	P1
27	Bhadrak	BSER	Asurali Substation	5 MVA	8 MVA	P1
28	Bhadrak	BSER	Asurali Substation	5 MVA	8 MVA	P1
29	Bhadrak	BSER	Dahala Substation	5 MVA	8 MVA	P1
30	Bhadrak	BNED	Eram Substation	5 MVA	8 MVA	P1
31	Bhadrak	BNED	Tihidi Substation	5 MVA	8 MVA	P1
32	Balasore	JED	Jagannathpur Substation	5 MVA	8 MVA	P1
33	Balasore	CED	Odangi Substation	5 MVA	8 MVA	P1
34	Balasore	CED	Sergarh Substation	5 MVA	8 MVA	P1

Annexure-K Earthing system for PSS

Sr No	Circle	Division	Location	No's of Bore well Earthing (1 No's for 1-PTR)	Priority
1	Baripada	UED	Purunabaripada Substation	1	P1
2	Jajpur	JTED	Jajpur town Substation	1	P1
3	Jajpur	JTED	Dhamdhada Substation	1	P1
4	Jajpur	JTED	Dasarthpur Substation	1	P1
5	Jajpur	KuED	Jaraka Substation	6	P1
6	Jajpur	KuED	Neulpur Substation	4	P1
7	Jajpur	KuED	Aruha Substation	6	P1
8	Balasore	CED	Sergarh Substation	3	P1
9	Balasore	CED	Nilgiri Substation	3	P1
10	Balasore	CED	Bhalukasuni Substation	3	P1
11	Balasore	CED	Mitrapur Substation	3	P1
12	Balasore	CED	Ajodhya Substation	3	P1
13	Balasore	CED	Berhampur Substation	3	P1
14	Baripada	BPED	Samakhunta Substation	4	P1
15	Baripada	BPED	Sapanichua Substation	3	P1
16	Baripada	BPED	Kostha Substation	5	P1
17	Baripada	BPED	Bhaliasole Substation	3	P1
18	Baripada	BPED	Barkand Substation	4	P1
19	Baripada	BPED	Rasagobindpur Substation	4	P1
20	Baripada	BPED	Dhangridsole Substation	3	P1
21	Baripada	BPED	Saragachida Substation	3	P1
22	Baripada	BPED	Bangriposi Substation	3	P1
23	Baripada	BPED	Randasahi Substation	3	P1
24	Baripada	BPED	Kalabadia Substation	3	P1
25	Baripada	BPED	Sirsa Substation	3	P1
26	Baripada	RED	Kuldiha Substation	3	P1
27	Baripada	RED	Badampahad Substation	3	P1
28	Baripada	RED	Ghagarbeda Substation	3	P1

Annexure-L Construction of new control room building for PSS					
Sr No	Circle	Division	Location	New Control Room	Priority
1	Bhadrak	BNED	Rahanj Substation	1	P1
2	Jajpur	JRED	Panikoili Substation	1	P1
3	Balasore	JED	Hatigarh Substation	1	P1
4	Balasore	JED	Kamarda Substation	1	P1
5	Baripada	UED	Kerko Substation	1	P1
6	Bhadrak	BNED	Tihidi Substation	1	P1
7	Baripada	RED	Sukruli Substation/Khiching	1	P1

Annexure-M 33 KV Conductor up gradation												
Sl. No.	Name Of the Circle	Division	Source GSS / PSS Name	Feeder	Proposal Length (CKm)	Proposal From	Proposal To	Existing Conductor	Proposed Conductor	Exisltng Loading (MVA)	% Load growth per year	Abnormlity Identified
1	Balasore	JED	Jaleswar	Basta (Hatigarh)	2.70	Baghabali cut point pt.	Teghri PSS-Hatigarh intersection tapping	100 sqmm	232 sqmm	13.3	6.18	Overloading Mitigation & Voltage Improvement
2	Baripada	RED	Karanjia GSS	Karanjia	3.20	Karanjia GSS	Karanjia PSS	100 sqmm	232 sqmm	15.1	5.00	Overloading Mitigation & Voltage Improvement
3	Jajpur	KuED	JAJPUR TOWN GSS	BARI	7.30	SUJANPUR TAPPING	BARI PSS	80/100 sqmm	232 sqmm	20.23	2.30	Under-Voltage Mitigation & Reliability Improvement
4	Balasore	CED	Balasore	Nilgiri	1.50	After Snow world	Nilgiri PSS	100 sqmm	232 sqmm	10.8	9.86	Overloading Mitigation & Voltage Improvement
5	Bhadrak	BNED	Bhadrak Grid	Gopinathpur	2.00	GSS	Asura PSS	148 sqmm	232 sqmm	18.18	5.23	Overloading Mitigation & Voltage Improvement
6	Jajpur	JTED	JAJPUR TOWN GSS	BINJHARPUR	8.50	KALARABANKA	33/11 KV MANSARA PSS	55/80/100 sqmm	232 sqmm	14.92	2.30	Overloading Mitigation & Voltage Improvement
7	Keonjhar	AED	Dhenkikote GSS	Harichandanpur	1.50	Railway crossing	Harichandanpur PSS	148 sqmm	232 sqmm	2	6.17	Reliability and Safety Improvement
8	Balasore	BED	Balasore	Balasore-1	0.60	Bls GSS	Tentulia Mandir	148 sqmm	232 sqmm	20.8	9.86	Overloading Mitigation & Voltage Improvement
9	Jajpur	JRED	OLD DUBURI GSS	DAITARY	3.15	33/11 KV DUBURI PSS	33/11 KV DEULKANA (TAMKA) PSS	55/80/100 sqmm	232 sqmm	14.18	4.94	Overloading Mitigation & Voltage Improvement
10	Keonjhar	JOED	Barbil GSS	Bhadrasahi	0.50	Barbil GSS	4 Km before Bhadrasahi PSS	100 sqmm	232 sqmm	3.5	7.67	N-1 Interconnectivity & Reliability improvement
11	Jajpur	JTED	JAJPUR TOWN GSS	JAJPUR TOWN	0.30	JAJPUR TOWN GSS	JAJPUR TOWN PSS	100/148 sqmm	232 sqmm	19.36	5.49	Overloading Mitigation & Voltage Improvement
12	Jajpur	KuED	CHANDIKHOL GSS	JARAKA	5.10	NEAR NEULPUR PSS TAPPING	JARAKA PSS	55/80 sqmm	232 sqmm	14.7	5.49	Overloading Mitigation & Voltage Improvement
13	Baripada	RED	Karanjia GSS	Karanjia	8.50	Karanjia PSS	Kendujuani PSS	34/55 sqmm	232 sqmm	15.1	5.00	Overloading Mitigation & Voltage Improvement
14	Keonjhar	JOED	Joda GSS	Rugudi (Industrial)	10.50	Before Rugudi PSS	OMC Triveni	100/148 sqmm	232 sqmm	19.84	3.07	Overloading Mitigation & Voltage Improvement
15	Jajpur	KuED	CHANDIKHOL GSS	KABATABANDHA	1.50	ADHEIDHARA PSS Branch TAPPING	GMPUR RAILWAY	55/100 sqmm	232 sqmm	11.59	4.94	Overloading Mitigation & Voltage Improvement
16	Baripada	RED	Rairangpur GSS	Bisoi	7.50	Rairangpur GSS	Kuldiha PSS	100 sqmm	232 sqmm	8.7	5.00	Overloading Mitigation & Voltage Improvement
17	Keonjhar	KED	Ranki GSS	Keonjhar-1	7.60	Khireitangiri 4-pole structure	Gambharia PSS	100 sqmm	232 sqmm	17.67	7.67	Overloading Mitigation & Voltage Improvement
18	Bhadrak	BNED	Bhadrak Grid	Nandapur	8.50	Gadi PSS	Sindol PSS	80 sqmm	232 sqmm	15.21	5.23	Under-Voltage Mitigation
19	Keonjhar	AED	Agarpada GSS	Bidyadharpur	7.00	Agarpada GSS	Bidyadharpur PSS	100 sqmm	232 sqmm	10.73	6.17	Overloading Mitigation & Voltage Improvement
20	Jajpur	JRED	OLD DUBURI GSS	SUKINDA	12.50	TATA GATE	IDCO PUMP HOUSE/ PANKAPAL CHHAK	80/100 sqmm	232 sqmm	16.47	5.49	Overloading Mitigation & Voltage Improvement
21	Jajpur	JRED	OLD DUBURI GSS	TATA MEDICA	1.00	OLD DUBURI GSS	TATA MEDICA	148 sqmm	232 sqmm	-	-	N-1 Interconnectivity & Reliability improvement
22	Baripada	BPED	Bariapada GSS	Industrial	5.00	Bariapada GSS	Chanacha PSS	100 sqmm	232 sqmm	10.5	5.00	Overloading Mitigation & Voltage Improvement
23	Balasore	CED	Chandipur	New Saragaon	2.70	Genguti tapping	Sasanga	55 sqmm	232 sqmm	7.14	6.18	Overloading Mitigation & Voltage Improvement
24	Balasore	JED	Bhograi GSS	New Kamarda	2.60	GSS	Batagram RMU	100 sqmm	232 sqmm	15.73	6.18	Overloading Mitigation & Voltage Improvement

Annexure-N 11 KV Conductor up gradation

Sl. No.	Name Of the Circle	Division	Source GSS / PSS Name	Feeder	Proposal Length (CKm)	Proposal From	Proposal To	Existing Conductor	Proposed Conductor	Exisltng Loading (MVA)	% Load growth per year	Abnormlity Identified
1	Baripada	UED	Udala PSS	Purunakhunta	5.50	Udala PSS	BALICHHATRA/16 KVA	34/55 Sqmm	100 Sqmm	1.30	5.00	Under-Voltage Mitigation
2	Jajpur	JTED	SUNDARIMUHN_ SIDDHESWAR NEW (ODSSP) PSS	NEW RANGAPUR	5.45	RANGAPUR	RAHASOI	55 Sqmm	100 Sqmm	1.80	2.30	Overloading Mitigation & Voltage Improvement
3	Jajpur	JTED	MANSARA PSS	BINJHARPUR	3.00	After 5 km from Source	Towards block office	55 Sqmm	100 Sqmm	3.04	2.30	Overloading Mitigation & Voltage Improvement
4	Bhadrak	BNED	TALANGA	KALIDASHPUR	3.00	RWSS TALANGA 2	JHATIA	34 Sqmm	100 Sqmm	0.19	5.23	Overloading Mitigation & Voltage Improvement
5	Jajpur	KUED	NEULPUR PSS	CHANDIKHOL	1.60	SOURCE HEAD [NEULPUR PSS]	NEAR PANJA COMPLEX	55/34 Sqmm	148 Sqmm	2.46	2.30	Overloading Mitigation & Voltage Improvement
6	Jajpur	JRED	DHABALAGIRI	COLLEGE	2.00	SOURCE HEAD [Dhabalgrir PSS]	RMU_4WAY- SAPAGADIA	55/34 Sqmm	148 Sqmm	1.21	5.49	Overloading Mitigation & Voltage Improvement
7	Balasore	BTED	Kusudiha	Kusudiha	3.00	Rajdhani chawk	Tail end	55 Sqmm	100 Sqmm	2.98	6.18	Overloading Mitigation & Voltage Improvement
8	Jajpur	KUED	JARAKA PSS	DHARMSHALA	3.00	SOURCE HEAD [Jaraka PSS]	Chahata	100/55/34 sqmm	148 Sqmm	4.02	5.49	Overloading Mitigation & Voltage Improvement
9	Jajpur	JTED	BALASHRAMPADIA NEW (ODSSP) PSS	GARIAPUR	3.00	BALASHRAMPADIA NEW (ODSSP) PSS	NEAR DHH JAJPUR	55/34 Sqmm	148 Sqmm (Covd.)	2.70	5.49	Overloading Mitigation & Voltage Improvement
10	Jajpur	KUED	BRAMHABARADA (RGGVY) PSS	BAZARGHAT (NEW)	3.00	SOURCE HEAD [BRAMHABARADA (RGGVY) PSS]	SHEKH NAGAR	55/34 Sqmm	100 Sqmm	3.13	2.30	Overloading Mitigation & Voltage Improvement
11	Jajpur	JTED	DHAMDHADA PSS	GUHALI	3.00	Source	Tantala Chowk	55 Sqmm	100 Sqmm	1.44	2.30	Under-Voltage Mitigation & Reliability Improvement
12	Jajpur	KUED	Kuakhia PSS	Khanditar	2.15	Bilipada	Tail End	34 Sqmm	100 Sqmm	1.16	2.30	Under-Voltage Mitigation & Reliability Improvement
13	Jajpur	KUED	NARASINGHPUR PSS	NALAKULA	3.00	Swainsahi	Tail End	55/34 Sqmm	148 Sqmm	0.57	2.30	Aged & Under-Rated Conductor
14	Bhadrak	BNED	ASURA	COLLEGE	3.00	MASTER COLONY	ROUT SAHI 2.1	34 Sqmm	100 Sqmm	1.75	5.23	Overloading Mitigation
15	Bhadrak	BSED	BARAPADA	BARAPADA	3.00	PSS	BSNL TOWER-1	55 Sqmm	100 Sqmm	1.36	5.23	Overloading Mitigation & Voltage Improvement
16	Bhadrak	BSED	DAHALA	RANAJIT	2.30	RANJIT RWSS	SIMILIA BPL	34 Sqmm	100 Sqmm	1.21	5.23	Under-Voltage Mitigation
17	Jajpur	JTED	BOULANGA PSS	ARUHA	2.00	ARUHA	NEAR BASANTIPADIA PSS	55 Sqmm	100 Sqmm	0.79	2.30	N-1 Interconnectivity & Reliability improvement
18	Jajpur	KUED	MATHASAHAI PSS	NATHUABAR	2.00	Source Head Mathasahi PSS	ASHRAM, HARIZAN SAHI	55 Sqmm	100 Sqmm	2.00	2.30	Overloading Mitigation & Voltage Improvement
19	Keonjhar	JOED	Jurudi PSS	Jajang	2.00	Belda village	Belda River side	55 Sqmm	100 Sqmm	1.50	6.17	Under-Voltage Mitigation
20	Keonjhar	KED	Telkoi PSS	Oriyagoda	5.00	Telkoi PSS	25 KVA DTR Baliapal	55 Sqmm	100 Sqmm (Covd.)	1.00	6.17	Undervoltage Mitigation & Aged Conductor / Highest SAIDI
21	Keonjhar	KED	JYOTIPUR	BHUINPUR	3.40	BALIPOSI	NISAGADIA SCHOOL	55,34 sqmm	100 Sqmm (Covd.)	0.40	6.17	Reliability and Safety Improvement
22	Keonjhar	KED	MACHHAGARH	DAMAHUDA	3.40	KAMARAMARA	BELASAREI	55,34 sqmm	100 Sqmm (Covd.)	0.30	6.17	Reliability and Safety Improvement
23	Keonjhar	KED	MUSAKHORI	CHINAMALIPOSI	2.00	CHINAMALIPOSI	CHINAMALIPOSI L.I POINT	55,34 sqmm	100 Sqmm (Covd.)	0.30	6.17	Reliability and Safety Improvement
24	Bhadrak	BSED	ORALI	BASANTIA	2.00	Source head	A40 BASANTIA	34 Sqmm	100 Sqmm	2.46	5.23	Overloading Mitigation & Voltage Improvement
25	Balasore	JED	Teghori	Srirampur	2.00	SRIRAMPUR RWSS	Beherasahi tail end	34 Sqmm	100 Sqmm	1.96	6.18	Overloading Mitigation & Voltage Improvement
26	Bhadrak	BSED	CHHAYAL SINGH	TILO	2.80	PSS	A24 MANGULI	55 Sqmm	100 Sqmm	1.33	5.23	Overloading Mitigation & Voltage Improvement
27	Keonjhar	AED	Anandpur PSS	Anandpur	2.50	Anandpur	Padampur	55 Sqmm	100 Sqmm	2.88	7.67	Overloading Mitigation & Voltage Improvement

Annexure-N 11 KV Conductor up gradation

Sl. No.	Name Of the Circle	Division	Source GSS / PSS Name	Feeder	Proposal Length (CKm)	Proposal From	Proposal To	Existing Conductor	Proposed Conductor	Exisltng Loading (MVA)	% Load growth per year	Abnormlity Identified
28	Jajpur	JRED	CHORDA PSS	SAPAGADIA	2.50	Source Head	Stadium Road	34 Sqmm	100 Sqmm	4.33	5.49	Overloading Mitigation & Voltage Improvement
29	Balasore	JED	Nampo	Sugo	2.50	PSS	BANIDA-1-1	55 Sqmm	100 Sqmm	2.38	6.18	Overloading Mitigation & Voltage Improvement
30	Jajpur	KUED	MATHASAH1 PSS	DEEPANCHAL	2.00	Source End	Tail End	55,34 sqmm	100 Sqmm	0.95	2.30	Aged & Under-Rated Conductor
31	Jajpur	KUED	JARAKA	NAKPOLE	2.00	Source Head	Pandua	34 Sqmm	100 Sqmm	1.90	2.30	Overloading Mitigation & Voltage Improvement
32	Jajpur	KUED	CHITRAKULA /BARABATI (ODSSP) PSS	SINGAPUR	2.00	Source Head	Tail end	55,34 sqmm	100 Sqmm	1.71	2.30	Aged & Under-Rated Conductor
33	Keonjhar	AED	Ghasipura PSS	Ghasipura	2.00	63 KVA Sarajodan	63 KVA Ghasipura	55 Sqmm	100 Sqmm	1.70	7.67	Reliability and Safety Improvement
34	Keonjhar	AED	Ghasipura PSS	Salapada	2.00	Archilles Hotel	ITI	55 Sqmm	100 Sqmm	2.50	7.67	Overloading Mitigation & Voltage Improvement
35	Keonjhar	AED	Chenapadi PSS	Mugupur	2.00	16 KVA Balabhadrapur	100 KVA Baneswar	55 Sqmm	100 Sqmm	1.00	6.17	Under-Voltage Mitigation
36	Keonjhar	JOED	Sundara/Barbil-2 PSS	Thakurani	2.00	sading Basti	Jindal Road,Kara	34/55 sqmm	100 Sqmm	1.50	7.67	Reliability and Safety Improvement
37	Keonjhar	JOED	Joda PSS	Baneikala	2.00	Block Chhak	DB Singh Chhak	34/55 sqmm	100 Sqmm	3.00	7.67	Reliability and Safety Improvement
38	Bhadrak	BNED	SINDOL	PIRHAT	2.00	PSS	KHANDIA SAHI	55 Sqmm	100 Sqmm	2.08	5.23	Overloading Mitigation & Voltage Improvement
39	Balasore	CED	Chhanua	Industrial	3.00	PSS	DADA MARINE DIESEL	55 Sqmm	148 Sqmm	2.63	9.86	Overloading Mitigation & Voltage Improvement
40	Balasore	SED	Soro College	Uttareswar	2.50	PSS	JIO NAYAPALLI	100/55 sqmm	148 Sqmm	2.85	9.86	Overloading Mitigation & Voltage Improvement
41	Balasore	BED	City	City Sunhat	2.00	PSS	Chapulua	80 Sqmm	148 Sqmm (Covd.)	3.40	9.86	Overloading Mitigation & Voltage Improvement
42	Keonjhar	JOED	Barbil GSS	Laxmiparia	1.00	Laxmiparia shishu Mandir	Hospital	34/55 sqmm	100 Sqmm	2.00	7.67	Reliability and Safety Improvement
43	Balasore	BED	Digrania	Sunhat	2.50	Digrania PSS	Piro_Bhujakhia	55,80 Sqmm	148 Sqmm	3.69	9.86	Overloading Mitigation & Voltage Improvement
44	Baripada	BPED	Takatpur PSS	LIC	4.50	TAKATPUR PSS	RWSS SECTION OFFICE	34/55/80 Sqmm	148 Sqmm	3.30	10.00	Overloading Mitigation & Voltage Improvement
45	Baripada	RED	Karanjia PSS	Karanjia Town	10.90	Karanjia pss	saradha	34/55 Sqmm	100 Sqmm (Covd.)	2.00	10.00	Aged & Under-Rated Conductor
46	Bhadrak	BNED	POWERHOUSE	CHARAMPA-I	1	DAGARASI CANAL 2	SITARAM MANDIR	55 Sqmm	100 Sqmm	4.74	9.09	Overloading Mitigation & Voltage Improvement
47	Jajpur	JRED	PANIKOLI	SARAWATI	0.5	Source Head	Aditya Market Complex	55/34 Sqmm	100 Sqmm	1.42	5.49	Overloading Mitigation & Voltage Improvement

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
1	Baleshwar	SED	Soro No-I	Jania	63	P1
2	Baleshwar	SED	Mulisingh	Khandasahi Chandan Pokhari	100	P1
3	Baleshwar	SED	Khaira	Kasapa	100	P1
4	Baleshwar	SED	Khaira	Kupari Bazar	100	P1
5	Baleshwar	SED	Gandibed	Tipisigadia	100	P1
6	Baleshwar	SED	Gandibed	Matialpada	100	P1
7	Baleshwar	SED	Ouapada	DHUKHANDA KHAIRA	100	P1
8	Baleshwar	SED	Bahanaga	Bahanaga Bazar	100	P1
9	Baleshwar	SED	GOPALPUR	PANDAHARIPUR	100	P1
10	Baleshwar	SED	KHANTAPADA	ANTARA MARKET	100	P1
11	Baleshwar	SED	MARKONA	MELANA PADA	100	P1
12	Baleshwar	SED	MARKONA	100 KV PADUPANDA	100	P1
13	Baleshwar	SED	MARKONA	.4 KV STATION DTR	100	P1
14	Baleshwar	SED	MARKONA	BATI MALLIK SAHI	100	P1
15	Baleshwar	SED	MARKONA	GAUDAPADA VILLAGE	100	P1
16	Baleshwar	SED	MARKONA	BANGALPUR	100	P1
17	Baleshwar	SED	MARKONA	BATI PATANA	100	P1
18	Baleshwar	SED	MARKONA	KUWAGADIYA	100	P1
19	Baleshwar	SED	MARKONA	PURUSOTAMPUR	100	P1
20	Baleshwar	SED	Mulisingh	Barahpur IPDS	100	P1
21	Baleshwar	SED	Mulisingh	Kedarpur Tundapada	100	P1
22	Baleshwar	SED	Anantapur	Sajanpur	100	P1
23	Baleshwar	SED	Mulisingh	Kodandapur	100	P1
24	Baleshwar	SED	Mulisingh	Ekasaya	100	P1
25	Baleshwar	SED	Mulisingh	Tentuliapada	100	P1
26	Baleshwar	SED	Mulisingh	Khandasahi	100	P1
27	Baleshwar	SED	Mulisingh	Meghamadhaba	100	P1
28	Baleshwar	SED	Mulisingh	Mulisingh Chhaka	100	P1
29	Baleshwar	SED	Mulisingh	Tala Mulisingh	100	P1
30	Baleshwar	SED	Khaira	Kadaligadia	100	P1
31	Baleshwar	SED	DUNGURA	KUNDU SAHI	100	P1
32	Baleshwar	SED	OUPADA	DUKHANDAKHIRA	100	P1
33	Baleshwar	SED	OUPADA	AGHIRAPADA	100	P1
34	Baleshwar	SED	OUPADA	DARIPOKHARI	100	P1
35	Baleshwar	SED	OUPADA	BUDAKHUNTA	100	P1
36	Baleshwar	SED	KHANTAPADA	SUTHANGA	100	P1
37	Baleshwar	SED	KHANTAPADA	KHANTAPADA BAZAR-I	100	P1
38	Baleshwar	SED	KHANTAPADA	KHANTAPADA BAZAR-II	100	P1
39	Baleshwar	SED	KHANTAPADA	RAMNAGAR OLD	100	P1
40	Baleshwar	SED	KHANTAPADA	NACHINTA	100	P1
41	Baleshwar	SED	KHANTAPADA	MANGALADI	100	P1
42	Baleshwar	SED	KHANTAPADA	JAIPUR	100	P1
43	Baleshwar	BED	No I	North Hostel	100	P1
44	Baleshwar	BED	No I	Jail Gate	100	P1
45	Baleshwar	BED	Gopalgaon	Galapola	100	P1
46	Baleshwar	BED	No II	IPDS Piro	100	P1
47	Baleshwar	BED	Gopalgaon	Chunbhati Srinix College	100	P1
48	Baleshwar	BED	Gopalgaon	Chunbhati Cement Gali	100	P1
49	Baleshwar	BED	No II	Prassana Bbau	100	P1
50	Baleshwar	BED	No II	Reza Ula Lane	100	P1

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
51	Baleshwar	BED	Ganeswarpur	Bhattar House	100	P1
52	Baleshwar	BED	Ganeswarpur	Near Salabani School	100	P1
53	Baleshwar	BED	Ganeswarpur	Near Maruti Suzuki	100	P1
54	Baleshwar	BED	NO-III	MAL GODOWN	100	P1
55	Baleshwar	BED	NO-III	NEW RADHAKRUSHNA MANDIR	100	P1
56	Baleshwar	BED	NO-III	SHAKTI NAGAR	100	P1
57	Baleshwar	JED	Chandaneswar	Udaypur 100 KVA S/S	100	P1
58	Baleshwar	JED	Chandaneswar	Rankotha Market	100	P1
59	Baleshwar	JED	Chandaneswar	Nimatpur Market 100 KVA	100	P1
60	Baleshwar	JED	Bhograi	Tengramari 100 kva	100	P1
61	Baleshwar	JED	Bhograi	Bartana No-1	100	P1
62	Baleshwar	JED	KAMARDA-II	UPLAHAT-1 100KVA	100	P1
63	Baleshwar	JED	KAMARDA-II	BAGDA-100KVA NEAR GADIA	100	P1
64	Baleshwar	JED	KAMARDA-II	DAHUNDA-100KVA SDO DP	100	P1
65	Baleshwar	JED	jaleswar-1	TPNODL office 100 kva	100	P1
66	Baleshwar	JED	jaleswar-2	ARUHA 100 kva	100	P1
67	Baleshwar	JED	jaleswar-2	KALIKAPUR 100 kva	100	P1
68	Baleshwar	JED	NAMPO	KHALINA/PATANAGADIA/100KVA	100	P1
69	Baleshwar	JED	NAMPO	SAMPATIA/NEAR SCHOOL/100KVA	100	P1
70	Baleshwar	JED	Hatigarh	Chamargaon 100kva	100	P1
71	Baleshwar	JED	Hatigarh	Kalama 100kva	100	P1
72	Baleshwar	JED	Hatigarh	Mankidia 100kva	100	P1
73	Baleshwar	JED	Hatigarh	Rajnagar(Olmara) 100kva	100	P1
74	Baleshwar	JED	Hatigarh	Chafra-I 100kva	100	P1
75	Bhadrak	BSED	Asurali	Aradi Medical	100	P1
76	JAJPUR	JRED	KORAI	BADAPATULI	100	P1
77	JAJPUR	JRED	DALA	AKHANDALMANI FOUNDARY	100	P1
78	JAJPUR	JRED	DALA	BIRAMANIPUR	100	P1
79	JAJPUR	JRED	DANAGADI	BALUNGABANDI	100	P1
80	JAJPUR	JRED	DANAGADI	MANAPUR	100	P1
81	JAJPUR	JRED	CHORDA	UMAPADA HARIJAN SAHI	100	P1
82	JAJPUR	JRED	CHORDA	NEAR PANI TANKI,STADIUM ROAD	100	P1
83	JAJPUR	JRED	SUKINDA	BOTALANDA	100	P1
84	JAJPUR	JRED	SUKINDA	DAMODARPUR NEAR SCHOOL	100	P1
85	JAJPUR	JRED	SUKINDA	AMPOLABA	63	P1
86	JAJPUR	JRED	SUKINDA	HATIBARI NEAR OLDING SHOP	100	P1
87	JAJPUR	JRED	SUKINDA	SUKINDA MUSLIM SAHI	100	P1
88	JAJPUR	JRED	DUBURI	MANDIRA CHHAKA	100	P1
89	JAJPUR	JRED	PANIKOILI	RUDHIA	100	P1
90	JAJPUR	JRED	PANIKOILI	DAIDASPATNA	63	P1
91	JAJPUR	JRED	PANIKOILI	PATHARAPADA	100	P1
92	JAJPUR	JRED	PANIKOILI	KATRAPUR	100	P1
93	JAJPUR	JRED	BT ROAD	RANAPUR	100	P1
94	Jajpur	JTED	DASARATHPUR	URDANGA	100	P1
95	Jajpur	JTED	DASARATHPUR	KATIKATA	100	P1
96	Jajpur	JTED	AHIYAS	AHIYAS HIGHSCHOOL	100	P1
97	Jajpur	JTED	AHIYAS	ARDAULA	100	P1
98	Jajpur	JTED	AHIYAS	MAHANTYPATNA	100	P1
99	Jajpur	JTED	MANGALPUR	KUSUNPUR	100	P1
100	Jajpur	JTED	JAJPUR TOWN-3	Maitpur	100	P1

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
101	Jajpur	JTED	MADHUSUDANPUR	CHANDRMUNHA	100	P1
102	Jajpur	JTED	MADHUSUDANPUR	RANAPUR	100	P1
103	Jajpur	JTED	ESO TOWN-1	MOTARANGAPAL	63	P1
104	Jajpur	JTED	ESO TOWN-1	KUMARSAHI	63	P1
105	Jajpur	JTED	JAJPUR TOWN 2	AREI CHAKKA	100	P1
106	Jajpur	JTED	JAJPUR TOWN 2	RAHASOI KHAJIRAPADIA	100	P1
107	Jajpur	JTED	BINJHARPUR-II	AUNRI,MOHANTY BADI	100	P1
108	Jajpur	JTED	BALAMUKULI	OLEI-1	100	P1
109	Jajpur	JTED	BALAMUKULI	NEW BAZAR SINGHPUR	100	P1
110	Jajpur	JTED	BALAMUKULI	NEW BAZAR(Sriram hotel front)	100	P1
111	Jajpur	JTED	JAJPUR TOWN 2	SUDHAGOBINDA	100	P1
112	Jajpur	JTED	JAJPUR TOWN 2	BAKULI	100	P1
113	Jajpur	KUED	MATHASAH	MIRZAPUR MUSLIM SAHI	100	P1
114	Jajpur	KUED	MATHASAH	KARUASAH	100	P1
115	Jajpur	KUED	MATHASAH	GORDHA	100	P1
116	Jajpur	KUED	MATHASAH	KANTHIAKAN	100	P1
117	Jajpur	KUED	MATHASAH	JABARA PANDA SAHI	100	P1
118	Jajpur	KUED	KABATABANDHA	shyamasundarpur	100	P1
119	Jajpur	KUED	KABATABANDHA	BARALA SAHI	100	P1
120	Jajpur	KUED	KABATABANDHA	MADHUSUDANPUR	100	P1
121	Jajpur	KUED	KABATABANDHA	REKHIDEIPUR	100	P1
122	Jajpur	KUED	Neulpur	Khasapada	100	P1
123	Jajpur	KUED	Neulpur	Express Colony	100	P1
124	Jajpur	KUED	Neulpur	Millatnagar	100	P1
125	Jajpur	KUED	Neulpur	Muraripur	100	P1
126	Jajpur	KUED	Neulpur	Pratapur	100	P1
127	Jajpur	KUED	Neulpur	Barada	100	P1
128	Jajpur	KUED	Neulpur	Kaduamaguara	100	P1
129	Jajpur	KUED	Neulpur	Rampe	100	P1
130	Jajpur	KUED	SUJANPUR	EARBANK SANI MANDIR	100	P1
131	Jajpur	KUED	SUJANPUR	REKEIBAZAR	100	P1
132	Jajpur	KUED	SUJANPUR	SANKUJHALA	100	P1
133	Keonjhar	KED	SAHARPADA	SILIPADA	100	P1
134	Keonjhar	KED	RE	Nekdaghar	100	P1
135	Keonjhar	KED	Telkoi	Kulanga	63	P1
136	Keonjhar	KED	RE	Wood Dope	100	P1
137	Keonjhar	KED	Patna	SARASKOLA	100	P1
138	Keonjhar	KED	RE	Mahadeipur	100	P1
139	Keonjhar	KED	RE	Jalabandha	100	P1
140	Keonjhar	KED	Patna	MIRIGIKHOJI	100	P1
141	Keonjhar	KED	RE	Halditangari	100	P1
142	Keonjhar	KED	Patna	KHAJURIPANI	100	P1
143	Keonjhar	KED	SAHARPADA	KAMARMAMARA	100	P1
144	Keonjhar	KED	Patna	Jhatipada	100	P1
145	Keonjhar	KED	TURUMUNGA	GODIPOKHARI	100	P1
146	Keonjhar	KED	Patna	BHALIADAL	63	P1
147	Keonjhar	AED	GHASIPURA	ARNAPURNA BHAWAN	63	P1
148	Keonjhar	AED	ANANDAPUR	SALABANI SUKHILA POKHARI	100	P1
149	Keonjhar	AED	KESHADURAPAL	JALASUAPATANA	100	P1
150	Keonjhar	AED	Ramachandrapur	Khandidhuli	63	P1

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
151	Keonjhar	AED	KESHADURAPAL	TORANIAPALA	100	P1
152	Keonjhar	AED	DHENKIKOTE	NUDURPADA/MUNDA SAHI	100	P1
153	Keonjhar	AED	GHATAGAON	MEDICAL OLD	100	P1
154	Keonjhar	AED	GHASIPURA	PADANPUR	100	P1
155	Keonjhar	AED	KESHADURAPAL	KANTAROH	100	P1
156	Keonjhar	AED	Bidyadharpur	Bidyadharpur jena sahi	100	P1
157	Keonjhar	AED	DHENKIKOTE	KASHIBEDA/MURGAPAT SAHI	100	P1
158	Keonjhar	AED	GHATAGAON	MAA TARINI TEMPLE	100	P1
159	Keonjhar	AED	GHASIPURA	BHANDARIDIHA	100	P1
160	Keonjhar	JoED	Jhumpura	tangarani brahma sahi	100	P1
161	Keonjhar	JoED	BHADRASAH	BHADRASAH MOTI	63	P1
162	Keonjhar	JoED	BARBIL-1	BELKUNDI	100	P1
163	Keonjhar	JoED	Joda	Kuldum	63	P1
164	Keonjhar	JoED	REMULI	BAIKUNTHAPUR	100	P1
165	Keonjhar	JoED	REMULI	SIJUKALA MUNDASAH	63	P1
166	Keonjhar	JoED	REMULI	PARSALA	63	P1
167	Keonjhar	JoED	REMULI	NICHINTAPUR	63	P1
168	Keonjhar	JoED	CHAMPUA	SANANAI	100	P1
169	Keonjhar	JoED	CHAMPUA	RAIGUDI	100	P1
170	Keonjhar	JoED	CHAMPUA	TOLAKNANDA	63	P1
171	Keonjhar	JoED	CHAMPUA	TUNUTUNA	100	P1
172	Keonjhar	JoED	CHAMPUA	KASIPAL	63	P1
173	BARIPADA	RED	RAIRANGPUR	NUAGAON PETROL PUMP	100	P1
174	BARIPADA	RED	KARANJIA-II	SARANGAD	100	P1
175	BARIPADA	RED	BISOI	ASANA-I	100	P1
176	BARIPADA	RED	BISOI	ASANA-II	100	P1
177	BARIPADA	RED	KUSUMI	TARINI MANDIR	100	P1
178	BARIPADA	RED	KUSUMI	BASILA	100	P1
179	BARIPADA	RED	KUSUMI	DOVA	100	P1
180	BARIPADA	RED	KUSUMI	TENTAPOSI	100	P1
181	BARIPADA	RED	THAKURMUNDA	MITUANI	100	P1
182	BARIPADA	RED	THAKURMUNDA	DHATKIABEDA	100	P1
183	BARIPADA	RED	THAKURMUNDA	PATBIL	100	P1
184	BARIPADA	RED	TIRING	BALIASAH-I	100	P1
185	BARIPADA	RED	TIRING	MAGHUA	100	P1
186	BARIPADA	RED	JASHIPUR	BHANJAKIA MANDIRSAH	100	P1
187	BARIPADA	RED	JASHIPUR	ITIGHAR	100	P1
188	BARIPADA	RED	JASHIPUR	SIRAKULI	100	P1
189	BARIPADA	RED	RARUAN	JAMUTI	100	P1
190	BARIPADA	RED	RARUAN	BAIDYANATH	100	P1
191	BARIPADA	RED	RARUAN	FAGU	100	P1
192	BARIPADA	RED	RARUAN	BUDAMARA NEAR SCHOOL	100	P1
193	Baripada	RED	ESO Jamda	Naharda	100	P1
194	Baripada	RED	ESO Jamda	Tarana Muslim sahi	100	P1
195	Baripada	UED	Kaptipada	Dhundaria	63	P1
196	Baripada	UED	Kaptipada	Majhigadia	63	P1
197	Baripada	UED	Kaptipada	Sulagadia	100	P1
198	Baripada	UED	Kaptipada	Ambapichula	63	P1
199	BARIPADA	UED	UDALA	DUGDHA	100	P1
200	BARIPADA	UED	UDALA	PATSANIPUR	100	P1

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
201	BARIPADA	UED	MANATRI	GUDIPUKHURI	100	P1
202	BARIPADA	UED	MANATRI	MANATRI SCHOOL	100	P1
203	BARIPADA	UED	MANATRI	CHENGUA MANGALAPUR	100	P1
204	BARIPADA	UED	MANATRI	DASIPUR	100	P1
205	BARIPADA	UED	MANATRI	SALAGAON	100	P1
206	BARIPADA	UED	MANATRI	MIRIGIDHARI	100	P1
207	BARIPADA	UED	MANATRI	KHIRPADA	100	P1
208	BARIPADA	UED	MANATRI	GADIAMALA	100	P1
209	BARIPADA	UED	MANATRI	KHADIKAPA	100	P1
210	BARIPADA	UED	MANATRI	SIRATALI	100	P1
211	BARIPADA	UED	MANATRI	DARIPALA	100	P1
212	BARIPADA	UED	MANATRI	SANIKULA	100	P1
213	BARIPADA	UED	MANATRI	HATANUAGAON	100	P1
214	BARIPADA	UED	KHUNTA	BAIRATPUR	100	P1
215	BARIPADA	UED	Badasahi	DANTUNI POKHARI SAHI	100	P1
216	BARIPADA	UED	Badasahi	KHANUA	100	P1
217	BARIPADA	UED	Badasahi	PRATAPUR NM CENTRE	100	P1
218	BARIPADA	UED	Badasahi	KOCHILAPADA	100	P1
219	BARIPADA	UED	Badasahi	SATPAUTIA	100	P1
220	BARIPADA	UED	Badasahi	BELAM	100	P1
221	BARIPADA	UED	Badasahi	NAUPAL	100	P1
222	BARIPADA	UED	Badasahi	Gualdhi	100	P1
223	BARIPADA	BPED	Jharpokharia	Gholamundakata	100	P1
224	BARIPADA	BPED	Jharpokharia	Kalyannagar	100	P1
225	BARIPADA	BPED	Jharpokharia	Mohanty Palasia	63	P1
226	BARIPADA	BPED	Jharpokharia	NabinMundhakata	63	P1
227	BARIPADA	BPED	Jharpokharia	Bombay chaka	63	P1
228	BARIPADA	BPED	NO.II	MURGABADI	100	P1
229	BARIPADA	BPED	BAISINGA	MERDA	100	P1
230	BARIPADA	BPED	BAISINGA	ANLA	100	P1
231	BARIPADA	BPED	BETNOTI	Bahanada -1	100	P1
232	BARIPADA	BPED	BETNOTI	Bahanada -2	100	P1
233	BARIPADA	BPED	KOCHILAKHUNTA	KOCHILAKHUNTA	100	P1
234	Bhadrak	BNED	Charampa	Garage Sahi	100	P1
235	Bhadrak	BNED	Charampa	Aju Colony	100	P1
236	Bhadrak	BNED	Bhadrak No-3	Gujidarada	100	P1
237	Bhadrak	BNED	Bhadrak No-4	Elkha School	100	P1
238	Bhadrak	BNED	Bhadrak No-4	Akash Garage(MM Glass)	100	P1
239	Bhadrak	BNED	Jashipur	Mahaimamani Madira	100	P1
240	Bhadrak	BNED	Dolosahi	Jharpada	100	P1
241	Bhadrak	BNED	Dhamara	SARATPRASAD 100 KVA	100	P1
242	Bhadrak	BNED	Dhamara	GOURPRASAD 100KVA	100	P1
243	Bhadrak	BNED	Dhamara	CHEDAK 100KVA	100	P1
244	Bhadrak	BNED	Dhamara	JHARPADA GULA 100KVA	100	P1
245	Bhadrak	BNED	Dhamara	DRYCORE JAGULA 100KVA	100	P1
246	Bhadrak	BNED	Dhamara	SANKHAJODI 100KVA	100	P1
247	Bhadrak	BNED	Tihidi	Kaujodi	100	P1
248	Bhadrak	BNED	Tihidi	Paidipur	100	P1
249	Bhadrak	BNED	Tihidi	Satibati	100	P1
250	Bhadrak	BNED	Tihidi	Saya	100	P1

Annexure-O Installation of HV Protection						
SL No.	Circle	Division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Priority
251	Bhadrak	BNED	Tihidi	Mukundpur	100	P1
252	Bhadrak	BNED	Tihidi	Arasa	100	P1
253	Bhadrak	BNED	Tihidi	Gandharpokhari	100	P1
254	Bhadrak	BNED	Eram	Sarapokhari Adi	100	P1
255	Baleshwar	SED	ANANTAPUR	500 KVA ANANTAPUR MARKET	500	P1
256	Baleshwar	SED	MARKONA	MARKONA BAZAR(RN HIGH SCHOOL)	250	P1
257	Baleshwar	SED	MARKONA	RIA	250	P1
258	Baleshwar	SED	ADABAZAR	SABANGA	200	P1
259	Baleshwar	BED	NO-IV	KARANJIA	250	P1
260	Baleshwar	BED	NO-IV	MADAMASANI	250	P1
261	Baleshwar	BED	NO-IV	KUKUDA PALA	250	P1
262	Baleshwar	BED	NO-IV	TECHNO INDIA	500	P1
263	Baleshwar	BED	NO-IV	NEAR CELEBRATION	250	P1
264	Baleshwar	BED	MATHASAH	KHAPRAPADA	500	P1
265	Baleshwar	BED	MATHASAH	CENTRAL SCHOOL CHHAKA	250	P1
266	Baleshwar	BED	MATHASAH	HARAGANGA	250	P1
267	Baleshwar	BED	Ganeswarpur	Baghajatin	250	P1
268	Baleshwar	BED	Ganeswarpur	Bhimpura Gaon	250	P1
269	Baleshwar	BED	Ganeswarpur	Block Campous	500	P1
270	Baleshwar	BED	NO-III	FIRINGIPATNA	200	P1
271	Baleshwar	BED	NO-III	PADU BABU	200	P1
272	Baleshwar	BED	NO-III	DIVISION OFFICE	250 &200	P1
273	Baleshwar	BED	NO-III	BALASHRAM PHD OFFICE	200	P1
274	Baleshwar	BED	NO-III	KALIDASPUR (PUMP HOUSE)	500	P1
275	Bhadrak	BNED	Charampa	Natabara	250	P1
276	Bhadrak	BNED	Chandabali	Baitrani	250	P1
277	Bhadrak	BNED	Basudevpur No-2	Bazar	250	P1
278	JAJPUR	JRED	DALA	GEMS SCHOOL	250	P1
279	JAJPUR	JRED	CHORDA	TRIPATHI	250/500	P1
280	JAJPUR	JRED	SUKINDA	SUKINDA BANGALA	250	P1
281	Jajpur	JTED	ESO TOWN-1	TALAKIANALI	250	P1
282	Keonjhar	AED	ANANDAPUR	MOCHINDA	200	P1
283	Keonjhar	AED	ANANDAPUR	SBI FRONT	250	P1
284	Keonjhar	AED	ANANDAPUR	THANA	500	P1
285	Keonjhar	JoED	Jhumpura	palaspanga	200	P1
286	Keonjhar	JoED	BARBIL- 2	TN THACKER	500	P1
287	Keonjhar	JoED	BARBIL- 2	BALANI MARKET 1	250	P1
288	Keonjhar	JoED	BARBIL- 2	BALANI MARKET 2	250	P1
289	Keonjhar	JoED	BARBIL- 2	ARATI HOSPITAL	250	P1
290	Keonjhar	JoED	CHAMPUA	MAHESWARPUR NEW COLONY	200	P1
291	BARIPADA	RED	RAIRANGPUR	ICHINDA-VATIKA	250	P1
292	Baripada	RED	KANTABANI	BHARANDIA	200	P1
293	BARIPADA	BPED	NO1 SECTION	Madhuban PHD	200	P1
294	BARIPADA	BPED	NO1 SECTION	RANISWATI MANDIR	250	P1
295	BARIPADA	BPED	Chhancha	Tikka Counter	250	P1
296	BARIPADA	BPED	Betnoti	Chandi chhaka	250	P1
297	BARIPADA	BPED	Betnoti	Hata Chhaka	250	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
1	Baleshwar	BtED	BASTA	RAJGHAT	UJUDA 100KVA	100	1	P1
2	Baleshwar	BtED	BASTA	RAJGHAT	BADAPADHIARIPUR 100KVA	100	1	P1
3	Baleshwar	BtED	BASTA	RAJGHAT	BELI 100KVA	100	1	P1
4	Baleshwar	BtED	BASTA	RAJGHAT	SANAPADHIARIPUR 63KVA	63	1	P1
5	Baleshwar	BtED	BASTA	RAJGHAT	SANAUJUDA63KVA	63	1	P1
6	Baleshwar	BtED	BASTA	RAJGHAT	MACHHARANKA 63KVA	63	1	P1
7	Baleshwar	BtED	BASTA	RAJGHAT	GILAJODI-1 63KVA	63	1	P1
8	Baleshwar	BtED	BASTA	RAJGHAT	GOPINATHPUR 63KVA	63	1	P1
9	Baleshwar	BtED	BASTA	RAJGHAT	MADHUPURA 63KVA	63	1	P1
10	Baleshwar	BtED	BASTA	RAJGHAT	GILAJODI ROUTSAHI 63KVA	63	1	P1
11	Baleshwar	BtED	BASTA	RAJGHAT	MACHHARANKA-II 63KVA	63	1	P1
12	Baleshwar	BtED	BASTA	RAJGHAT	BELA 100KVA	100	1	P1
13	Baleshwar	BtED	BASTA	RAJGHAT	BELA 63KVA	63	1	P1
14	Baleshwar	BtED	BASTA	BASTA-I	BASANTPUR-1	100	1	P1
15	Baleshwar	BtED	BASTA	BASTA-I	GUDHIKHAL	100	1	P1
16	Baleshwar	BtED	BASTA	BASTA-I	GUNDRIMARA	100	1	P1
17	Baleshwar	BtED	BASTA	BASTA-I	BADACHARANESWARPUR	63	1	P1
18	Baleshwar	BtED	BASTA	BASTA-I	AMARDA RAILWAY STATION	100	1	P1
19	Baleshwar	BtED	BASTA	BASTA-I	GUNDRIPADA	100	1	P1
20	Baleshwar	BtED	BASTA	BASTA-I	PARIVILLA	63	1	P1
21	Baleshwar	BtED	BASTA	BASTA-I	MANUDIHA	100	1	P1
22	Baleshwar	BtED	BASTA	BASTA-I	CHHATARA	100	1	P1
23	Baleshwar	BtED	BASTA	BASTA-I	NIMA	100	1	P1
24	Baleshwar	BtED	BASTA	BASTA-I	NIMA	63	1	P1
25	Baleshwar	BtED	BASTA	BASTA-I	DHAPAKAND	2x100	2	P1
26	Baleshwar	BtED	BASTA	BASTA-I	MAHADEVVSARAI	2x100	2	P1
27	Baleshwar	BtED	BASTA	BASTA-I	BIDYADHARPUR	2x100	2	P1
28	Baleshwar	BtED	BASTA	BASTA-I	TALA KUSHUDIHA	2x100	2	P1
29	Baleshwar	BtED	BASTA	BASTA-I	TIKIRAPADA	2x100	2	P1
30	Baleshwar	BtED	BASTA	BASTA-I	DANDIKA	63	1	P1
31	Baleshwar	BtED	BASTA	BASTA-I	JAIPUR	63	1	P1
32	Baleshwar	BtED	BASTA	BASTA-I	DHENUKHJA	2x100	2	P1
33	Baleshwar	BtED	BASTA	BASTA-I	SANKHUDI CHAUDAMADAL PADIA	2x100	2	P1
34	Baleshwar	BtED	BASTA	BASTA-I	PEGARPADA	2x100	2	P1
35	Baleshwar	BtED	BASTA	BASTA-I	PODAPADA	2x100	2	P1
36	Baleshwar	BtED	BASTA	BASTA-I	DUDHAHANSA	2x100	2	P1
37	Baleshwar	BtED	BASTA	BASTA-I	MATHANI GALAPOLO	2x100	2	P1
38	Baleshwar	BtED	BASTA	BASTA-I	NALABAHAR BARIK SAHI	2x100	2	P1
39	Baleshwar	BtED	BASTA	BASTA-I	UPARTAPANDA	2x100	2	P1
40	Baleshwar	BtED	BASTA	BASTA-I	DHANAHANDA	63	1	P1
41	Baleshwar	BtED	BASTA	BASTA-I	LAKHANAPADA	2x100	2	P1
42	Baleshwar	CED	RE-II	FULADI	SAN DAHAPADA	63	1	P1
43	Baleshwar	CED	RE-II	FULADI	UDAPADA	2x100	2	P1
44	Baleshwar	CED	RE-II	FULADI	LENKASAHAI	2x100	2	P1
45	Baleshwar	CED	RE-II	FULADI	ORAD	63	1	P1
46	Baleshwar	CED	RE-II	FULADI	KHEDARPUR	2x100	2	P1
47	Baleshwar	CED	NILAGIRI	SERAGARH	PATARA	2x100	2	P1
48	Baleshwar	CED	NILAGIRI	SERAGARH	PATARA	2x100	2	P1
49	Baleshwar	CED	NILAGIRI	SERAGARH	BIRUAN-1	2x100	2	P1
50	Baleshwar	CED	NILAGIRI	SERAGARH	BIRUAN-2	2x100	2	P1
51	Baleshwar	CED	NILAGIRI	SERAGARH	HIRATIKIRI	63	1	P1
52	Baleshwar	CED	NILAGIRI	SERAGARH	PANCHAGARD	2x100	2	P1
53	Baleshwar	CED	NILAGIRI	SERAGARH	SERAGARH	2x100	2	P1
54	Baleshwar	CED	NILAGIRI	SERAGARH	BAUNSAMUHA	2x100	2	P1
55	Baleshwar	CED	NILAGIRI	SERAGARH	SANTTA	2x100	2	P1
56	Baleshwar	CED	NILAGIRI	SERAGARH	TELIBADI	2x100	2	P1
57	Baleshwar	CED	NILAGIRI	SERAGARH	KILLA	2x100	2	P1
58	Baleshwar	CED	NILAGIRI	SERAGARH	SASANPADA	2x100	2	P1
59	Baleshwar	CED	NILAGIRI	SERAGARH	PINCHABANIA	63	1	P1
60	Baleshwar	CED	RE-II	SARAGAN	GARADA	2x100	2	P1
61	Baleshwar	CED	RE-II	SARAGAN	SARAGAON-1	2x100	2	P1
62	Baleshwar	CED	RE-II	SARAGAN	SARAGAON-2	2x100	2	P1
63	Baleshwar	CED	RE-II	SARAGAN	SARAGAON-3	63	1	P1
64	Baleshwar	CED	RE-II	SARAGAN	SEKHAPATNA	2x100	2	P1
65	Baleshwar	CED	RE-II	SARAGAN	INCHUDIA(LI)-1	63	1	P1
66	Baleshwar	CED	RE-II	SARAGAN	INCHUDIA-2	63	1	P1
67	Baleshwar	CED	RE-II	SARAGAN	INCHUDIA-3	63	1	P1
68	Baleshwar	CED	RE-II	SARAGAN	SAHADA-1	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
69	Baleshwar	CED	RE-II	SARAGAN	SAHADA-2	100	1	P1
70	Baleshwar	CED	RE-II	SARAGAN	SAHADA-3	63	1	P1
71	Baleshwar	CED	RE-II	SARAGAN	HARSAPURA-1	2x100	2	P1
72	Baleshwar	CED	RE-II	SARAGAN	HARSAPURA-2	2x100	2	P1
73	Baleshwar	CED	RE-II	SARAGAN	SUNDARI 1	63	1	P1
74	Baleshwar	CED	RE-II	SARAGAN	SUNDARI 2	2x100	2	P1
75	Baleshwar	CED	RE-II	SARAGAN	PADAGAN	2x100	2	P1
76	Baleshwar	CED	RE-II	SARAGAN	KANCHANIBAG	2x100	2	P1
77	Baleshwar	CED	RE-II	SARAGAN	KADARABAD	2x100	2	P1
78	Baleshwar	CED	RE-II	SARAGAN	JAYADEV KASPA-1	2x100	2	P1
79	Baleshwar	CED	RE-II	SARAGAN	BIKKRAM KASPA	2x100	2	P1
80	Baleshwar	CED	RE-II	SARAGAN	JAYADEV KASPA-2	63	1	P1
81	Baleshwar	CED	RE-II	SARAGAN	JAYADEV KASPA-3	63	1	P1
82	Baleshwar	CED	RE-II	SARAGAN	JAYADEV KASPA-4	63	1	P1
83	Baleshwar	CED	RE-II	SARAGAN	BARDHANPUR-2	2x100	2	P1
84	Baleshwar	CED	RE-II	SARAGAN	TIKIRAPADA	63	1	P1
85	Baleshwar	CED	RE-II	SARAGAN	SAHAJANAGAR-1	63	1	P1
86	Baleshwar	CED	RE-II	SARAGAN	SAHAJANAGAR-2	63	1	P1
87	Baleshwar	CED	RE-II	SARAGAN	SAHAJANAGAR-3	2x100	2	P1
88	Baleshwar	CED	RE-II	SARAGAN	MANASAH	63	1	P1
89	Baleshwar	CED	RE-II	SARAGAN	TIKIRAPADA-2	63	1	P1
90	Baleshwar	CED	RE-II	SARAGAN	BARDHANPUR-4	2x100	2	P1
91	Baleshwar	CED	RE-II	SARAGAN	9 MILE	2x100	2	P1
92	Baleshwar	CED	RE-II	SARAGAN	8 MILE	63	1	P1
93	Baleshwar	CED	RE-II	SARAGAN	JAYADEB KASBA PAHI	63	1	P1
94	Baleshwar	CED	RE-II	SARAGAN	JAYADEB KASBA PAHI	2x100	2	P1
95	Baleshwar	CED	RE-II	SARAGAN	LUNA PAHI	63	1	P1
96	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR PATRA SAHI	63	1	P1
97	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR-01	2x100	2	P1
98	Baleshwar	CED	RE-II	SARAGAN	BHIMPUR-02	2x100	2	P1
99	Baleshwar	CED	RE-II	SARAGAN	RUHALA	2x100	2	P1
100	Baleshwar	CED	RE-II	SARAGAN	JHAGADAPADHI-1	2x100	2	P1
101	Baleshwar	CED	RE-II	SARAGAN	TAPSHI	2x100	2	P1
102	Baleshwar	CED	RE-II	SARAGAN	ALDIA-1	2x100	2	P1
103	Baleshwar	CED	RE-II	SARAGAN	ALDIA-2	2x100	2	P1
104	Baleshwar	CED	RE-II	SARAGAN	ALDIA-3	2x100	2	P1
105	Baleshwar	CED	RE-II	SARAGAN	MULLANAGAR-1	2x100	2	P1
106	Baleshwar	CED	RE-II	SARAGAN	MULLANAGAR-2	2x100	2	P1
107	Baleshwar	CED	RE-II	SARAGAN	SARANGBAD	63	1	P1
108	Baleshwar	CED	RE-II	SARAGAN	RANASAHJ,BALAKRUSHNA POKHARI-1	63	1	P1
109	Baleshwar	CED	RE-II	SARAGAN	BALAKRUSHNA POKHARI-2	2x100	2	P1
110	Baleshwar	CED	RE-II	SARAGAN	JAYNAGAR	2x100	2	P1
111	Baleshwar	CED	RE-II	SARAGAN	DEBANSAHI	63	1	P1
112	Baleshwar	CED	RE-II	SARAGAN	GOBAGAN	63	1	P1
113	Baleshwar	CED	RE-II	SARAGAN	RASALPUR JEE SAHI	2x100	2	P1
114	Baleshwar	CED	RE-II	SARAGAN	NADIGAON-1	63	1	P1
115	Baleshwar	CED	RE-II	SARAGAN	NADIGAON-2	63	1	P1
116	Baleshwar	CED	RE-II	SARAGAN	BIKRAM KASABA	2x100	2	P1
117	Baleshwar	CED	RE-II	SARAGAN	RASALPUR MARKET	63	1	P1
118	Baleshwar	CED	RE-II	SARAGAN	RASALPUR VILLAGE	2x100	2	P1
119	Baleshwar	CED	RE-II	SARAGAN	RASALPUR MUKHI SAHI	2x100	2	P1
120	Baleshwar	CED	RE-II	SARAGAN	SASANG	2x100	2	P1
121	Baleshwar	CED	RE-II	SARAGAN	SASANG	2x100	2	P1
122	Baleshwar	CED	RE-II	SARAGAN	KHERANA-1	63	1	P1
123	Baleshwar	CED	RE-II	SARAGAN	KHERANA-2	63	1	P1
124	Baleshwar	CED	RE-II	SARAGAN	BANKESHWAR-1	2x100	2	P1
125	Baleshwar	CED	RE-II	SARAGAN	BANKESHWAR-2	63	1	P1
126	Baleshwar	CED	RE-II	SARAGAN	BANKESHWAR-3	63	1	P1
127	Baleshwar	CED	RE-II	SARAGAN	BANKESHWAR-4	63	1	P1
128	Baleshwar	CED	RE-II	SARAGAN	BANKESHWAR-5	63	1	P1
129	Baleshwar	CED	RE-II	SARAGAN	BADAKIA-1	63	1	P1
130	Baleshwar	CED	RE-II	SARAGAN	BADAKIA-2	2x100	2	P1
131	Baleshwar	CED	RE-II	SARAGAN	BADAKIA-3	63	1	P1
132	Baleshwar	CED	RE-II	SARAGAN	PADAMPUR-1	2x100	2	P1
133	Baleshwar	CED	RE-II	SARAGAN	PADAMPUR-2	2x100	2	P1
134	Baleshwar	CED	RE-II	SARAGAN	PADAMPUR-3	63	1	P1
135	Baleshwar	CED	RE-II	SARAGAN	PADAMPUR-4	2x100	2	P1
136	Baleshwar	CED	RE-II	SARAGAN	PADAMPUR-5	2x100	2	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
137	Baleshwar	CED	RE-II	SARAGAN	BARINGIA	2x100	2	P1
138	Baleshwar	CED	RE-II	SARAGAN	PACHHUDIA	2x100	2	P1
139	Baleshwar	CED	RE-II	SARAGAN	JUDHISTIRAPUR	2x100	2	P1
140	Baleshwar	CED	RE-II	SARAGAN	BHOYA POKHARI	2x100	2	P1
141	Baleshwar	CED	RE-II	SARAGAN	PACHHUDIADURGA MANDAP	2x100	2	P1
142	Baleshwar	CED	RE-II	SARAGAN	SANA SAUN	2x100	2	P1
143	Baleshwar	CED	RE-II	SARAGAN	MAJHI SAUN	2x100	2	P1
144	Baleshwar	CED	RE-II	SARAGAN	PALASPUR	63	1	P1
145	Baleshwar	CED	RE-II	SARAGAN	PALASPURFIELD	2x100	2	P1
146	Baleshwar	CED	RE-II	SARAGAN	PURUSWATAMPUR	2x100	2	P1
147	Baleshwar	CED	RE-II	SARAGAN	GAJENDRAPUR	63	1	P1
148	Baleshwar	CED	RE-II	SARAGAN	KURKURA	2x100	2	P1
149	Baleshwar	CED	RE-II	SARAGAN	KURKURAFIELD	2x100	2	P1
150	Baleshwar	CED	RE-II	SARAGAN	BANGARAFIELD	2x100	2	P1
151	Baleshwar	CED	RE-II	SARAGAN	BANGARAROAD	63	1	P1
152	Baleshwar	CED	RE-II	SARAGAN	SAUNCHHAKA	2x100	2	P1
153	Baleshwar	CED	RE-II	SARAGAN	BANASAUN	2x100	2	P1
154	Baleshwar	CED	RE-II	SARAGAN	JAMBESWARPUR	2x100	2	P1
155	Baleshwar	CED	RE-II	SRIJUNG	MAHISHASURI	2x100	2	P1
156	Baleshwar	CED	RE-II	SRIJUNG	MAHISHASURI	63	1	P1
157	Baleshwar	CED	RE-II	SRIJUNG	HATAPDA	2x100	2	P1
158	Baleshwar	CED	RE-II	SRIJUNG	LIBRARY CHHACK	2x100	2	P1
159	Baleshwar	CED	RE-II	SRIJUNG	DURGAMANDAP	63	1	P1
160	Baleshwar	CED	RE-II	SRIJUNG	MANGALA	63	1	P1
161	Baleshwar	CED	RE-II	SRIJUNG	TINA, UDAPADA	2x100	2	P1
162	Baleshwar	CED	RE-II	SRIJUNG	GANJIA	63	1	P1
163	Baleshwar	CED	RE-II	SRIJUNG	BATITANKI	63	1	P1
164	Baleshwar	CED	RE-II	SRIJUNG	BAULAPADA	2x100	2	P1
165	Baleshwar	CED	RE-II	SRIJUNG	DAKHINA	2x100	2	P1
166	Baleshwar	CED	RE-II	SRIJUNG	PASCHIMA	2x100	2	P1
167	Baleshwar	CED	RE-II	ODANGI	OLANDA 63KVA	63	1	P1
168	Baleshwar	CED	RE-II	ODANGI	OLANDA 100KVA	2x100	2	P1
169	Baleshwar	CED	RE-II	ODANGI	OUPAL 63KVA	63	1	P1
170	Baleshwar	CED	RE-II	ODANGI	GOPINATHPUR 63KVA	63	1	P1
171	Baleshwar	CED	RE-II	ODANGI	DUMURIA 100KVA	2x100	2	P1
172	Baleshwar	CED	RE-II	ODANGI	ODANGI 100KVA	2x100	2	P1
173	Baleshwar	CED	RE-II	ODANGI	AMARA 100KVA	100	1	P1
174	Baleshwar	CED	RE-II	ODANGI	DIGI CHAKA 100KVA	100	1	P1
175	Baleshwar	CED	NILAGIRI	MITRAPUR	BEDHA	100	1	P1
176	Baleshwar	CED	NILAGIRI	MITRAPUR	PUNDALA	100	1	P1
177	Baleshwar	CED	NILAGIRI	MITRAPUR	KANSA NEAR STATE BANK	100	1	P1
178	Baleshwar	CED	NILAGIRI	MITRAPUR	NARSINGPUR	100	1	P1
179	Baleshwar	CED	NILAGIRI	MITRAPUR	AJODHYA	100	1	P1
180	Baleshwar	CED	NILAGIRI	MITRAPUR	KHASAPADIA	63	1	P1
181	Baleshwar	CED	NILAGIRI	MITRAPUR	BADIA	100	1	P1
182	Baleshwar	CED	NILAGIRI	MITRAPUR	MATIALI PANCAYET OFFICE	100	1	P1
183	Baleshwar	CED	NILAGIRI	MITRAPUR	MATIALI	100	1	P1
184	Baleshwar	CED	NILAGIRI	MITRAPUR	MATIALI SASAN	100	1	P1
185	Baleshwar	CED	NILAGIRI	MITRAPUR	CHARGADI	100	1	P1
186	Baleshwar	CED	NILAGIRI	MITRAPUR	MITRAPUR MARKET	100	1	P1
187	Baleshwar	CED	NILAGIRI	MITRAPUR	SANAKALIAPADA	100	1	P1
188	Baleshwar	CED	NILAGIRI	NILAGIRI	KAHALIA	100	1	P1
189	Baleshwar	CED	NILAGIRI	NILAGIRI	TALA KAHALIA	100	1	P1
190	Baleshwar	CED	NILAGIRI	NILAGIRI	SASANA	100	1	P1
191	Baleshwar	CED	NILAGIRI	NILAGIRI	KAHALIA SASANA	100	1	P1
192	Baleshwar	CED	NILAGIRI	NILAGIRI	GOPNATHPUR SASANA	100	1	P1
193	Baleshwar	CED	NILAGIRI	NILAGIRI	GOPINATHPUR	100	1	P1
194	Baleshwar	CED	NILAGIRI	NILAGIRI	DHOBASILA-I	100	1	P1
195	Baleshwar	CED	NILAGIRI	NILAGIRI	DHOBASILA-II	100	1	P1
196	Baleshwar	CED	NILAGIRI	NILAGIRI	OLDONG	100	1	P1
197	Baleshwar	CED	RE NO-1	REMUNA	Basanti Market	100	1	P1
198	Baleshwar	CED	RE NO-1	REMUNA	Mahastavpadia	2x100	2	P1
199	Baleshwar	CED	RE NO-1	REMUNA	Garuhata-3	100	1	P1
200	Baleshwar	CED	RE NO-1	REMUNA	Khusaliganj	100	1	P1
201	Baleshwar	CED	RE NO-1	REMUNA	Baula Pukhari	100	1	P1
202	Baleshwar	CED	RE NO-1	REMUNA	Pothala-1	2x100	2	P1
203	Baleshwar	CED	RE NO-1	REMUNA	Sukhia Hata	100	1	P1
204	Baleshwar	CED	RE NO-1	REMUNA	Madhipur	2x100	2	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
205	Baleshwar	CED	RE NO-1	REMUNA	Mandir Chhaka	100	1	P1
206	Baleshwar	CED	RE NO-1	REMUNA	Kendusauli	100	1	P1
207	Baleshwar	CED	RE NO-1	REMUNA	Purusattampur	100	1	P1
208	Baleshwar	CED	RE NO-1	REMUNA	Athantar	2x100	2	P1
209	Baleshwar	CED	RE NO-1	REMUNA	Ganapatibhandar	100	1	P1
210	Baleshwar	CED	RE NO-1	REMUNA	Asuragadia	63	1	P1
211	Baleshwar	CED	RE NO-1	REMUNA	malikasahi	100	1	P1
212	Baleshwar	CED	RE NO-1	REMUNA	Kundasahi	100	1	P1
213	Baleshwar	CED	RE NO-1	REMUNA	Armala matha	100	1	P1
214	Baleshwar	CED	RE NO-1	REMUNA	Agria	63	1	P1
215	Baleshwar	CED	RE NO-1	REMUNA	Bimburia	2x100	2	P1
216	Baleshwar	CED	RE NO-1	REMUNA	Basukhunta	100	1	P1
217	Baleshwar	CED	RE NO-1	REMUNA	Badua	100	1	P1
218	Baleshwar	CED	RE NO-1	REMUNA	Dubeiti	100	1	P1
219	Baleshwar	CED	RE NO-1	REMUNA	Rasalpur	100	1	P1
220	Baleshwar	CED	RE NO-1	REMUNA	Fulkiari	63	1	P1
221	Baleshwar	CED	RE NO-1	REMUNA	Rasalpur	63	1	P1
222	Baleshwar	CED	RE NO-1	REMUNA	udamber	2x100	2	P1
223	Baleshwar	CED	RE NO-1	REMUNA	dologahira	100	1	P1
224	Baleshwar	CED	RE NO-1	REMUNA	kathasagada	100	1	P1
225	Baleshwar	CED	RE NO-1	REMUNA	patnaraipur	100	1	P1
226	Baleshwar	CED	RE NO-1	REMUNA	mendhara	100	1	P1
227	Baleshwar	CED	RE-I	ESO RUPSA	GHANTIA CHHACK	100	1	P1
228	Baleshwar	CED	RE-I	ESO RUPSA	SARPANCH	100	1	P1
229	Baleshwar	CED	RE-I	ESO RUPSA	SIVA MANDIR	100	1	P1
230	Baleshwar	CED	RE-I	ESO RUPSA	PADABADAGAN 33/.4 KV	100	1	P1
231	Baleshwar	CED	RE-I	ESO RUPSA	AMBAPUNJA	100	1	P1
232	Baleshwar	CED	RE-I	ESO RUPSA	KHANDAHAR 2	100	1	P1
233	Baleshwar	CED	RE-I	ESO RUPSA	GOBINDA	100	1	P1
234	Baleshwar	CED	RE-I	ESO RUPSA	budhiamari-mohan	100	1	P1
235	Baleshwar	CED	RE-I	ESO RUPSA	kasafal market	100	1	P1
236	Baleshwar	CED	RE-I	ESO RUPSA	Bhagachako	63	1	P1
237	Baleshwar	CED	RE-I	ESO RUPSA	TN PUR	100	1	P1
238	Baleshwar	CED	RE-I	ESO RUPSA	Tourist	100	1	P1
239	Baleshwar	CED	RE-I	ESO RUPSA	Tadrabudhia	63	1	P1
240	Baleshwar	CED	RE-I	ESO RUPSA	Tadrabudhia	100	1	P1
241	Baleshwar	CED	RE-I	ESO RUPSA	padabaranga	100	1	P1
242	Baleshwar	CED	RE-I	ESO RUPSA	Raisua	100	1	P1
243	Baleshwar	CED	RE-I	ESO RUPSA	Khandahar	100	1	P1
244	Baleshwar	CED	RE-1	DURGADEVI	JAGANNATHAPUR	63	1	P1
245	Baleshwar	CED	RE-1	DURGADEVI	KURUNIA-1	100	1	P1
246	Baleshwar	CED	RE-1	DURGADEVI	KURUNIA -2	100	1	P1
247	Baleshwar	CED	RE-1	DURGADEVI	PANDASAH	100	1	P1
248	Baleshwar	CED	RE-1	DURGADEVI	TUTAPADA	63	1	P1
249	Baleshwar	CED	RE-1	DURGADEVI	PALSAHI	100	1	P1
250	Baleshwar	CED	RE-1	DURGADEVI	BADAPAL	100	1	P1
251	Baleshwar	CED	RE-1	DURGADEVI	MAYURGRAM	100	1	P1
252	Baleshwar	CED	RE-1	DURGADEVI	MOHANTYPADA	100	1	P1
253	Baleshwar	CED	RE-1	DURGADEVI	GANGPURA	63	1	P1
254	Baleshwar	CED	RE-1	DURGADEVI	PALASIA	100	1	P1
255	Baleshwar	CED	RE-1	DURGADEVI	PANCHUPUTULI	63	1	P1
256	Baleshwar	CED	RE-1	DURGADEVI	GANDARDA	100	1	P1
257	Baleshwar	CED	RE-1	DURGADEVI	GANDARDA-2	100	1	P1
258	Baleshwar	CED	RE-1	DURGADEVI	GANDARDA-3	100	1	P1
259	Baleshwar	CED	RE-1	DURGADEVI	GANDARDA-4	100	1	P1
260	Baleshwar	CED	RE-1	DURGADEVI	DARKOILI	100	1	P1
261	Baleshwar	CED	RE-1	DURGADEVI	BARABANK	100	1	P1
262	Baleshwar	SED	Soro No II	Mulisingh	Barahpur IPDS	100	1	P1
263	Baleshwar	SED	Soro No II	Mulisingh	Kedarpur Tundapada	100	1	P1
264	Baleshwar	SED	Soro No II	Anantapur	Sajanpur	100	1	P1
265	Baleshwar	SED	Soro No II	Mulisingh	Kodandapur	100	1	P1
266	Baleshwar	SED	Soro No II	Mulisingh	Ekasaya	100	1	P1
267	Baleshwar	SED	Soro No II	Mulisingh	Tentuliapada	100	1	P1
268	Baleshwar	SED	Soro No II	Mulisingh	Khandasahi	100	1	P1
269	Baleshwar	SED	Soro No II	Mulisingh	Meghamadhaba	100	1	P1
270	Baleshwar	SED	Soro No II	Mulisingh	Mulisingh Chhaka	100	1	P1
271	Baleshwar	SED	Soro No II	Mulisingh	Tala Mulisingh	100	1	P1
272	Baleshwar	SED	Khaira	Khaira	Kadaligadia	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
273	Baleshwar	SED	Khaira	Khaira	Rajib Padia	100	1	P1
274	Baleshwar	SED	Khaira	DUNGURA	KUNDU SAHI	100	1	P1
275	Baleshwar	SED	Khaira	OUPADA	DUKHANDAKHIRA	100	1	P1
276	Baleshwar	SED	Khaira	Khaira	Gavara	100	1	P1
277	Baleshwar	SED	Khaira	Khaira	Nayakhandi	100	1	P1
278	Baleshwar	SED	Khaira	Khaira	Arjunpur	100	1	P1
279	Baleshwar	SED	Khaira	OUPADA	AGHIRAPADA	100	1	P1
280	Baleshwar	SED	Khaira	OUPADA	SARUGAON UDAPADA	100	1	P1
281	Baleshwar	SED	Khaira	OUPADA	DARAKHOLI	100	1	P1
282	Baleshwar	SED	Khaira	OUPADA	GARUDAHOTA	100	1	P1
283	Baleshwar	SED	Khaira	OUPADA	DARIPOKHARI	100	1	P1
284	Baleshwar	SED	Khaira	OUPADA	BUDAKHUNTA	100	1	P1
285	Baleshwar	SED	Khaira	OUPADA	RODANPUR	100	1	P1
286	Baleshwar	SED	BAHANAGA	KHANTAPADA	JHATIGADIA	63	1	P1
287	Baleshwar	SED	BAHANAGA	KHANTAPADA	SUTHANGA	100	1	P1
288	Baleshwar	SED	BAHANAGA	KHANTAPADA	KHANTAPADA BAZAR-I	100	1	P1
289	Baleshwar	SED	BAHANAGA	KHANTAPADA	KHANTAPADA BAZAR-II	100	1	P1
290	Baleshwar	SED	BAHANAGA	KHANTAPADA	RAMNAGAR OLD	100	1	P1
291	Baleshwar	SED	BAHANAGA	KHANTAPADA	OLIAPATNA	63	1	P1
292	Baleshwar	SED	BAHANAGA	KHANTAPADA	KAMALA PATNA SASAN	63	1	P1
293	Baleshwar	SED	BAHANAGA	KHANTAPADA	NACHINTA	100	1	P1
294	Baleshwar	SED	BAHANAGA	KHANTAPADA	MANGALADI	100	1	P1
295	Baleshwar	SED	BAHANAGA	KHANTAPADA	JAIPUR	100	1	P1
296	Baleshwar	BED	SUPPLY-1	CHANDIPUR	SUKUAKHALA	100	1	P1
297	Baleshwar	BED	SUPPLY-1	CHANDIPUR	KASHMIR HOTEL	100	1	P1
298	Baleshwar	BED	SUPPLY-1	CHANDIPUR	NAUPALGADI	100	1	P1
299	Baleshwar	BED	SUPPLY-1	CHANDIPUR	MIRZAPUR CHHAKA	100	1	P1
300	Baleshwar	BED	SUPPLY-1	CHANDIPUR	MIRZAPUR SCHOOL FRONT	63	1	P1
301	Baleshwar	BED	Baleswar No - II	Ganeswarpur	ODISHA FEED	100	1	P1
302	Baleshwar	BED	Baleswar No - II	Ganeswarpur	SASANBAD DURGA MANDAP	100	1	P1
303	Baleshwar	BED	Baleswar No - II	Ganeswarpur	MANGALPUR CHHAKA	100	1	P1
304	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NUAGAON CHHAKA	100	1	P1
305	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NUGAON MANDIR	100	1	P1
306	Baleshwar	BED	Baleswar No - II	Ganeswarpur	MARUTI SUZUKI	100	1	P1
307	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BHATTAR HOUSE	100	1	P1
308	Baleshwar	BED	Baleswar No - II	Ganeswarpur	SALABANI IPDS	100	1	P1
309	Baleshwar	BED	Baleswar No - II	Ganeswarpur	DADHIBAMANA NAGAR	100	1	P1
310	Baleshwar	BED	Baleswar No - II	Ganeswarpur	SPORTSHOSTEL	100	1	P1
311	Baleshwar	BED	Baleswar No - II	Ganeswarpur	TENTULIANAGAR	100	1	P1
312	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BHIMESWAR KALYANMANDAP	100	1	P1
313	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BHIMPURA CHAKA	100	1	P1
314	Baleshwar	BED	Baleswar No - II	Ganeswarpur	MASANIPADA	100	1	P1
315	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BHIMPURA GAON	100	1	P1
316	Baleshwar	BED	Baleswar No - II	Ganeswarpur	SSDAS	100	1	P1
317	Baleshwar	BED	Baleswar No - II	Ganeswarpur	HURTICULTURE	63	1	P1
318	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BEHERA POKHARI	100	1	P1
319	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BEHERA POKHARI	100	1	P1
320	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BALI POKHARI	100	1	P1
321	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NEAR SANI MANDIR	100	1	P1
322	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NEAR SANI MANDIR	100	1	P1
323	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NEAR COLLEGE IPDS	100	1	P1
324	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BAMPADA CHHAKA	100	1	P1
325	Baleshwar	BED	SUPPLY-II	NO-III	DAV SCHOOL	100	1	P1
326	Baleshwar	BED	SUPPLY-II	NO-III	SIJUBADI	100	1	P1
327	Baleshwar	BED	SUPPLY-II	NO-III	DWARIKA NAGAR-3	63	1	P1
328	Baleshwar	BED	SUPPLY-II	NO-III	NEW RADHAKRUSHNA MANDIR	100	1	P1
329	Baleshwar	BED	SUPPLY-II	NO-III	SAMALESWARI NAGAR-2	63	1	P1
330	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ANLADUBA-MATHA 1	100	1	P1
331	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ANLADUBA-MATHA 2	100	1	P1
332	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ANLADUBA -OIL MILL	100	1	P1
333	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ANLADUBA-MOHANTA SAHI	100	1	P1
334	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	THAKURANIBEDA-NALO	100	1	P1
335	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ASHANBANI	100	1	P1
336	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	ICHINDA-JAHIRASAHU	100	1	P1
337	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	DANDBOSE	63	1	P1
338	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	KALARDA	63	1	P1
339	BARIPADA	RED	KARANJIA	KARANJIA-II	Bala (Near GP)	63	1	P1
340	BARIPADA	RED	KARANJIA	KARANJIA-II	Kia (Mohanta Sahi)	63	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
341	BARIPADA	RED	KARANJIA	KARANJIA-II	Kurulia (Mandir Sahi)	63	1	P1
342	BARIPADA	RED	KARANJIA	KARANJIA-II	Malarpada (Mohanta Sahi)	63	1	P1
343	BARIPADA	RED	KARANJIA	KARANJIA-II	Nadhagadia (Near Tower Line)	63	1	P1
344	BARIPADA	RED	KARANJIA	KARANJIA-II	Ranipat	63	1	P1
345	BARIPADA	RED	KARANJIA	KARANJIA-II	Tato (Near School)	63	1	P1
346	BARIPADA	RED	KARANJIA	KARANJIA-II	Tulsiposi (Near School)	63	1	P1
347	BARIPADA	RED	KARANJIA	KARANJIA-II	Jhumkakudar (Near Gaon Sala)	63	1	P1
348	BARIPADA	RED	KARANJIA	KARANJIA-II	Kadadiha (Ho Sahi)	63	1	P1
349	BARIPADA	RED	KARANJIA	KARANJIA-II	Kuspada (Near Club)	63	1	P1
350	BARIPADA	RED	KARANJIA	KARANJIA-II	Murga Sahi (Road side)	63	1	P1
351	BARIPADA	RED	KARANJIA	KARANJIA-II	Bhanra (Hudí Sahi)	63	1	P1
352	BARIPADA	RED	KARANJIA	KARANJIA-II	Kerkera (Naik Sahi)	63	1	P1
353	BARIPADA	RED	KARANJIA	KARANJIA-II	Murgapat	63	1	P1
354	BARIPADA	RED	KARANJIA	KARANJIA-II	Nuagaon	63	1	P1
355	BARIPADA	RED	KARANJIA	KARANJIA-II	Nuagaon (Guda sahi)	63	1	P1
356	BARIPADA	RED	KARANJIA	KARANJIA-II	Saranggad (Behera Sahi)	100	1	P1
357	BARIPADA	RED	RAIRANGPUR II	KUSUMI	BASILA	100	1	P1
358	BARIPADA	RED	RAIRANGPUR II	KUSUMI	TARINI MANDIR	100	1	P1
359	BARIPADA	RED	RAIRANGPUR II	KUSUMI	TENTAPOSI MANDALSAHI	63	1	P1
360	BARIPADA	RED	RAIRANGPUR II	KUSUMI	MUCHI	63	1	P1
361	BARIPADA	RED	RAIRANGPUR II	KUSUMI	SANHATNABEDA	63	1	P1
362	BARIPADA	RED	RAIRANGPUR II	KUSUMI	DALKI FARAM	63	1	P1
363	BARIPADA	RED	RAIRANGPUR II	KUSUMI	JORADA	63	1	P1
364	BARIPADA	RED	RAIRANGPUR II	KUSUMI	JANUMGHUTU	63	1	P1
365	BARIPADA	RED	RAIRANGPUR II	KUSUMI	BANAKATI	63	1	P1
366	BARIPADA	RED	RAIRANGPUR II	KUSUMI	CHANDIDA	63	1	P1
367	BARIPADA	RED	RAIRANGPUR II	KUSUMI	KUMDASOLE	63	1	P1
368	BARIPADA	RED	RAIRANGPUR II	KUSUMI	DEULI	63	1	P1
369	BARIPADA	RED	RAIRANGPUR II	KUSUMI	SHYAMSUNDAR	63	1	P1
370	BARIPADA	RED	KARANJIA	THAKURMUNDA	TARAMARA	100	1	P1
371	BARIPADA	RED	KARANJIA	THAKURMUNDA	GHULGHULIA	100	1	P1
372	BARIPADA	RED	KARANJIA	THAKURMUNDA	SATKOSIA	100	1	P1
373	BARIPADA	RED	KARANJIA	THAKURMUNDA	DAKEIPAL	100	1	P1
374	BARIPADA	RED	KARANJIA	THAKURMUNDA	BAGHDAFA	63	1	P1
375	BARIPADA	RED	KARANJIA	THAKURMUNDA	JAGIASAHI	63	1	P1
376	BARIPADA	RED	KARANJIA	THAKURMUNDA	BADUDIGHORA	63	1	P1
377	BARIPADA	RED	KARANJIA	THAKURMUNDA	DUBAPAL	63	1	P1
378	BARIPADA	RED	KARANJIA	THAKURMUNDA	KATHUANUAGAN	63	1	P1
379	BARIPADA	RED	KARANJIA	THAKURMUNDA	MITUANI	100	1	P1
380	BARIPADA	RED	KARANJIA	THAKURMUNDA	NIPANIA	100	1	P1
381	BARIPADA	RED	KARANJIA	THAKURMUNDA	BHARANDIA	100	1	P1
382	Baripada	RED	Joshipur	Sukruli	BEGUNIABINDHA	63	1	P1
383	Baripada	RED	Joshipur	Sukruli	GHARAMBEDA	63	1	P1
384	Baripada	RED	Joshipur	Sukruli	BADBIL	63	1	P1
385	Baripada	RED	Joshipur	Sukruli	SINGDA	63	1	P1
386	Baripada	RED	Joshipur	Sukruli	SINGDA CHC	63	1	P1
387	Baripada	RED	Joshipur	Sukruli	TANGIA	63	1	P1
388	Baripada	RED	Joshipur	Sukruli	TANGIA CHATURISAHÍ	63	1	P1
389	Baripada	RED	Joshipur	Sukruli	DHANGARBEDA	63	1	P1
390	Baripada	RED	Joshipur	Sukruli	ROUTALIPAT	63	1	P1
391	Baripada	RED	Joshipur	Sukruli	NAUPANA	100	1	P1
392	Baripada	RED	Joshipur	Sukruli	DHAKATA	63	1	P1
393	Baripada	RED	Joshipur	Sukruli	KAKHARUPONA	100	1	P1
394	Baripada	RED	Joshipur	Sukruli	KHICHING	100	1	P1
395	Baripada	UED	Udala	Kaptipada	Sarat	100	1	P1
396	Baripada	UED	Udala	Kaptipada	Pachabati	63	1	P1
397	Baripada	UED	Udala	Kaptipada	Filmhall	100	1	P1
398	Baripada	UED	Udala	Kaptipada	Gadsahi	100	1	P1
399	Baripada	UED	Udala	Kaptipada	Pedagadi	63	1	P1
400	Baripada	UED	Udala	Kaptipada	Pedagadi waterline	63	1	P1
401	Baripada	UED	Udala	Kaptipada	Jarada	63	1	P1
402	Baripada	UED	Udala	Kaptipada	Pedagadi beheerasahi	100	1	P1
403	Baripada	UED	Udala	Kaptipada	Badabisol BPL	63	1	P1
404	Baripada	UED	Udala	Kaptipada	Galagadia BPL	63	1	P1
405	Baripada	UED	Udala	Kaptipada	Khuntapal2	63	1	P1
406	Baripada	UED	Udala	Kaptipada	Hillblock 75	63	1	P1
407	Baripada	UED	Udala	Kaptipada	kaptipada policestation	63	1	P1
408	Baripada	UED	Udala	Kaptipada	bapun farmhouse	63	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
409	Baripada	UED	Udala	Kaptipada	Ghalaghathi	63	1	P1
410	Baripada	UED	Udala	Kaptipada	kaladhai LI point	63	1	P1
411	Baripada	UED	Udala	Kaptipada	Sadak sahi	63	1	P1
412	Baripada	UED	Udala	Kaptipada	Asurkhal	63	1	P1
413	Baripada	UED	Udala	Kaptipada	Jhikpada	100	1	P1
414	Baripada	UED	Udala	Kaptipada	Soubhgyadeipur	63	1	P1
415	Baripada	UED	Udala	Kaptipada	Sarat market	63	1	P1
416	Baripada	UED	Udala	Kaptipada	Sulahghadia	100	1	P1
417	Baripada	UED	Udala	Kaptipada	Majhigadia	63	1	P1
418	Baripada	UED	Udala	Kaptipada	Dangarsahi	63	1	P1
419	BARIPADA	UED	UDALA	UDALA	RELAIANCE100KVA	100	1	P1
420	BARIPADA	UED	UDALA	UDALA	NUDADIHA	100	1	P1
421	BARIPADA	UED	UDALA	UDALA	NUDADIHA CHAKA	100	1	P1
422	BARIPADA	UED	UDALA	UDALA	GUDUGUDIA	100	1	P1
423	BARIPADA	UED	UDALA	UDALA	KANAKPADA	100	1	P1
424	BARIPADA	UED	UDALA	UDALA	GODHIMARA	63	1	P1
425	BARIPADA	UED	UDALA	UDALA	BHANDASAH	63	1	P1
426	BARIPADA	UED	UDALA	UDALA	APATROUT	100	1	P1
427	BARIPADA	UED	UDALA	UDALA	DUGDHA	100	1	P1
428	BARIPADA	UED	UDALA	UDALA	KUNDABAI	2x100	2	P1
429	BARIPADA	UED	KHUNTA	BADASAH	SHUAGPURA	2x100	2	P1
430	BARIPADA	UED	KHUNTA	BADASAH	MARKUNDI	63	1	P1
431	BARIPADA	UED	KHUNTA	BADASAH	KULIANA B	2x100	2	P1
432	BARIPADA	UED	KHUNTA	BADASAH	SATAPAUTIA	2x100	2	P1
433	BARIPADA	UED	KHUNTA	BADASAH	DHOBLANG	63	1	P1
434	BARIPADA	UED	KHUNTA	BADASAH	AB PUR	63	1	P1
435	BARIPADA	BPED	BARIPADA	NO.II	KAMALA NEHRU(2)	2x100	2	P1
436	BARIPADA	BPED	BARIPADA	NO.II	CHAITANYA MAJHI	2x100	2	P1
437	BARIPADA	BPED	BARIPADA	NO.II	THAKURANI THHANA	2x100	2	P1
438	BARIPADA	BPED	BARIPADA	NO.II	SUBHADRA PUMP HOUSE	2x100	2	P1
439	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	EKTALI	2x100	2	P1
440	Baripada	BPED	RE-BARIPADA	Chhancha	TATA Motors	2x100	2	P1
441	Baripada	BPED	RE-BARIPADA	Chhancha	RE-BARIPADAliance petrol pump	2x100	2	P1
442	Baripada	BPED	RE-BARIPADA	Chhancha	chena gali	2x100	2	P1
443	Baripada	BPED	Moroda	Rasgobindpur	Majnadiha	2x100	2	P1
444	Baripada	BPED	Moroda	Rasgobindpur	Rasgobindpur-1	2x100	2	P1
445	Baripada	BPED	Moroda	Rasgobindpur	Rasgobindpur-2	2x100	2	P1
446	Baripada	BPED	Moroda	Rasgobindpur	Manida	2x100	2	P1
447	Baripada	BPED	Moroda	Rasgobindpur	Kanthi	2x100	2	P1
448	Baripada	BPED	Moroda	Rasgobindpur	Karanjpada	2x100	2	P1
449	Baripada	BPED	Moroda	Rasgobindpur	Kunchbania	2x100	2	P1
450	Baripada	BPED	Moroda	Rasgobindpur	Saldiha	2x100	2	P1
451	Baripada	BPED	Betnoti	Betnoti	NAHANDASOLE	2x100	2	P1
452	Baripada	BPED	Betnoti	Betnoti	KUNDHEI	2x100	2	P1
453	Baripada	BPED	Betnoti	Betnoti	DHOBANISOLE	2x100	2	P1
454	Baripada	BPED	Betnoti	Betnoti	KC PUR HOSPITAL	2x100	2	P1
455	Baripada	BPED	Betnoti	Betnoti	KABARSTHAN	2x100	2	P1
456	Baripada	BPED	Betnoti	Betnoti	BADJAMBANI	2x100	2	P1
457	Baripada	BPED	Betnoti	Betnoti	Bhalia	2x100	2	P1
458	Baripada	BPED	Betnoti	Betnoti	Purinda	2x100	2	P1
459	Baripada	BPED	Kuliana	Kuliana	Mathachaka 100KVA	2x100	2	P1
460	Baripada	BPED	Kuliana	Kuliana	Bhuyangada 100 KVA	2x100	2	P1
461	Baripada	BPED	Kuliana	Kuliana	Kuabuda 100KVA	2x100	2	P1
462	Baripada	BPED	Kuliana	Kuliana	Dhadipada 100KVA	2x100	2	P1
463	Baripada	BPED	Kuliana	Kuliana	Fuljhara 100 KVA	2x100	2	P1
464	Baripada	BPED	Kuliana	Kuliana	Tadki 100KVA	2x100	2	P1
465	Baripada	BPED	Moroda	Gaon Amarda	Podapoda	2x100	2	P1
466	Baripada	BPED	Moroda	Gaon Amarda	bhaduasole	2x100	2	P1
467	Baripada	BPED	Moroda	Gaon Amarda	KUSDIHA	2x100	2	P1
468	Baripada	BPED	Moroda	Gaon Amarda	ASTAGADIA	2x100	2	P1
469	Baripada	BPED	Moroda	Gaon Amarda	BERHAMPURA	2x100	2	P1
470	Baripada	BPED	Moroda	Gaon Amarda	PURNACHANDRA PUR	2x100	2	P1
471	Baripada	BPED	Moroda	Moroda	Chadeigan 100 kva-1	2x100	2	P1
472	Baripada	BPED	Moroda	Moroda	Chadeigan 100 kva-2	2x100	2	P1
473	Baripada	BPED	Moroda	Moroda	Khuntapal 100 kva	2x100	2	P1
474	Baripada	BPED	Moroda	Moroda	Gadigan 100 Kva	2x100	2	P1
475	Baripada	BPED	Moroda	Moroda	Makund 100 Kva	2x100	2	P1
476	Baripada	BPED	Moroda	Moroda	Mahulabani 100 Kva	2x100	2	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
477	Baripada	BPED	Moroda	Moroda	Dhansola 100 Kva	2x100	2	P1
478	Baripada	BPED	Moroda	Moroda	Khuruntia 100 kva-1	100	1	P1
479	Baripada	BPED	Moroda	Moroda	Khuruntia 100 kva-2	100	1	P1
480	Baripada	BPED	Moroda	Moroda	Tukpalasia 100 kva	100	1	P1
481	Baripada	BPED	Moroda	Moroda	Rukuni 100 Kva	100	1	P1
482	Baripada	BPED	Moroda	Moroda	Patpur 100 Kva	100	1	P1
483	Baripada	BPED	Moroda	Moroda	Silda 100 Kva	100	1	P1
484	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	BAHADURPUR(SADAKSAHI)	63	1	P1
485	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	DUDHIASOLE	63	1	P1
486	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	KISHANDAH	63	1	P1
487	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	SHAMAKHUNTA	63	1	P1
488	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	KHANDIA	63	1	P1
489	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	AMBADUBI	63	1	P1
490	BARIPADA	BPED	RE-BARIPADA	SHAMAKHUNTA	AMBASIKIDA	63	1	P1
491	Baripada	BPED	Moroda	Rasgobindpur	Raisole	63	1	P1
492	Baripada	BPED	Moroda	Moroda	Bholagadia 63 KVA	63	1	P1
493	Baripada	BPED	Moroda	Moroda	Panchabhaya 63 Kva	63	1	P1
494	Baripada	BPED	Moroda	Moroda	Fulbadia 63 KVA	63	1	P1
495	Baripada	BPED	Moroda	Moroda	Belajhari 63 Kva	63	1	P1
496	Baripada	BPED	Moroda	Moroda	Chikitamatia Mango 63 kva	63	1	P1
497	Baripada	BPED	Moroda	Moroda	Kaduani 63 kva	63	1	P1
498	Baripada	BPED	Moroda	Moroda	Nuhamalia 63 KVA	63	1	P1
499	Baripada	BPED	Moroda	Moroda	Khalapada 63 kva	63	1	P1
500	Baripada	BPED	Moroda	Moroda	BAUNSAKANTIA 63 KVA	63	1	P1
501	Baripada	BPED	Moroda	Moroda	Lunia 63 Kva-1	63	1	P1
502	Baripada	BPED	Moroda	Moroda	Lunia 63 Kva-2	63	1	P1
503	JAJPUR	JRED	JAJPUR ROAD	KORAI	UPULEI	63	1	P1
504	JAJPUR	JRED	JAJPUR ROAD	KORAI	BANDI	63	1	P1
505	JAJPUR	JRED	JAJPUR ROAD	KORAI	ARANYAMODAN	63	1	P1
506	JAJPUR	JRED	JAJPUR ROAD	DANAGADI	SOBARA SANOSHI MANDIR	100	1	P1
507	JAJPUR	JRED	DUBURI	SUKINDA	RAJAGOLA	2x100	2	P1
508	JAJPUR	JRED	DUBURI	SUKINDA	JAMUPASI	100	1	P1
509	JAJPUR	JRED	DUBURI	SUKINDA	AMBASARA	100	1	P1
510	JAJPUR	JRED	DUBURI	SUKINDA	PATRAMARA	100	1	P1
511	JAJPUR	JRED	DUBURI	SUKINDA	HATIBARI DURGAMANDAP	100	1	P1
512	JAJPUR	JRED	DUBURI	SUKINDA	HATIBARI MAHADEV SAHI	100	1	P1
513	JAJPUR	JRED	DUBURI	SUKINDA	HATIBARI MOHANTY SAHI	100	1	P1
514	JAJPUR	JRED	DUBURI	SUKINDA	BAIRIMALA	100	1	P1
515	JAJPUR	JRED	DUBURI	SUKINDA	GANDHAPLA	100	1	P1
516	JAJPUR	JRED	DUBURI	SUKINDA	NUADIHI	100	1	P1
517	JAJPUR	JRED	DUBURI	SUKINDA	BOULAPAL	100	1	P1
518	JAJPUR	JRED	DUBURI	SUKINDA	BANDHAGAN	100	1	P1
519	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Abdalpur	100	1	P1
520	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	DPRC Building	63	1	P1
521	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Collage chhaka	100	1	P1
522	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Dihasahi	100	1	P1
523	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Mallikapur	100	1	P1
524	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Mallikapur Bandha side	100	1	P1
525	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN-3	Belagachhamula	100	1	P1
526	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	UPPER KIANALI	100	1	P1
527	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	UPPER KIANALI-1	100	1	P1
528	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	MOTARANGAPAL	63	1	P1
529	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	MOTARANGAPAL	100	1	P1
530	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	BINDHAN	100	1	P1
531	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	JAGANNATHA BEDHA	100	1	P1
532	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	KUMARSAHI	63	1	P1
533	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	BIBISAREI	100	1	P1
534	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	TARINI CHHAKA	63	1	P1
535	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	LALITESWAR NAGAR	2x100	2	P1
536	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	AMBICAMANDAP	100	1	P1
537	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	MANASAPOLLA	100	1	P1
538	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	NARSINGHPUR	100	1	P1
539	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	RAGHUPUR	63	1	P1
540	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	AREI CHAKKA	100	1	P1
541	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	RAHSOI KHAJIRAPADIA	100	1	P1
542	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	MARKANDPUR	100	1	P1
543	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	BARAHATA	100	1	P1
544	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	KHANDARA PANDASAH	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
545	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	SUDHAGOBINDA	100	1	P1
546	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	PADASAH	100	1	P1
547	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	NACHIPUR SWAIN SAHI	63	1	P1
548	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	OLEI -1	100	1	P1
549	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	OLEI-2	100	1	P1
550	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	BACHHOL	100	1	P1
551	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	RUDRAPUR-1	100	1	P1
552	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	RUDRAPUR-2	100	1	P1
553	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	BARUNABANKA	100	1	P1
554	JAJPUR	JTED	BINJHARPUR	BALAMUKULI	SAMALSAHI SINGHPUR	63	1	P1
555	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	TARINI CHOWK	100	1	P1
556	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	KATARA	100	1	P1
557	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	MANGALPUR MEDICAL CHC	100	1	P1
558	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	IRUZAPUR(MUSLIM SAHI)	100	1	P1
559	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	DASARATHAPUR(MEDICAL-1)	100	1	P1
560	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	DASARATHAPUR(FANDI)	100	1	P1
561	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	KALIPADIA-2	100	1	P1
562	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	NUAGOUN-1	100	1	P1
563	JAJPUR	JTED	DASARATHPUR	ESO AHIDAS	MALLIKAPUR-2-100 KVA	100	1	P1
564	JAJPUR	JTED	DASARATHPUR	ESO AHIDAS	SANABASTI-100 KVA	100	1	P1
565	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	DAKHINBANDHA	100	1	P1
566	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	KARANDIPUR CHOWK	100	1	P1
567	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	KATIKATA	100	1	P1
568	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	KHAJURIMALA	100	1	P1
569	JAJPUR	JTED	DASARATHPUR	ESO AHIDAS	TENTULI DHIA-1-100 KVA	100	1	P1
570	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	BALIGANDA	100	1	P1
571	JAJPUR	JTED	DASARATHPUR	ESO AHIDAS	PURUNA SAHI-100 KVA	100	1	P1
572	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	NUAGOUN-2	100	1	P1
573	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	CHANCHINA	100	1	P1
574	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	BIRIPATA-1	100	1	P1
575	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	RAHASOI(KALIPADIA)	100	1	P1
576	JAJPUR	JTED	DASARATHPUR	ESO MANGALPUR	KANIKAPADA (NARI SAHO) 100 KVA	100	1	P1
577	JAJPUR	JTED	DASARATHPUR	ESO AHIDAS	KASAPA-2-100 KVA	100	1	P1
578	JAJPUR	JTED	DASARATHPUR	ESO DASARATHPUR	DASARATHAPUR(MEDICAL-2)	100	1	P1
579	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-I	KHAN MAHAL-100 KVA	100	1	P1
580	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-I	MOGALMOHALLA-2	100	1	P1
581	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-I	SONA NAHALA-100 KVA	100	1	P1
582	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-I	KAYENA(MASJID-2)	100	1	P1
583	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-II	CHIKINA(BRAHMANI GOUN)	100	1	P1
584	JAJPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-II	DANDAKUA	100	1	P1
585	JAJPUR	KUED	BARI	BARI-I	BHANRA	100	1	P1
586	JAJPUR	KUED	BARI	BARI-I	BHURUNGA 1	100	1	P1
587	JAJPUR	KUED	BARI	BARI-I	RAMPA BANDHA	100	1	P1
588	JAJPUR	KUED	BARI	BARI-I	TALA KAPADA	100	1	P1
589	JAJPUR	KUED	BARI	SUJANPUR	RISHIPUR	100	1	P1
590	JAJPUR	KUED	BARI	SUJANPUR	EARBANK	100	1	P1
591	JAJPUR	KUED	BARI	SUJANPUR	RAGHUNATHPUR	100	1	P1
592	JAJPUR	KUED	BARI	SUJANPUR	DARAKUL	100	1	P1
593	JAJPUR	KUED	BARI	SUJANPUR	UDAYAPUR	100	1	P1
594	JAJPUR	KUED	KUAKHIA	kuakhia	nathipur	100	1	P1
595	JAJPUR	KUED	KUAKHIA	kuakhia	kolthal-1	100	1	P1
596	JAJPUR	KUED	KUAKHIA	kuakhia	kolthala-2	100	1	P1
597	JAJPUR	KUED	KUAKHIA	kuakhia	hharipur-1	100	1	P1
598	JAJPUR	KUED	KUAKHIA	kuakhia	rasulpur	100	1	P1
599	JAJPUR	KUED	KUAKHIA	kuakhia	baruana	100	1	P1
600	JAJPUR	KUED	KUAKHIA	BRAHMABBARADA	RAHAMATNAGAR	100	1	P1
601	JAJPUR	KUED	KUAKHIA	BRAHMABBARADA	HAGINAGAR	100	1	P1
602	JAJPUR	KUED	KUAKHIA	BRAHMABBARADA	SK NAGAR	100	1	P1
603	JAJPUR	KUED	KUAKHIA	BRAHMABBARADA	HATA 1	100	1	P1
604	JAJPUR	KUED	KUAKHIA	BRAHMABBARADA	CHANDIPADIA	100	1	P1
605	JAJPUR	KUED	DHARMASALA	KABATABANDHA	DAGARAPADA	100	1	P1
606	JAJPUR	KUED	DHARMASALA	KABATABANDHA	KABATABANDHA MEDICAL	100	1	P1
607	JAJPUR	KUED	DHARMASALA	KABATABANDHA	MANDAPA SAHI	100	1	P1
608	JAJPUR	KUED	DHARMASALA	KABATABANDHA	MARJIDAPUR TAREI SAHI	100	1	P1
609	JAJPUR	KUED	DHARMASALA	KABATABANDHA	HARICHANDAPUR	100	1	P1
610	JAJPUR	KUED	DHARMASALA	KABATABANDHA	SENDAPUR	100	1	P1
611	JAJPUR	KUED	DHARMASALA	KABATABANDHA	DURGAPADIA	100	1	P1
612	JAJPUR	KUED	DHARMASALA	KABATABANDHA	DURGAPADIA NEW SCHOOL	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
613	JAJPUR	KUED	DHARMASALA	KABATABANDHA	ARIMULA	100	1	P1
614	JAJPUR	KUED	DHARMASALA	KABATABANDHA	ARIMULA BARALA SAHI	100	1	P1
615	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NALAKULA	100	1	P1
616	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	MANGALPUR	100	1	P1
617	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NILAKANTHAPUR BEHERASAH	100	1	P1
618	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NARASINGHAPUR POND	100	1	P1
619	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NARASINGHAPUR POKA SAHOO	100	1	P1
620	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	JALESWARPUR SCHOOL	100	1	P1
621	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NAHANGAPATANA SCHOOL;	100	1	P1
622	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	NILAKANTHAPUR	100	1	P1
623	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	SUKUTIPATANA	100	1	P1
624	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	MUNDUMALA	100	1	P1
625	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	GOBINDARAMPATANA	100	1	P1
626	JAJPUR	KUED	DHARMASALA	KUNDAPATANA	KOTAPUR NEAR BANK	100	1	P1
627	Keonjhar	KED	No-II	RE	BATTALION	100	1	P1
628	Keonjhar	KED	TURUMUNGA	PATNA	MIRIGIKHOJI	100	1	P1
629	Keonjhar	KED	TURUMUNGA	SAHARPADA	UDAYPUR PARIDA SAHI	100	1	P1
630	Keonjhar	KED	TURUMUNGA	SAHARPADA	BELASARI	100	1	P1
631	Keonjhar	KED	TURUMUNGA	PATNA	SADANGABAHALI CHHAKA	63	1	P1
632	Keonjhar	KED	No-II	RE	KHOLPA	63	1	P1
633	Keonjhar	KED	No-II	RE	KUSPADA	63	1	P1
634	Keonjhar	KED	No-II	RE	POTAL	63	1	P1
635	Keonjhar	KED	No-II	BANSPAL	Urumunda	63	1	P1
636	Keonjhar	KED	No-II	RE	GUTKESWAREE	100	1	P1
637	Keonjhar	KED	No-II	TELKOI	SINGH CRUSHER(PRIVATE)	100	1	P1
638	Keonjhar	KED	No-II	TELKOI	MAIN SAHI	100	1	P1
639	Keonjhar	KED	No-II	TELKOI	KARADANGI	100	1	P1
640	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	RAJANAGR MARKET	100	1	P1
641	Keonjhar	KED	TURUMUNGA	SAHARPADA	UDAYPUR, PARIDASAH	100	1	P1
642	Keonjhar	KED	TURUMUNGA	PATNA	MUSAPODA	100	1	P1
643	Keonjhar	KED	No-II	Banspal	Kusakala	63	1	P1
644	Keonjhar	KED	No-II	Banspal	gonasika jda girls high school	63	1	P1
645	Keonjhar	KED	No-II	Banspal	gonasika boys High school	63	1	P1
646	Keonjhar	KED	No-II	Banspal	Ichinda bhuna sahi	63	1	P1
647	Keonjhar	KED	No-II	Banspal	nithigat 2	63	1	P1
648	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	FULKANLEI	63	1	P1
649	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	JYOTIPUR MISHRA L.I POINT	63	1	P1
650	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	TENTALA(MUNDA SAHI)	63	1	P1
651	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	BUDHIKAPUDI	63	1	P1
652	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	BHUINPUR(PATRA SAHI)	63	1	P1
653	Keonjhar	KED	TURUMUNGA	PATNA	ANLADIHA	63	1	P1
654	Keonjhar	KED	No-II	RE	BANAJODI	63	1	P1
655	Keonjhar	KED	TURUMUNGA	SAHARPADA	TANDO, L.I POINT-1	63	1	P1
656	Keonjhar	KED	TURUMUNGA	SAHARPADA	TANDO, L.I POINT-2	63	1	P1
657	Keonjhar	KED	TURUMUNGA	SAHARPADA	TANDO, L.I POINT-3	63	1	P1
658	Keonjhar	KED	No-II	TELKOI	TELKOI POLICE STETION	63	1	P1
659	Keonjhar	KED	No-II	TELKOI	ORIYA MANDIR SAHI	63	1	P1
660	Keonjhar	KED	No-II	TELKOI	BHALIYADAL	63	1	P1
661	Keonjhar	KED	No-II	TELKOI	BHALIYADAL	63	1	P1
662	Keonjhar	KED	No-II	Banspal	upper kaiasari	63	1	P1
663	Keonjhar	KED	No-II	banspal	Tarmakant Chhaka	50	1	P1
664	Keonjhar	KED	No-II	BANSPAL	KUMUNDI(PATRA SAHI)	63	1	P1
665	Keonjhar	KED	No-II	BANSPAL	BALABHADRAPUR	63	1	P1
666	Keonjhar	KED	No-II	BANSPAL	URUMUNDA(CHHAKA)	63	1	P1
667	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	SASAN SAHI	63	1	P1
668	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	BHUNGRAJPOSI	63	1	P1
669	Keonjhar	KED	No-II	RE	NARASINGH PUR	63	1	P1
670	Keonjhar	KED	No-II	RE	BARDAPAL SIMILI SAHI	63	1	P1
671	Keonjhar	KED	No-II	RE	KUSUMITA ASRAM	63	1	P1
672	Keonjhar	KED	No-II	RE	UPPER KUSUMITA ASHRAM	63	1	P1
673	Keonjhar	KED	No-II	TELKOI	LAXMI PUJA MANDOP	63	1	P1
674	Keonjhar	KED	No-II	TELKOI	PRIVATE DTR	63	1	P1
675	Keonjhar	KED	No-II	TELKOI	SIRIABAHAL NAYEK SAHI	63	1	P1
676	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	NUAKHAMAN	63	1	P1
677	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	NUAKHAMAN	63	1	P1
678	Keonjhar	KED	TURUMUNGA	ESO TURUMUNGA	BARUDIPOSI L.I POINT	63	1	P1
679	Keonjhar	KED	No-II	RE	UPPER KUSUMITA ASHRAM	63	1	P1
680	Keonjhar	KED	No-II	RE	MAHADEIJODA MAHANTA SAHI	63	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
681	Keonjhar	AED	ANANDAPUR	ANANDAPUR	FAKIRPUR PANDA SAHI	100	1	P1
682	Keonjhar	AED	GHATAGAON	GHATAGAON	BATAHARICHANDANPUR	63	1	P1
683	Keonjhar	AED	ANANDAPUR	GHASIPURA	SAILONG CHHAKA	63	1	P1
684	Keonjhar	AED	GHATAGAON	DHENKIKOTE	UKUCHABEDA	100	1	P1
685	Keonjhar	AED	ANANDAPUR	GHASIPURA	NEAR SANI MANDIR	63	1	P1
686	Keonjhar	AED	GHATAGAON	DHENKIKOTE	KASHIBEDA	100	1	P1
687	Keonjhar	AED	ANANDAPUR	ANANDAPUR	SAWMILL GALI	100	1	P1
688	Keonjhar	AED	ANANDAPUR	GHASIPURA	ARNAPURNNA BHAWAN	63	1	P1
689	Keonjhar	AED	GHATAGAON	DHENKIKOTE	JHATIALI SAHI	100	1	P1
690	Keonjhar	AED	ANANDAPUR	ANANDAPUR	KHADIPAL	63	1	P1
691	Keonjhar	AED	GHATAGAON	GHATAGAON	COLLAGE DTR	63	1	P1
692	Keonjhar	AED	ANANDAPUR	GHASIPURA	SAILONG VILLAGE	100	1	P1
693	Keonjhar	AED	GHATAGAON	DHENKIKOTE	NUSURIPOSI GIRI SAHI	100	1	P1
694	Keonjhar	AED	ANANDAPUR	ANANDAPUR	RED CHILEY FRONT 100KVA	100	1	P1
695	Keonjhar	AED	GHATAGAON	GHATAGAON	BARATIPURA	100	1	P1
696	Keonjhar	AED	ANANDAPUR	GHASIPURA	PODAKHAMAN	100	1	P1
697	Keonjhar	AED	GHATAGAON	DHENKIKOTE	JHARBEDA	100	1	P1
698	Keonjhar	AED	GHATAGAON	GHATAGAON	TARA	100	1	P1
699	Keonjhar	AED	ANANDAPUR	ANANDAPUR	XAVIR SCHOOL	100	1	P1
700	Keonjhar	AED	GHATAGAON	GHATAGAON	GOLABANDHA	2x100	2	P1
701	Keonjhar	AED	GHATAGAON	DHENKIKOTE	SANAMASINABILL BANDHA SAHI	100	1	P1
702	Keonjhar	AED	GHATAGAON	GHATAGAON	NAKJHARI	63	1	P1
703	Keonjhar	AED	ANANDAPUR	ANANDAPUR	TARENISALA	100	1	P1
704	Keonjhar	AED	GHATAGAON	DHENKIKOTE	DEOBANDH	100	1	P1
705	Keonjhar	AED	GHATAGAON	DHENKIKOTE	JHARBEDA MARKET	100	1	P1
706	Keonjhar	AED	GHATAGAON	DHENKIKOTE	KATHABARI	100	1	P1
707	Keonjhar	AED	GHATAGAON	DHENKIKOTE	BHOLBEDA BEHERA SAHI	100	1	P1
708	Keonjhar	AED	GHATAGAON	DHENKIKOTE	DWARIKAPOSHI	100	1	P1
709	Keonjhar	JODA	CHAMPUA	REMULI	KANCHANDUMURIA	100	1	P1
710	Keonjhar	JODA	CHAMPUA	REMULI	SITARAMPUR	63	1	P1
711	Keonjhar	JODA	CHAMPUA	REMULI	MARSUAN	100	1	P1
712	Keonjhar	JODA	CHAMPUA	REMULI	SANKARPUR COLONY	100	1	P1
713	Keonjhar	JODA	CHAMPUA	REMULI	BALABHARDAPUR COONY	63	1	P1
714	Keonjhar	JODA	CHAMPUA	REMULI	BINODBIHARIPUR	63	1	P1
715	Keonjhar	JODA	CHAMPUA	REMULI	PANCHAYAT	63	1	P1
716	Keonjhar	JODA	CHAMPUA	REMULI	REMULI NUA SAHI	63	1	P1
717	Keonjhar	JODA	CHAMPUA	REMULI	JAMNALIA	63	1	P1
718	Keonjhar	JODA	CHAMPUA	REMULI	RAMACHANDRAPUR IRR	63	1	P1
719	Keonjhar	JODA	CHAMPUA	REMULI	RAMACHANDRAPUR IRR	63	1	P1
720	Keonjhar	JODA	CHAMPUA	REMULI	NARADAPUR	63	1	P1
721	Keonjhar	JODA	CHAMPUA	REMULI	ANGULIA IRR	63	1	P1
722	Keonjhar	JODA	CHAMPUA	REMULI	GUMURA HIGH SCHOOL	63	1	P1
723	Keonjhar	JODA	CHAMPUA	REMULI	BINODBIHARI PUR	63	1	P1
724	Keonjhar	JODA	CHAMPUA	REMULI	ICHINDA	63	1	P1
725	Keonjhar	JODA	CHAMPUA	REMULI	MANADA	63	1	P1
726	Keonjhar	JODA	CHAMPUA	CHAMPUA	BHANDA	2x100	2	P1
727	Keonjhar	JODA	CHAMPUA	CHAMPUA	BANKIA	63	1	P1
728	Keonjhar	JODA	CHAMPUA	CHAMPUA	RARUANAGODA	100	1	P1
729	Keonjhar	JODA	CHAMPUA	CHAMPUA	GULUDIPOSHI	63	1	P1
730	Keonjhar	JODA	CHAMPUA	CHAMPUA	PANCHAPOKHARIA	100	1	P1
731	Keonjhar	JODA	CHAMPUA	CHAMPUA	GODHULI	2x63	2	P1
732	Keonjhar	JODA	CHAMPUA	CHAMPUA	BHALIADHIPA	100	1	P1
733	Keonjhar	JODA	CHAMPUA	CHAMPUA	ADHANGAPAL	63	1	P1
734	Keonjhar	JODA	CHAMPUA	CHAMPUA	KUTARIPOSHI MAHNTA SAHI	63	1	P1
735	Keonjhar	JODA	CHAMPUA	CHAMPUA	KUTARIPOSHI PATRA SAHI	63	1	P1
736	Keonjhar	JODA	CHAMPUA	CHAMPUA	PURUSHTTAMPUR	100	1	P1
737	Keonjhar	JODA	CHAMPUA	CHAMPUA	PURUSHTTAMPUR	63	1	P1
738	Keonjhar	JODA	CHAMPUA	CHAMPUA	NAYAKRUSHNAPUR	63	1	P1
739	Keonjhar	JODA	CHAMPUA	CHAMPUA	ANSEIKALA	2x63	2	P1
740	Keonjhar	JODA	CHAMPUA	CHAMPUA	JUGUDHARA	100	1	P1
741	Keonjhar	JODA	CHAMPUA	CHAMPUA	DAMPUR NEW COLONY	63	1	P1
742	Keonjhar	JODA	CHAMPUA	CHAMPUA	DAMPUR MAHANTASAH	63	1	P1
743	Keonjhar	JODA	CHAMPUA	CHAMPUA	CHIMILA	100	1	P1
744	Keonjhar	JODA	CHAMPUA	CHAMPUA	KODAGADIA	100	1	P1
745	Keonjhar	JODA	CHAMPUA	CHAMPUA	MUKUNDPUR	100	1	P1
746	Keonjhar	JODA	CHAMPUA	CHAMPUA	MUKUNDPUR	63	1	P1
747	Keonjhar	JODA	CHAMPUA	CHAMPUA	BANKA	100	1	P1
748	Bhadrak	BNED	Dhamara	Dhamara	MARKET	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
749	Bhadrak	BNED	Dhamara	Dhamara	KISHOREPRASAD	100	1	P1
750	Bhadrak	BNED	Dhamara	Dhamara	KANAKPRASAD	63	1	P1
751	Bhadrak	BNED	Dhamara	Dhamara	KRUSHNAPRASAD	63	1	P1
752	Bhadrak	BNED	Dhamara	Dhamara	PATRASAHU CHEDAK	63	1	P1
753	Bhadrak	BNED	Dhamara	Dhamara	GUANLA SARADHIA	63	1	P1
754	Bhadrak	BNED	Dhamara	Bideipur	Kasia	63	1	P1
755	Bhadrak	BNED	Dhamara	Bideipur	Nalabanka	63	1	P1
756	Bhadrak	BNED	Dhamara	Bideipur	Krushnpur	63	1	P1
757	Bhadrak	BNED	Dhamara	Bideipur	Dihasaki	63	1	P1
758	Bhadrak	BNED	Dhamara	Bideipur	bhanjsahi	100	1	P1
759	Bhadrak	BNED	Dhamara	Bideipur	Badjagnathpur	100	1	P1
760	Bhadrak	BNED	Dhamara	Bideipur	Bideipur	63	1	P1
761	Bhadrak	BNED	Dhamara	Bideipur	Gadala	63	1	P1
762	Bhadrak	BNED	Dhamara	Bideipur	Gadala	100	1	P1
763	Bhadrak	BNED	Dhamara	Bideipur	Bahupokhari	63	1	P1
764	Bhadrak	BNED	Dhamara	Bideipur	Kerasahi	63	1	P1
765	Bhadrak	BNED	Dhamara	Bideipur	Gadi	63	1	P1
766	Bhadrak	BNED	Dhamara	Bideipur	Malikadepur	63	1	P1
767	Bhadrak	BNED	Dhamara	Bideipur	Madhaoi	63	1	P1
768	Bhadrak	BNED	Dhamara	Bideipur	Bideipur	100	1	P1
769	Bhadrak	BNED	Dhamara	Bideipur	Dihasaki	63	1	P1
770	Bhadrak	BNED	Dhamara	Bideipur	Balimeda	100	1	P1
771	Bhadrak	BNED	Dhamara	Bideipur	Apartipur	100	1	P1
772	Bhadrak	BNED	Dhamara	Bideipur	Balimunda	63	1	P1
773	Bhadrak	BNED	Dhamara	Bideipur	Budhichhak	63	1	P1
774	Bhadrak	BNED	Dhamara	Bideipur	karanpalli	63	1	P1
775	Bhadrak	BNED	Dhamara	Bideipur	Balimunda Bank	63	1	P1
776	Bhadrak	BNED	Dhamara	Bideipur	Habalisahi	100	1	P1
777	Bhadrak	BNED	Dhamara	Bideipur	Narendrapur	100	1	P1
778	Bhadrak	BNED	Dhamara	Bideipur	Malikadepur	63	1	P1
779	Bhadrak	BNED	Dhamara	Bideipur	Rajgharpokhari	63	1	P1
780	Bhadrak	BNED	Dhamara	Bideipur	Bideipur	100	1	P1
781	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	PHD Bhadrak College	63	1	P1
782	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	Pump House sweeper colony	63	1	P1
783	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	KADAMBEDA 2	100	1	P1
784	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	POWER HOUSE (BLUE VINE)	100	1	P1
785	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	SUTHA AGA IPDS (GARAGE)	100	1	P1
786	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	HARIAKARA GALI	100	1	P1
787	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	HARIAKARA GALI IPDS	100	1	P1
788	Bhadrak	BNED	Bhadrak No-1	Tahasil	FRINDS COLONY	63	1	P1
789	Bhadrak	BNED	Bhadrak No-1	Tahasil	PURUSOTTAM NAGAR	100	1	P1
790	Bhadrak	BNED	Bhadrak No-1	Tahasil	DRDA HOUSE	63	1	P1
791	Bhadrak	BNED	Bhadrak No-1	Tahasil	ADIBASI COLONY	100	1	P1
792	Bhadrak	BNED	Bhadrak No-1	Tahasil	SUNAKHALA CHARIGHARIA	63	1	P1
793	Bhadrak	BNED	Bhadrak No-1	Tahasil	MAJHI SAHI	63	1	P1
794	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-2	BADA SANKARPUR MASJID	63	1	P1
795	BARIPADA	RED	RAIRANGPUR-II	BISOI	MANADA	100	1	P1
796	BARIPADA	RED	Joshipur	Jashipur	Manada-1	100	1	P1
797	BARIPADA	RED	Joshipur	Jashipur	Moudi Sanjunposi-3	100	1	P1
798	BARIPADA	RED	Joshipur	Jashipur	ITAMUNDI	100	1	P1
799	BARIPADA	RED	Joshipur	Jashipur	Kajala-5	100	1	P1
800	BARIPADA	RED	Joshipur	Jashipur	Madrangajodi-1	100	1	P1
801	BARIPADA	RED	Joshipur	Jashipur	Tuntuna-3	100	1	P1
802	BARIPADA	RED	Joshipur	Jashipur	Kantasimla-3	100	1	P1
803	BARIPADA	RED	Joshipur	Jashipur	Itighar-7	100	1	P1
804	BARIPADA	RED	Joshipur	Jashipur	Bhanjakia-1	100	1	P1
805	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	GUHALI DHALSAHI	100	1	P1
806	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	RATANPAL	100	1	P1
807	JAJPUR	JTED	JAJPUR TOWN-1	JAJPUR TOWN 2	CHANDIPADIA	100	1	P1
808	JAJPUR	KUED	KUAKHIA	kuakhia	karajanga	100	1	P1
809	JAJPUR	KUED	KUAKHIA	kuakhia	parthamakhandi	100	1	P1
810	JAJPUR	KUED	KUAKHIA	kuakhia	Topimian chhak	100	1	P1
811	JAJPUR	KUED	KUAKHIA	kuakhia	Rekapibazr	100	1	P1
812	JAJPUR	KUED	KUAKHIA	MATHASAHU	EKTALA	100	1	P1
813	JAJPUR	KUED	KUAKHIA	MATHASAHU	PANCHAGOOHHIA	100	1	P1
814	JAJPUR	KUED	KUAKHIA	MATHASAHU	GORDHA	100	1	P1
815	JAJPUR	KUED	KUAKHIA	MATHASAHU	PANCHAGOOHHIA BRAHAMAN SAHI	100	1	P1
816	JAJPUR	KUED	KUAKHIA	MATHASAHU	KURANSA	100	1	P1

Annexure-P Installation of LV Protection								
S.No.	Circle	Division	Sub-division	Section	Name of the DTR	Capacity of DTR	LV Required in No.	Priority
817	JAJPUR	KUED	KUAKHIA	MATHASAH	SRIBANTPUR SWAIN SAHI	100	1	P1
818	JAJPUR	KUED	KUAKHIA	MATHASAH	BRAHAMANBAD	100	1	P1
819	JAJPUR	KUED	KUAKHIA	MATHASAH	PAIKARAPUR	100	1	P1
820	JAJPUR	KUED	KUAKHIA	MATHASAH	SULIA DAMASAH	100	1	P1
821	JAJPUR	KUED	KUAKHIA	MATHASAH	ANDEIGODA	100	1	P1
822	JAJPUR	KUED	KUAKHIA	MATHASAH	ANDEIGODA PATRA SAHI	100	1	P1
823	JAJPUR	KUED	KUAKHIA	MATHASAH	ANDEIGODA TALA SAHI	100	1	P1
824	Keonjhar	JODA	CHAMPUA	jhumpura	sankir	100	1	P1
825	Keonjhar	JODA	CHAMPUA	jhumpura	bhagabandha	100	1	P1
826	Keonjhar	JODA	CHAMPUA	jhumpura	kusumula	100	1	P1
827	Keonjhar	JODA	CHAMPUA	jhumpura	putulia	100	1	P1
828	Keonjhar	JODA	CHAMPUA	jhumpura	putulia 2	100	1	P1
829	Keonjhar	JODA	CHAMPUA	jhumpura	banua	100	1	P1
830	Keonjhar	JODA	CHAMPUA	jhumpura	balisuan	100	1	P1
831	Keonjhar	JODA	CHAMPUA	jhumpura	haldiaguna	100	1	P1
832	Keonjhar	JODA	CHAMPUA	jhumpura	dabank	100	1	P1
833	Keonjhar	JODA	CHAMPUA	jhumpura	bankamaruni	100	1	P1
834	Keonjhar	JODA	BARBIL	BARBIL-1	JAGGANTH MANDIR	100	1	P1
835	Keonjhar	JODA	BARBIL	BARBIL-1	SRIRAM NAGAR	100	1	P1
836	Keonjhar	JODA	BARBIL	BARBIL-1	TATA HUTTING	100	1	P1
837	Keonjhar	JODA	BARBIL	BARBIL-1	KUKUDA PADA	100	1	P1
838	BARIPADA	RED	Joshipur	Jashipur	Kaluakhman	100	1	P1
839	BARIPADA	RED	Joshipur	Jashipur	Goili	100	1	P1
840	BARIPADA	RED	Joshipur	Jashipur	Singarpur	100	1	P1
841	Baleshwar	BtED	BASTA	BASTA-I	AMARDA MARKET	200	3	P1
842	Baleshwar	CED	NILGIRI	BERHAMPUR	SAJNAGARH	250	3	P1
843	Baleshwar	CED	RE-II	SARAGAN	RANASAH	250	3	P1
844	Baleshwar	CED	RE-II	SRIJUNG	MAHARAJPUR	200	3	P1
845	Baleshwar	SED	SORO	ANANTAPUR	500 KVA ANANTAPUR MARKET	500	3	P1
846	Baleshwar	SED	MARKONA	MARKONA	MARKONA BAZAR(RN HIGH SCHOOL)	250	3	P1
847	Baleshwar	SED	MARKONA	MARKONA	RIA	250	3	P1
848	Baleshwar	SED	MARKONA	ADABAZAR	SABANGA	200	3	P1
849	Baleshwar	BED	Supply I	No-I	North Hostel	250	3	P1
850	Baleshwar	BED	Supply I	No-I	FM College	250	3	P1
851	Baleshwar	BED	Supply I	No-I	Coxcial	200	3	P1
852	Baleshwar	BED	Supply I	No-I	Bishram Pokhari	250	3	P1
853	Baleshwar	BED	SUPPLY-1	MATHASAH	NATHAPANI	250	3	P1
854	Baleshwar	BED	SUPPLY-1	MATHASAH	CENTRAL SCHOOL	250	3	P1
855	Baleshwar	BED	SUPPLY-1	MATHASAH	HARAGANGA	250	3	P1
856	Baleshwar	BED	Baleswar No - II	Ganeswarpur	STEEL WORLD	250	3	P1
857	Baleshwar	BED	Baleswar No - II	Ganeswarpur	NOCCI	250	3	P1
858	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BKP COTTON	250	3	P1
859	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BAGHAJATIN	250	3	P1
860	Baleshwar	BED	Baleswar No - II	Ganeswarpur	SAPATAGIRI	500	3	P1
861	Baleshwar	BED	Baleswar No - II	Ganeswarpur	BHIMPURA GAON	250	3	P1
862	Baleshwar	BED	Baleswar No - II	Ganeswarpur	REMUNA GOLEI FISH MARKET	250	3	P1
863	Baleshwar	BED	SUPPLY-II	NO-III	STATION (33/0.4) (SOVARAMPUR PSS)	250	3	P1
864	Baleshwar	BED	SUPPLY-II	NO-III	CITY CLINIC-1	200	3	P1
865	Baleshwar	BED	SUPPLY-II	NO-III	CITY CLINIC-2	250	3	P1
866	Baleshwar	BED	SUPPLY-II	NO-III	POSTAL COLONY	250	3	P1
867	Baleshwar	BED	SUPPLY-II	NO-III	Circle Office 1	250	3	P1
868	Baleshwar	BED	SUPPLY-II	NO-III	Circle Office 2	250	3	P1
869	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MAHULDIHA KANYASHRAM	250	3	P1
870	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	MAHULDIHA PRESIDENT HOME	250	3	P1
871	BARIPADA	RED	RAIRANGPUR-I	RAIRANGPUR	KUCHEIBUDHI	250	3	P1
872	BARIPADA	UED	UDALA	UDALA	NEAR FOREST(SUMP) OFFICE	250	3	P1
873	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	NEAR RURAL PS	250	3	P1
874	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	GOUTAM HOTEL NUA BAZAR	250	3	P1
875	JAJPUR	JRED	JAJPUR ROAD	DANAGADI	MANATIRA TALASAH	250	3	P1
876	JAJPUR	JRED	JAJPUR ROAD	DANAGADI	MANATIRA TALASAH	250	3	P1
877	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	TALAKIANALI	250	3	P1
878	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	SANABAZAR	500	3	P1
879	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	DEBIGADA	250	3	P1
880	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	BIRAJAPARK	315	3	P1
881	JAJPUR	JTED	JAJPUR TOWN-1	ESO TOWN-1	TARAMADAN	200	3	P1

Annexure-Q Installation of Auto Reclosure for 11kV								
S.No.	Circle	Division	Section	Voltage Level	Name of Feeder	Length of Feeder in Km	No of AR	Priority
1	Baleshwar	BED	CHANDIPUR	11kV	FISHERY	65	1	P1
2	Baleshwar	BED	CHANDIPUR	11kV	GABAGAON	52	1	P1
3	Baleshwar	BED	CHANDIPUR	11kV	NAUPALGADI	18	1	P1
4	Baleshwar	BED	Ganeswarpur	11kV	Bamul	16	2	P1
5	Baleshwar	BED	Ganeswarpur	11kV	Industrial No - I	6	2	P1
6	Baleshwar	BED	Ganeswarpur	11kV	Industrial No - II	100	4	P1
7	Baleshwar	BED	Ganeswarpur	11kV	Januganj	72	4	P1
8	Baleshwar	BED	Ganeswarpur	11kV	Kuruda	48	1	P1
9	Baleshwar	BED	Ganeswarpur	11kV	Town	72	4	P1
10	Baleshwar	BED	Gopalgaon	11kV	Ranipatna	15.2	1	P1
11	Baleshwar	BED	Gopalgaon	11kV	Suelpur	10.23	1	P1
12	Baleshwar	BED	No II	11kV	Bania Mandir	12.08	2	P1
13	Baleshwar	BED	No II	11kV	Puruna Balasore	8.33	2	P1
14	Baleshwar	BED	No II	11kV	Sunhat	16.58	2	P1
15	Baleshwar	BED	NO-III	11kV	BUS-STAND	5.2	1	P1
16	Baleshwar	BtED	BALIAPAL	11kV	BALIAPAL-KHAPARAPADA	70	1	P1
17	Baleshwar	BtED	BALIAPAL	11kV	SITADIHA-KHAPARAPADA	25	1	P1
18	Baleshwar	BtED	Basta II	11kV	Sartha	80	1	P1
19	Baleshwar	BtED	BASTA-I	11kV	AMARDA	35	1	P1
20	Baleshwar	BtED	BASTA-I	11kV	H.Q	25	1	P1
21	Baleshwar	BtED	BASTA-I	11kV	MANUDIHA	40	1	P1
22	Baleshwar	BtED	BASTA-I	11kV	MATHANI	40	1	P1
23	Baleshwar	BtED	RAJGHAT	11kV	CHASIPADA	29	1	P1
24	Baleshwar	CED	city	11kV	Kuruda bazar	24.08	1	P1
25	Baleshwar	CED	Durgadevi	11kV	Kasimpur Gandarda	58.13	1	P1
26	Baleshwar	CED	Durgadevi	11kV	Durgadevi	67.65	1	P1
27	Baleshwar	CED	Fuladi	11kV	11KV Fuladi	44.83	1	P1
28	Baleshwar	CED	Mitrapur	11kV	11kv ayodhya	39.86	1	P1
29	Baleshwar	CED	Mitrapur	11kV	11kv Kansa	33.41	1	P1
30	Baleshwar	CED	Nilgiri	11kV	11kv Nilgiri	9.96	1	P1
31	Baleshwar	CED	Odangi	11kV	11 KV gududa	11.71	1	P1
32	Baleshwar	CED	Odangi	11kV	11 KV parikhi	23.77	1	P1
33	Baleshwar	CED	Remuna	11kV	11kv Gourpur	35.45	1	P1
34	Baleshwar	CED	Rupsa	11kV	11 kv Khadikapda	16.33	1	P1
35	Baleshwar	CED	Rupsa	11kV	11kv Brahamda	49.49	1	P1
36	Baleshwar	CED	Saragaon	11kV	11kv Bardhanpur	19.11	1	P1
37	Baleshwar	CED	Saragaon	11kV	11kv Rsalpur market	11.32	1	P1
38	Baleshwar	CED	Saragaon	11kV	11kv Saragon	25.13	1	P1
39	Baleshwar	CED	Sergarh	11kV	11kv Barapada	18.7	1	P1
40	Baleshwar	CED	srijung	11kV	11 KV srijung	14.01	1	P1
41	Baleshwar	CED	srijung	11kV	11kv Kuligaon	24.95	1	P1
42	Baleshwar	JED	Bhograi	11kV	Bhograi	67.78	1	P1
43	Baleshwar	JED	Bhograi	11kV	Jairampur	58.72	1	P1
44	Baleshwar	JED	Dehurda	11kV	Chauki	10.61	1	P1
45	Baleshwar	JED	Dehurda	11kV	Deula	71.66	1	P1
46	Baleshwar	JED	Jaleswar No.2	11kV	Bargadia	32.03	1	P1
47	Baleshwar	JED	Jaleswar No.2	11kV	Chalanty	58.9	1	P1
48	Baleshwar	JED	Jaleswar No.2	11kV	Khalabadia	45	1	P1
49	Baleshwar	JED	Jaleswar No.2	11kV	Paikasida	47.55	1	P1
50	Baleshwar	JED	Kamarda 1	11kV	Balim	59.16	1	P1
51	Baleshwar	JED	Kamarda 1	11kV	Kusuda(Kamarda PSS)	40.17	1	P1

Annexure-Q Installation of Auto Reclosure for 11kV								
S.No.	Circle	Division	Section	Voltage Level	Name of Feeder	Length of Feeder in Km	No of AR	Priority
52	Baleshwar	JED	Kamarda 1	11kV	Mohagob	28.39	1	P1
53	Baleshwar	JED	Kamarda 1	11kV	Putina(Gujadiha PSS)	10.55	1	P1
54	Baleshwar	JED	Kamarda 1	11kV	Putina(Kamarda PSS)	64.84	1	P1
55	Baleshwar	JED	Nampo	11kV	Amblitha	17.58	1	P1
56	Baleshwar	JED	Nampo	11kV	Demuria	40.33	1	P1
57	Baleshwar	SED	ANANTAPUR	11kV	ANANTAPUR	25	1	P1
58	Baleshwar	SED	BAHANAGA	11kV	KAMARIPUR	45	1	P1
59	Baleshwar	SED	BAHANAGA	11kV	SANTARAGADIA	60	1	P1
60	Baleshwar	SED	DUNGURA	11kV	DUNGURA	80	1	P1
61	Baleshwar	SED	Gadibed	11kV	Achuitpur	30	1	P1
62	Baleshwar	SED	Gadibed	11kV	Chakradharpur	15	1	P1
63	Baleshwar	SED	Gadibed	11kV	Matialpada	20	1	P1
64	Baleshwar	SED	Khaira	11kV	Fatepur	55	1	P1
65	Baleshwar	SED	Khaira	11kV	Sundhira	45	1	P1
66	Baleshwar	SED	KHANTAPADA	11kV	KHANTAPADA	120	2	P1
67	Baleshwar	SED	KHANTAPADA	11kV	PANAPANA	100	2	P1
68	Baleshwar	SED	Kupari	11kV	Bartana	50	1	P1
69	Baleshwar	SED	Kupari	11kV	canal Bandha	50	1	P1
70	Baleshwar	SED	Kupari	11kV	Gadapokhari	35	1	P1
71	Baleshwar	SED	MARKONA	11kV	BARI	30	1	P1
72	Baleshwar	SED	MARKONA	11kV	JAMUJHADI BAZAR	30	1	P1
73	Baleshwar	SED	MARKONA	11kV	NAYAPALLI	30	1	P1
74	Baleshwar	SED	Soro No-I	11kV	Kesaripur	17	1	P1
75	Baripada	BPED	Raghunathpur	11kV	Raghunathpur 11 KV Feeder	14.76	1	P1
76	Baripada	RED	Bahalda	11kV	DUNDU	29	1	P1
77	Baripada	RED	KARANJIA-I	11kV	KARANJIA TOWN	40	1	P1
78	Baripada	RED	KUSUMI	11kV	BADAMPAHAR	33	1	P1
79	Baripada	RED	KUSUMI	11kV	HATBADRA	73	1	P1
80	Baripada	RED	KUSUMI	11kV	KUSUMI	45	1	P1
81	Baripada	RED	KUSUMI	11kV	PADHIA	60	1	P1
82	Baripada	RED	KUSUMI	11kV	SULEIPAT	29	1	P1
83	Baripada	RED	RAIRANGPUR	11kV	BHALUBASA	22	1	P1
84	Baripada	RED	RAIRANGPUR	11kV	RANIPAL	17	1	P1
85	Baripada	RED	RAIRANGPUR	11kV	Town	11	1	P1
86	Bhadrak	BNED	Basudevpur-1	11kV	Kopagadia	6.66	1	P1
87	Bhadrak	BNED	Basudevpur-1	11kV	Mishrapur	40	1	P1
88	Bhadrak	BNED	Basudevpur-1	11kV	Padampur	80	1	P1
89	Bhadrak	BNED	Basudevpur-2	11kV	Bazar	21	1	P1
90	Bhadrak	BNED	Bhadrak No-2	11kV	Chandanbazar	24	1	P1
91	Bhadrak	BNED	Bhadrak No-2	11kV	Sangat	15	1	P1
92	Bhadrak	BNED	Bhadrak No-2	11kV	Santhia	10	1	P1
93	Bhadrak	BNED	Bhadrak No-3	11kV	Baranga	52	1	P1
94	Bhadrak	BNED	Bhadrak No-3	11kV	Erien	23	1	P1
95	Bhadrak	BNED	Bhadrak No-3	11kV	Harishankarpur	24	1	P1
96	Bhadrak	BNED	Bhadrak No-3	11kV	Maa Bhadrak Kali	54	2	P1
97	Bhadrak	BNED	Bideipur	11kV	Chandimal	120	1	P1
98	Bhadrak	BNED	Bideipur	11kV	Karanjadia	178	4	P1
99	Bhadrak	BNED	Chandabali	11kV	Bijaynagar	70	1	P1
100	Bhadrak	BNED	Chandabali	11kV	Chandabali	22	1	P1
101	Bhadrak	BNED	Chandabali	11kV	Mahulia	26	1	P1
102	Bhadrak	BNED	Dhamara	11kV	Bansada	35	1	P1

Annexure-Q Installation of Auto Reclosure for 11kV								
S.No.	Circle	Division	Section	Voltage Level	Name of Feeder	Length of Feeder in Km	No of AR	Priority
103	Bhadrak	BNED	Dolosahi	11kV	Dolosahi	21	1	P1
104	Bhadrak	BNED	Jashipur	11kV	Ghanteswar	63	1	P1
105	Bhadrak	BNED	Jashipur	11kV	Karanpokhari	36	1	P1
106	Bhadrak	BNED	Jashipur	11kV	Naredrapur	33	1	P1
107	Bhadrak	BNED	Rahanja	11kV	Palli	25	1	P1
108	Bhadrak	BNED	Rahanja	11kV	Rahanja	23	1	P1
109	Bhadrak	BNED	Tahasil	11kV	Samraipur	18	1	P1
110	Bhadrak	BNED	Tihidi	11kV	Kalimegha	21	1	P1
111	Bhadrak	BNED	Tihidi	11kV	Kolho	30	1	P1
112	Bhadrak	BNED	Tihidi	11kV	Madhapur	144	2	P1
113	Bhadrak	BSED	Agarpada	11kV	Kaupur	65	1	P1
114	Bhadrak	BSED	Agarpada	11kV	RK pur	44	1	P1
115	Bhadrak	BSED	Arnopal	11kV	Andabazar	20	1	P1
116	Bhadrak	BSED	Arnopal	11kV	Arnopal	30	1	P1
117	Bhadrak	BSED	Asurali	11kV	Dhusuri	70	1	P1
118	Bhadrak	BSED	Asurali	11kV	Nodigaon	40	1	P1
119	Bhadrak	BSED	Betaligaon	11kV	Aradi	55	1	P1
120	Bhadrak	BSED	Betaligaon	11kV	sahaspur	40	1	P1
121	Bhadrak	BSED	Bhadaripokhari-1	11kV	Naami	67	1	P1
122	Bhadrak	BSED	Bhadaripokhari-1	11kV	sarsada	56	1	P1
123	Bhadrak	BSED	Bhadaripokhari-2	11kV	Kenduapada	46	1	P1
124	Bhadrak	BSED	Bhadaripokhari-2	11kV	Nirgundi	77	1	P1
125	Bhadrak	BSED	Bonth	11kV	Odanga	89	1	P1
126	Bhadrak	BSED	Bonth	11kV	Sarmara	61	1	P1
127	Bhadrak	BSED	Dhamnagar	11kV	Dhamnagar	57	1	P1
128	Bhadrak	BSED	Dhamnagar	11kV	khangara	65	1	P1
129	Jajpur	JRED	CHORDA	11kV	COLLEGE CHHAKA	10	1	P1
130	Jajpur	JRED	CHORDA	11kV	KUSUNPUR	7	1	P1
131	Jajpur	JRED	DANAGADI	11kV	JAKHAPURA	22	1	P1
132	Jajpur	JRED	DANAGADI	11kV	MANPUR	32	1	P1
133	Jajpur	JRED	DANAGADI	11kV	STREET LIGHT	2.5	1	P1
134	Jajpur	JRED	DUBURI	11kV	BARAGADIA	24	1	P1
135	Jajpur	JRED	DUBURI	11kV	DUBURI	52	1	P1
136	Jajpur	JRED	DUBURI	11kV	SUKINDA	50.8	1	P1
137	Jajpur	JRED	KORAI	11kV	ALLIA	53	1	P1
138	Jajpur	JRED	KORAI	11kV	TALAGADA	33	1	P1
139	Jajpur	JRED	KOREI	11kV	KOREI	42	1	P1
140	Jajpur	JRED	KOREI	11kV	SALAKANA	30	1	P1
141	Jajpur	JRED	PANIKOILI	11kV	GANESH BAZAR	2.72	1	P1
142	Jajpur	JRED	PANIKOILI	11kV	NATHASAH	68	1	P1
143	Jajpur	JRED	PANIKOILI	11kV	PANIKOILI	23	1	P1
144	Jajpur	JRED	PANIKOILI	11kV	SARASWATI BAZAR	25	1	P1
145	Jajpur	JRED	PANIKOILI	11kV	SATHIPUR	81	1	P1
146	Jajpur	JRED	SUKINDA	11kV	KABAT	77	1	P1
147	Jajpur	JTED	AHIYAS	11kV	AHIYAS	55	1	P1
148	Jajpur	JTED	AHIYAS	11kV	BAISPAN	45	1	P1
149	Jajpur	JTED	AHIYAS	11kV	MANGALPUR	40	1	P1
150	Jajpur	JTED	BALAMUKULI	11kV	BACHHOLA	110	2	P1
151	Jajpur	JTED	BALAMUKULI	11kV	KALYANPUR	20	1	P1
152	Jajpur	JTED	BALAMUKULI	11kV	KANTIPUR	35	1	P1
153	Jajpur	JTED	BINJHARPUR-II	11kV	BINJHARPUR	35	1	P1

Annexure-Q Installation of Auto Reclosure for 11kV

S.No.	Circle	Division	Section	Voltage Level	Name of Feeder	Length of Feeder in Km	No of AR	Priority
154	Jajpur	JTED	BINJHARPUR-II	11kV	BITANA	45	1	P1
155	Jajpur	JTED	BINJHARPUR-II	11kV	CHIKANA	50	1	P1
156	Jajpur	JTED	BINJHARPUR-II	11kV	HALADIDIHA	50	1	P1
157	Jajpur	JTED	BINJHARPUR-II	11kV	KAPILA	54	1	P1
158	Jajpur	JTED	BINJHARPUR-II	11kV	UTTARKULA	45	1	P1
159	Jajpur	JTED	DASRATHPUR	11kV	CHATRAPADA	30	1	P1
160	Jajpur	JTED	DASRATHPUR	11kV	ARUHA	20	1	P1
161	Jajpur	JTED	DASRATHPUR	11kV	NANDIPUR	35	1	P1
162	Jajpur	JTED	ESO TOWN-1	11kV	BALLAVIGHAT	17	1	P1
163	Jajpur	JTED	ESO TOWN-1	11kV	BIRAJAHATA	22	1	P1
164	Jajpur	JTED	ESO TOWN-1	11kV	GARIAPUR	6	1	P1
165	Jajpur	JTED	ESO TOWN-1	11kV	NO-2	36	3	P1
166	Jajpur	JTED	ESO TOWN-1	11kV	SUNDARIMUHAN	8	1	P1
167	Jajpur	JTED	JAJPUR TOWN 2	11kV	BARAHATA	18	1	P1
168	Jajpur	JTED	JAJPUR TOWN 2	11kV	CHITALO	60	1	P1
169	Jajpur	JTED	JAJPUR TOWN 2	11kV	GUHALI	70	1	P1
170	Jajpur	JTED	JAJPUR TOWN 2	11kV	KHANDARA	19	1	P1
171	Jajpur	JTED	JAJPUR TOWN 2	11kV	MARKANDPUR	50	1	P1
172	Jajpur	JTED	JAJPUR TOWN-3	11kV	Ankula	36	1	P1
173	Jajpur	JTED	JAJPUR TOWN-3	11kV	Similia	40	1	P1
174	Jajpur	JTED	MANGALPUR	11kV	KAYAN	78	1	P1
175	Jajpur	JTED	MANGALPUR	11kV	NARIGAON	45	1	P1
176	Jajpur	JTED	MANSADA	11kV	BINJHARPUR	35	1	P1
177	Jajpur	KUED	AMATHPUR	11kV	RATNAGIRI	52	1	P1
178	Jajpur	KUED	BARI-1	11kV	BARI	234	8	P1
179	Jajpur	KUED	BARI-2	11kV	BALIA	69	1	P1
180	Jajpur	KUED	JARAKA	11kV	JARAKA	26	1	P1
181	Jajpur	KUED	KABATABANDHA	11kV	CHADHEIDHARA	10	1	P1
182	Jajpur	KUED	KABATABANDHA	11kV	KABATABANDHA	100	6	P1
183	Jajpur	KUED	KUAKHIA	11kV	KUAKHIA	57	2	P1
184	Jajpur	KUED	KUNDAPATANA	11kV	NARSINGHPUR	47	2	P1
185	Jajpur	KUED	MATHASAH	11kV	MATHASAH	24	1	P1
186	Jajpur	KUED	NEULPUR	11kV	NEULPUR	16	1	P1
187	Jajpur	KUED	SUJANPUR	11kV	SUJANPUR	150	8	P1

Annexure-R Installation of Auto Reclosure for 33kV								
S.No.	Circle	Division	Section	Voltage Level	Name of Feeder	Length of Feeder in Km	No of AR	Priority
1	Baleshwar	CED	NA	33kV	Nilgiri Feeder	39.18	1	P1
2	Baleshwar	BED	NA	33kV	Balasore-1	12.75	1	P1
3	Baleshwar	SED	NA	33kV	Bahanaga Feeder	37.49	1	P1
4	Baleshwar	SED	NA	33kV	Khaira Feeder	43.5	2	P1
5	Baleshwar	SED	NA	33kV	Gopinathpur(Markona) feeder	43.83	1	P1
6	Baleshwar	BED	NA	33kV	Swadhinpadia Feeder	8.25	2	P1
7	Baleshwar	CED	NA	33kV	Odangi Feeder	31.75	1	P1
8	Bhadrak	BSED	NA	33kV	Dhamnagar	61.43	2	P1
9	Bhadrak	BNED	NA	33kV	Bedeipur	59.25	1	P1
10	Bhadrak	BNED	NA	33kV	Gopinathpur	52.93	1	P1
11	Baripada	BPED	NA	33kV	Betnoti-I	56.93	1	P1
12	Baripada	BPED	NA	33kV	Medical OH	27.44	1	P1
13	Jajpur	KUED	NA	33kV	Kabatabandha Feeder	58.3	2	P1
14	Jajpur	JRED	NA	33kV	Sukina Feeder	25.3	1	P1
15	Baleshwar	BED	No IV	33kV	Chandipur	36.73	2	P1
16	Jajpur	JTED	AHIYAS	33kV	Mangalpur	44.2	3	P1

Annexure-S Installation of 33kV & 11kV RMUs									
Sr No	Circle	Division	Voltage Level	Feeder Name	Location	Feeder Length in Ckm	Type of RMUs	RMUs Required	Priority
1	Keonjhar	JOED	33kV	Sundara	Kiriburu Chhak	8	4W	1	P1
2	Balasore	BED	33kV	New Swadhinpadia	Near Cahndipur GSS	9.2	4W	1	P1
3	Baripada	BPED	33kV	Bangirposi new	Near Banigiriposi GSS	20	4W	1	P1
4	Jajpur	JRED	33kV	PANIKOILI	Near Jajpur Road GSS	26.06	4W	1	P1
5	Jajpur	KuED	33kV	BARI	Near Balia PSS	51.8	4W	1	P1
6	Baripada	BPED	11kV	Khunta-Kamardiha	Near Rajgabindpur PSS	80	4W	1	P1
7	Baripada	BPED	11kV	Jublee	Near Lalbazar PSS	12	4W	1	P1
8	Baleshwar	BED	11kV	BUS-STAND	NEAR CHANDMARIPADIA	5.2	3W	1	P1
9	Baripada	RED	11kV	BASINGI	BASINGI JUNGAL SIDE	60	3W	1	P1
10	Baripada	BPED	11kV	PALABANI	TULASICHOURA	10	4W	1	P1
11	Baripada	BPED	11kV	BANSULI	Nalagaja	75	3W	1	P1
12	Bhadrak	BNED	11kV	Sangat	Beka	22	4W	1	P1
13	Jajpur	JTED	11kV	BALLAVIGHAT	DEBIGADA	12	4W	1	P1
14	Jajpur	JTED	11kV	CHITALO	CHITALO COLLEGE	60	4W	1	P1
15	Keonjhar	KED	11kV	NARANPUR	Near Omm Shri Hotel to Naranpur Chowk	21	3W	1	P1
16	Keonjhar	AED	11kV	Badapalasapala	After Tahasil Office	178	3W	1	P1
17	Keonjhar	JOED	11kV	BALIBANDHA	BALIBANDHA	210	4W	1	P1
18	Baleshwar	BED	11kV	Motiganj	Pani tanki	3.2	3W	1	P1
19	Keonjhar	KED	11kV	OMFED	Raisuan Bazar	21	3W	1	P1
20	Jajpur	JRED	11kV	BAZAR	DANDIKIRI	17	3W	1	P1
21	Jajpur	JTED	11kV	GUHALI	GOBINDPUR	70	4W	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
1	Baleshwar	BED	11kV	Industrial No - I	Towards Mahindra	1	P1
2	Baleshwar	BED	11kV	Industrial No - I	Towards BKB Cotton	1	P1
3	Baleshwar	BED	11kV	Town	Near Prakash Plastic	1	P1
4	Baleshwar	BED	11kV	Januganj	Aliagada	1	P1
5	Baleshwar	BED	11kV	Januganj	Near Omfed	1	P1
6	Baleshwar	BED	11kV	Januganj	Achutapur Pada AB Switch	1	P1
7	Baleshwar	BED	11kV	Januganj	Gyandeep School Gali	1	P1
8	Baleshwar	BED	11kV	Bamul	Near Omfed	1	P1
9	Baleshwar	BED	11kV	Bamul	Near FM Medical College	1	P1
10	Baleshwar	BED	11kV	Kuruda	Near Charu Transformer	1	P1
11	Baleshwar	BED	11kV	Kuruda	Near Wearhouse	1	P1
12	Baleshwar	BED	11kV	SAHADEVKHUNTA	ANAND BAZAR & BHASKARGANJ	2	P1
13	Baleshwar	BED	11kV	BALIA	TAILE BASA & DAMBURU CHHAK	2	P1
14	Baleshwar	BED	11kV	SAMALPUR	BIJAY NAGAR CHHAK & SHAKTI NAGAR	2	P1
15	Baleshwar	BED	11kV	BUS-STAND	FIRINGPATNA	1	P1
16	Baleshwar	BED	11kV	CITY CLINIC	POSTAL COLONY & NUASAH CHHAK	2	P1
17	Baleshwar	BtED	11kV	Sartha	palasia	1	P1
18	Baleshwar	BtED	11kV	Sartha	Dandi	1	P1
19	Baleshwar	BtED	11kV	Sartha	Dhobachakuri	1	P1
20	Baleshwar	BtED	11kV	Sartha	Gamanandi	1	P1
21	Baleshwar	BtED	11kV	Sartha	Sahada Jali Sahi	1	P1
22	Baleshwar	BtED	11kV	Kushadiha	Khadakhadi	1	P1
23	Baleshwar	BtED	11kV	Kushadiha	Trailokya	1	P1
24	Baleshwar	BtED	11kV	Kushadiha	Indipada	1	P1
25	Baleshwar	BtED	11kV	Kushadiha	Kunduli Chhaka	1	P1
29	Baleshwar	BtED	11kV	H.Q	Barmadhia	1	P1
30	Baleshwar	BtED	11kV	BASTA	Ektali	1	P1
31	Baleshwar	BtED	11kV	BASTA	Khejuriadi	1	P1
32	Baleshwar	BtED	11kV	NAIKUDI	KUNDUPUR PETROL PIMP	1	P1
33	Baleshwar	BtED	11kV	NAIKUDI	Naikudi	1	P1
34	Baleshwar	BtED	11kV	H.Q	Old Hospital	1	P1
35	Baleshwar	BtED	11kV	Mathani	Dakhinasahi	1	P1
36	Baleshwar	BtED	11kV	Mathani	Badakhudi	1	P1
37	Baleshwar	BtED	11kV	Mathani	Dhanahanda	1	P1
38	Baleshwar	BtED	11kV	H.Q	Baharda	1	P1
39	Baleshwar	BtED	11kV	MATHANI	Routpada	1	P1
40	Baleshwar	BtED	11kV	MATHANI	Sundarhata	1	P1
41	Baleshwar	BtED	11kV	MATHANI	Pandrungi	1	P1
42	Baleshwar	BtED	11kV	BASTA	Upartapanda	1	P1
43	Baleshwar	BtED	11kV	Rasalpur	Oladi	1	P1
44	Baleshwar	BtED	11kV	Manudiha	Gothagadia	1	P1
45	Baleshwar	BtED	11kV	Manudiha	Dhapakand	1	P1
46	Baleshwar	BtED	11kV	Manudiha	Nima	1	P1
47	Baleshwar	BtED	11kV	Manudiha	Paltadiha	1	P1
48	Baleshwar	BtED	11kV	Kusudiha	Asuradiha	1	P1
49	Baleshwar	BtED	11kV	Kusudiha	Balabudhi	1	P1
50	Baleshwar	BtED	11kV	Kusudiha	Gundripada	1	P1
51	Baleshwar	BtED	11kV	Amarda	Badacharigan	1	P1
52	Baleshwar	BtED	11kV	Amarda	Mankadagadia	1	P1
53	Baleshwar	BtED	11kV	Amarda	Kulida	1	P1
54	Baleshwar	CED	11kV	Remuna	Remuna	2	P1
55	Baleshwar	CED	11kV	Gourpur	Gourpur	2	P1
56	Baleshwar	CED	11kV	Kasimpur/Gandarda	Kasimpur/Gandarda	2	P1
57	Baleshwar	CED	11kV	Bahabalpur	Bahabalpur	1	P1
58	Baleshwar	CED	11kV	Kasipada	Kasipada	1	P1
59	Baleshwar	CED	11kV	Haldipada	Haldipada	1	P1
60	Baleshwar	CED	11kV	Malisahi	Malisahi	1	P1
61	Baleshwar	CED	11kV	Ataspur	Ataspur	1	P1
62	Baleshwar	CED	11kV	Maharajpur	Maharajpur	1	P1
63	Baleshwar	CED	11kV	Bhimpur	Bhimpur	1	P1
64	Baleshwar	CED	11kV	Fishery	Fishery	1	P1
65	Baleshwar	CED	11kV	Fuladi	Fuladi	1	P1
66	Baleshwar	CED	11kV	Padampur	Padampur	2	P1
67	Baleshwar	CED	11kV	Balisuan	Balisuan	3	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
68	Baleshwar	CED	11kV	Parkhi	Parkhi	4	P1
69	Baleshwar	CED	11kV	Amara	Amara	2	P1
70	Baleshwar	CED	11kV	Panchlingeswar	Panchlingeswar	3	P1
71	Baleshwar	CED	11kV	Barapada	Barapada	2	P1
72	Baleshwar	CED	11kV	Industrial	Industrial	2	P1
73	Baleshwar	CED	11kV	Kuruda Bazar	Kuruda Bazar	1	P1
74	Baleshwar	CED	11kV	Sajanagarh	Sajanagarh	5	P1
75	Baleshwar	CED	11kV	Telipal	Telipal	1	P1
76	Baleshwar	CED	11kV	Gohira	Gohira	2	P1
77	Baleshwar	CED	11kV	Berhampur	Berhampur	3	P1
78	Baleshwar	CED	11kV	Machhua	Machhua	2	P1
79	Baleshwar	CED	11kV	Mitrapur	Mitrapur	2	P1
80	Baleshwar	CED	11kV	Matiali	Matiali	3	P1
81	Baleshwar	JED	11kV	khuard	Dudhiasul	1	P1
82	Baleshwar	JED	11kV	khuard	kalajudi	1	P1
83	Baleshwar	JED	11kV	chudamanipur	Gopinath Pur	1	P1
84	Baleshwar	JED	11kV	chudamanipur	kabatghati	1	P1
85	Baleshwar	JED	11kV	chudamanipur	Biswanath pur	1	P1
86	Baleshwar	JED	11kV	Mahulia1	upertuta	1	P1
87	Baleshwar	JED	11kV	Mahulia1	Bhadua	1	P1
88	Baleshwar	JED	11kV	Mahulia 2	Baidya Tapping	1	P1
89	Baleshwar	JED	11kV	Mahulia 2	Chengda Tapping	1	P1
90	Baleshwar	JED	11kV	Mahulia 2	Nimdiha Tapping	1	P1
91	Baleshwar	JED	11kV	Mahulia 2	Bankati Tapping	1	P1
92	Baleshwar	JED	11kV	Mahulia 2	Amtuba Tapping	1	P1
93	Baleshwar	JED	11kV	Mahulia 2	Bambay chhaka tapping	1	P1
94	Baleshwar	JED	11kV	Mahulia 2	kuchbania Tapping	1	P1
95	Baleshwar	JED	11kV	Mahulia 2	Gundrisole Tapping	1	P1
96	Baleshwar	JED	11kV	Mahulia 2	Teghari Tapping	2	P1
97	Baleshwar	JED	11kV	Mahulia 2	Kalma AB Switch	1	P1
98	Baleshwar	JED	11kV	Mahulia 2	Gholei AB Switch	1	P1
99	Baleshwar	JED	11kV	Mahulia 2	Saradiha AB Switch	1	P1
100	Baleshwar	JED	11kV	Mahulia 2	srirampur	1	P1
101	Baleshwar	JED	11kV	Baradiha	Kanki	1	P1
102	Baleshwar	JED	11kV	Baradiha	Bhagbuda	1	P1
103	Baleshwar	JED	11kV	Baradiha	kumchia	1	P1
104	Baleshwar	JED	11kV	Rajnagar	Kaumari Tappng	1	P1
105	Baleshwar	JED	11kV	Rajnagar	uttar Gopalprasad tapping	1	P1
106	Baleshwar	JED	11kV	Rajnagar	Karanjgouri Tapping	1	P1
107	Baleshwar	JED	11kV	Rajnagar	Mahalsahi Tapping	1	P1
108	Baleshwar	JED	11kV	Rajnagar	Makdia Tapping	1	P1
109	Baleshwar	JED	11kV	Rajnagar	Makidia Market Tapping	1	P1
110	Baleshwar	JED	11kV	Rajnagar	Olmara BSNL Tapping	1	P1
111	Baleshwar	JED	11kV	Rajnagar	Rajnagar Tapping	1	P1
112	Baleshwar	JED	11kV	Rajnagar	Olmara Thana Tapping	1	P1
113	Baleshwar	JED	11kV	Rajnagar	Pramanik Sahi Tapping	1	P1
114	Baleshwar	JED	11kV	BALIM	KHAIRDA	2	P1
115	Baleshwar	JED	11kV	UPLA	CHANDAKUSUMI DP TAPPING	2	P1
116	Baleshwar	JED	11kV	UPLA	DUBASAH	1	P1
117	Baleshwar	JED	11kV	UPLA	AGARDA KANAN BADI DP	1	P1
118	Baleshwar	JED	11kV	BELDA	GHEEGADIA LINE A-B SWITCH DP	2	P1
119	Baleshwar	JED	11kV	PUTINA	KANTABANI DP,RAMDEICHAK DP,GABGAN DP,KACUADI,KHETRAPAL,DARUHA	6	P1
120	Baleshwar	JED	11kV	MOHAGAV	NEAR POLICE STATION	1	P1
121	Baleshwar	JED	11kV	BALIM	NAHARA	1	P1
122	Baleshwar	SED	11kV	Town	Town	1	P1
123	Baleshwar	SED	11kV	Uttareshwar	Uttareshwar	2	P1
124	Baleshwar	SED	11kV	Dahisada	Dahisada	1	P1
125	Baleshwar	SED	11kV	Manipur	Manipur	1	P1
126	Baleshwar	SED	11kV	Manatri	Manatri	1	P1
127	Baleshwar	SED	11kV	Kacheripada Mangalpur	Kacheripada Mangalpur	1	P1
128	Baleshwar	SED	11kV	Phataarjuna	Phataarjuna	1	P1
129	Baleshwar	SED	11kV	Gopinathpur	Sirapur,Ankabarhampur	3	P1
130	Baleshwar	SED	11kV	KHANTAPADA	PADAGAN	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
131	Baleshwar	SED	11kV	KHANTAPADA	JAIPUR	1	P1
132	Baleshwar	SED	11kV	KHANTAPADA	CHAKAJAGANATHPUR	1	P1
133	Baleshwar	SED	11kV	KHANTAPADA	MULAKUDEI	1	P1
134	Baleshwar	SED	11kV	KHANTAPADA	KPAD A GIRLS HIGH SCHOOL	1	P1
135	Baleshwar	SED	11kV	KHANTAPADA	TINIPADA	1	P1
136	Baleshwar	SED	11kV	MAHARAJPUR	ATAPUR	1	P1
137	Baleshwar	SED	11kV	PANAPANA	MALDAPADA	1	P1
138	Baleshwar	SED	11kV	PANAPANA	BETAGADI	1	P1
139	Baleshwar	SED	11kV	PANAPANA	SHIVAPURA	1	P1
140	Baleshwar	SED	11kV	PANAPANA	PANAPANA	1	P1
141	Baleshwar	SED	11kV	PANAPANA	SENAPATI CUT POINT	1	P1
142	Baleshwar	SED	11kV	PURAN	PURAN	1	P1
143	Baleshwar	SED	11kV	ANDRA	ANDRA	1	P1
144	Baleshwar	SED	11kV	BARAKOILI	SANTRAGADIA	1	P1
145	Baleshwar	SED	11kV	BIDU	BIDU	1	P1
146	Baleshwar	SED	11kV	Bari	Sabat Canal	1	P1
147	Baleshwar	SED	11kV	Biranchipur	Deopada	1	P1
148	Baleshwar	SED	11kV	Ramakrushnapur	Raghunathpur	1	P1
149	Baleshwar	SED	11kV	ADA FROM MARKONA	KHADIGADIA	1	P1
150	Baripada	RED	11kV	KULIPOSI	RODANG	1	P1
151	Baripada	RED	11kV	KULIPOSI	CHHELIAPOSI	1	P1
152	Baripada	RED	11kV	KERKERA	CHITRAPOSI	1	P1
153	Baripada	RED	11kV	KERKERA	BHANRAPOSI	1	P1
154	Baripada	RED	11kV	TATO	BATAPALSA	1	P1
155	Baripada	RED	11kV	TATO	BADAGAON	1	P1
156	Baripada	RED	11kV	BADAMPAHAR	CHHANUA	1	P1
157	Baripada	RED	11kV	KUSUMI	SANJAYDHANPOSI	1	P1
158	Baripada	RED	11kV	KUSUMI	TALAKPOKHARI	1	P1
159	Baripada	RED	11kV	KUSUMI	AHARBANDH	1	P1
160	Baripada	RED	11kV	PADHIA	PADHIA	1	P1
161	Baripada	RED	11kV	PADHIA	BASILA	1	P1
162	Baripada	RED	11kV	SULEIPAT	DEULI	1	P1
163	Baripada	RED	11kV	JAYPUR	BD CHHAKA	1	P1
164	Baripada	RED	11kV	SULEIPAT	MAYURDAR	1	P1
165	Baripada	RED	11kV	SULEIPAT	UKAM	1	P1
166	Baripada	RED	11kV	KENDUJIANI	PURUNAPANI	1	P1
167	Baripada	RED	11kV	KENDUJIANI	DUMURIA TAPING	1	P1
168	Baripada	RED	11kV	KENDUJIANI	BISIPUR	1	P1
169	Baripada	RED	11kV	KENDUJIANI	RENGALBEDA	1	P1
170	Baripada	RED	11kV	KENDUJIANI	PATBIL	1	P1
171	Baripada	RED	11kV	KENDUJIANI	BALIPOSI	1	P1
172	Baripada	RED	11kV	KENDUJIANI	SSIT COLLEGE	1	P1
173	Baripada	RED	11kV	KENDUJIANI	TANGURUSAHI	1	P1
174	Baripada	RED	11kV	MAHULDIHA	BAGHADAFA	1	P1
175	Baripada	RED	11kV	MAHULDIHA	MANKADBEDA	1	P1
176	Baripada	RED	11kV	CHAMPAJHAR	NIHANGANDI	1	P1
177	Baripada	RED	11kV	CHAMPAJHAR	COLLEGE AB SWITCH	1	P1
178	Baripada	RED	11kV	CHAMPAJHAR	MITUANI-2	1	P1
179	Baripada	RED	11kV	SINGDA	HALDIA	1	P1
180	Baripada	RED	11kV	SINGDA	RAUTALIPAT	1	P1
181	Baripada	RED	11kV	SINGDA	TANGIA	1	P1
182	Baripada	RED	11kV	Jamda	Kudahansa	1	P1
183	Baripada	RED	11kV	Jamda	Tarana gada sahi	1	P1
184	Baripada	RED	11kV	Jamda	Tendra	1	P1
185	Baripada	RED	11kV	Jamda	Sagjodi	1	P1
186	Baripada	RED	11kV	Jamda	Belposi Lagasahi	1	P1
187	Baripada	RED	11kV	Dundu	Maredhi	1	P1
188	Baripada	BPED	11kV	GADDEULIA	GADDEULIA	1	P1
189	Baripada	BPED	11kV	PAIKSAHI	PAIKSAHI	1	P1
190	Baripada	BPED	11kV	BACHHURIPADA	BACHHURIPADA	1	P1
191	Baripada	BPED	11kV	MERDA	MERDA	1	P1
192	Baripada	BPED	11kV	NEW PAIKSAHI	NEW PAIKSAHI	1	P1
193	Baripada	BPED	11kV	KHADIKAPADA	KHADIKAPADA	1	P1
194	Baripada	BPED	11kV	DAHIKATI	DAHIKATI	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
195	Baripada	BPED	11kV	S RURAL	S RURAL	1	P1
196	Baripada	BPED	11kV	Keutunimari	Keutunimari	1	P1
197	Baripada	BPED	11kV	Kuliana (RN Pur)	Kuliana (RN Pur)	1	P1
198	Baripada	BPED	11kV	Asanjoda	Asanjoda	1	P1
199	Baripada	BPED	11kV	Jiani	Jiani	1	P1
200	Baripada	BPED	11kV	Bhalubasa	Bhalubasa	1	P1
201	Baripada	BPED	11kV	JOGINUAGAON	JOGINUAGAON	1	P1
202	Baripada	BPED	11kV	KHADISOLE	KHADISOLE	1	P1
203	Baripada	BPED	11kV	SIALIGHATI	SIALIGHATI	1	P1
204	Baripada	BPED	11kV	RURAL	RURAL	1	P1
206	Baripada	BPED	11kV	RURAL 11 KV	RURAL 11 KV	1	P1
207	Baripada	BPED	11kV	SARASKANA 11 KV	SARASKANA 11 KV	1	P1
208	Baripada	BPED	11kV	JHARPOKHARIA	JHARPOKHARIA	1	P1
209	Baripada	BPED	11kV	AMARDA	AMARDA	1	P1
210	Baripada	BPED	11kV	TAMBAKHURI	TAMBAKHURI	1	P1
211	Baripada	BPED	11kV	BANSULI	BANSULI	1	P1
212	Baripada	BPED	11kV	KASAFALIA	KASAFALIA	1	P1
213	Baripada	BPED	11kV	Kaudia	Kaudia	1	P1
214	Baripada	BPED	11kV	Kaudia	Kaudia	1	P1
215	Baripada	BPED	11kV	Kaudia	Kaudia	1	P1
216	Baripada	BPED	11kV	Kaudia	Kaudia	1	P1
217	Baripada	BPED	11kV	Bholagadia	Bholagadia	1	P1
218	Baripada	BPED	11kV	Bholagadia	Bholagadia	1	P1
219	Baripada	BPED	11kV	Bholagadia	Bholagadia	1	P1
220	Baripada	BPED	11kV	Moroda	Moroda	1	P1
221	Baripada	BPED	11kV	Kaudia	Kaudia	1	P1
222	Baripada	BPED	11kV	Kujidihi	Kujidihi	1	P1
223	Baripada	BPED	11kV	Chitrada	Chitrada	1	P1
224	Baripada	BPED	11kV	Chitrada	Chitrada	1	P1
225	Baripada	BPED	11kV	Jhinkiria	Jhinkiria	1	P1
226	Baripada	UED	11kV	Old Sarat	Old Sarat	1	P1
227	Baripada	UED	11kV	Old Sarat	Old Sarat	1	P1
228	Baripada	UED	11kV	Old Sarat	Old Sarat	1	P1
229	Baripada	UED	11kV	Old Sarat	Old Sarat	1	P1
230	Baripada	UED	11kV	Old Sarat	Old Sarat	1	P1
231	Baripada	UED	11kV	Pedagadi	Pedagadi	1	P1
232	Baripada	UED	11kV	Pedagadi	Pedagadi	1	P1
233	Baripada	UED	11kV	Kalo	Kalo	1	P1
234	Baripada	UED	11kV	Kalo	Kalo	1	P1
235	Baripada	UED	11kV	No-2	No-2	1	P1
236	Baripada	UED	11kV	No-3	No-3	1	P1
237	Baripada	UED	11kV	Kalamgadial	Kalamgadial	1	P1
238	Baripada	UED	11kV	Kalamgadial	Kalamgadial	1	P1
239	Baripada	UED	11kV	Katuria	Katuria	1	P1
240	Baripada	UED	11kV	Katuria	Katuria	1	P1
241	Baripada	UED	11kV	No-1	No-1	1	P1
242	Baripada	UED	11kV	Sarat	Sarat	1	P1
243	Baripada	UED	11kV	UDALA-1	UDALA-1	1	P1
244	Baripada	UED	11kV	NUDADIHA	NUDADIHA	1	P1
245	Baripada	UED	11kV	SALAMUNDALI	SALAMUNDALI	1	P1
246	Baripada	UED	11kV	PURUNAKHUNTA	PURUNAKHUNTA	1	P1
247	Baripada	UED	11kV	RADHO	RADHO	1	P1
248	Baripada	UED	11kV	UDALA-3	UDALA-3	1	P1
249	Baripada	UED	11kV	PODADIHA	PODADIHA	1	P1
250	Baripada	UED	11kV	PRATAPPUR(BADASAH)	PRATAPPUR(BADASAH)	1	P1
251	Baripada	UED	11kV	CHANDADHIA	CHANDADHIA	1	P1
252	Baripada	UED	11kV	CHANDADHIA	CHANDADHIA	1	P1
253	Baripada	UED	11kV	CHANDADHIA	CHANDADHIA	1	P1
254	Baripada	UED	11kV	CHANDADHIA	CHANDADHIA	1	P1
255	Baripada	UED	11kV	SINGTIA	SINGTIA	1	P1
256	Baripada	UED	11kV	SINGTIA	SINGTIA	1	P1
257	Baripada	UED	11kV	SINGTIA	SINGTIA	1	P1
258	Baripada	UED	11kV	Boidpur	Boidpur	1	P1
259	Baripada	UED	11kV	Boidpur	Boidpur	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
260	Baripada	UED	11kV	BELAM	BELAM	1	P1
261	Baripada	UED	11kV	MARKUNDI	MARKUNDI	3	P1
262	Jajpur	JRED	11kV	ALLIA	DHANAPUR CHACK	1	P1
263	Jajpur	JRED	11kV	KOREI	KARGIL CHACK	1	P1
264	Jajpur	JRED	11kV	MARTHAPUR	MARTHAPUR TO JALAKA	1	P1
265	Jajpur	JRED	11kV	SOLEI	SOLEI NAGAR HIGHSCHOOL	1	P1
266	Jajpur	JRED	11kV	SOLEI	HIND CLUB	1	P1
267	Jajpur	JRED	11kV	RANIPADA	NEAR BEER BAR SOBARA	1	P1
268	Jajpur	JRED	11kV	SAPAGADIA	SAPAGADIA	1	P1
269	Jajpur	JRED	11kV	SUKINDA	SIBANI CAMP	1	P1
270	Jajpur	JRED	11kV	HARIPUR	BANJA	1	P1
271	Jajpur	JRED	11kV	HARIPUR	BALIPASI	1	P1
272	Jajpur	JRED	11kV	AMPOLABA	JAMUPASI	1	P1
273	Jajpur	JRED	11kV	KABATA	GOUDASAH	1	P1
274	Jajpur	JRED	11kV	KABATA	KOILA	1	P1
275	Jajpur	JRED	11kV	KABATA	BIRIGADA	1	P1
276	Jajpur	JRED	11kV	HATIBARI	NUA HATIBARI	1	P1
277	Jajpur	JRED	11kV	HATIBARI	DIS AREA	1	P1
278	Jajpur	JRED	11kV	HATIBARI	BHALUKANTHIA	1	P1
279	Jajpur	JRED	11kV	PIMPUDIA	JEMADEIPUR	1	P1
280	Jajpur	JRED	11kV	PIMPUDIA	NUADIHI	1	P1
281	Jajpur	JRED	11kV	BANDHAGAN	KENDUDIPI	1	P1
282	Jajpur	JRED	11kV	BANDHAGAN	RANKIA	1	P1
283	Jajpur	JRED	11kV	MANGALPUR	KANCHICHUA	1	P1
284	Jajpur	JRED	11kV	MANGALPUR	BOTALANDA	1	P1
285	Jajpur	JRED	11kV	MANGALPUR	ICHHAPUR	1	P1
286	Jajpur	JRED	11kV	RANSOL	KATENI	1	P1
287	Jajpur	JRED	11kV	RANSOL	KUHIKA	1	P1
288	Jajpur	JRED	11kV	RANSOL	KALARANGIATTA	1	P1
289	Jajpur	JRED	11kV	RANSOL	GIRINGAMALI	1	P1
290	Jajpur	JRED	11kV	DUBURI	NAKULA SAHI,PRANABA,NADIABHANGA	1	P1
291	Jajpur	JRED	11kV	TELEPHON EXCHANGE	BAGHARAI SAHI,FOUR -2 SET	1	P1
292	Jajpur	JRED	11kV	BARAGADIA	SARANGAPUR,BARAGADIA	1	P1
293	Jajpur	JRED	11kV	PANKAPAL	PINGALA,PANKAPAL	1	P1
294	Jajpur	JRED	11kV	TUNGEISUNI	BANA SAHI	1	P1
295	Jajpur	JRED	11kV	NACHHIPURA	DHABAHALI	1	P1
296	Jajpur	JRED	11kV	NACHHIPURA	BENAPATIA	1	P1
297	Jajpur	JRED	11kV	NACHHIPURA	PURIASIR,GOBARDHANPUR	1	P1
298	Jajpur	JRED	11kV	SARASWATI BAZAR	KALAPATHARA, OCHINDA ROAD	1	P1
299	Jajpur	JRED	11kV	TANKI	KANKALA AB SWITCH	1	P1
300	Jajpur	JTED	11kV	DASARATHPUR	PATAPUR	1	P1
301	Jajpur	JTED	11kV	AHIYAS	AHIYAS	1	P1
302	Jajpur	JTED	11kV	PARIPADA	PARIPADA	1	P1
303	Jajpur	JTED	11kV	NARIGAON	NARIGAON	1	P1
304	Jajpur	JTED	11kV	KAYAN	DUBAKANA	1	P1
305	Jajpur	JTED	11kV	CHATRAPADA	KANTABANIA	1	P1
306	Jajpur	JTED	11kV	DHANIPUR	DHANIPUR	1	P1
307	Jajpur	JTED	11kV	NANDIPUR	NANDIPUR CHAK	1	P1
308	Jajpur	JTED	11kV	RANGAPUR	PALADA, RAHASOI, TALIA	3	P1
309	Jajpur	JTED	11kV	BAISAPAN	BAISAPAN CHAK	1	P1
310	Jajpur	JTED	11kV	MANGALPUR	ISWARPUR	1	P1
311	Jajpur	JTED	11kV	Simulia	Gobindpur	1	P1
312	Jajpur	JTED	11kV	Simulia	Baramunda	1	P1
313	Jajpur	JTED	11kV	Ankula	Gurdashpur	1	P1
314	Jajpur	JTED	11kV	JAGANNTHPUR	BANAPUR	1	P1
315	Jajpur	JTED	11kV	JAGANNTHPUR	MADHIALI	1	P1
316	Jajpur	JTED	11kV	NO-I	BINDHANA CUT-POINT	1	P1
317	Jajpur	JTED	11kV	BO-I	PATAPUR TAPPING	1	P1
318	Jajpur	JTED	11kV	BIRAJAHATA	MANGALA CHHAKA	1	P1
319	Jajpur	JTED	11kV	BIRAJAHATA	GHUSURIASAH	1	P1
320	Jajpur	JTED	11kV	NO-2	NUAGOAN	1	P1
321	Jajpur	JTED	11kV	NO-2	KUANSARPUR	1	P1
322	Jajpur	JTED	11kV	NO-2	SBI ROAD	1	P1
323	Jajpur	JTED	11kV	GUHALI	GOBINDPUR	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
324	Jajpur	JTED	11kV	GUHALI	SASANDA	1	P1
325	Jajpur	JTED	11kV	MARKANDPUR	DEULIPADIA	1	P1
326	Jajpur	JTED	11kV	KHANDARA	SUDHAGOBINDA	1	P1
327	Jajpur	JTED	11kV	BACHHOLA	BANSHIPUR DURGA PADIA	1	P1
328	Jajpur	JTED	11kV	BACHHOLA	JENADIHA	1	P1
329	Jajpur	JTED	11kV	BACHHOLA	KANCHHNADA	1	P1
336	Jajpur	KUED	11kV	RATNAGIRI	RATNAGIRI	2	P1
337	Jajpur	KUED	11kV	RAIPUR	RAIPUR	2	P1
338	Jajpur	KUED	11kV	BANIARY	BANIARY	2	P1
339	Jajpur	KUED	11kV	INDUPUR	SUKAL	2	P1
340	Jajpur	KUED	11kV	ATIRA	BALIKANTIA	2	P1
341	Jajpur	KUED	11kV	ATIRA	MUTTON CHAKA	1	P1
342	Jajpur	KUED	11kV	BARI	AURANGABAD	1	P1
343	Jajpur	KUED	11kV	BARI	THANA LINE	1	P1
344	Jajpur	KUED	11kV	BALIA	SANKARAKUL	1	P1
345	Jajpur	KUED	11kV	BALIA	BALIA-II	1	P1
346	Jajpur	KUED	11kV	BALIA	AKHADADIHA	1	P1
347	Jajpur	KUED	11kV	BALIA	KANDISAH	1	P1
348	Jajpur	KUED	11kV	BALIA	HARIPUR	1	P1
349	Jajpur	KUED	11kV	BALIA	SWAINKHANDA	1	P1
350	Jajpur	KUED	11kV	BALIA	BEHERASAH	1	P1
351	Jajpur	KUED	11kV	BARABATI	JORAKULA	1	P1
352	Jajpur	KUED	11kV	BARABATI	SAMANTARAPUR	1	P1
353	Jajpur	KUED	11kV	DIPANCHAL	PODAJAGULEI/BANTRA/EKTALA/PARIKAINCHI	2	P1
354	Jajpur	KUED	11kV	NATHUABAR	NIMAPATANA/KRUSHNAPADA/KURUKURA/B AIDANGI/SRIBANTPUR/BARDANGI	2	P1
355	Jajpur	KUED	11kV	SINGAPUR	MANATIR/SINGAPUR/ODISO/ARTIA KUSUNPUR/MELAKA	2	P1
356	Jajpur	KUED	11kV	BAZARGHAT	ISTAMAPADIA AB SWITCH	1	P1
357	Jajpur	KUED	11kV	BAZARGHAT	BAZARGHAT AB SWITCH	1	P1
358	Jajpur	KUED	11kV	jenapur	durgapadia	1	P1
359	Jajpur	KUED	11kV	jenapur	nua sahi branch	3	P1
360	Jajpur	KUED	11kV	balarampur	bichhakhandi	2	P1
361	Jajpur	KUED	11kV	balarampur	patapur	1	P1
362	Jajpur	KUED	11kV	NALAKULA	KHAPARADHIA	1	P1
363	Jajpur	KUED	11kV	NALAKULA	BASUDEVPUR	1	P1
364	Jajpur	KUED	11kV	NALAKULA	BANKASAH	1	P1
365	Keonjhar	AED	11kV	GHASIPURA	GHASIPURA	2	P1
366	Keonjhar	AED	11kV	SADANGA	SADANGA	2	P1
367	Keonjhar	AED	11kV	Fakirpur	Fakirpur	3	P1
368	Keonjhar	AED	11kV	DHENKIKOTE	DHENKIKOTE	3	P1
369	Keonjhar	AED	11kV		Gaunighasa,Rebanapalasapala,Bhanrpur	3	P1
370	Keonjhar	AED	11kV	BALARAMPUR	BALARAMPUR	1	P1
371	Keonjhar	AED	11kV	GEDMA	GEDMA	3	P1
372	Keonjhar	AED	11kV	KANTIPAL	KANTIPAL	3	P1
373	Keonjhar	AED	11kV	ANANDAPUR	ANANDAPUR	2	P1
374	Keonjhar	AED	11kV	HATIBARI	HATIBARI	1	P1
375	Keonjhar	AED	11kV	Jamuda	jamada,Dhurudiamba,Baunsanali	2	P1
376	Keonjhar	AED	11kV	BELABAHALI	BELABAHALI	2	P1
377	Keonjhar	AED	11kV	ORALI	ORALI	2	P1
378	Keonjhar	AED	11kV	MUGUPUR	MUGUPUR	3	P1
379	Keonjhar	AED	11kV	MARKET FEEDER	MARKET FEEDER	1	P1
380	Keonjhar	AED	11kV	CHENAPADI	CHENAPADI	2	P1
381	Keonjhar	AED	11kV	MAA TARINI FEEDER	MAA TARINI FEEDER	1	P1
382	Keonjhar	AED	11kV	HATADIHI	HATADIHI	2	P1
383	Keonjhar	JOED	11kV	handibhanga	Raikala, Sankiri,Handibhanga, Chandiaposi,Baneikala,Amuni	3	P1
384	Keonjhar	JOED	11kV	palaspanga	Jhodaposi, Kandraposi, Bankamaruni	3	P1
385	Keonjhar	JOED	11kV	BELKUNDI	UPARBASTI	3	P1
386	Keonjhar	JOED	11kV	Bileipada	Dhublabeda	3	P1
387	Keonjhar	JOED	11kV	ASANPAT	RANIPUR	3	P1
388	Keonjhar	JOED	11kV	RIMULI PHD	RIMULI	3	P1
389	Keonjhar	JOED	11kV	BALAJARI	NICHINTAPUR	3	P1
390	Keonjhar	JOED	11kV	KASHIPUR	BADANEULI	3	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
391	Keonjhar	JOED	11kV	NARADAPUR	NARADAPUR	3	P1
392	Keonjhar	JOED	11kV	BOLANI 1	BOLANI SAIL GATE	3	P1
393	Keonjhar	JOED	11kV	TOWN	TOWN	3	P1
394	Keonjhar	JOED	11kV	SASAN	SASAN	3	P1
395	Keonjhar	JOED	11kV	ADHANGAPAL	ADHANGAPAL	3	P1
396	Keonjhar	KED	11kV	EXPRESS	Kids Public School	1	P1
397	Keonjhar	KED	11kV	RE	ROUT SAHI TAPPING	1	P1
398	Keonjhar	KED	11kV	BARBIL	GHUNTIBEDA	1	P1
399	Keonjhar	KED	11kV	EXPRESS	Satsang	1	P1
400	Keonjhar	KED	11kV	Dangapani	Thakurdihi,Talachampe	1	P1
401	Keonjhar	KED	11kV	BILLA	BOLANIPOSI	1	P1
402	Keonjhar	KED	11kV	Kaliahota feeder	Dullavpur near Ab Switch	1	P1
403	Keonjhar	KED	11kV	BAUNSNALI	HARIDAGOATH	1	P1
404	Keonjhar	KED	11kV	OLD TOWN	MALIGAON	1	P1
405	Keonjhar	KED	11kV	NARANPUR	KATHADIPU	1	P1
406	Keonjhar	KED	11kV	MURUSUAN	RAJANAGAR	1	P1
407	Keonjhar	KED	11kV	Kaliahota feeder	Panasia branch	1	P1
408	Keonjhar	KED	11kV	MAIDANKHEL	DALANGA	1	P1
409	Keonjhar	KED	11kV	NARANPUR	DIMBO	1	P1
410	Keonjhar	KED	11kV	NANDPUR	PADMAPUR BRIDGE	1	P1
411	Keonjhar	KED	11kV	NO-3	KASAHIPUR PETROL PUMP	1	P1
412	Keonjhar	KED	11kV	Fuljhar	Balibeda,Talajagar,Kasia	1	P1
413	Keonjhar	KED	11kV	MIRIGIKHOJI	MIRIGIKHOJI	1	P1
414	Keonjhar	KED	11kV	BONAJODI	BARDAPAL	1	P1
415	Keonjhar	KED	11kV	KENDUAPADA	HANUMAN CHAWK	1	P1
416	Keonjhar	KED	11kV	Adala	Jatra,Dhangadi,Tarmakanth,Gopapur	1	P1
417	Keonjhar	KED	11kV	BHUINPUR	KUSUMNALI TAPPING	1	P1
418	Keonjhar	KED	11kV	Jagamohanpur	Saruuli	1	P1
419	Keonjhar	KED	11kV	DENUA	KIAPADA	1	P1
420	Keonjhar	KED	11kV	Suakathi Town	Near girls highschool	1	P1
421	Keonjhar	KED	11kV	SARDHAPUR	JADICHATER	1	P1
422	Keonjhar	KED	11kV	BONAJODI	KUSUMITA	1	P1
423	Keonjhar	KED	11kV	KANTIAPADA	JAMUNAPOSI	1	P1
424	Keonjhar	KED	11kV	BONAJODI	NUAGAON	1	P1
425	Keonjhar	KED	11kV	Jagamohanpur	Rugudihi tolplaza	1	P1
426	Keonjhar	KED	11kV	Oriyagoda	Goda	1	P1
427	Keonjhar	KED	11kV	KEMPSADA	SAHADAPUR	1	P1
428	Keonjhar	KED	11kV	NO-4	BACK SIDE OF YAMAHA SHOWROOM	1	P1
429	Keonjhar	KED	11kV	KEMPSADA	POTAL	1	P1
430	Keonjhar	KED	11kV	NO-1	MAGURGADIA	1	P1
431	Keonjhar	KED	11kV	OLDTOWN	HUDCO Colony ABS	1	P1
432	Keonjhar	KED	11kV	ENGG.COLLEGE	JUDIA FARM	1	P1
433	Keonjhar	KED	11kV	MANDUA	Ghatur	1	P1
434	Bhadrak	BNED	11kV	CHARAMPA COLLEGE	CHARAMPA COLLEGE	1	P1
435	Bhadrak	BNED	11kV	POLY	POLY	1	P1
436	Bhadrak	BNED	11kV	CHANDIGAON	CHANDIGAON	1	P1
437	Bhadrak	BNED	11kV	BACHHADA	BACHHADA	1	P1
438	Bhadrak	BNED	11kV	BAINCHA	BAINCHA	1	P1
439	Bhadrak	BNED	11kV	MOHANPUR	MOHANPUR	1	P1
440	Bhadrak	BNED	11kV	PADMAPUR	PADMAPUR	1	P1
441	Bhadrak	BNED	11kV	CHANDIMAL	CHANDIMAL	1	P1
442	Bhadrak	BNED	11kV	ERAM BAZAR	ERAM BAZAR	1	P1
443	Bhadrak	BNED	11kV	MANDARI	MANDARI	1	P1
444	Bhadrak	BNED	11kV	BARANDUA	BARANDUA	1	P1
445	Bhadrak	BNED	11kV	NARASINGHAPUR	NARASINGHAPUR	1	P1
446	Bhadrak	BNED	11kV	BALIMUDA	BALIMUDA	1	P1
447	Bhadrak	BNED	11kV	KARANJADIA	KARANJADIA	1	P1
448	Bhadrak	BNED	11kV	BEDEIPUR	BEDEIPUR	1	P1
449	Bhadrak	BNED	11kV	RAJGHARPOKHARI	RAJGHARPOKHARI	1	P1
450	Bhadrak	BNED	11kV	MAA BHADRAKALI	MAA BHADRAKALI	1	P1
451	Bhadrak	BNED	11kV	SANGAT	SANGAT	1	P1
452	Bhadrak	BNED	11kV	BODAK	BODAK	1	P1
453	Bhadrak	BNED	11kV	NUNDOR	NUNDOR	1	P1
454	Bhadrak	BNED	11kV	BILANA	BILANA	1	P1

Annexure-T Installation of FPIs for 11kV Lines							
S.No.	Circle	Division	Voltage Level	Name of Feeder	Location	Set of 3	Priority
455	Bhadrak	BNED	11kV	CHANDABALI	CHANDABALI	3	P1
456	Bhadrak	BNED	11kV	BIJAYANAGAR	BIJAYANAGAR	1	P1
457	Bhadrak	BNED	11kV	TENTULIDIHI	TENTULIDIHI	1	P1
458	Bhadrak	BNED	11kV	MAHULIA	MAHULIA	1	P1
459	Bhadrak	BNED	11kV	AMARGARDIHA	AMARGARDIHA	1	P1
460	Bhadrak	BNED	11kV	CHARIGHARIA	CHARIGHARIA	1	P1
461	Bhadrak	BNED	11kV	BAUTPUR	BAUTPUR	1	P1
462	Bhadrak	BNED	11kV	BAGURAI	BAGURAI	1	P1
463	Bhadrak	BNED	11kV	DHAMARA INDUSTRIAL	DHAMARA INDUSTRIAL	1	P1
464	Bhadrak	BNED	11kV	DOSINGA	DOSINGA	1	P1
465	Bhadrak	BNED	11kV	BANSADA	BANSADA	1	P1
466	Bhadrak	BNED	11kV	KAITHKHOLA	KAITHKHOLA	1	P1
467	Bhadrak	BNED	11kV	ERAM	ERAM	1	P1
468	Bhadrak	BNED	11kV	CHUDAMANI-IND	CHUDAMANI-IND	1	P1
469	Bhadrak	BNED	11kV	FALCON	FALCON	1	P1
470	Bhadrak	BNED	11kV	SUAN	SUAN	2	P1
471	Bhadrak	BNED	11kV	SADEIPADA	SADEIPADA	1	P1
472	Bhadrak	BSED	11kV	NADIGAN	NADIGAN	1	P1
473	Bhadrak	BSED	11kV	ARNAPALA	ARNAPALA	1	P1
474	Bhadrak	BSED	11kV	DHUSURI	DHUSURI	1	P1
475	Bhadrak	BSED	11kV	JHARADIA	JHARADIA	1	P1
476	Bhadrak	BSED	11kV	BAHUDARADA	BAHUDARADA	1	P1
477	Bhadrak	BSED	11kV	CHINGUDIPUR	CHINGUDIPUR	2	P1
478	Bhadrak	BSED	11kV	ANDHERIPALAI	ANDHERIPALAI	1	P1
479	Bhadrak	BSED	11kV	BARAPADA	BARAPADA	2	P1
480	Bhadrak	BSED	11kV	KAUPUR	KAUPUR	1	P1
481	Bhadrak	BSED	11kV	ARADI	ARADI	2	P1
482	Bhadrak	BSED	11kV	SAHASPUR(PIASAH)	SAHASPUR(PIASAH)	1	P1
483	Bhadrak	BSED	11kV	MUNDALI	MUNDALI	1	P1
484	Bhadrak	BSED	11kV	CHARIGAN	CHARIGAN	1	P1
485	Bhadrak	BSED	11kV	APTIRA	APTIRA	1	P1
486	Bhadrak	BSED	11kV	AGARPADA	AGARPADA	2	P1
487	Bhadrak	BSED	11kV	KADABARANGA	KADABARANGA	1	P1
488	Bhadrak	BSED	11kV	ANIJO	ANIJO	1	P1
489	Bhadrak	BSED	11kV	ODANGA	ODANGA	1	P1
490	Bhadrak	BSED	11kV	SENDITIRA	SENDITIRA	1	P1
491	Bhadrak	BSED	11kV	TILO	TILO	1	P1
492	Bhadrak	BSED	11kV	RANAJIT	RANAJIT	2	P1
493	Bhadrak	BSED	11kV	AKHUAPADA(Dahala)	AKHUAPADA(Dahala)	1	P1
494	Bhadrak	BSED	11kV	BANDAL	BANDAL	1	P1
495	Bhadrak	BSED	11kV	RWSS	RWSS	2	P1
496	Bhadrak	BSED	11kV	DHAMNAGAR	DHAMNAGAR	1	P1
497	Bhadrak	BSED	11kV	TALAPADA	TALAPADA	1	P1
498	Bhadrak	BSED	11kV	DOBAL	DOBAL	3	P1
499	Bhadrak	BSED	11kV	BHAGABANPUR	BHAGABANPUR	1	P1
500	Bhadrak	BSED	11kV	INDUSTRIAL	INDUSTRIAL	1	P1
501	Bhadrak	BSED	11kV	GUHALIA	GUHALIA	1	P1
502	Bhadrak	BSED	11kV	KENDUAPADA	KENDUAPADA	1	P1
503	Bhadrak	BSED	11kV	BHANDARIPOKHARI	BHANDARIPOKHARI	2	P1
504	Bhadrak	BSED	11kV	SARSADA	SARSADA	1	P1
505	Bhadrak	BSED	11kV	NIRGUNDI	NIRGUNDI	1	P1
506	Bhadrak	BSED	11kV	MALDA	MALDA	1	P1
507	Bhadrak	BSED	11kV	KHARISINHA	KHARISINHA	2	P1
508	Bhadrak	BSED	11kV	RAHANIA	RAHANIA	1	P1
509	Bhadrak	BSED	11kV	NAAMI	NAAMI	1	P1

Annexure-U Installation of Line AB Switch/Isolator for 33kV & 11kV							
SL No.	Circle	Division	Voltage Level	Name of 11 KV Feeder	Location	Proposed Qty	Priority
1	Baleshwar	BED	11kV	BALARAMGADI	OTDC CHHAKA	1	P1
2	Baleshwar	BED	11kV	Balasore II	Azimabad Mangala Mandir	2	P1
3	Baleshwar	BED	11kV	ALUPUR	NEAR TAMULIA VILLAGE	1	P1
4	Baleshwar	BED	11kV	CITY SUNHAT	NEAR SS DAS HOUSE	1	P1
5	Baleshwar	BtED	11kV	chhada	Chhada	1	P1
6	Baleshwar	BtED	11kV	Langaleswar new	Bahadalpur	1	P1
7	Baleshwar	BtED	11kV	Oladhia	Durga Mandap	1	P1
8	Baleshwar	CED	11kV	BERHAMPUR	UPERDIHA	1	P1
9	Baleshwar	CED	11kV	GUHIRA	GUHIRA	1	P1
10	Baleshwar	CED	11kV	GUHIRA	TARTARI	2	P1
11	Baleshwar	CED	11kV	SAJNAGARH	MALDIHA	1	P1
12	Baleshwar	CED	11kV	RANASAH	NIMPADA	2	P1
13	Baleshwar	CED	11kV	RANASAH	JAYNAGAR	1	P1
14	Baleshwar	CED	11kV	FULADI	BELBARIA	1	P1
15	Baleshwar	CED	11kV	FULADI	NAYAK SAHI	1	P1
16	Baleshwar	CED	11kV	TELIPAL	KADAMGADI	1	P1
17	Baleshwar	SED	11kV	Gopinathpur Town	Mohanpur	1	P1
18	Baleshwar	SED	11kV	Phataarjuna	Jampada	1	P1
19	Baleshwar	SED	11kV	Nandor	Nandor	1	P1
20	Baleshwar	SED	11kV	PAKHARA	PAKHARA	1	P1
21	Baleshwar	SED	11kV	SARDANGA MARKET	SARDANGA MARKET	1	P1
22	Baleshwar	SED	11kV	ANANTAPUR	GHATA CHAKA	1	P1
23	Baripada	RED	11kV	TATO	SANGAON	1	P1
24	Baripada	RED	11kV	DALIMA	BHAGABANDI	1	P1
25	Baripada	RED	11kV	SINGDA	BANGIRIPOS	1	P1
26	Baripada	UED	11kV	Old Sarat	Mahuaklapankha	1	P1
27	Baripada	UED	11kV	Old Sarat	Chatraamba Raipal side	1	P1
28	Baripada	UED	11kV	Old Sarat	Kuhanpur	1	P1
29	Baripada	UED	11kV	Kalamgad	Bagdafa	1	P1
30	Baripada	UED	11kV	Katuria	Bishnugaon	1	P1
31	BARIPADA	UED	11kV	Podadiha	PATPUR	1	P1
32	Baripada	UED	11kV	Pedagadi	Nandin nagar	1	P1
33	Baripada	RED	11kV	TOWN	ANUKRA	1	P1
34	BARIPADA	UED	11kV	Podadiha	BAIDAKHOLI	1	P1
35	Bhadrak	BNED	11kV	Bagurai	RK Nayak	1	P1
36	Bhadrak	BNED	11kV	Charigharia	Purusattampur	1	P1
37	Bhadrak	BNED	11kV	Amargadia	Sunakhala	1	P1
38	Bhadrak	BNED	11kV	Charampa	Near Happyhome School	1	P1
39	Bhadrak	BSED	11kV	Dhusuri	Rebo Bridge	1	P1
40	Bhadrak	BSED	11kV	Nadigaon	Dinajpur Matha	1	P1
41	JAJPUR	JRED	11kV	AMPOLABA	RAGHUNATHPUR	1	P1
42	JAJPUR	JRED	11kV	KABATA	OLIA	1	P1
43	JAJPUR	JRED	11kV	SATHIPUR	STATION SAHI	1	P1
44	Jajpur	JTED	11kV	NANDIPUR	TARANGA	1	P1
45	Jajpur	JTED	11kV	NARIGAON	NARIGON	1	P1
46	Jajpur	JTED	11kV	BAISAPAN	ARDALUA	1	P1
47	Jajpur	KUED	11kV	Raipur	Haldharpur	1	P1
48	Jajpur	KUED	11kV	BALIA	PATANA SCHOOL	1	P1
49	JAJPUR	JRED	11kV	ALIA	PATULI CHAKA	1	P1
50	Jajpur	JTED	11kV	KANTIPUR	KALYANPUR KANDISAH(4-POLE)	1	P1
51	Jajpur	JTED	11kV	NO-I	PANASA CUT-POINT	1	P1
52	Jajpur	KUED	11kV	RAMACHANDRAPUR	KHAJURIBATI BRANCH	1	P1
53	Jajpur	KUED	11kV	DIPANCHAL	NAGUAN	1	P1
54	Keonjhar	AED	11kV	KANTIPAL	PANDUA	1	P1
55	Keonjhar	JOED	11kV	SOYABALI	RAIKA ROAD SOYABALI	1	P1
56	Keonjhar	JOED	11kV	KSHIPUR	PANPOS TO JADAKENDU	1	P1
57	Keonjhar	JOED	11kV	CHAUTHIA	ASANPAT DHIPASAH	1	P1
58	Keonjhar	JOED	11kV	ADHANGAPAL	KANPUR	1	P1
59	Keonjhar	KED	11kV	COLLECTORE OFFICE	DHOBADIA POLICE SCHOOL	1	P1
60	Keonjhar	KED	11kV	RE	MAIN LINE NEAR UG CABLE CRUSH	1	P1
61	Keonjhar	KED	11kV	BEGUNAPOS	ARJUNPOS	1	P1
62	Keonjhar	AED	11kV	GEDMA	GEDMA VILLAGE	1	P1
63	Keonjhar	AED	11kV	KESHADURAPAL	BRAMHANIDEVI	1	P1
64	Keonjhar	AED	11kV	GHASIPURA	NEAR VETENARY OFFICE	1	P1
65	Baleshwar	BtED	33kV	Sahada	Uchhadiha	1	P1
66	Baleshwar	BtED	33kV	Sahada	Machhia	1	P1
67	Baleshwar	BtED	33kV	Bhogari Kaliapal line	Jamkunda bandaha	1	P1
68	Baleshwar	BtED	33kV	Bhogari Kaliapal line	Kalipada Kathopolo	1	P1
69	Baleshwar	BtED	33kV	Kusudiha	Kudia 33kv Near Rice mill	1	P1
70	Jajpur	JRED	33kV	KORAI	TALAGADA	1	P1

Annexure-U Installation of Line AB Switch/Isolator for 33kV & 11kV							
SL No.	Circle	Division	Voltage Level	Name of 11 KV Feeder	Location	Proposed Qty	Priority
71	Baleshwar	SED	33kV	33 KV BAHANAGA FEEDER	NEAR BIDU	1	P1
72	Baleshwar	SED	33kV	33 KV BAHANAGA FEEDER	ICE FACTORY CHHAKA	1	P1
73	Baleshwar	SED	33kV	33KV GOPINATHPUR	MARKONA PSS FRONT	1	P1
74	Baleshwar	SED	33kV	33 KV JAMUJHADI OUTGOING	KUPURA BAZAR	1	P1
75	Baleshwar	BED	33kV	Swadhin Padia	Near Modern ITI	1	P1
76	Baleshwar	BED	33kV	Balasore No II	Near Corporate office	1	P1
77	Baleshwar	BED	33kV	Balasore No I	Near Rameswarmandir DP	1	P1
78	Baleshwar	BED	33kV	Balasore No I	Inside Scrap store DP	1	P1
79	BARIPADA	RED	33kV	Jashipur	KURULIA	1	P1
80	BARIPADA	RED	33kV	BISOI	BHOLBEDA	1	P1
81	BARIPADA	RED	33kV	BAHALDA	Baising	1	P1
82	BARIPADA	RED	33kV	KUSUMI FEEDER	RAIRANGPUR GSS	1	P1
83	BARIPADA	RED	33kV	THAKURMUNDA	RUGUDIBEDA	1	P1
84	BARIPADA	RED	33kV	Jashipur	Tangabilla HATOPADIA	1	P1
85	BARIPADA	RED	33kV	GHAGARBEDA	NUABEDA	1	P1
86	BARIPADA	RED	33kV	ANGARPADA	SUKRULI	1	P1
87	BARIPADA	RED	33kV	BAHALDA	DANDBOSE	1	P1
88	Baripada	BPED	33kV	Bangriposi New	Kasiabeda	1	P1
89	Baripada	BPED	33kV	Betnoti-I Old	Manchabandha	1	P1
90	Baripada	BPED	33kV	Samakhunta	Bagdiha, Devendrapur	1	P1
91	Bhadrak	Bned	33kV	Nandpur	Ishapur	1	P1
92	Bhadrak	Bned	33kV	Bedeipur	Binayakpur	1	P1
93	Bhadrak	Bned	33kV	Jashipur	Degachiya	1	P1
94	Jajpur	JRED	33kV	SUKINDA	MANOHARPUR	1	P1
95	Jajpur	JRED	33kV	DAMODARPUR OUTGOING	ICHHAPUR	1	P1
96	Jajpur	JRED	33kV	NALUA	TARAKOT	1	P1
97	Jajpur	JTED	33kV	33KV MANGALPUR	MANSAPOLA ONLY ISOLATOR	1	P1
98	Jajpur	JTED	33kV	33KV BINJHARPUR	DHAMDHADA(2 SETS ONLY ISOLATOR) , 1 SET WITH KAPASI	1	P1
99	Jajpur	KUED	33kV	KUAKHIA	KOLATHALA	1	P1
100	Jajpur	KUED	33kV	KABATABANDHA	BAGHUA NASHI	1	P1
101	Jajpur	KUED	33kV	BARI	CHANDANPUR	1	P1
102	Keonjhar	KED	33kV	Industrial Feeder	33kV KJR No II Feeder(Industrial FDR)	1	P1
103	Keonjhar	KED	33kV	Jyotipur	Jyotipur	1	P1
104	Keonjhar	KED	33kV	Patna	PatnaNear Mudrabeda Village	1	P1
105	Keonjhar	KED	33kV	Patna	Inside Mushakhori PSS for Narayanrice mill	1	P1
106	Keonjhar	AED	33kV	RAMCHANDRAPUR	SIAPADA CHHACK NEAR BELABAHALI	1	P1
107	Keonjhar	AED	33kV	Bhagamunda Feeder	near taladi,near rangamatia2	1	P1
108	Keonjhar	AED	33kV	Janghira Feeder	Near ramachandrapur,Near nudurpada	1	P1
109	Keonjhar	JOED	33kV	Barbil-1/Rugudi	JODA DAV SCHOOL FRONT	1	P1
110	Keonjhar	JOED	33kV	Joda	OPTCL Grid inside	1	P1
111	Keonjhar	JOED	33kV	Bileipada	OPTCL Gridinside	1	P1
112	Keonjhar	JOED	33kV	Bileipada	MMTC Colony	1	P1

Annexure-V Augmentation of PTRs

Sr No	Circle	Division	PSS Name	Location	Existing Capacity in MVA	Augmented Capacity in MVA	Priority
1	Balasore	BED	Kalimandir	Kalimandir	8	12.5	P1
2	Balasore	BED	Swadhinpadia	Swadhinpadia	8	12.5	P1
3	Balasore	JED	Jaleswar	Jaleswar	5	12.5	P1
4	Balasore	SED	Soro Collage	Soro Collage	8	12.5	P1
5	Jajpur	JRED	Chorda	Chorda	5	12.5	P1
6	Jajpur	JTED	Jajpur Town	Balashrampadia	8	12.5	P1
7	Balasore	BED	Sovarampur	Sovarampur	3.15	8	P1
8	Jajpur	JRED	Vyassarovar	Vyassarovar	5	8	P1

Annexure-W Augmentation of DTRs																			
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100		
1	BALASORE	CED	GOUTAM KHHATUA	TPNODL37101447	250	80	447.36	179%	553.90	222%	480.38	33	29.71	0.013	0.27	33.02	4.82	P1	500
2	BHADRAK	BNED	250KVA RURAL THANA	TPNODL29001047	250	160	446.08	178%	539.93	216%	479.00	33	29.63	0.013	0.27	32.92	4.81	P1	500
3	BHADRAK	BNED	250KVA BHUYAN MAHAL 1	TPNODL29001437	250	160	402.24	161%	486.87	195%	431.93	30	26.72	0.012	0.27	29.69	4.33	P1	500
4	JAIPUR	JRED	MANDIRA CHAKA-100	TPNODL39002815	100	40	163	163%	185.98	186%	170.54	7	6.51	0.003	0.27	7.23	1.06	P1	500
5	BHADRAK	BNED	250KVA DI OFFICE	TPNODL29001876	250	160	319.68	128%	386.94	155%	343.27	24	21.23	0.009	0.27	23.59	3.44	P1	500
6	JAIPUR	JTED	BIMKARPUR-2-100-KVA	TPNODL29000550	250	80	308.80	124%	361.62	145%	331.59	23	20.51	0.009	0.27	22.79	3.33	P1	500
7	BARIPADA	BPED	SUBHADRA PUMP	TPNODL39009991	250	80	272.5	109%	329.20	132%	290.24	18	15.94	0.007	0.27	17.71	2.59	P1	500
8	JAIPUR	KUED	KANTA BANIA 250	TPNODL29001241	250	80	279.84	112%	327.71	131%	300.49	21	18.59	0.008	0.27	20.65	3.02	P1	500
9	KEONJHAR	KED	MEDICAL BACK SIDE OXYGEN	TPNODL39002638	250	160	275	110%	326.30	131%	290.90	16	14.61	0.006	0.27	16.23	2.37	P1	500
10	BALASORE	JED	GAJIPUR BUS STAND	TPNODL39000624	100	40	103.1	103%	127.65	128%	110.71	8	6.85	0.003	0.27	7.61	1.11	P1	500
11	JAIPUR	KUED	JAMUBANIA-250 KVA	TPNODL39007167	250	80	276	110%	314.37	126%	288.26	12	11.01	0.005	0.27	12.23	1.79	P1	500
12	BARIPADA	BPED	WALI GANI SHANTI MANDIR	TPNODL29000152	250	80	258.08	103%	314.32	126%	277.13	19	17.14	0.008	0.27	19.05	2.78	P1	500
13	BARIPADA	BPED	BRAHMAN SASAN 100KVA	TPNODL39000358	100	40	101.9	102%	123.12	123%	108.55	7	5.96	0.003	0.27	6.63	0.97	P1	500
14	JAIPUR	KUED	BHADANGA	TPNODL39008983	200	80	212	106%	241.72	121%	221.65	9	8.46	0.004	0.27	9.40	1.37	P1	500
15	JAIPUR	JTED	JANABAGICHA-250 KVA	TPNODL39006846	250	80	252	101%	287.35	115%	263.49	11	10.06	0.004	0.27	11.18	1.63	P1	500
16	JAIPUR	JTED	TARAMADAN JAIJUR TOWN	TPNODL39003301	200	80	196	98%	223.31	112%	204.77	9	7.82	0.003	0.27	8.69	1.27	P1	500
17	BALASORE	BED	SIBA NAYAK	TPNODL39007919	250	80	225.23	90%	278.87	112%	241.85	17	14.96	0.007	0.27	16.62	2.43	P1	500
18	JAIPUR	JRED	HENGULA 250KVA	TPNODL39003790	250	80	244	97%	277.59	111%	254.54	11	9.72	0.004	0.27	10.80	1.58	P1	500
19	BHADRAK	BNED	250KVA GARADPUR	TPNODL29001440	250	160	229.12	92%	277.33	111%	246.03	17	15.22	0.007	0.27	16.91	2.47	P1	500
20	BALASORE	BED	L & T FIELD	TPNODL39000956	315	160	274	87%	339.80	108%	294.70	20	18.23	0.008	0.27	20.25	2.96	P1	500
21	BARIPADA	BPED	HATA CHHAKA BETNOTI-1	TPNODL29000134	250	80	219.68	88%	267.56	107%	235.89	16	14.59	0.006	0.27	16.21	2.37	P1	500
22	JAIPUR	JTED	BAIDYRAJPUR-250 KVA	TPNODL39008324	250	160	232	93%	264.61	106%	242.64	10	9.26	0.004	0.27	10.29	1.50	P1	500
23	KEONJHAR	KED	MEDICAL BACK SIDE	TPNODL39003912	250	160	218	87%	258.78	104%	230.71	13	11.59	0.005	0.27	12.87	1.88	P1	500
24	KEONJHAR	KED	MAGURGADIA	TPNODL29001923	250	160	213.44	85%	257.08	103%	229.19	16	14.18	0.006	0.27	15.75	2.30	P1	500
25	JAIPUR	JRED	NEAR ELEGANCE DECORS-2	TPNODL29000865	250	80	216.64	87%	253.70	101%	232.63	16	14.39	0.006	0.27	15.99	2.33	P1	500
26	BHADRAK	BNED	250KVA LOKANATH TEMPLE	TPNODL29001879	250	160	208.96	84%	252.92	101%	224.38	15	13.88	0.006	0.27	15.42	2.25	P1	500
27	BARIPADA	BPED	MEDICAL DT	TPNODL39007503	250	80	209.1	84%	252.60	101%	222.71	14	12.23	0.005	0.27	13.59	1.98	P1	500
28	BARIPADA	BPED	BANGIRIPOSI NEW BY HATCHALI	TPNODL39009899	250	80	208.3	83%	251.63	101%	221.85	14	12.19	0.005	0.27	13.54	1.98	P1	500
29	KEONJHAR	JOED	GURUDWARA	TPNODL39004193	250	80	210	84%	249.15	100%	222.12	12	11.16	0.005	0.27	12.39	1.81	P1	500
30	BALASORE	BED	TULSI PADA	TPNODL59000115	200	80	160	80%	197.71	99%	171.46	12	10.61	0.005	0.27	11.78	1.72	P1	500
31	BALASORE	BED	NEAR FANDI	TPNODL29000109	25	20	41.80	167%	51.75	207%	44.88	3	2.78	0.001	0.072	3.08	1.69	P1	100
32	BALASORE	CED	DAHAPADA JATRA PADIA	TPNODL37101868	25	40	40.00	160%	49.52	198%	42.95	3	2.66	0.001	0.072	2.95	1.62	P1	100
33	JAIPUR	KUED	ALIABAD 25 KVA	TPNODL29001462	25	40	41.52	166%	48.62	194%	44.58	3	2.76	0.001	0.072	3.06	1.68	P1	100
34	BALASORE	BTED	BIDYADHARPUR	TPNODL59001020	63	40	98.88	157%	122.43	194%	106.18	7	6.57	0.003	0.072	7.30	4.00	P1	100
35	BARIPADA	BPED	BALKA UDAPADA	TPNODL39001555	25	40	39.84	159%	48.53	194%	42.78	3	2.65	0.001	0.072	2.94	1.61	P1	100
36	BHADRAK	BNED	63 DOLASAH BAZAR	TPNODL59000832	63	40	97.60	155%	118.13	188%	104.80	7	6.48	0.003	0.072	7.20	3.94	P1	100
37	JAIPUR	JRED	GANESH PETROL PUMP	TPNODL29000674	63	40	97.52	155%	114.20	181%	104.72	7	6.48	0.003	0.072	7.20	3.94	P1	100
38	BALASORE	CED	GHUDAPADA	TPNODL37102569	25	40	36.55	146%	45.25	181%	39.25	3	2.43	0.001	0.072	2.70	1.48	P1	100
39	BALASORE	CED	SAIPUR PRIMARY SCHOOL	TPNODL37102222	25	40	36.46	146%	45.14	181%	39.15	3	2.42	0.001	0.072	2.69	1.47	P1	100
40	JAIPUR	KUED	MAHESWARPUR 25 KVA	TPNODL39010747	25	40	37.70	151%	44.15	177%	40.48	3	2.50	0.001	0.072	2.78	1.52	P1	100
41	BHADRAK	BNED	63KVA PURUNA BAZAR HELA SAHI	TPNODL37102431	63	40	91.83	146%	111.15	176%	98.61	7	6.10	0.003	0.072	6.78	3.71	P1	100
42	BHADRAK	BNED	63KVA DHANTOLA MASJID 2	TPNODL29000137	63	40	91.36	145%	110.58	176%	98.10	7	6.07	0.003	0.072	6.74	3.69	P1	100
43	BARIPADA	UED	SIKULA	TPNODL59001026	63	40	89.8	142%	108.43	172%	95.59	6	5.25	0.002	0.072	5.83	3.19	P1	100
44	BALASORE	BED	KABALI PADIA	TPNODL29001199	25	40	34.48	138%	42.69	171%	37.02	3	2.29	0.001	0.072	2.54	1.39	P1	100
45	BHADRAK	BNED	25KVA SUKADEV GADHIA	TPNODL39010101	25	40	35.07	140%	42.45	170%	37.66	3	2.33	0.001	0.072	2.59	1.42	P1	100
46	JAIPUR	JRED	KHARADI VILLAGE 63 KVA	TPNODL59001912	63	40	90.56	144%	106.05	168%	97.24	7	6.01	0.003	0.072	6.68	3.66	P1	100
47	BARIPADA	UED	NEAR PODADIHA AK PAL	TPNODL39010635	25	40	33.28	133%	40.53	162%	35.73	2	2.21	0.001	0.072	2.46	1.34	P1	100
48	JAIPUR	JRED	JARADA	TPNODL39007473	63	40	86.70	138%	101.53	161%	93.09	6	5.76	0.003	0.072	6.40	3.50	P1	100
49	KEONJHAR	JOED	JALAHARI PARKING AREA	TPNODL39010038	25	40	33.37	133%	40.19	161%	35.83	2	2.22	0.001	0.072	2.46	1.35	P1	100
50	BALASORE	SED	BALIGANI CHHAK	TPNODL29000095	63	40	81.36	129%	100.74	160%	87.36	6	5.40	0.002	0.072	6.00	3.29	P1	100
51	BALASORE	CED	HARIDA DTR	TPNODL39009715	63	40	81	129%	100.31	159%	87.00	6	5.38	0.002	0.072	5.98	3.27	P1	100
52	BHADRAK	BNED	63KVA DHANATOLA BPL	TPNODL37101855	63	40	81.29	129%	98.39	156%	87.29	6	5.40	0.002	0.072	6.00	3.28	P1	100
53	KEONJHAR	JOED	NEAR SAGAR MINING (DB SINGH CHHAKA) P-13	TPNODL39011602	25	40	31.97	128%	38.50	154%	34.33	2	2.12	0.001	0.072	2.36	1.29	P1	100
54	JAIPUR	JRED	KRUSHNA NAGAR TALASAH-25KVA	TPNODL29000936	25	40	32.64	131%	38.22	153%	35.05	2	2.17	0.001	0.072	2.41	1.32	P1	100
55	BALASORE	BED	NAER NIKHIL GHADEI HOUSE IPDS	TPNODL37102540	25	40	31	125%	37.75	151%	34.23	23	20.72	0.009	0.072	23.03	12.61	P1	100
56	BHADRAK	BNED	63KVA BIKALAPATI NEW ROAD SIDE	TPNODL37102085	63	40	78.49	125%	95.00	151%	84.28	6	5.21	0.002	0.072	5.79	3.17	P1	100
57	JAIPUR	KUED	MAHESWARPUR JARAKA 25 KVA	TPNODL29001363	25	40	31.92	127%	37.38	150%	34.28	2	2.12	0.001	0.072	2.36	1.29	P1	100
58	JAIPUR	KUED	DEULIPAL 25 KVA	TPNODL29001364	25	40	31.76	127%	37.19	149%	34.10	2	2.11	0.001	0.072	2.34	1.28	P1	100
59	JAIPUR	KUED	ISTAMAPADIA GULCHAD 25 KVA	TPNODL29001643	25	40	31.68	127%	37.10	148%	34.02	2	2.10	0.001	0.072	2.34	1.28	P1	100
60	BALASORE	BTED	BIDYADHARPUR JAVED	TPNODL29002000	63	40	75.36	120%	93.31	148%	80.92	6	5.01	0.002	0.072	5.56	3.04	P1	100
61	BHADRAK	BNED	63KVA MAA BANADURGA	TPNODL39011258	63	40	76.38	121%	92.45	147%	82.02	6	5.07	0.002	0.072	5.64	3.09	P1	100
62	JAIPUR	KUED	CHANDAPUR BEHRA SHAI 25 KVA	TPNODL29001284	25	40	31.28	125%	36.63	147%	33.59	2	2.08	0.001	0.072	2.31	1.26	P1	100
63	BARIPADA	UED	UDALA BLOCK CHAKA	TPNODL59002058	63	40	74.40	118%	90.61	144%	79.89	5	4.94	0.002	0.072	5.49	3.01	P1	100

Annexure-W Augmentation of DTRs																				
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)	
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100			
64	BARIPADA	BPED	KADALIA SHIVA MANDIR	TPNODL29001902	63	40	73.68	117%	89.74	142%	79.12	5	4.89	0.002	0.072	5.44	2.98	P1	100	
65	JAIPUR	KUED	CHANDAPUR REVER SIDE 25 KVA	TPNODL29001281	25	40	30.24	121%	35.41	142%	32.47	2	2.01	0.001	0.072	2.23	1.22	P1	100	
66	JAIPUR	JRED	SINGADIA CHAKA NEAR GATE -63KVA	TPNODL29000940	63	40	76.16	121%	89.19	142%	81.78	6	5.06	0.002	0.072	5.62	3.08	P1	100	
67	JAIPUR	KUED	SIDHIPUR 63 KVA	TPNODL39011511	63	40	76.12	121%	89.13	141%	81.73	6	5.06	0.002	0.072	5.62	3.08	P1	100	
68	BARIPADA	RED	TOWN CAMP BADAM ROAD-1	TPNODL59002145	63	40	72.96	116%	88.86	141%	78.34	5	4.85	0.002	0.072	5.38	2.95	P1	100	
69	JAIPUR	KUED	JALSUKHA 25 KVA	TPNODL29001361	25	40	30.00	120%	35.13	141%	32.21	2	1.99	0.001	0.072	2.21	1.21	P1	100	
70	BARIPADA	BPED	ANALAGUNJA VILLEG-2	TPNODL39010919	63	40	72.02	114%	87.71	139%	77.33	5	4.78	0.002	0.072	5.31	2.91	P1	100	
71	BALASORE	SED	UADA SASAN	TPNODL59000273	63	40	71	112%	87.56	139%	75.94	5	4.70	0.002	0.072	5.22	2.86	P1	100	
72	BARIPADA	BPED	NALAGNJA MEDICAL	TPNODL59002118	63	40	70.88	113%	86.33	137%	76.11	5	4.71	0.002	0.072	5.23	2.86	P1	100	
73	BARIPADA	BPED	SATHILO PANCHAYAT OFFICE	TPNODL59002217	63	40	70.40	112%	85.74	136%	75.60	5	4.68	0.002	0.072	5.20	2.84	P1	100	
74	BALASORE	CED	DAIBADI	TPNODL29000252	63	40	69.20	110%	85.68	136%	74.31	5	4.60	0.002	0.072	5.11	2.80	P1	100	
75	BALASORE	SED	MUSLIM SAHI	TPNODL39011343	63	40	68.45	109%	84.75	135%	73.50	5	4.55	0.002	0.072	5.05	2.77	P1	100	
76	BHADRAK	BNED	63KVA KALA GHERI	TPNODL29001304	63	40	69.04	110%	83.57	133%	74.14	5	4.59	0.002	0.072	5.10	2.79	P1	100	
77	BARIPADA	BPED	NADAPUR VILLAGE(1)	TPNODL39011117	63	40	68.58	109%	83.53	133%	73.64	5	4.56	0.002	0.072	5.06	2.77	P1	100	
78	BALASORE	CED	TARAPUR (ROAD SIDE PLINTH DT)	TPNODL29001828	63	40	66.80	106%	82.71	131%	71.73	5	4.44	0.002	0.072	4.93	2.70	P1	100	
79	BHADRAK	BNED	100KVA BODAK MALLICK SAHI	TPNODL59000921	63	40	69	109%	82.34	131%	73.04	4	3.82	0.002	0.072	4.24	2.32	P1	100	
80	BALASORE	CED	AMBUDIA NILGIRI ROAD SIDE	TPNODL29000461	63	40	65.60	104%	81.22	129%	70.44	5	4.36	0.002	0.072	4.84	2.65	P1	100	
81	JAIPUR	KUED	NATHUABARA HATA 63 KVA	TPNODL59001756	63	40	71	113%	80.91	128%	74.19	3	2.83	0.001	0.072	3.15	1.72	P1	100	
82	BARIPADA	UED	SALAMUNDALI CHAITANYAGADI NEW	TPNODL29001006	63	40	66.16	105%	80.58	128%	71.04	5	4.39	0.002	0.072	4.88	2.67	P1	100	
83	BALASORE	CED	8 MILE	TPNODL39010401	63	40	65.05	103%	80.54	128%	69.85	5	4.32	0.002	0.072	4.80	2.63	P1	100	
84	BALASORE	BED	HEMKAPADA CHAKK	TPNODL29000325	63	40	65	103%	80.03	127%	69.41	5	4.29	0.002	0.072	4.77	2.61	P1	100	
85	BALASORE	BED	HEMKAPADA CHAKK	TPNODL29000325	63	40	64.64	103%	80.03	127%	69.41	5	4.29	0.002	0.072	4.77	2.61	P1	100	
86	BALASORE	SED	KHERAPADA	TPNODL39011440	63	40	64.28	102%	79.58	126%	69.02	5	4.27	0.002	0.072	4.74	2.60	P1	100	
87	BARIPADA	RED	LIPi GUTU	TPNODL39011311	63	40	65.34	104%	79.58	126%	70.16	5	4.34	0.002	0.072	4.82	2.64	P1	100	
88	BALASORE	BTED	SANKHUDI	TPNODL39010990	63	40	64.25	102%	79.55	126%	68.99	5	4.27	0.002	0.072	4.74	2.60	P1	100	
89	BARIPADA	BPED	NADPUR VILLAGE -4	TPNODL29001269	63	40	65.04	103%	79.21	126%	69.84	5	4.32	0.002	0.072	4.80	2.63	P1	100	
90	BALASORE	CED	RUDRAGOPALPUR	TPNODL59000163	63	40	63.84	101%	79.04	125%	68.55	5	4.24	0.002	0.072	4.71	2.58	P1	100	
91	BALASORE	CED	JAYNAGAR	TPNODL59000126	63	40	64	101%	78.84	125%	68.38	5	4.23	0.002	0.072	4.70	2.57	P1	100	
92	BALASORE	BED	JAYNAGAR	TPNODL59000126	63	40	63.7	101%	78.84	125%	68.38	5	4.23	0.002	0.072	4.70	2.57	P1	100	
93	BALASORE	BTED	MANCHUDIA	TPNODL39010994	63	40	63.42	101%	78.53	125%	68.10	5	4.21	0.002	0.072	4.68	2.56	P1	100	
94	BALASORE	BTED	PARULIA VILLAGE 8	TPNODL59000596	63	40	63	101%	78.45	125%	68.04	5	4.21	0.002	0.072	4.68	2.56	P1	100	
95	BALASORE	CED	RASALPUR CHAKA	TPNODL39008033	63	40	63	100%	77.74	123%	67.42	5	4.17	0.002	0.072	4.63	2.54	P1	100	
96	JAIPUR	JRED	PAIKARAPUR-63KVA	TPNODL59002275	63	40	65.76	104%	77.01	122%	70.61	5	4.37	0.002	0.072	4.85	2.66	P1	100	
97	JAIPUR	KUED	GOPALPUR 63 KVA	TPNODL39010610	63	40	65.52	104%	76.73	122%	70.35	5	4.35	0.002	0.072	4.84	2.65	P1	100	
98	BARIPADA	RED	DAMADIH SCHOOL	TPNODL59000032	63	40	63	100%	75.96	121%	66.97	4	3.68	0.002	0.072	4.09	2.24	P1	100	
99	BALASORE	CED	UDAYAPADA	TPNODL39010107	63	40	61.13	97%	75.69	120%	65.64	5	4.06	0.002	0.072	4.51	2.47	P1	100	
100	BALASORE	SED	BEDPUR	TPNODL39010375	63	40	61.07	97%	75.61	120%	65.57	5	4.06	0.002	0.072	4.51	2.47	P1	100	
101	BALASORE	SED	NAYAPALI(CANEL)_2	TPNODL39011393	63	40	60.83	97%	75.32	120%	65.32	4	4.04	0.002	0.072	4.49	2.46	P1	100	
102	BHADRAK	BSED	DAGARPADA	TPNODL39009721	63	40	63	100%	75.10	119%	66.62	4	3.48	0.002	0.072	3.87	2.12	P1	100	
103	JAIPUR	KUED	PANCHAGOCCHHIA MAHARANA SAHI	TPNODL39009170	63	40	66	105%	74.99	119%	68.77	3	2.63	0.001	0.072	2.92	1.60	P1	100	
104	BALASORE	BTED	ATHALIA	TPNODL59000961	63	40	60	96%	74.68	119%	64.77	4	4.01	0.002	0.072	4.45	2.44	P1	100	
105	JAIPUR	KUED	HAJIBAG MUSLIM SAHI	TPNODL39008625	63	40	66	104%	74.68	119%	68.48	3	2.61	0.001	0.072	2.90	1.59	P1	100	
106	BARIPADA	UED	DHANAPANA 63KVA	TPNODL29001007	63	40	61.28	97%	74.63	118%	65.80	5	4.07	0.002	0.072	4.52	2.48	P1	100	
107	BHADRAK	BSED	GELTUA	TPNODL39008639	63	40	62	99%	74.53	118%	66.12	4	3.46	0.002	0.072	3.84	2.10	P1	100	
108	BHADRAK	BNED	63KVA BANSADA MARKET	TPNODL29000872	63	40	61.36	97%	74.27	118%	65.89	5	4.08	0.002	0.072	4.53	2.48	P1	100	
109	BHADRAK	BNED	63KVA CHUDAMANI MARKET	TPNODL39011374	63	40	61.31	97%	74.21	118%	65.84	5	4.07	0.002	0.072	4.52	2.48	P1	100	
110	BARIPADA	BPED	DHARAMSALA BETNOTI	TPNODL29000228	63	40	60.56	96%	73.76	117%	65.03	4	4.02	0.002	0.072	4.47	2.45	P1	100	
111	BHADRAK	BNED	63KVA HABIB NAGAR	TPNODL59000354	63	40	61	98%	73.53	117%	65.23	4	3.41	0.001	0.072	3.79	2.08	P1	100	
112	BALASORE	SED	GUHARIA SAHI	TPNODL29001603	63	40	59.36	94%	73.50	117%	63.74	4	3.94	0.002	0.072	4.38	2.40	P1	100	
113	BHADRAK	BSED	KENDUAPADA	TPNODL39009694	63	40	61	97%	72.94	116%	64.71	4	3.38	0.001	0.072	3.76	2.06	P1	100	
114	BARIPADA	UED	BHOLAGADIA	TPNODL29001889	63	40	59.84	95%	72.88	116%	64.26	4	3.97	0.002	0.072	4.42	2.42	P1	100	
115	BHADRAK	BSED	PALASA	TPNODL39005150	63	40	61	97%	72.84	116%	64.62	4	3.38	0.001	0.072	3.76	2.06	P1	100	
116	BALASORE	CED	HOSPITAL NILGIRI (CHILDREN PARK)	TPNODL29001534	63	40	58.64	93%	72.60	115%	62.97	4	3.89	0.002	0.072					

Annexure-W Augmentation of DTRs																			
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100		
127	BHADRAK	BNED	63KVA POCHALA	TPNODL39011233	63	40	57.75	92%	69.90	111%	62.01	4	3.84	0.002	0.072	4.26	2.33	P1	100
128	BALASORE	JED	63 KVA KISMAT PASHCHIMBARD	TPNODL59001610	63	40	56.2	89%	69.53	110%	60.30	4	3.73	0.002	0.072	4.14	2.27	P1	100
129	BALASORE	BTED	MANDURUKULA	TPNODL29001821	63	40	56.00	89%	69.34	110%	60.13	4	3.72	0.002	0.072	4.13	2.26	P1	100
130	BALASORE	JED	GAJIPUR(NEAR P.N.B BANK)	TPNODL39000682	63	40	55.9	89%	69.19	110%	60.01	4	3.71	0.002	0.072	4.12	2.26	P1	100
131	BALASORE	BTED	KADRAYAN POST OFFICE	TPNODL39010517	63	40	55.48	88%	68.69	109%	59.57	4	3.68	0.002	0.072	4.09	2.24	P1	100
132	BHADRAK	BSED	ANJO MARKET	TPNODL39006295	63	40	57	91%	68.55	109%	60.81	4	3.18	0.001	0.072	3.53	1.93	P1	100
133	BARIPADA	UED	KUSHAGADAI-1	TPNODL59001188	25	40	22.4	90%	27.06	108%	23.86	1	1.31	0.001	0.072	1.46	0.80	P1	100
134	BALASORE	SED	MANITRI CHHAK	TPNODL59002404	63	40	55	87%	67.95	108%	58.93	4	3.65	0.002	0.072	4.05	2.22	P1	100
135	BHADRAK	BNED	63KVA KUAMARA 2	TPNODL39011333	63	40	56.07	89%	67.86	108%	60.20	4	3.72	0.002	0.072	4.14	2.27	P1	100
136	JAIPUR	KUED	BATJANGAHA 63 KVA	TPNODL39011009	63	40	57.69	92%	67.56	107%	61.95	4	3.83	0.002	0.072	4.26	2.33	P1	100
137	BALASORE	BTED	PUTURA SHIVA TEMPLE	TPNODL59002685	63	40	55	87%	67.55	107%	58.59	4	3.62	0.002	0.072	4.03	2.20	P1	100
138	BALASORE	CED	HARIDA	TPNODL39010557	63	40	54.47	86%	67.44	107%	58.49	4	3.62	0.002	0.072	4.02	2.20	P1	100
139	JAIPUR	JRED	NILAMANIDEIPUR PANIPANCHAYAT,63KVA	TPNODL59002014	63	40	57.44	91%	67.26	107%	61.68	4	3.82	0.002	0.072	4.24	2.32	P1	100
140	BALASORE	CED	BARDHANPUR 2	TPNODL59002169	63	40	54.24	86%	67.16	107%	58.24	4	3.60	0.002	0.072	4.00	2.19	P1	100
141	BALASORE	BTED	BHAGABANPUR	TPNODL29001915	63	40	54.00	86%	66.86	106%	57.99	4	3.59	0.002	0.072	3.99	2.18	P1	100
142	JAIPUR	KUED	ARAMBAG HARIJAN SAHI 63 KVA	TPNODL39010418	63	40	57.07	91%	66.83	106%	61.28	4	3.79	0.002	0.072	4.21	2.31	P1	100
143	BHADRAK	BSED	SAPTASAH	TPNODL39009695	63	40	55.00	87%	66.57	106%	59.06	4	3.65	0.002	0.072	4.06	2.22	P1	100
144	BALASORE	BED	CHHANUPUR PANI TANKI	TPNODL39010780	63	40	54	85%	66.30	105%	57.50	4	3.56	0.002	0.072	3.95	2.16	P1	100
145	JAIPUR	KUED	MAHAKHALA CHAKA 63 KVA	TPNODL39011046	63	40	56.53	90%	66.20	105%	60.70	4	3.75	0.002	0.072	4.17	2.28	P1	100
146	BARIPADA	BPED	JUBILEE KARATE SCHOOL	TPNODL59000720	63	40	54.6	87%	65.91	105%	58.11	4	3.19	0.001	0.072	3.55	1.94	P1	100
147	BARIPADA	RED	MEDICAL BISOI	TPNODL39010739	63	40	54.05	86%	65.83	104%	58.04	4	3.59	0.002	0.072	3.99	2.18	P1	100
148	BALASORE	JED	63 KVA NIDHUBANI	TPNODL59000502	63	40	53.1	84%	65.77	104%	57.04	4	3.53	0.002	0.072	3.92	2.15	P1	100
149	BALASORE	BTED	GUHALIPADA	TPNODL59002481	63	40	53.12	84%	65.77	104%	57.04	4	3.53	0.002	0.072	3.92	2.15	P1	100
150	BARIPADA	UED	Brun dabani	TPNODL59002553	63	40	53.92	86%	65.67	104%	57.90	4	3.58	0.002	0.072	3.98	2.18	P1	100
151	JAIPUR	JTED	ANKULA 9-63- KVA	TPNODL29000789	63	40	55.92	89%	65.48	104%	60.05	4	3.71	0.002	0.072	4.13	2.26	P1	100
152	BALASORE	CED	BALISAH	TPNODL37102570	63	40	52.86	84%	65.45	104%	56.76	4	3.51	0.002	0.072	3.90	2.14	P1	100
153	BALASORE	BTED	KAINAGIRI	TPNODL59002482	63	40	53	84%	65.37	104%	56.70	4	3.51	0.002	0.072	3.90	2.13	P1	100
154	BALASORE	CED	SANA DAHAPADA	TPNODL29001756	63	40	52.56	83%	65.08	103%	56.44	4	3.49	0.002	0.072	3.88	2.12	P1	100
155	BALASORE	JED	63 KVA AJANAGACCHA CHHACK	TPNODL59002420	63	40	52.32	83%	64.78	103%	56.18	4	3.48	0.002	0.072	3.86	2.11	P1	100
156	KEONJHAR	AED	NUA PATANA	TPNODL59001372	63	40	53.76	85%	64.75	103%	57.73	4	3.57	0.002	0.072	3.97	2.17	P1	100
157	BALASORE	SED	ULASKARAGPUR-1	TPNODL59000677	63	40	52.16	83%	64.58	103%	56.01	4	3.46	0.002	0.072	3.85	2.11	P1	100
158	BALASORE	JED	MALARUA CHAKO	TPNODL39000644	63	40	52.1	83%	64.52	102%	55.96	4	3.46	0.002	0.072	3.85	2.11	P1	100
159	BHADRAK	BNED	63KVA KRUSNAPUR NAYAK SAHI	TPNODL39010175	63	40	53.26	85%	64.46	102%	57.19	4	3.54	0.002	0.072	3.93	2.15	P1	100
160	BALASORE	SED	NADIGAON	TPNODL39010876	63	40	52.05	83%	64.44	102%	55.89	4	3.46	0.002	0.072	3.84	2.10	P1	100
161	BHADRAK	BNED	63KVA NATIAPALA	TPNODL39010933	63	40	53.10	84%	64.27	102%	57.01	4	3.53	0.002	0.072	3.92	2.15	P1	100
162	BALASORE	SED	ANJI MARKET	TPNODL59000929	63	40	52	82%	64.19	102%	55.67	4	3.44	0.002	0.072	3.83	2.09	P1	100
163	BALASORE	JED	KOYELABABU S/S	TPNODL39005969	63	40	51.83	82%	64.17	102%	55.65	4	3.44	0.002	0.072	3.82	2.09	P1	100
164	BARIPADA	BPED	RAILWAY STATION FRONT	TPNODL39007013	63	80	53.0	84%	64.04	102%	56.47	3	3.10	0.001	0.072	3.45	1.89	P1	100
165	BALASORE	SED	SARUGAON NAYAK SAHI	TPNODL59002664	63	40	51.68	82%	63.99	102%	55.49	4	3.43	0.002	0.072	3.81	2.09	P1	100
166	JAIPUR	JTED	GARADESWAR 63 KVA	TPNODL29000070	63	40	54.48	86%	63.80	101%	58.50	4	3.62	0.002	0.072	4.02	2.20	P1	100
167	BALASORE	BTED	DIGIRIPHI NEAR FISARY	TPNODL39011098	63	40	51.46	82%	63.72	101%	55.26	4	3.42	0.001	0.072	3.80	2.08	P1	100
168	BHADRAK	BNED	BOUDPUR NEAR WATER TANK	TPNODL39000861	63	40	53	84%	63.68	101%	56.49	3	2.95	0.001	0.072	3.28	1.80	P1	100
169	BALASORE	BED	63 KVA DTR AMBUA	TPNODL59002091	63	40	51	81%	63.39	101%	54.98	4	3.40	0.001	0.072	3.78	2.07	P1	100
170	BHADRAK	BSED	63KVA DEOPADA	TPNODL37101923	63	40	52.26	83%	63.26	100%	56.12	4	3.47	0.002	0.072	3.86	2.11	P1	100
171	BALASORE	BED	63KVA LANKA DTR	TPNODL39009254	63	40	51	81%	63.24	100%	54.85	4	3.39	0.001	0.072	3.77	2.06	P1	100
172	BALASORE	CED	MANASAH, BARDHANPUR	TPNODL59000819	63	40	51	81%	63.19	100%	54.81	4	3.39	0.001	0.072	3.77	2.06	P1	100
173	BALASORE	BTED	BADADHANADI	TPNODL39010992	63	40	50.88	81%	63.00	100%	54.64	4	3.38	0.001	0.072	3.76	2.06	P1	100
174	BALASORE	BED	FM NAGAR PASCHIMANCHAL	TPNODL29001800	63	40	50.88	81%	63.00	100%	54.63	4	3.38	0.001	0.072	3.75	2.06	P1	100
175	BALASORE	BED	FM NAGAR PASCHIMANCHAL	TPNODL29001800	63	40	45	71%	63.00	100%	54.63	10	9.07	0.004	0.072	10.07	5.52	P1	100
176	BALASORE	BTED	NAUGAN BAZAR	TPNODL59001019	63	40	51	81%	62.80	100%	54.46	4	3.37	0.001	0.072	3.74	2.05	P1	100
177	BHADRAK	BNED	63KVA RAUSAR NAGAR	TPNODL59000004	63	40	52	83%	62.61	99%	55.55	3	2.91	0.001	0.072	3.23	1.77	P1	100
178	BALASORE	JED	63 KVA NEAR PATHARESWAR PRIMARY SCHOOL	TPNODL39010536	63	40	50.51	80%	62.54	99%	54.24	4	3.36	0.001	0.072	3.73	2.04	P1	100
179	BALASORE	BED	TAZIABAD	TPNODL39006407	63	40	59	94%	73.00	115%	63.00	4	3.27	0.001	0.072	3.64	1.99	P1	100
180	JAIPUR	JRED	Nahaka RD Adheswar colony - 63 kva	TPNODL29001956	63	40	53.20	84%	62.30	99%	57.13	4	3.53	0.002	0.072	3.93	2.15	P1	100
181	BARIPADA	BPED	GOUDADIHA BUS STAND	TPNODL39010673	63	40	50.83	81%	61.91	98%	54.59	4	3.38	0.001	0.072	3.75	2.05	P1	100
182	JAIPUR	KUED	BHABANIPUR 63 KVA	TPNODL59002600	63	40	52.80	84%	61.83	98%	56.70	4	3.51	0.002	0.072	3.90	2.13	P1	100
183	BALASORE	JED	63 KVA AKANDIA-2	TPNODL59001682	63	40	49.9	79%	61.81	98%	53.60	4	3.32	0.001	0.072	3.68	2.02	P1	100
184	BARIPADA	UED	Nududiha	TPNODL39010296	63	40	50.54	80%	61.55	98%	54.27	4	3.36	0.001	0.072	3.73	2.04	P1	100
185	BARIPADA	RED	GANPATI CLUB-6	TPNODL39011295	63	40	50.49	80%	61.49	98%	54.22	4	3.35	0.001	0.072	3.73	2.04	P1	100
186	BARIPADA	BPED	NURUDHI	TPNODL39010861	63	40	50.46	80%	61.46	98%	54.19	4	3.35	0.001	0.072	3.72	2.04	P1	100
187	JAIPUR	KUED	MADINABAG 63 KVA	TPNODL39011510	63	40	52.39	83%	61.35	97%	56.26	4	3.48	0.002	0.072	3.87	2.12	P1	100
188	BALASORE	JED	GAMBHARIA 25KVA	TPNODL39000821	25	40	19.6	79%	24.30	97%	21.07	1	1.30	0.001	0.072	1.45	0.79	P1	100
189	BARIPADA	BPED	MACHASAH	TPNODL59000189	63	40	50.2	80%	60.69	96%	53.51	3	2.94	0.001	0.072	3.27	1.79	P1	100

Annexure-W Augmentation of DTRs																			
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100		
190	KEONJHAR	AED	TARIMUL TALA SAHI	TPNODL59001364	63	40	51	81%	60.25	96%	53.72	3	2.70	0.001	0.072	3.00	1.64	P1	100
191	JAIPUR	JTED	SASANDA MUSLIM SAHI 63 KVA	TPNODL29000893	63	40	51.36	82%	60.14	95%	55.15	4	3.41	0.001	0.072	3.79	2.08	P1	100
192	JAIPUR	KUED	KAIPADA SCHOOL 63 KVA	TPNODL59001460	63	40	51.04	81%	59.77	95%	54.81	4	3.39	0.001	0.072	3.77	2.06	P1	100
193	BALASORE	BED	FM GOLEI INFRONT BSNL OFFICE 63KVA	TPNODL39009534	63	40	48	76%	59.61	95%	51.70	4	3.20	0.001	0.072	3.55	1.95	P1	100
194	JAIPUR	JTED	BALI PADA 63 KVA	TPNODL29001860	63	40	50.80	81%	59.49	94%	54.55	4	3.37	0.001	0.072	3.75	2.05	P1	100
195	JAIPUR	KUED	B B COLLEGE 63 KVA	TPNODL390010971	63	40	50.50	80%	59.14	94%	54.23	4	3.35	0.001	0.072	3.73	2.04	P1	100
196	BALASORE	BTED	NARASINGHDIHA 63 - 2	TPNODL59000108	63	40	48	75%	58.84	93%	51.03	4	3.16	0.001	0.072	3.51	1.92	P1	100
197	BARIPADA	UED	TADKI-2	TPNODL59000255	25	40	29	118%	35.00	139%	31.00	2	1.40	0.001	0.072	1.56	0.85	P1	100
198	BALASORE	BED	POLICE COLONY	TPNODL59000876	63	40	29	98%	36.45	58%	31.61	2	1.96	0.001	0.072	2.17	1.19	P1	100
199	BARIPADA	UED	SORISA KATHA-7	TPNODL59000441	25	40	18.9	76%	22.81	91%	20.11	1	1.10	0.000	0.072	1.23	0.67	P1	100
200	BALASORE	JED	HATOSARISA	TPNODL39007995	63	40	58	93%	72.00	113%	62.28	4	3.57	0.002	0.072	3.96	2.17	P1	100
201	BALASORE	BED	MIRZAPUR SCHOOL FRONT	TPNODL59001045	63	40	35	86%	42.99	68%	37.28	3	2.31	0.001	0.072	2.56	1.40	P1	100
202	BARIPADA	UED	JADUNATHPUR MILL	TPNODL37201489	100	40	185.79	186%	226.28	226%	199.50	14	12.34	0.005	0.16	13.71	3.38	P1	250
203	BALASORE	CED	CHHANUA 11	TPNODL37200080	100	40	175.54	176%	217.34	217%	188.49	13	11.66	0.005	0.16	12.95	3.19	P1	250
204	JAIPUR	KUED	NAUPAL-100 KVA	TPNODL39006013	100	40	173	173%	197.53	198%	181.12	8	6.92	0.003	0.16	7.68	1.89	P1	250
205	JAIPUR	KUED	KOLHA NAVAK SAHI	TPNODL29001245	100	40	157.28	157%	184.18	184%	168.89	12	10.45	0.005	0.16	11.61	2.86	P1	250
206	JAIPUR	KUED	BARIK SAHI-100 KVA	TPNODL39003533	100	80	150	150%	170.56	171%	156.39	7	5.97	0.003	0.16	6.63	1.63	P1	250
207	BHADRAK	BNED	BAGHAMARA	TPNODL39009995	63	40	93	148%	111.81	177%	99.19	6	5.19	0.002	0.16	5.76	1.42	P1	250
208	BALASORE	CED	BIJAYA KUMAR BARIK 2	TPNODL37102519	100	40	143.72	144%	177.95	178%	154.33	11	9.55	0.004	0.16	10.61	2.61	P1	250
209	BARIPADA	RED	MANDIRSAHI	TPNODL39008564	100	40	143	143%	172.83	173%	152.38	9	8.37	0.004	0.16	9.30	2.29	P1	250
210	BARIPADA	BPED	RANIBHAGAN	TPNODL39001926	100	40	142.40	142%	173.43	173%	152.91	11	9.46	0.004	0.16	10.51	2.59	P1	250
211	BARIPADA	RED	RAJBATI COLONY GHARA W N 7 100 KV DTR	TPNODL39008883	100	80	139.13	139%	169.45	169%	149.40	10	9.24	0.004	0.16	10.27	2.53	P1	250
212	BHADRAK	BNED	100KVA PRAFULLA NAGAR	TPNODL29000775	100	40	138.64	139%	167.81	168%	148.87	10	9.21	0.004	0.16	10.23	2.52	P1	250
213	BALASORE	CED	PARIMAL MANNA	TPNODL37200916	100	40	138.48	138%	171.46	171%	148.70	10	9.20	0.004	0.16	10.22	2.52	P1	250
214	JAIPUR	JRED	DIVISION OFFICE BACK SITE-100KVA	TPNODL29000861	100	40	137.44	137%	160.95	161%	147.58	10	9.13	0.004	0.16	10.14	2.50	P1	250
215	JAIPUR	JRED	COURT ROAD-100KVA	TPNODL29000541	100	40	136.96	137%	160.39	160%	147.07	10	9.10	0.004	0.16	10.11	2.49	P1	250
216	KEONJHAR	KED	100KVA SISHU BHAWAN ROAD(KAR COMPLEX)	TPNODL39011448	100	40	135.77	136%	163.53	164%	145.79	10	9.02	0.004	0.16	10.02	2.47	P1	250
217	BALASORE	SED	BAPUNAGAR	TPNODL29000740	100	40	132.24	132%	163.73	164%	142.00	10	8.78	0.004	0.16	9.76	2.40	P1	250
218	BALASORE	JED	100 KVA PURUSOTTAMPUR	TPNODL39010537	100	40	131.54	132%	162.87	163%	141.25	10	8.74	0.004	0.16	9.71	2.39	P1	250
219	JAIPUR	JRED	JMS SCHOOL -100 KVA	TPNODL39002483	100	40	131	131%	148.79	149%	136.43	6	5.21	0.002	0.16	5.79	1.43	P1	250
220	BALASORE	CED	PATRA BAZAR 100KVA	TPNODL39000383	100	40	131	131%	161.63	162%	140.17	10	8.67	0.004	0.16	9.63	2.37	P1	250
221	BARIPADA	BPED	TULSI MANDAP	TPNODL59000378	100	40	126.40	126%	153.95	154%	135.73	9	8.40	0.004	0.16	9.33	2.30	P1	250
222	JAIPUR	JRED	PANIKOILI COLLEGE FIELD	TPNODL59002616	100	40	123.52	124%	144.65	145%	132.64	9	8.20	0.004	0.16	9.12	2.25	P1	250
223	BALASORE	CED	MIRIGIMUNDI100KVA DTR	TPNODL39000382	100	40	123	123%	152.10	152%	131.91	9	8.16	0.004	0.16	9.07	2.23	P1	250
224	BALASORE	BTED	DEVOG(3)	TPNODL59000463	100	40	122.08	122%	151.15	151%	131.09	9	8.11	0.004	0.16	9.01	2.22	P1	250
225	BALASORE	SED	R.K LODGE FRONT	TPNODL39007580	100	40	122	122%	151.01	151%	130.96	9	8.10	0.004	0.16	9.00	2.22	P1	250
226	BHADRAK	BNED	EREIN-1	TPNODL59000939	100	40	121.44	121%	146.99	147%	130.40	9	8.07	0.004	0.16	8.96	2.21	P1	250
227	BALASORE	SED	COLLEGE CHHAKA-1	TPNODL39007240	100	40	121	121%	149.39	149%	129.56	9	8.01	0.004	0.16	8.90	2.19	P1	250
228	BARIPADA	BPED	DHARAMSALA BETNOTI 2	TPNODL29000230	100	40	120.08	120%	146.25	146%	128.94	9	7.98	0.003	0.16	8.86	2.18	P1	250
229	JAIPUR	JRED	DAHISAH100KVA-1	TPNODL39004454	100	40	120	120%	136.50	136%	125.16	5	4.78	0.002	0.16	5.31	1.31	P1	250
230	BHADRAK	BNED	100KVA DURGAPUR OLD 1	TPNODL29001625	100	40	119.84	120%	145.05	145%	128.68	9	7.96	0.003	0.16	8.84	2.18	P1	250
231	BHADRAK	BNED	100KVA SANKARPUR SAINIK SCHOOL	TPNODL29000136	100	40	118.96	119%	143.99	144%	127.74	9	7.90	0.003	0.16	8.78	2.16	P1	250
232	JAIPUR	JRED	AHMEDNAGAR-1-100 KVA	TPNODL39002508	100	40	118	118%	134.21	134%	123.07	5	4.70	0.002	0.16	5.22	1.29	P1	250
233	JAIPUR	JRED	JODABARA VILLAGE-2-100 KVA	TPNODL39003767	100	40	118	118%	133.97	134%	122.85	5	4.69	0.002	0.16	5.21	1.28	P1	250
234	BALASORE	BED	SRI LANKA	TPNODL39001342	100	40	117 LANKA	117%	144.96	145%	125.72	9	7.78	0.003	0.16	8.64	2.13	P1	250
235	BALASORE	JED	DHARA STOCK	TPNODL39001812	100	40	116.6	117%	144.35	144%	125.19	9	7.74	0.003	0.16	8.60	2.12	P1	250
236	BARIPADA	BPED	ASTHA COACHING CENTRE	TPNODL39006242	100	80	114.9	115%	138.85	139%	122.42	7	6.72	0.003	0.16	7.47	1.84	P1	250
237	KEONJHAR	KED	GYATRI TEMPLE NEAR (KSAHIPUR)	TPNODL39011202	100	40	113.81	114%	137.08	137%	122.21	8	7.56	0.003	0.16	8.40	2.07	P1	250
238	JAIPUR	JRED	BANTAR GODAM-100 KVA DTR	TPNODL39002998	100	40	113	113%	128.36	128%	117.70	5	4.49	0.002	0.16	4.99	1.23	P1	250
239	KEONJHAR	KED	BANIAPAT IPDS (PRIMAY SCHOOL NEAR)	TPNODL29001853	100	40	112.56	113%	135.58	136%	120.87	8	7.48	0.003	0.16	8.31	2.05	P1	250
240	BARIPADA	UED	UDALA NEW BY GANESH TEMPLE	TPNODL39004500	100	40	112.3	112%	135.65	136%	119.59	7	6.57	0.003	0.16	7.30	1.80	P1	250
241	JAIPUR	JRED	TALAGARH-100 KVA	TPNODL39003575	100	40	112	112%	127.41	127%	116.83	5	4.46	0.002	0.16	4.96	1.22	P1	250
242	BALASORE	SED	TUDIGADIA GAYATRI MANDAP-II	TPNODL39007686	100	40	110	110%	136.80	137%	118.65	8	7.34	0.003	0.16	8.15	2.01	P1	250
243	BHADRAK	BNED	100KVA KARA SAHI,BLUE VINE HOTEL	TPNODL29001617	100	40	110.40	110%	133.63	134%	118.55	8	7.33	0.003	0.16	8.15	2.01	P1	250
244	BALASORE	CED	SOLAPATA	TPNODL37100819	100	40	110.28	110%	136.54	137%	118.41	8	7.32	0.003	0.16	8.14	2.01	P1	250
245	BALASORE	BTED	CHENA BASA MAHADEV SARAI	TPNODL39011644	100	40	109.93	110%	136.11	136%	118.04	8	7.30	0.003	0.16	8.11	2.00	P1	250
246	BALASORE	SED	STATION BAZAR DTR	TPNODL39008363	100	40	110	110%	135.98	136%	117.93	8	7.29	0.003	0.16	8.10	2.00	P1	250
247	BALASORE	CED	RUPSA 9	TPNODL39011434	100	40	109.51	110%	135.59	136%	117.59	8	7.27	0.003	0.16	8.08	1.99	P1	250
248	BHADRAK	BNED	100 KVA DTR BIDEIPUR MARKET	TPNODL39009475	100	80	109	109%	130.46	130%	115.74	7	6.05	0.003	0.16	6.73	1.66	P1	250
249	BHADRAK	BNED	63KVA PARK BAZAR	TPNODL59000366	63	40	69	109%	82.15	130%	72.88	4	3.81	0.002	0.16	4.24	1.04	P1	250
250	BALASORE	CED	RAISUAN 100KVA	TPNODL39000974	100	40	108	108%	134.05	134%	116.26	8	7.19	0.003	0.16	7.99	1.97	P1	250
251	BARIPADA	BPED	KAMLA NEHRU 2	TPNODL39005766	100	80	108.2	108%	130.73	131%	115.26	7	6.33	0.003	0.16	7.03	1.73	P1	250
252	JAIPUR	KUED	KUMARI-1-100 KVA	TPNODL39002514	100	30	108	108%	123.12	123%	112.89	5	4.31	0.002	0.16	4.79	1.18	P1	250

Annexure-W Augmentation of DTRs																			
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100		
253	BHADRAK	BNED	100 KVA DTR COLLEGE CHHAK	TPNODL39007096	100	40	108	108%	129.37	129%	114.77	7	6.00	0.003	0.16	6.67	1.64	P1	250
254	BARIPADA	BPED	RI OFFICER 1	TPNODL39000749	100	40	108.0	108%	130.44	130%	115.01	7	6.32	0.003	0.16	7.02	1.73	P1	250
255	BALASORE	CED	JAGANNATH TEMPLE (GADAN)	TPNODL29001535	100	40	107.92	108%	133.62	134%	115.88	8	7.17	0.003	0.16	7.96	1.96	P1	250
256	KEONJHAR	AED	SAW MILL GALI	TPNODL29000611	100	40	107.68	108%	129.70	130%	115.63	8	7.15	0.003	0.16	7.95	1.96	P1	250
257	BARIPADA	RED	GOLEI CHOWK-2	TPNODL29001754	100	40	106.80	107%	130.08	130%	114.68	8	7.09	0.003	0.16	7.88	1.94	P1	250
258	BHADRAK	BNED	100KVA HOUSING BOARD IPDS	TPNODL29001102	100	40	106.40	106%	128.79	129%	114.25	8	7.07	0.003	0.16	7.85	1.93	P1	250
259	JAIPUR	JRED	BARIK CLINIC GALI-100KVA	TPNODL29000937	100	40	105.20	105%	123.19	123%	112.96	8	6.99	0.003	0.16	7.76	1.91	P1	250
260	BARIPADA	BPED	SUNAMUHI NEW	TPNODL29001994	100	40	104.96	105%	127.83	128%	112.71	8	6.97	0.003	0.16	7.75	1.91	P1	250
261	BHADRAK	BNED	100KVA DARGIPATI 2	TPNODL29000140	100	80	104.96	105%	127.04	127%	112.71	8	6.97	0.003	0.16	7.75	1.91	P1	250
262	BHADRAK	BNED	KANTA KABI NAGAR-2	TPNODL29000819	100	40	104.48	104%	126.46	126%	112.19	8	6.94	0.003	0.16	7.71	1.90	P1	250
263	JAIPUR	KUED	TALA ARDA, PANDA SAHI-100 KVA	TPNODL39002617	100	80	104	104%	118.70	119%	108.84	5	4.16	0.002	0.16	4.62	1.14	P1	250
264	BHADRAK	BNED	100KVA DTR TRUPTI PLAZA	TPNODL29001273	100	40	104	104%	124.53	125%	110.48	6	5.78	0.003	0.16	6.42	1.58	P1	250
265	BALASORE	SED	NEW JANASALA KENDRA	TPNODL39009509	100	40	104	104%	128.70	129%	111.62	8	6.90	0.003	0.16	7.67	1.89	P1	250
266	BARIPADA	RED	NO-2 SUBSTATION 100	TPNODL39001771	100	40	103	103%	124.71	125%	109.95	7	6.04	0.003	0.16	6.71	1.65	P1	250
267	BHADRAK	JED	100 KVA NEWCHATANA	TPNODL29001357	100	40	103.04	103%	127.58	128%	110.64	8	6.84	0.003	0.16	7.60	1.87	P1	250
268	BHADRAK	BNED	100 KVA BADA BAZAR	TPNODL39008065	100	40	103	103%	123.28	123%	109.37	6	5.72	0.003	0.16	6.36	1.57	P1	250
269	JAIPUR	JRED	SAGADI-100 KVA	TPNODL39002831	100	40	102	102%	116.70	117%	107.01	5	4.09	0.002	0.16	4.54	1.12	P1	250
270	JAIPUR	KUED	BRAHMABARADA HATO 100KVA	TPNODL29002375	100	40	102	102%	116.67	117%	106.98	5	4.08	0.002	0.16	4.54	1.12	P1	250
271	KEONJHAR	AED	BARAGUDA UPAR SAHI	TPNODL29001953	100	40	101.36	101%	122.09	122%	108.84	7	6.73	0.003	0.16	7.48	1.84	P1	250
272	BARIPADA	BPED	SHIVA SINGH (PLINTH)	TPNODL39006241	100	80	101.1	101%	122.15	122%	107.69	7	5.92	0.003	0.16	6.57	1.62	P1	250
273	BARIPADA	RED	BAIDAPOSI COLONY-2	TPNODL29000436	100	40	100.72	101%	122.67	123%	108.15	7	6.69	0.003	0.16	7.43	1.83	P1	250
274	BALASORE	JED	PADMA 2	TPNODL39005613	100	40	100.4	100%	124.28	124%	107.79	7	6.67	0.003	0.16	7.41	1.83	P1	250
275	BHADRAK	BNED	100KVAPURUNA BAZAR SAKA SUNI 2	TPNODL37102433	100	40	100.27	100%	121.37	121%	107.67	7	6.66	0.003	0.16	7.40	1.82	P1	250
276	BHADRAK	BNED	HAMIR BINDHA 2	TPNODL39003404	100	80	100	100%	119.82	120%	106.30	6	5.56	0.002	0.16	6.18	1.52	P1	250
277	BHADRAK	BNED	100KVA DTR THANAPATTI-2	TPNODL39001150	100	40	100	100%	119.45	119%	105.97	6	5.54	0.002	0.16	6.16	1.52	P1	250
278	BARIPADA	UED	NEAR DISHA BEAUTY PARLOUR	TPNODL39011052	100	40	99.63	100%	121.34	121%	106.98	7	6.62	0.003	0.16	7.35	1.81	P1	250
279	BALASORE	CED	100KVA GOVT SCHOOL REMUNA DTR	TPNODL39002231	100	40	99	99%	122.81	123%	106.51	7	6.59	0.003	0.16	7.32	1.80	P1	250
280	JAIPUR	JRED	V.N COLLAGE CAMPAS-100 KVA	TPNODL39008904	100	40	99	99%	112.77	113%	103.40	4	3.95	0.002	0.16	4.39	1.08	P1	250
281	BALASORE	CED	STATION BAZAR-2	TPNODL39000972	100	40	99	99%	122.43	122%	106.18	7	6.57	0.003	0.16	7.30	1.80	P1	250
282	BARIPADA	BPED	KOSTHA PSS FRONT	TPNODL29001919	100	40	98.88	99%	120.43	120%	106.18	7	6.57	0.003	0.16	7.30	1.80	P1	250
283	JAIPUR	JTED	SITALESWAR(DALEI SAHI)	TPNODL39009258	100	40	98	98%	112.14	112%	102.83	4	3.93	0.002	0.16	4.36	1.07	P1	250
284	BALASORE	BED	SANJAY HEIGHTS	TPNODL39006599	100	80	98	98%	121.88	122%	105.70	7	6.54	0.003	0.16	7.26	1.79	P1	250
285	JAIPUR	JRED	TRIANGA-4-100 KVA	TPNODL39004474	100	40	98	98%	111.99	112%	102.69	4	3.92	0.002	0.16	4.36	1.07	P1	250
286	KEONJHAR	AED	TARTARA	TPNODL39003098	100	40	98.24	98%	118.33	118%	105.49	7	6.52	0.003	0.16	7.25	1.79	P1	250
287	BHADRAK	BNED	100KVADTR NUASAH	TPNODL39001151	100	40	98	98%	117.03	117%	103.82	6	5.43	0.002	0.16	6.03	1.49	P1	250
288	BARIPADA	BPED	BHADUDI BANDHA	TPNODL29000151	100	40	97.68	98%	118.97	119%	104.89	7	6.49	0.003	0.16	7.21	1.78	P1	250
289	KEONJHAR	AED	NEAR TASTY HOTEL 100KVA	TPNODL39003185	100	40	98	98%	115.92	116%	103.34	6	5.19	0.002	0.16	5.77	1.42	P1	250
290	BALASORE	SED	BAGUDI MARKET	TPNODL39004555	100	40	97	97%	120.64	121%	104.63	7	6.47	0.003	0.16	7.19	1.77	P1	250
291	BALASORE	BED	MINATI MOHAPATRA IPDS 100KVA	TPNODL39001873	100	40	97	97%	120.64	121%	104.62	7	6.47	0.003	0.16	7.19	1.77	P1	250
292	BALASORE	SED	MAHUMAHANA I	TPNODL39009087	100	40	97	97%	120.62	121%	104.61	7	6.47	0.003	0.16	7.19	1.77	P1	250
293	BARIPADA	UED	NUASAH 100KVA	TPNODL39001684	100	40	97.3	97%	117.53	118%	103.62	6	5.69	0.002	0.16	6.32	1.56	P1	250
294	BALASORE	SED	KAMNPUR	TPNODL39009150	100	40	97	97%	120.12	120%	104.18	7	6.44	0.003	0.16	7.16	1.76	P1	250
295	BALASORE	SED	ITTLA DTR	TPNODL39009149	100	40	97	97%	120.12	120%	104.17	7	6.44	0.003	0.16	7.16	1.76	P1	250
296	BHADRAK	BNED	100KVA DTR ARABINDA SCHOOL	TPNODL39006333	100	40	97	97%	116.06	116%	102.96	6	5.39	0.002	0.16	5.98	1.47	P1	250
297	BHADRAK	BNED	100KVA ALAPUR BHATA MAHALA	TPNODL29001439	100	40	96.96	97%	117.36	117%	104.12	7	6.44	0.003	0.16	7.16	1.76	P1	250
298	BARIPADA	BPED	INDRANGER (MOHAPATRA)	TPNODL29000926	100	40	96.80	97%	117.90	118%	103.94	7	6.43	0.003	0.16	7.14	1.76	P1	250
299	BALASORE	BED	ASANAGAR, FM NAGAR	TPNODL39001095	100	40	96	96%	119.19	119%	103.37	7	6.39	0.003	0.16	7.10	1.75	P1	250
300	BHADRAK	BNED	100KVA STR BANITIA BAZAR	TPNODL39003502	100	40	96	96%	115.16	115%	102.17	6	5.34	0.002	0.16	5.94	1.46	P1	250
301	BALASORE	JED	BAHARD ROAD SIDE	TPNODL39006761	100	40	96.2	96%	119.09	119%	103.28	7	6.39	0.003	0.16	7.10	1.75	P1	250
302	BARIPADA	BPED	R.G.P PSS FRONT NEAR BY	TPNODL39005731	100	40	95.8	96%	115.71	116%	102.02	6	5.60	0.002	0.16	6.23	1.53	P1	250
303	BALASORE	JED	JD CONSTRUCTION ROAD SIDE	TPNODL39000122	100	40	95.8	96%	118.59	119%	102.85	7	6.36	0.003	0.16	7.07	1.74	P1	250
304	JAIPUR	JRED	Near Little Ganesh Play School - 100	TPNODL29001226	100	40	95.76	96%	112.14	112%	102.83	7	6.36	0.003	0.16	7.07	1.74	P1	250
305	BALASORE	BED	DURGAMANDIR IPDS 100	TPNODL39001981	100	40	96	96%	118.52	119%	102.79	7	6.36	0.003	0.16	7.06	1.74	P1	250
306	BHADRAK	BNED	100 KVA DTR GHANTESWAR BUS STAND	TPNODL39006532	100	40	96	96%	114.51	115%	101.59	6	5.31	0.002	0.16	5.90	1.45	P1	250
307	KEONJHAR	KED	KAPUNDI	TPNODL39002818	100	80	96	96%	113.63	114%	101.30	6	5.09	0.002	0.16	5.65	1.39	P1	250
308	BHADRAK	BSED	JAHANGIR ROAD	TPNODL39004556	100	40	96	96%	114.29	114%	101.40	6	5.30	0.002	0.16	5.89	1.45	P1	250
309	BHADRAK	BNED	KAMALPUR-2(GUJIDARDA)	TPNODL39000711	100	40	95	95%	114.23	114%	101.34	6	5.30	0.002	0.16	5.89	1.45	P1	250
310	BARIPADA	BPED	MADHUBAN CHAUK 2	TPNODL39001201	100	40	95.0	95%	114.80	115%	101.22	6	5.56	0.002	0.16	6.18	1.52	P1	250
311	BALASORE	BED	TULANGSAHI(IPDS)	TPNODL39001875	100	40	95	95%	117.62	118%	102.01	7	6.31	0.003	0.16	7.01	1.73	P1	250
312	BARIPADA	BPED	SINGH SAHI	TPNODL29001969	100	40	94.96	95%	115.65	116%	101.97	7	6.31	0.003	0.16	7.01	1.73	P1	250
313	BALASORE	BED	PHD CHANDAMANI PADIA CHHAKA	TPNODL39001109	100	40	95	95%	117.48	117%	101.89	7	6.30	0.003	0.16	7.00	1.73	P1	250
314	BARIPADA	RED	MAHULDHIA NEW BY RIVER DT	TPNODL39007370	100	80	94	94%	113.49	113%	100.06	6	5.50	0.002	0.16	6.11	1.50	P1	250
315	BHADRAK	BSED	100 KVA DTR JAYA NAGAR SEBA STIAN ASRAM	TPNODL39007893	100	40	94	94%	112.14	112%	99.49	6	5.20	0.002	0.16	5.78	1.42	P1	250

Annexure-W Augmentation of DTRs																			
Sl. No.	Circle	Division	Name of DTR	Meter No.	DTR Capacity (kVA)	MF	Current Peak Loading (kVA)	Current Peak Loading (%)	Peak Loading after 3-Yr Load Growth (kVA)	Peak Loading after 3-Yr Load Growth (%)	Peak Loading after 1-Yr Load Growth (kVA)	Additional Load due to LG Accommodation (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Planning Priority	Proposed Capacity (in kVA)
							A				B	C=B-A	D=C*PF	E=D*8760*LF	F	F/E	E/F*100		
316	BHADRAK	BSED	100KVA BITUMPUR	TPNODL39004991	100	40	94	94%	111.96	112%	99.32	6	5.19	0.002	0.16	5.77	1.42	P1	250
317	BARIPADA	UED	HANUMAN TEMPLE 100KVA	TPNODL39001955	100	40	93.5	94%	112.97	113%	99.60	6	5.47	0.002	0.16	6.08	1.50	P1	250
318	BARIPADA	BPED	NALAGANJA CHACK	TPNODL39009232	100	80	93.3	93%	112.70	113%	99.36	6	5.46	0.002	0.16	6.06	1.49	P1	250
319	KEONJHAR	AED	BAIJA PETA 100KVA	TPNODL39003184	100	40	93	93%	110.38	110%	98.41	5	4.94	0.002	0.16	5.49	1.35	P1	250
320	JAIPUR	KUED	JKRIL-2 100 KVA	TPNODL29001242	100	40	92.80	93%	108.67	109%	99.65	7	6.16	0.003	0.16	6.85	1.69	P1	250
321	BHADRAK	BNED	100KVA DTR KHERANGA BAZAR	TPNODL39003345	100	40	92	92%	110.33	110%	97.88	6	5.12	0.002	0.16	5.69	1.40	P1	250
322	KEONJHAR	KED	JHARBEDA PALA MANDAP	TPNODL39003318	100	40	92	92%	109.36	109%	97.50	5	4.90	0.002	0.16	5.44	1.34	P1	250
323	BARIPADA	BPED	NADPUR VILLAGE-1	TPNODL29001267	100	40	92.00	92%	112.05	112%	98.79	7	6.11	0.003	0.16	6.79	1.67	P1	250
324	BALASORE	BED	SPORTS HOSTEL/BHIMPURA DURGA MANDAP-2	TPNODL29001110	100	40	91.76	92%	113.61	114%	98.53	7	6.09	0.003	0.16	6.77	1.67	P1	250
325	BALASORE	SED	NATAPARA CHAKA	TPNODL39007131	100	40	92	92%	113.49	113%	98.42	7	6.09	0.003	0.16	6.76	1.67	P1	250
326	BALASORE	BED	IPDS SANTI KANAN	TPNODL39004897	100	40	91	91%	113.06	113%	98.05	7	6.07	0.003	0.16	6.74	1.66	P1	250
327	KEONJHAR	JOED	SHISU MANDIR	TPNODL39007552	100	40	91	91%	108.44	108%	96.67	5	4.86	0.002	0.16	5.39	1.33	P1	250
328	BALASORE	SED	POST OFFICE DTR	TPNODL39007972	100	40	91	91%	113.00	113%	98.00	7	6.06	0.003	0.16	6.74	1.66	P1	250
329	BALASORE	CED	JHAGADAPADHI-1	TPNODL39007185	100	40	91	91%	113.00	113%	98.00	7	6.06	0.003	0.16	6.74	1.66	P1	250
330	KEONJHAR	AED	MAREI GAON MARKET	TPNODL39005697	100	40	91	91%	108.41	108%	96.65	5	4.85	0.002	0.16	5.39	1.33	P1	250
331	BALASORE	BED	BHASKARGANJ B	TPNODL39001044	100	30	91	91%	112.86	113%	97.88	7	6.05	0.003	0.16	6.73	1.66	P1	250
332	BALASORE	CED	100KVA PURASTAMPUR(2) DTR	TPNODL39002157	100	40	91	91%	112.38	112%	97.46	7	6.03	0.003	0.16	6.70	1.65	P1	250
333	BHADRAK	BNED	100KVA DTR NALGUNDA BAZAR	TPNODL39003657	100	40	90	90%	108.21	108%	96.00	6	5.02	0.002	0.16	5.58	1.37	P1	250
334	KEONJHAR	KED	TIKARGUMRA	TPNODL39011420	100	40	90.20	90%	108.65	109%	96.86	7	5.99	0.003	0.16	6.66	1.64	P1	250
335	BALASORE	BED	TRISULIA BATIA IPDS	TPNODL39007651	100	40	90	90%	111.66	112%	96.84	7	5.99	0.003	0.16	6.66	1.64	P1	250
336	BARIPADA	RED	200 KV DTR KICKESWARI GOV GIRL HIGH SCHOOL	TPNODL39005514	200	80	180	90%	217.81	109%	192.03	12	10.55	0.005	0.16	11.72	2.89	P1	250
337	BARIPADA	RED	100 KV DTR BAHALDA	TPNODL39007059	100	40	90	90%	108.81	109%	95.93	6	5.27	0.002	0.16	5.85	1.44	P1	250
338	BARIPADA	BPED	KUMARSAHI	TPNODL39000258	100	40	90.0	90%	108.72	109%	95.85	6	5.27	0.002	0.16	5.85	1.44	P1	250
339	BALASORE	CED	BARDHANPUR GAON DTR	TPNODL39000460	100	40	90	90%	111.39	111%	96.61	7	5.98	0.003	0.16	6.64	1.64	P1	250
340	BALASORE	BED	MALADIHA	TPNODL29001728	100	40	89.76	90%	111.14	111%	96.38	7	5.96	0.003	0.16	6.62	1.63	P1	250
341	BALASORE	SED	NEAR IDFC FIRST BANK	TPNODL39005090	100	40	90	90%	110.99	111%	96.26	7	5.95	0.003	0.16	6.62	1.63	P1	250
342	BALASORE	CED	100KV PADABADAGAON DTR	TPNODL39001589	100	40	89	89%	110.37	110%	95.72	7	5.92	0.003	0.16	6.58	1.62	P1	250
343	BALASORE	BTED	100KVA BAHARDA MUSLIM BASTI	TPNODL39001087	100	40	89	89%	110.21	110%	95.58	7	5.91	0.003	0.16	6.57	1.62	P1	250
344	BALASORE	BED	MADHU BHAI GHARA	TPNODL39000487	100	40	89	89%	109.97	110%	95.38	7	5.90	0.003	0.16	6.56	1.61	P1	250
345	BALASORE	JED	100 KVA JALESWAR GIRLS HIGH SCHOOL	TPNODL59001415	100	40	88.6	89%	109.75	110%	95.18	7	5.89	0.003	0.16	6.54	1.61	P1	250
346	BALASORE	JED	MAKDIA DTR1	TPNODL39006463	100	40	88.4	88%	109.46	109%	94.93	7	5.87	0.003	0.16	6.52	1.61	P1	250
347	BALASORE	SED	GOPALPUR PSS SIDE DTR	TPNODL39008255	100	40	88	88%	108.92	109%	94.47	6	5.84	0.003	0.16	6.49	1.60	P1	250
348	BALASORE	BED	HARIPLAZO 100KVA	TPNODL39000904	100	40	88	88%	108.72	109%	94.29	6	5.83	0.003	0.16	6.48	1.60	P1	250
349	BALASORE	JED	CHALANTI DTR	TPNODL39000172	100	40	87.8	88%	108.70	109%	94.27	6	5.83	0.003	0.16	6.48	1.60	P1	250
350	BALASORE	CED	NALAPATNA DTR	TPNODL39009792	100	40	88	88%	108.66	109%	94.24	6	5.83	0.003	0.16	6.48	1.60	P1	250
351	BALASORE	CED	KANTABANIA, MUSUMSAHI	TPNODL39009010	100	40	88	88%	108.59	109%	94.18	6	5.83	0.003	0.16	6.47	1.59	P1	250
352	BALASORE	BED	NEAR GYANDEEP COMPUTER EDUCATION	TPNODL39011197	100	40	87.68	88%	108.56	109%	94.15	6	5.82	0.003	0.16	6.47	1.59	P1	250
353	BALASORE	BED	BALIYA 100KVA	TPNODL39000543	100	40	88	88%	108.48	108%	94.09	6	5.82	0.003	0.16	6.47	1.59	P1	250
354	BALASORE	BTED	PRATAPPUR	TPNODL39011672	100	40	87.50	87%	108.33	108%	93.95	6	5.81	0.003	0.16	6.46	1.59	P1	250
355	BALASORE	CED	100KVA HOSPITAL ROAD DTR	TPNODL39002229	100	40	87	87%	108.30	108%	93.92	6	5.81	0.003	0.16	6.46	1.59	P1	250

Annexure-X Conversion of 1Ph DTR to 3Ph DTR along with lines										
SL No.	Circle	Division	Sub-division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Connected load in DTR(KW)	% load growth on DT per year	Proposed DT capacity (KVA)	Priority
1	Baleswar	BtED	Jamsuli	Jamsuli	Bentpur	1*16+25	35	15%	63	P1
2	Baleswar	BtED	Jamsuli	Langaleswar	Padmadighi	2*16 + 1*25	80	15%	100	P1
3	Baleswar	BtED	BASTA	RAJGHAT	Sanaasti16kva	(16*3,10*1)	140	15%	100	P1
4	Baleswar	BtED	Basta	Basta no-2	Kundulichhack	3*16+1*10	48	15%	100	P1
5	Baleswar	BtED	Basta	BASTA-I	RASALPUR	4X16	100	15%	100	P1
6	Baleswar	BtED	Basta	BASTA-I	JUKNANDI	3X16	80	15%	100	P1
7	Baleswar	CED	RE-I	Durgadevi	Kalayanpur	2x16kVA + 1x10kVA	100	15%	100	P1
8	Baleswar	CED	RE-I	Durgadevi	Chandkudia	4x 16 kVA	100	15%	100	P1
9	Baleswar	CED	RE-I	Rupsa	Bhabalpur Market	1x16+1x25	100	15%	100	P1
10	Baleswar	CED	NILGIRI	Nilgiri	Dhubsila	3X16	100	15%	100	P1
11	Baleswar	CED	NILGIRI	Nilgiri	Managarh	5X16	100	15%	100	P1
12	Baleswar	CED	NILGIRI	Rupsa	Balighuri	2X16+1x25	100	15%	100	P1
13	Baleswar	CED	NILAGIRI	Saragaon	Tina Udadapa	3x16kVA	100	15%	100	P1
14	Baleswar	SED	Soro	Soro No-I	Uttatreshwar Bus stand	1x16&1x25	70	15%	100	P1
15	Baleswar	SED	Soro	Soro No II	Agiria	10+16+16	45	15%	100	P1
16	Baleswar	SED	Khaira	Khaira	Bainchakhunta	5 X 16	160	15%	2 X 100	P1
17	Baleswar	SED	Khaira	Khaira	Barajodi	4x16	122	15%	100	P1
18	Baleswar	SED	Khaira	Khaira	Kumarmouda	5x16	134	15%	100	P1
19	Baleswar	SED	Khaira	Khaira	Sana Andelo	16 + 10	58	15%	100	P1
20	Baleswar	SED	Khaira	Gandibed	Galangaon	4x16	100	15%	100	P1
21	Baleswar	SED	KHAIRA	DUNGURA	RAGHUNATHPUR	3X16+1X10	110	15%	100	P1
22	Baleswar	SED	KHAIRA	DUNGURA	KISHORNAGAR	3X16	100	15%	100	P1
23	Baleswar	SED	KHAIRA	DUNGURA	AGINIPUR	5X16	190	15%	250	P1
24	Baleswar	SED	Bahanaga	Bahanaga	Roulkhunta	3*16	50	15%	63	P1
25	Baleswar	SED	Bahanaga	Bahanaga	HUNTAPUR	3*16	40	15%	63	P1
26	Baleswar	SED	Bahanaga	Bahanaga	PATANAPADA	3*16	70	15%	100	P1
27	Baleswar	SED	BAHANAGA	KHANTAPADA	SIBAPURA	3*16	98	15%	100	P1
28	Baleswar	SED	MARKONA	MARKONA	GHUSARIYAPA	16+25	40	15%	100	P1
29	Baleswar	SED	MARKONA	MARKONA	DEEPO MALLIK SAHI	16*3	55	15%	100	P1
30	Baleswar	SED	MARKONA	MARKONA	BENAPADA	16*3	55	15%	100	P1
31	Baleswar	SED	MARKONA	MARKONA	SAHU PADA	25+16+10	55	15%	100	P1
32	Baleswar	SED	MARKONA	ADABAZAR	KATUNI	2X10 KVA +1X16KVA	35	15%	100	P1
33	Baleswar	BED	Supply I	No II	Kajipokhari	3x16	55	15%	100	P1
34	Baleswar	BED	Supply I	No II	Balubazzar	2x16+1x25	60	15%	100	P1
35	Baleswar	BED	Supply I	CHANDIPUR	Choudhary Chhak	2x10+1x16	45	15%	100	P1
36	Baleswar	BED	Supply I	No II	Piro 2	3x16	50	15%	100	P1
37	Baleswar	BED	Supply I	No II	Caselane	3x16	45	15%	100	P1
38	Baleswar	JED	jaleswar	jaleswar-2	Khalabadia	3X16	50	15%	100	P1
39	Baleswar	JED	jaleswar	jaleswar-2	Bartana Nahalia	1X25+1X16	55	15%	100	P1
40	Baleswar	JED	Jaleswar	Hatigarh	Olmara Basti	2x25+1x16	60	15%	100	P1
41	Baripada	UED	Udala	Kaptipada	Kaptipada Hata	4X10KVA	60	15%	100	P1
42	Baripada	UED	Udala	Kaptipada	Kaptipada ME school	2X25KVA + 16KVA	60	15%	100	P1
43	Baripada	UED	Udala	KHUNTA	BRUNDAGADI	25KVA 1PH	40	15%	63	P1
44	Baripada	UED	UDALA	UDALA	KUANARPAL	25*1+16*1KVA	50	15%	63	P1
45	Baripada	UED	UDALA	UDALA	RAIDANDIA	16*2+25*1KVA	90	15%	100	P1
46	Baripada	UED	UDALA	UDALA	POHANDA	25*1+16*1+10*2KVA	45	15%	100	P1
47	Baripada	UED	KHUNTA	BADASAH	MATIASAH	2*16+1*10	60	15%	100	P1
48	Baripada	UED	KHUNTA	BADASAH	KULDIHA	1*10+1*25*1*16	85	15%	100	P1
49	Baripada	UED	KHUNTA	BADASAH	GENDAGADIA	2*25+1*16	70	15%	100	P1
50	Baripada	UED	KHUNTA	BADASAH	DHANPUTTA-SCHOOLS	1*10+2*25	55	15%	100	P1
51	Baripada	UED	KHUNTA	BADASAH	KERKO VILLAGE	4*16	70	15%	100	P1
52	Baripada	UED	KHUNTA	BADASAH	BADAKERKO	2*16+1*25	60	15%	100	P1
53	Baripada	UED	KHUNTA	BADASAH	TANGASOLE	2*10+2*16	65	15%	100	P1
54	Baripada	UED	KHUNTA	BADASAH	PCPUR	25*1+16*16	70	15%	100	P1
55	Baripada	RED	RAIRANGPUR-I	RAIRANGPUR	ANLADUBA - TOWER SAHI	2 X16	40	15%	63	P1
56	Baripada	RED	RAIRANGPUR-I	RAIRANGPUR	PUKHURIDHIPA	3 X16	80	15%	100	P1
57	Baripada	RED	RAIRANGPUR-I	BAHALDA	BHAKTAMAHULPANI	2X16+1X10	52	15%	63	P1
58	Baripada	RED	RAIRANGPUR-I	BAHALDA	KANKI	2X16+1X25	146	15%	100	P1
59	Baripada	BPED	KULIANA	SARASKANA	NOTA	2X10+16	40	15%	63	P1
60	Baripada	BPED	RE	SHAMAKHUNTA	CHAHALAPADA	2x 16KVA	70	15%	100	P1
61	Baripada	BPED	Kuliana	Kuliana	SATPOUTIA	11/.23KV 2*16KVA	55	15%	100	P1
62	Baripada	BPED	Kuliana	Kuliana	KAKHARUSOLE 1	11/.23KV 2*16KVA	70	15%	100	P1
63	Baripada	BPED	Moroda	Rasgobindpur	Angargadia	2x16 kva,11/0.23 kv	35	15%	63	P1
64	Baripada	BPED	Kuliana	Kuliana	KAKHARUSOLE 2	11/.23KV 2*16KVA	65	15%	100	P1
65	Baripada	BPED	Kuliana	Kuliana	KAKHARUSOLE 3	11/.23KV 2*16KVA	80	15%	100	P1
66	Baripada	BPED	Kuliana	Kuliana	TULASIBANI	11/.23KV 2*16KVA	90	15%	100	P1
67	Baripada	BPED	Kuliana	Kuliana	HATIBARI	11/.23KV 2*16KVA	70	15%	100	P1
68	Baripada	UED	UDALA	UDALA	CHATURSAHI	16*2KVA	50	15%	63	P1
69	Baripada	UED	KHUNTA	BADASAH	HATIBANDHA	1*25+1*16	50	15%	100	P1
70	Baripada	UED	KHUNTA	BADASAH	DHANPUTTA-KUABINDHA	2*25	80	15%	100	P1
71	Baripada	UED	KHUNTA	BADASAH	DAHISAH	25*2	50	15%	100	P1
72	Bhadrak	BSED	Asurali	Asurali	Thatei Sahi (Fatepur)	16	45	15%	63	P1
73	Bhadrak	BSED	Asurali	Asurali	Kasimpur	16	45	15%	63	P1
74	Bhadrak	BSED	Asurali	Arnabal	Rasikabad	16	55	15%	100	P1
75	Bhadrak	BSED	Asurali	Arnabal	Antapur	16	50	15%	100	P1
76	Bhadrak	BSED	Asurali	Betaligaon	Sitalpur	16	40	15%	63	P1
77	Bhadrak	BSED	Asurali	Betaligaon	Daritri nagar sriganga	16	40	15%	63	P1
78	Bhadrak	BSED	Asurali	Betaligaon	Bodak Jena Sahi	16	35	15%	63	P1
79	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-	Jaganathprasad	16	40	15%	63	P1
80	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-	Kusama	16	55	15%	100	P1

Annexure-X Conversion of 1Ph DTR to 3Ph DTR along with lines										
SL No.	Circle	Division	Sub-division	Section	Name of DTR/Location	Exisitng DTR Capacity(KVA)	Connected load in DTR(KW)	% load growth on DT per year	Proposed DT capacity (KVA)	Priority
81	Bhadrak	BSED	Dhamnagar	Bhandaripokhari-	Bdheisahi Kenduapada	16	40	15%	63	P1
82	Bhadrak	BSED	RE Bhadrak	Agarpada	Badhegi Gadia	16	35	15%	63	P1
83	Bhadrak	BSED	RE Bhadrak	Agarpada	Routray pur	16	30	15%	63	P1
84	Bhadrak	BSED	RE Bhadrak	Bonth	Gobindagadia	16	50	15%	63	P1
85	Bhadrak	BNED	Bhadrak No-1	Tahasil	Fisherybandha	3X16	24	15%	63	P1
86	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	Dixit Hotel Gali	5X16+100	105	15%	250	P1
87	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-1	Bakhrabadi	4X16	32	15%	100	P1
88	Bhadrak	BNED	Bhadrak No-1	Bhadrak No-2	Lahapati Hadamill	5X16+25	123	15%	250	P1
89	Bhadrak	BNED	Bhadrak No-2	Rahanja	Atto Jena Sahi	3X16	39	15%	63	P1
90	Bhadrak	BNED	Bhadrak No-2	Bhadrak No-3	Dhata Jena Sahi	4X16	44	15%	100	P1
91	Bhadrak	BNED	Bhadrak No-2	Bhadrak No-4	Bandhagaon saho sah 1	2X16	22	15%	63	P1
92	Bhadrak	BNED	Tihidi	Jashipur	Nalgunda Pachapada	1X16+1X25	22	15%	100	P1
93	Bhadrak	BNED	Tihidi	Chandabali	Panijharia	7X10+2X16	99	15%	2X100	P1
94	Bhadrak	BNED	Tihidi	Tihidi	Baulapal Mahalik Sahi	3X16	33	15%	63	P1
95	Bhadrak	BNED	Tihidi	Dolosahi	Mankadagola	2X16+1X25+1X10	44	15%	100	P1
96	Bhadrak	BNED	Dhamara	Bideipur	Tamakhandi	2X16	22	15%	100	P1
97	Bhadrak	BNED	Basudevpur	Basudevpur No-2	Bhagapur Panda Sahi	2X25	22	15%	100	P1
98	Bhadrak	BNED	Basudevpur	Eram	Jagantapur Karasahi	2X16	22	15%	63	P1
99	Bhadrak	BNED	Basudevpur	Basudevpur No-2	Mandari Mallik Sahi	2X16	22	15%	100	P1
100	Jajpur	JTED	DASARATHPUR	DASARATHPUR	TALIA	5*16	70KW	15%	100	P1
101	Jajpur	JTED	DASARATHPUR	DASARATHPUR	RADHADEIPUR	5*16	72KW	15%	100	P1
102	Jajpur	JTED	DASARATHPUR	AHIYAS	DOBABIL	3*16	40	15%	63	P1
103	Jajpur	JTED	DASARATHPUR	AHIYAS	GOPAKUL	5*16	72KW	15%	100	P1
104	Jajpur	JTED	JAIPUR TOWN 1	JAIPUR TOWN 2	AREI	1*25 1*16	70KW	15%	100	P1
105	Jajpur	JTED	JAIPUR TOWN 1	ESO TOWN-1	MOTARANGAPAL	16 ,11/0.23	22	15%	63	P1
106	Jajpur	JTED	BINJHARPUR	BINJHARPUR-II	BAKIKUL	25	45	15%	63	P1
107	Jajpur	JTED	JAIPUR TOWN 1	JAIPUR TOWN 3	Ankula ghatakula	25	40	15%	63	P1
108	Jajpur	JTED	DASARATHPUR	DASARATHPUR	CHANDAKUDA	3*16	38KW	15%	63	P1
109	Jajpur	JTED	DASARATHPUR	MANGALPUR	DIHUDISAH	16	30KW	15%	63	P1
110	Jajpur	JRED	JAIPUR ROAD	KORAI	BENAPURA	2X16+1X25	60	15%	100	P1
111	Jajpur	JRED	JAIPUR ROAD	KORAI	KANDARAGADIA	1X25+2X16	45	15%	100	P1
112	Jajpur	JRED	JAIPUR ROAD	DANAGADI	DHULIGARH	3*16kva	45	15%	100	P1
113	Jajpur	JRED	JAIPUR ROAD	DANAGADI	SOBRA	7*16 kva	124	15%	100	P1
114	Jajpur	JRED	JAIPUR ROAD	DANAGADI	MANGALPUR	4*16kva	35	15%	100	P1
115	Jajpur	JRED	DUBURI	SUKINDA	SUKINDA COLLEGE	25x1+16x4	160	15%	100	P1
116	Jajpur	JRED	PANIKOILI	PANIKOILI	MAHABIR COLONY	16*5	146.5	15%	2X100	P1
117	Jajpur	JRED	PANIKOILI	PANIKOILI	SATHIPUR MARKET	16*6	178.6	15%	100	P1
118	Jajpur	JRED	PANIKOILI	PANIKOILI	AMRUTIA SASAN	16*5	156	15%	2X100	P1
119	Jajpur	JRED	PANIKOILI	BT ROAD	CHINGUDIPUR	16*1+25*1	68.5	15%	100	P1
120	Jajpur	KUED	BARI	AMATHPUR	MITRASENPUR	3X16	80	15%	100	P1
121	Jajpur	KUED	BARI	AMATHPUR	NANKAR	2X16	50	15%	63	P1
122	Jajpur	KUED	BARI	BARI-II	MENDHA	16+16	45	15%	63	P1
123	Jajpur	KUED	BARI	BARI-II	KANDISAH	16+16+16+16	65	15%	100	P1
124	Jajpur	KUED	Kuakhia	Kuakhia	NAMIRZAPUR	16+100	105	15%	200	P1
125	Jajpur	KUED	Kuakhia	Kuakhia	ALI SURYANARAYAN MAT	16+16	40	15%	63	P1
126	Jajpur	KUED	Kuakhia	MATHASAH	NIMAPATANA	16*3+25*1	62 KW	15%	100	P1
127	Jajpur	KUED	Kuakhia	MATHASAH	GANDHANA	16*5	76KW	15%	100	P1
128	Jajpur	KUED	DHARMASALA	KABATABANDHA	RAICHANDA SAHOO SAHI	25KVA(1PH)	30	15%	63	P1
129	Jajpur	KUED	DHARMASALA	KABATABANDHA	BAGHUABARANA	16KVA(1PH)	36	15%	63	P1
130	Keonjhar	KED	RE	Sankarpur	Chakanuasahi	2x10+1x25KVA	110	15%	100	P1
131	Keonjhar	KED	RE	Gopalpur	Kandasar	4x10KVA	80	15%	63	P1
132	Keonjhar	KED	Saharpada	Saharpada Marke	Goranjodi	4x16KVA	120	15%	100	P1
133	Keonjhar	KED	Saharpada	Saharpada Marke	Goranjodi Behera Sahi	2x16KVA	40	15%	63	P1
134	Keonjhar	KED	Turmunga	Bhuinpur	Moudi	10KVA+16KVA	40	15%	63	P1
135	Keonjhar	KED	Turmunga	Chemna	Sarasposi	2x16KVA	70	15%	63	P1
136	Keonjhar	KED	Turmunga	Budhikapudi	Gidhibas	2x16KVA	35	15%	63	P1
137	Keonjhar	KED	Patna	Patna	Jhatipda	25KVA+100KVA	70	15%	250	P1
138	Keonjhar	KED	Patna	Tangerpada	Jhapasahi	2x10KVA+2x16KVA	40	15%	63	P1
139	Keonjhar	KED	Patna	Patna	Begnakhman	2x10KVA+2x16KVA	90	15%	100	P1
140	Keonjhar	KED	Patna	Tangerpada	Ankura	2x10KVA+3x16KVA	90	15%	100	P1
141	Keonjhar	AED	ANANDAPUR	ANANDAPUR	CHAMARDA (16KVA,16KVA)	2*16	35	15%	63	P1
142	Keonjhar	AED	GHATAGAON	Harichandanpur	Badakhamandara	3*16	80	15%	100	P1
143	Keonjhar	AED	ANANDAPUR	GHASIPURA	KAIANBOREI	16 KVA	20	15%	63	P1
144	Keonjhar	AED	Bidayadharpur	Bidayadharpur	Kushatikiri	3*10	60	15%	100	P1
145	Keonjhar	AED	GHATAGAON	GHATAGAON	PARADIHA 1 UPARADIHA	16 KVA+10KVA	55	15%	100	P1
146	Keonjhar	AED	Ghatagaon	Dhenkikote	atibari Barabeda(JaharSah	3*16	55	15%	100	P1
147	Keonjhar	AED	ANANDAPUR	Ramachnadrapur	Mahuri tarini Mandira	1*16+1*25	80	15%	100	P1
148	Keonjhar	AED	Bidyadharpur	Hatadihi	CHENAPADI JENA SAHI	16*2	36	15%	63	P1
149	Keonjhar	AED	ANANDAPUR	KESHADURAPAL	GHUSHURIAPADA	16 KVA	40	15%	63	P1
150	Keonjhar	AED	ANANDAPUR	ANANDAPUR	HATRAKANA(16,KVA,10KV	2*16	40	15%	63	P1
151	Keonjhar	JODA	CHAMPUA	REMULI	BRAHAPOSI	16KVA,10KVA	50	15%	100	P1
152	Keonjhar	JODA	CHAMPUA	REMULI	SI RADHAKRUSHNA MANI	16KVA,10KVA	45	15%	100	P1
153	Keonjhar	JODA	CHAMPUA	REMULI	KAINSI SIBANI CHAKKA	16KVA,10KVA	50	15%	100	P1
154	Keonjhar	JODA	CHAMPUA	Champua	Sananei Bandhasahi	10	25	15%	63	P1
155	Keonjhar	JODA	CHAMPUA	Champua	Mathurapur Mundasahi	16KVA	30	15%	63	P1
156	Keonjhar	JODA	BARBIL	BARBIL- 2	BHNJA COLONY	16	40	15%	100	P1
157	Keonjhar	JODA	BARBIL	BARBIL- 2	BASE CAMP	16	60	15%	100	P1
158	Keonjhar	JODA	CHAMPUA	Champua	Kashipal	16KVA	50	15%	100	P1
159	Keonjhar	JODA	CHAMPUA	Jhumpura	Sariaposi	16	47	15%	63	P1

Annexure -Y Addition of 11 kV Lines (O/H + UG) and additional Bay proposals for Load shift/ N-1 connectivity /Length Reduction / Loss optimization

Sl. No.	Name Of the Circle	Division	Source GSS / PSS Name	Feeder	Proposal Length (CKm)	Bay	RMU	Proposal From	Proposal To	Proposed Conductor	Existing Loading (MVA)	% Load growth per year	Abnornality Identified
1	Jajpur	KUED	BALIA PSS	BALIA	1.50	1	N	SOURCE HEAD [BALIA PSS]	PATANA A/B SWITCH	100 sqmm	2.86	2.30	Overloading Mitigation & Voltage Improvement
2	Keonjhar	JOED	Champua PSS	Adhangapal	1.00	N	N	Champua Town feeder	Godhuli Balidhipa village	100 sqmm	1	6.17	N-1 Interconnectivity & Reliability improvement
3	Keonjhar	AED	Harandanpur PSS	Badapalasapal	7.00	1	N	Bhagamunda PSS	Hayanpur	100 sqmm	0.9	6.17	Under-Voltage Mitigation & Long length Mitigation
4	Keonjhar	JOED	Sundara/Barbil-2 PSS	Balani-1	7.00	1	N	Barbil PSS	63 KVA Pani pump	100 sqmm	2.76	7.67	Overloading Mitigation & Voltage Improvement
5	Keonjhar	JOED	Joda PSS	Bileipada	3.80	N	N	Basudevpur PSS	Water dam	100 sqmm	1.5	7.67	Under-Voltage Mitigation & Long length Mitigation
6	Keonjhar	JOED	Jhumpura PSS	Jhumpura	1.50	1	N	Jhumpura PSS	Teliarsala School	100 sqmm	1.7	6.17	Under-Voltage Mitigation
7	Baripada	RED	Asanabani pss	Anlajodi	1.00	N	N	Anlajodi feeder	Gorumahisani feeder	100 sqmm	1.4	5	Under-Voltage Mitigation
8	Keonjhar	JOED	Jhumpura PSS	Palaspanga	3.00	1	N	Raisuan PSS	Palaspanga	100 sqmm	2.22	6.17	Under-Voltage Mitigation & Long length Mitigation
9	Keonjhar	AED	Salania PSS	Sadanga	0.50	N	N	Orali PSS	Chandra College	100 sqmm	1.11	6.17	Under-Voltage Mitigation
10	Keonjhar	AED	Pipilia PSS	Toranipokhari	1.00	N	N	Sarthapur feeder (Kendeiposi PSS_KED)	Toranipokhari feeder	100 sqmm	0.59	6.17	Under-Voltage Mitigation & Long length Mitigation
11	Keonjhar	KED	Banspal PSS	Kanjipani	6.00	1	N	suakati PSS	Talakaipur	100 sqmm	1	6.17	Undervoltage Mitigation & Long length mitigation / Highest SAIDI
12	Keonjhar	AED	Sainkula PSS	Bhaganai	1.50	N	N	Sainkula PSS	Bhagnai	100 sqmm	1	6.17	Loading Accomodation & Long Length reduction
13	Keonjhar	KED	Raisuan i PSS	Bonajadi feeder	7.00	N	N	raisuan PSS	10 KVA TIKIRA PARA SAHI DTR.	100 sqmm	1	6.17	Under-Voltage Mitigation / Highest SAIFI
14	Bhadrak	BSED	BISALPATA	AGARPADA	0.80	N	N	PURUSANDHA	Agarpada market	100 sqmm	1.68	5.23	Under-Voltage Mitigation
15	Bhadrak	BNED	CHANDABALI	BIJAYANAGAR	2.65	N	N	OAIC BEGUNIA	MRUGANAYANI	100 sqmm	2.03	5.23	Under-Voltage Mitigation
16	Bhadrak	BNED	CHANDABALI	BIJAYANAGAR	3.10	N	N	Tapping Point	ORA SAHI 1	100 sqmm	2.03	5.23	Under-Voltage Mitigation
17	Bhadrak	BNED	CHANDABALI	BIJAYANAGAR	3.00	N	N	B92 GOPAL SAHI-3	B76 GOBIND PUR	100 sqmm	2.03	5.23	Under-Voltage Mitigation
18	Bhadrak	BNED	POWERHOUSE	CHARAMPA-I	0.35	N	N	POWER HOUSE PSS	PANTALOOM RMU	3Cx400 sqmm	4.74	9.09	Overloading Mitigation & Voltage Improvement
19	Bhadrak	BSED	DHAMNAGAR	DHAMNAGAR	2.00	N	N	PURUSOTTAMPUR(PATULI)	D58 MATHA SAHI	100 sqmm	2.91	5.23	Overloading Mitigation & Voltage Improvement
20	Bhadrak	BNED	POWERHOUSE	EREIN	1.00	N	N	NACHHIPUR NATHA SCHOOL	MUNI PADIA	100 sqmm	3.74	9.09	Overloading Mitigation & Voltage Improvement
21	Bhadrak	BNED	POWERHOUSE	KANTABANIA	0.35	N	N	IGLU ICE FACTORY LEC	HOTEL BLUE VINE	3Cx400 sqmm	3.54	9.09	Overloading Mitigation & Voltage Improvement
22	Bhadrak	BNED	JASHIPUR	KARNAPOKHARI	0.30	N	N	B25 NUASAHI	3722	100 sqmm	2.43	5.23	Under-Voltage Mitigation
23	Bhadrak	BNED	JASHIPUR	KARNAPOKHARI	5.60	N	N	3717	3691	100 sqmm	2.43	5.23	Under-Voltage Mitigation
24	Bhadrak	BNED	JASHIPUR	KARNAPOKHARI	3.20	N	N	Tapping Point	3820	100 sqmm	2.43	5.23	Under-Voltage Mitigation
25	Bhadrak	BSED	DHAMNAGARCHHAK	KENDUAPADA	2.00	N	N	C 40.1 NIMI GADIA	BADA SHASAN 4	100 sqmm	1.89	5.23	Under-Voltage Mitigation
26	Bhadrak	BNED	BASUDEVPUR	MANDARI	0.80	N	N	PADHI SAHI	POLICE STATION	100 sqmm	1.43	9.09	Under-Voltage Mitigation
27	Bhadrak	BNED	KUNDIBAG (ODSSP)	NACHIPUR	1.50	N	N	Barik Chhak	Nachipur	100 sqmm	0.3	5.23	Overloading Mitigation & Voltage Improvement
28	Bhadrak	BNED	KUNDIBAG (ODSSP)	NACHIPUR	1.30	N	N	CARMEL SCHOOL	NACHIPUR RWSS	100 sqmm	0.30	5.23	Overloading Mitigation & Voltage Improvement
29	Bhadrak	BNED	BASUDEVPUR	NARASINGHAPUR	0.80	N	N	PITAGODIA KANTHI SAHI	PADHAN PADHI 3	100 sqmm	2.53	5.23	Under-Voltage Mitigation

Annexure -Y Addition of 11 kV Lines (O/H + UG) and additional Bay proposals for Load shift/ N-1 connectivity /Length Reduction / Loss optimization

30	Bhadrak	BSED	NILAK (ODSSP)	OLAMA	0.70	N	N	TIRIKANA CHHAK	A21 MAHULGADIA	100 sqmm	1.79	5.23	Under-Voltage Mitigation
31	Bhadrak	BNED	TAHASIL	SANTHIA	4.00	1	N	kundibag PSS	Sadabarata matha	3Cx400 sqmm	6.75	9.09	Overloading Mitigation & Voltage Improvement
32	Bhadrak	BSED	RAHANDIA	SARAMANGA	0.70	N	N	BARAPADA BAZAR	GOPAL GIRI	100 sqmm	2.27	5.23	Overloading Mitigation & Voltage Improvement
33	Bhadrak	BSED	RAHANDIA	SARAMANGA	2.00	N	N	PSS	KHANDIA SAHI	100 sqmm	2.27	5.23	Overloading Mitigation & Voltage Improvement
34	Keonjhar	AED	Ghatagaon PSS	Gadadharpur	2.50	1	N	Ghatagaon PSS Golabanda	Ghatagaon College Bataharichandanpur	100 sqmm	0.7	6.17	N-1 Interconnectivity & Reliability improvement
35	Keonjhar	AED	Dhenkikote PSS	Hatibari	1.70	N	N	63 KVA SNVL	Tikira Playground	100 sqmm	0.2	6.17	N-1 Interconnectivity & Reliability improvement
36	Balasore	BED	Kalimandir PSS	Damodarpur	1.00	1	N	PSS	NEAR TV HOSPITAL	3Cx400 sqmm	3.1	9.86	Overloading Mitigation & Voltage Improvement
37	Balasore	CED	Remuna	Remuna	3.00	1	N	dead line end pt.	AR	100 sqmm	3.92	6.18	Overloading Mitigation & Voltage Improvement
38	Balasore	CED	Remuna	Remuna	3.00	N	N	SRIRAMPUR RWSS	Beherasahi tail end	100 sqmm	3.92	6.18	Overloading Mitigation & Voltage Improvement
39	Balasore	SED	Soro Clg	Soro Town	1.50	N	N	Soro Clg PSS	21.283234,86.681032	3Cx400 sqmm	3.77	9.86	Overloading Mitigation & Voltage Improvement
40	Balasore	JED	Dehurda	Deula	0.80	N	N	Mahana LIU point	Soharia 100 KVA	100 sqmm	2.34	6.18	Under-Voltage Mitigation
41	Balasore	JED	Jaleswar	Jaleswar Town	4.00	N	N	JLS PSS Bada bazar	Nua Bazar Rajpur 1 way RMU	3Cx400 sqmm	3.51	9.86	Overloading Mitigation & Voltage Improvement
42	Balasore	JED	Nampo	Ambilitha	5.60	N	N	New Laxmannathpur PSS	Near Jio mart	100 sqmm	1.31	6.18	Overloading Mitigation & Voltage Improvement
43	Balasore	JED	Nampo	Ambilitha	0.35	N	N	Railway crossing	-	3Cx400 sqmm	1.31	6.18	Overloading Mitigation & Voltage Improvement
44	Baripada	BPED	Stadium PSS	Bhanjpur	1.00	N	N	Stadium PSS	Axis bank ,bhanjpur chhak,near tiger reserve forest office	148 Sqmm	4.10	10.00	Overloading Mitigation & Voltage Improvement
45	Baripada	BPED	New Murgabadi PSS	New Feeder	20.50	N	N	New Murgabadi PSS	New Bifurcation point	100 sqmm	-	-	Overloading Mitigation & Voltage Improvement
46	Bhadrak	BNED	New Haldidiha PSS	New Feeder	8.05	N	N	New Haldidiha PSS	New Bifurcation point	3Cx400 sqmm	-	-	Overloading Mitigation & Voltage Improvement
47	Bhadrak	BNED	New Haldidiha PSS	New Feeder	0.50	N	N	New Haldidiha PSS	New Bifurcation point	100 sqmm	-	-	Overloading Mitigation & Voltage Improvement
48	Baripada	RED	Kantabani pss	Dubulabeda	5.00	1	N	Kantabani pss	FOREST COLONY/100 KVA DTR	148 Sqmm	6.73	10.00	Overloading Mitigation & Voltage Improvement
49	Baripada	BPED	Lalbazar PSS	Jublee	3.50	1	1	Lalbazar PSS	KGN MODEL SEAT COVER CENTRE/100 KVA	148 Sqmm	4.4	10.00	Overloading Mitigation & Voltage Improvement
50	Baripada	BPED	Rasgobindpur PSS	Khunta-Kamardiha	0.80	N	1	Rasgobindpur PSS	Tentulidinga M.E. School	100 sqmm	1.5	5.00	Under-Voltage Mitigation
51	Keonjhar	JOED	Joda PSS	Joda Town	3.00	0	N	Joda PSS	Kundanala Colony	100 sqmm	3.6	7.67	Overloading Mitigation & Voltage Improvement
52	Keonjhar	JOED	Joda PSS	Joda Town	1.00	1	N	Kundanala Colony	Dhani Chowk	3Cx400 sqmm	3.6	7.67	Overloading Mitigation & Voltage Improvement
53	Baripada	BPED	Kalabadia PSS	Kuliana	6.00	1	N	Kalabadia PSS	PRINCE HOTEL/25 kva	100 sqmm	2	5	Under-Voltage Mitigation
54	Baripada	BPED	Kalabadia PSS	Kuliana	1.00	N	N	Kalabadia PSS	PRINCE HOTEL/25 kva	3Cx400 sqmm	2	5	Under-Voltage Mitigation
55	Baripada	UED	Rathipur PSS	Old Sarat	8.00	1	N	Rathipur PSS	Nadisahi/25 KVA	100 sqmm	2	5	Under-Voltage Mitigation
56	Balasore	BTED	Kalipada	Chowmukh	3.20	N	N	PSS	GIS_Laxmi V store	100 sqmm	2.0	6.18	Under-Voltage Mitigation

Annexure-Z Addition of 33 kV Lines (O/H + UG) and additional Bay proposals for Load shift/ N-1 connectivity /Length Reduction / Loss optimization

Sl. No.	Name Of the Circle	Division	Source GSS / PSS Name	Feeder	Proposal Length (CKm)	Bay	RMU	Proposal From	Proposal To	Proposed Conductor	Exisltng Loading (MVA)	% Load growth per year	Abnormlity Identified
1	Jajpur	JTED	JAJPUR TOWN GSS	MANGALPUR	0.25	N	N	SOURCE HEAD [JAJPUR TOWN GSS]	NEAR JAJPUR TOWN PSS	3Cx400 Sqmm	14.17	2.30	Overloading Mitigation & Voltage Improvement
2	Keonjhar	JOED	Barbil GSS	Sundara	1.00	N	1-Taken Separately	Barbil-1 feeder	Sunadara PSS	232 Sqmm	12.00	7.60	N-1 Interconnectivity & Reliability improvement
3	Bhadrak	BNED	soro grid	Basudevpur	8.00	N	N	Cost canal PSS	Eram PSS	232 Sqmm	18.30	5.23	Under-Voltage Mitigation
4	Bhadrak	BNED	Bhadrak Grid	Nandapur	0.30	N	N	Near New bus stand crossing	Entire Crossing	3Cx400 Sqmm	15.21	5.23	Overloading Mitigation & Voltage Improvement
5	Bhadrak	BNED	Bhadrak Grid	Gopinathpur	0.20	N	N	Railway Crossing	Entire Crossing	3Cx400 Sqmm	18.18	5.23	Overloading Mitigation & Voltage Improvement
6	Balasore	BED	Balasore	Balasore-1	1.70	1-Grid	N	Balasore GSS	Rameswar Mandir PSS	3Cx400 Sqmm	20.88	9.86	Overloading Mitigation & Voltage Improvement
7	Balasore	BED	Chandipur	New Swadhinpadia	5.00	1-Grid	1-Taken Separately	Infront Of GSS ITR DP	ITR PSS	3Cx400 Sqmm	21.28	9.86	Overloading Mitigation & Voltage Improvement
8	Balasore	SED	Soro	Gopinathpur	0.50	N	N	Nearby The Gym	PS PAINT & HARDWARE	3Cx400 Sqmm	15.81	6.18	Reliability and Safety Improvement
9	Baripada	BPED	Bangiriposi GSS	Bangiriposi new	13.00	1	1-Taken Separately	Saragchida PSS	Sirsa PSS	232 Sqmm	15.70	5.00	Overloading Mitigation & Voltage Improvement
10	Baripada	BPED	Bangiriposi GSS	New Murgabadi PSS	6.00	N	N	Bangiriposi GSS	New Murgabadi PSS	232 Sqmm	-	-	Overloading Mitigation & Voltage Improvement
11	Baripada	BPED	Bangiriposi GSS	New Murgabadi PSS	11.55	N	N	Bangiriposi GSS	New Murgabadi PSS	3Cx400 Sqmm	-	-	Overloading Mitigation & Voltage Improvement
12	Baripada	BPED	Bangiriposi GSS	Bangiriposi new	4.00	N	N	Saragchida PSS	Sirsa PSS	3Cx400 Sqmm	15.70	5.00	Overloading Mitigation & Voltage Improvement
13	Baripada	BPED	Betnoti GSS	Betnoti-II	10.00	1-Grid	N	Basta GSS	Merda PSS	232 Sqmm	16.80	5.00	Overloading Mitigation & Voltage Improvement
14	Baripada	UED	Udala GSS	Khunta	2.00	N	N	Hatibandha	Kerko PSS	232 Sqmm	8.70	5.00	Aged & Under-Rated Conductor
15	Jajpur	JRED	JAJPUR ROAD GSS	PANIKOILI	4.60	N	1-Taken Separately	SOURCE HEAD [JAJPUR ROAD GSS]	Near Janaha Bypass	3Cx400 Sqmm	14.05	4.94	Overloading Mitigation & Voltage Improvement
16	Jajpur	JRED	JAJPUR ROAD GSS	SALAKANA	4.00	1.00	1	RAMBAG PSS	RAMACHANDRAPUR PSS	232 Sqmm	14.46	5.49	Overloading Mitigation & Voltage Improvement
17	Jajpur	KuED	JAJPUR TOWN GSS	BARI	12.00	N	1-Taken Separately	SOURCE HEAD [NEW BALICHANDRAPUR GSS]	BALIA PSS	232 Sqmm	20.23	2.30	Overloading Mitigation & Voltage Improvement
18	Jajpur	KuED	JAJPUR TOWN GSS	BARI	1.00	N	N	SOURCE HEAD [NEW BALICHANDRAPUR GSS]	BALIA PSS	3Cx400 Sqmm	20.23	2.30	Overloading Mitigation & Voltage Improvement
19	Jajpur	JRED	JAJPUR ROAD GSS	KUAKHIA	0.30	N	1	JAJPUR ROAD GSS	Yazdani 4-Pole	3Cx400 Sqmm	20.63	5.49	Overloading Mitigation & Voltage Improvement
20	Jajpur	JRED	JAJPUR ROAD GSS	KUAKHIA	0.30	N	N	Concord Railway	Tapping of 33/11KV Vyasasarobar PSS	3Cx400 Sqmm	20.63	5.49	Overloading Mitigation & Voltage Improvement
21	Jajpur	JTED	JAJPUR TOWN GSS	SUNDARMUHI	3.00	N	N	JAJPUR TOWN GSS	Jaunlibandha	3Cx400 Sqmm	10.72	5.49	Overloading Mitigation & Voltage Improvement
22	Jajpur	JTED	JAJPUR TOWN GSS	BINJHARPUR	3	N	N	SOURCE HEAD [JAJPUR TOWN GSS]	KALARABANKA	3Cx400 Sqmm	14.93	2.3	N-1 Interconnectivity & Reliability improvement
23	Balasore	SED	Soro	Bahanaga	2	1-PSS	N	High land Agro	Sergarh	232 Sqmm	15.5	6.18	Overloading Mitigation & Voltage Improvement
24	Balasore	SED	Soro	Bahanaga	1.1	N	N	NH Crossing	-	3Cx400 Sqmm	15.5	6.18	Overloading Mitigation & Voltage Improvement

Annexure-AA Addition New DTRs along with Associated HT/LT lines

SL No.	Circle	Division	Sub-division	Section	Name of existing DTR /Location for which additiona DT is proposed	Exisitng DTR Capacity(KVA)	Proposed DT capacity (KVA)	Req. 11 KV line to charge the DT (In km)	Req. LT AB cable line (In km)	Additional Load due to Load Shift & LG Accomodaiton (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Justification for requirement	Priority
1	Baleshwar	CED	RE SDO-I BALASORE	ESO DURGADEVI	BALIAPAL CHHAKA DTR	100	100	0.20	0.3	6	5.64	0.002	0.17	68.86	1.45	OL, OG & Long length LT	P1
2	Baleshwar	CED	SDO NILGIRI	ESO SERGARH	KABARGHANA DTR	100	100	-	-	7	6.10	0.003	0.17	63.67	1.57	OL, OG & Long length LT	P1
3	Baleshwar	CED	RE SDO-I BALASORE	ESO SERGARH	SUTEI DTR	100	100	0.20	0.3	6	5.52	0.002	0.17	70.30	1.42	OL, OG & Long length LT	P1
4	Baleshwar	CED	RE SDO-II BALASORE	ESO FULADI	FULADI MARKET DTR	100	100	0.10	0.3	6	5.48	0.002	0.17	70.84	1.41	OL, OG & Long length LT	P1
5	Baleshwar	CED	RE SDO-I BALASORE	ESO DURGADEVI	SUHANA NURSERY	63	100	0.15	0.3	5	4.68	0.002	0.17	82.92	1.21	OL, OG & Long length LT	P1
6	Baleshwar	CED	SDO NILGIRI	ESO SERGARH	NUTIPATNA	100	100	0.20	0.3	6	5.64	0.002	0.17	68.78	1.45	OL, OG & Long length LT	P1
7	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-1	PWD COLONY	100	100	0.03	0.3	8	7.57	0.003	0.17	51.25	1.95	OL, OG & Long length LT	P1
8	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-1	MANIGAM MUNDA	100	100	0.10	0.3	4	3.80	0.002	0.17	102.21	0.98	OL, OG & Long length LT	P1
9	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-2	DOOR DARSHAN GALI	100	100	0.20	0.8	4	3.68	0.002	0.17	105.40	0.95	OL, OG & Long length LT	P1
10	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-2	BARKATT NAGAR	100	100	0.20	0.7	5	4.30	0.002	0.17	90.22	1.11	OL, OG & Long length LT	P1
11	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-2	MUNICIPALITY	100	100	0.30	0.7	4	3.58	0.002	0.17	108.34	0.92	OL, OG & Long length LT	P1
12	KEONJHAR	JOED	SDO BARBIL	ESO BARBIL-2	BHANJA COLONY	100	100	0.20	0.6	4	3.94	0.002	0.17	98.62	1.01	OL, OG & Long length LT	P1
13	KEONJHAR	JOED	SDO CHAMPUPA	ESO CHAMPUPA	HATAPADIA	100	100	0.04	0.1	5	4.75	0.002	0.17	81.79	1.22	OL, OG & Long length LT	P1
14	KEONJHAR	JOED	SDO CHAMPUPA	ESO CHAMPUPA	DAMAD MOHALLA	100	100	0.10	0.5	7	5.95	0.003	0.17	65.18	1.53	OL, OG & Long length LT	P1
15	KEONJHAR	JOED	SDO CHAMPUPA	ESO CHAMPUPA	PETROL PUMP	100	100	0.04	0.5	5	4.72	0.002	0.17	82.17	1.22	OL, OG & Long length LT	P1
16	KEONJHAR	KED	-	ESO PATNA	PATANA STRUCTURE	100	100	0.20	0.3	5	4.46	0.002	0.17	86.98	1.15	OL, OG & Long length LT	P1
17	Baleshwar	BED	SDO-II BALASORE	ESO GANESWARPUR	SAPTAGIRI	500	100	-	-	25	22.91	0.010	0.17	16.94	5.90	OL, OG & Long length LT	P1
18	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-IV	DURGA MANDAP	630	100	-	-	31	27.72	0.012	0.17	14.00	7.14	OL, OG & Long length LT	P1
19	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-IV	100KVA NARAYAN MANDIR	500	100	-	-	24	22.01	0.010	0.17	17.64	5.67	OL, OG & Long length LT	P1
20	Baleshwar	BED	SDO-I BALASORE	ESO MATHASAH	KHAPRAPADA	500	100	-	-	24	21.71	0.010	0.17	17.88	5.59	OL, OG & Long length LT	P1
21	Baleshwar	BED	SDO-I BALASORE	ESO MATHASAH	BAIRAM NAGAR	500	100	-	-	25	22.46	0.010	0.17	17.28	5.79	OL, OG & Long length LT	P1
22	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-III	KALIDASPUR 500KVA	500	100	-	-	24	21.91	0.010	0.17	17.72	5.64	OL, OG & Long length LT	P1
23	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	FANDI CHHAKA	400	100	-	-	19	17.38	0.008	0.17	22.34	4.48	OL, OG & Long length LT	P1
24	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	SUNHAT OFFICE 500KVA	400	100	-	-	22	19.85	0.009	0.17	19.55	5.12	OL, OG & Long length LT	P1
25	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-III	BJP PARTY OFFICE	400	100	-	-	26	23.44	0.010	0.17	16.56	6.04	OL, OG & Long length LT	P1
26	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-I	SALETAK COLONY IPDS	100	100	-	-	6	5.59	0.002	0.17	69.41	1.44	OL, OG & Long length LT	P1
27	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-IV	ASANAGAR, FM NAGAR	100	100	-	-	7	6.59	0.003	0.17	58.92	1.70	OL, OG & Long length LT	P1
28	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-IV	FM NAGAR 100KVA	100	100	-	-	8	7.18	0.003	0.17	54.03	1.85	OL, OG & Long length LT	P1
29	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-I	BALIGHAT 100KVA IPDS	100	100	-	-	8	7.08	0.003	0.17	54.81	1.82	OL, OG & Long length LT	P1
30	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	HANUMAN MANDIR IPDS	100	100	-	-	8	7.30	0.003	0.17	53.14	1.88	OL, OG & Long length LT	P1
31	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	AIGAR GALI IPDS	100	100	-	-	7	6.44	0.003	0.17	60.25	1.66	OL, OG & Long length LT	P1
32	Baleshwar	BED	SDO-I BALASORE	ESO GOPALGAON	RANIFRATANA IPDS-1 100KVA	100	100	-	-	6	5.46	0.002	0.17	71.08	1.41	OL, OG & Long length LT	P1
33	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-IV	PANDA FRONT HOUSE 100 KVA	100	100	-	-	7	6.65	0.003	0.17	58.35	1.71	OL, OG & Long length LT	P1
34	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-IV	GOVT. ITI HOSTEL FRONT 100KVA	100	100	-	-	7	6.56	0.003	0.17	59.14	1.69	OL, OG & Long length LT	P1
35	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-I	PARBATI NAGAR IPDS	100	100	-	-	7	5.98	0.003	0.17	64.85	1.54	OL, OG & Long length LT	P1
36	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	DEWANI SAHI PANI TRUNKAR	100	100	-	-	6	5.67	0.002	0.17	68.49	1.46	OL, OG & Long length LT	P1
37	Baleshwar	BED	SDO-I BALASORE	ESO BALASORE NO-II	GOLAPOKHARI IPDS-4	100	100	-	-	6	5.36	0.002	0.17	72.39	1.38	OL, OG & Long length LT	P1
38	Baleshwar	BED	SDO-II BALASORE	ESO BALASORE NO-III	MAA BAPA 100KVA	100	100	-	-	6	5.76	0.003	0.17	67.40	1.48	OL, OG & Long length LT	P1
39	Baleshwar	BED	SDO-I BALASORE	ESO MATHASAH	NATH PANI TEMPLE-IPDS RK JENA HOUSE	100	100	-	-	6	5.52	0.002	0.17	70.37	1.42	OL, OG & Long length LT	P1
40	Baleshwar	BTED	SDO JAMSULI	ESO JAMSULI	KHAPARAPADA	100	100	0.50	0.5	7	6.68	0.003	0.17	58.13	1.72	OL, OG & Long length LT	P1
41	Baleshwar	BTED	SDO BASTA	ESO BASTA NO-II	KUNEI63KV (JAGANNATH TEMPLE)	63	100	0.40	1	6	4.99	0.002	0.17	77.71	1.29	OL, OG & Long length LT	P1
42	BHADRAK	BNED	SDO-I BHADRAK	ESO BHADRAK NO-I	100KVA DTR THANACHHAKA BANDHA	100	100	-	0.1	5	4.87	0.002	0.17	79.73	1.25	OL, OG & Long length LT	P1
43	BHADRAK	BNED	SDO-I BHADRAK	ESO BHADRAK NO-I	250 KVA VETINARI	250	100	0.6(UG)	0.5	14	12.44	0.005	0.17	31.19	3.21	OL, OG & Long length LT	P1
44	BHADRAK	BNED	SDO-I BHADRAK	ESO BHADRAK NO-I	SALANDI HOSPITAL BACK SITE	100	100	-	0.5	4	3.91	0.002	0.17	99.34	1.01	OL, OG & Long length LT	P1
45	BHADRAK	BNED	SDO-I BHADRAK	ESO CHARAMPA	500 KVA SABITRI COLLAR LABA	500	100	-	0.5	21	18.97	0.008	0.17	20.46	4.89	OL, OG & Long length LT	P1
46	BHADRAK	BNED	SDO-II BHADRAK	ESO DOLASAH	100 KVA DOLASAH	100	100	0.10	0.8	6	5.23	0.002	0.17	74.16	1.35	OL, OG & Long length LT	P1
47	BHADRAK	BNED	SDO TIHIDI	ESO CHANDBALI	250 KVA MATTO KACHERI PADIA	250	100	0.10	0.6	14	12.76	0.006	0.17	30.41	3.29	OL, OG & Long length LT	P1
48	BHADRAK	BNED	SDO TIHIDI	ESO TIHIDI	100 KVA OLD SDO OFFICE	100	100	0.10	0.2	5	4.54	0.002	0.17	85.41	1.17	OL, OG & Long length LT	P1
49	BARIPADA	RED	SDO-I RAIRANGPUR	ESO KANTABANI	BANASAH 1DT	100	100	-	-	5	4.93	0.002	0.17	78.66	1.27	OL, OG & Long length LT	P1
50	BARIPADA	RED	SDO-I RAIRANGPUR	ESO RAIRANGPUR	BHALUBASA DT	100	100	-	-	6	5.00	0.002	0.17	77.58	1.29	OL, OG & Long length LT	P1
51	BARIPADA	RED	SDO-I RAIRANGPUR	ESO TIRINGI	DALIMA TOWN NESCO 100KVA	100	100	-	-	5	4.40	0.002	0.17	88.29	1.13	OL, OG & Long length LT	P1
52	BARIPADA	RED	SDO-I RAIRANGPUR	ESO BAHALDA	GOMORIA DT	100	100	-	-	6	4.97	0.002	0.17	78.10	1.28	OL, OG & Long length LT	P1
53	BARIPADA	RED	SDO-I RAIRANGPUR	ESO KANTABANI	GORUMAHISANI	100	100	-	-	5	4.32	0.002	0.17	89.84	1.11	OL, OG & Long length LT	P1
54	BARIPADA	RED	SDO-I RAIRANGPUR	ESO BAHALDA	63 KV DTR BASINGI 69	63	100	-	-	3	2.56	0.001	0.17	151.73	0.66	OL, OG & Long length LT	P1
55	BARIPADA	RED	SDO-I RAIRANGPUR	ESO BAHALDA	63K.V DTR MAA CXOMPUTER CENTER	63	100	-	-	3	2.69	0.001	0.17	144.54	0.69	OL, OG & Long length LT	P1
56	BARIPADA	RED	-	ESO BAHALDA	100KV DTR MOSHANI PADA	100	100	-	-	5	4.32	0.002	0.17	89.76	1.11	OL, OG & Long length LT	P1
57	BARIPADA	RED	SDO-II RAIRANGPUR	ESO JAMDA	63 KV DTR GUDTAGHUTU	63	100	-	-	3	2.55	0.001	0.17	152.03	0.66	OL, OG & Long length LT	P1
58	BARIPADA	RED	SDO-II BALASORE	ESO KUSUMI	KISKU	100	100	-	-	7	6.67	0.003	0.17	58.22	1.72	OL, OG & Long length LT	P1
59	BARIPADA	RED	SDO-I RAIRANGPUR	ESO RAIRANGPUR	BHALUBASHA BUS STAND	63	100	-	-	3	2.49	0.001	0.17	155.89	0.64	OL, OG & Long length LT	P1
60	BARIPADA	BPED	SDO KULIANA	ESO BANGIRIPOSI	DANDA I DT	100	100	0.10	0.2	7	6.25	0.003	0.17	62.10	1.61	OL, OG & Long length LT	P1
61	BARIPADA	BPED	SDO BARIPADA	ESO BHANJPUR	DI CHAR 250 KVA	250	100	0.40	0.5	14	12.66	0.006	0.17	30.65	3.26	OL, OG & Long length LT	P1
62	BARIPADA	BPED	SDO RURAL	ESO RAGHUNATHPUR	MUNSHIBANDHA	100	100	-	0.8	4	3.97	0.002	0.17	97.68	1.02	OL, OG & Long length LT	P1
63	BARIPADA	BPED	SDO MORODA	ESO MORODA	ASTAGADIA DT	100	100	0.20	0.6	5	4.29	0.002	0.17	90.57	1.10	OL, OG & Long length LT	P1

Annexure-AA Addition New DTRs along with Associated HT/LT lines

SL No.	Circle	Division	Sub-division	Section	Name of existing DTR /Location for which additiona DT is proposed	Exisitng DTR Capacity(KVA)	Proposed DT capacity (KVA)	Req. 11 KV line to charge the DT (In km)	Req. LT AB cable line (In km)	Additional Load due to Load Shift & LG Accomodaiton (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Justification for requirement	Priority
64	BARIPADA	BPED	SDO BARIPADA	ESO BARIPADA NO-I	JAGANATH MANDIR (2)	250	100	-	0.25	13	12.08	0.005	0.17	32.13	3.11	OL, OG & Long length LT	P1
65	BARIPADA	BPED	SDO RURAL	ESO CHHANCHA	TATA MOTORS	100	100	-	0.5	5	4.31	0.002	0.17	90.02	1.11	OL, OG & Long length LT	P1
66	BARIPADA	BPED	SDO BARIPADA	ESO BARIPADA NO-II	DEBENDRAPUR	100	100	-	1	6	5.55	0.002	0.17	69.90	1.43	OL, OG & Long length LT	P1
67	BARIPADA	BPED	SDO RURAL	ESO CHHANCHA	IDCO I N-CHHANCHA IDCO	100	100	0.20	0.35	5	4.18	0.002	0.17	92.78	1.08	OL, OG & Long length LT	P1
68	BARIPADA	BPED	SDO BARIPADA	No-1	CHURCH DTR	100	100	-	0.2	6	5.44	0.002	0.17	71.30	1.40	OL, OG & Long length LT	P1
69	BARIPADA	BPED	SDO BARIPADA	BHANJPUR	KANHU PRADHAN 1	100	100	0.30	0.5	5	4.69	0.002	0.17	82.81	1.21	OL, OG & Long length LT	P1
70	BARIPADA	BPED	SDO KULIANA	ESO JHARPOKHARIA	MUNDHAKOTA 100KVA	100	100	0.10	0.2	6	4.96	0.002	0.17	78.32	1.28	OL, OG & Long length LT	P1
71	BARIPADA	BPED	SDO MORODA	ESO MORODA	KISANTANDI (3) HOSPITAL	100	100	0.15	0.4	6	5.14	0.002	0.17	75.53	1.32	OL, OG & Long length LT	P1
72	BARIPADA	BPED	SDO MORODA	ESO MORODA	CHHITRODA 3 DT	100	100	0.15	0.3	4	4.02	0.002	0.17	96.66	1.03	OL, OG & Long length LT	P1
73	BARIPADA	BPED	SDO RURAL	ESO NO-IV SULIAPADA	SULIAPDA BLOCK CHALK MARKET	100	100	0.20	0.5	6	5.15	0.002	0.17	75.38	1.33	OL, OG & Long length LT	P1
74	BARIPADA	BPED	SDO KULIANA	ESO BANGIRIPOSI	DHABANISALE 100KV DT	100	100	0.20	0.5	5	4.35	0.002	0.17	89.27	1.12	OL, OG & Long length LT	P1
75	BARIPADA	BPED	SDO KULIANA	ESO BANGIRIPOSI	MANBHANJ	100	100	0.05	0.5	5	4.37	0.002	0.17	88.77	1.13	OL, OG & Long length LT	P1
76	BARIPADA	BPED	SDO KULIANA	ESO BANGIRIPOSI	NEAR GHATI DT	100	100	-	0.5	7	5.88	0.003	0.17	65.97	1.52	OL, OG & Long length LT	P1
77	KEONJHAR	AED	SDO ANANDAPUR	ESO ANANDPUR- Ghaspura	MEDICAL	500	100	0.10	0.2	25	22.56	0.010	0.17	17.20	5.81	OL, OG & Long length LT	P1
78	KEONJHAR	AED	SDO ANANDAPUR	ESO GHASIPURA	DHAKOTA VILLAGE	100	100	0.40	0.5	4	3.85	0.002	0.17	100.86	0.99	OL, OG & Long length LT	P1
79	KEONJHAR	AED	SDO ANANDAPUR	ESO RAMCHANDRAPUR	PATHARAPADA	100	100	0.20	0.7	4	3.83	0.002	0.17	101.46	0.99	OL, OG & Long length LT	P1
80	KEONJHAR	AED	SDO GHATGAON	ESO GHATAGAON	UPERDIHA-1	100	100	0.50	0.8	4	3.81	0.002	0.17	101.98	0.98	OL, OG & Long length LT	P1
81	KEONJHAR	AED	SDO BIDYADHARPUR	ESO HATADIHI	CHENAPADI MARKET	250	100	0.10	0.1	11	9.48	0.004	0.17	40.96	2.44	OL, OG & Long length LT	P1
82	KEONJHAR	AED	SDO BIDYADHARPUR	ESO BIDYADHARPUR Hatadihi	MAREI GAON POKHARI SAHI	100	100	0.05	0.5	4	3.76	0.002	0.17	103.25	0.97	OL, OG & Long length LT	P1
83	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	NETUA SCHOOL SIDE DTR	100	100	0.10	0.6	5	4.41	0.002	0.17	87.98	1.14	OL, OG & Long length LT	P1
84	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	AMBADIA DTR	100	100	0.10	0.8	5	4.92	0.002	0.17	78.93	1.27	OL, OG & Long length LT	P1
85	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	100KVA TANULITALA	100	100	0.40	0.8	5	4.32	0.002	0.17	89.91	1.11	OL, OG & Long length LT	P1
86	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	DAMURIA 2 DTR	100	100	0.20	0.8	7	5.87	0.003	0.17	66.12	1.51	OL, OG & Long length LT	P1
87	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	NAMPO-1	100	100	0.40	0.9	5	4.38	0.002	0.17	88.61	1.13	OL, OG & Long length LT	P1
88	Baleshwar	JED	SDO BHOGRAI	ESO BHOGRAI	RASALPUR NO-3	100	100	0.20	0.20	8	7.45	0.003	0.17	52.09	1.92	OL, OG & Long length LT	P1
89	Baleshwar	JED	SDO BHOGRAI	ESO BHOGRAI	TALPUKHRI 100KVA	100	100	-	-	6	5.36	0.002	0.17	72.41	1.38	OL, OG & Long length LT	P1
90	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-II	100KVA BAGDA 1 NO	100	100	0.20	1	6	5.32	0.002	0.17	72.96	1.37	OL, OG & Long length LT	P1
91	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-I	BAUNSDIHA DTR	100	100	-	1	6	5.20	0.002	0.17	74.68	1.34	OL, OG & Long length LT	P1
92	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-II	KHULUDA DTR-1	100	100	0.04	0.2	6	5.45	0.002	0.17	71.28	1.40	OL, OG & Long length LT	P1
93	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-I	PUTINA DTR MARKET	100	100	-	1	8	6.79	0.003	0.17	57.20	1.75	OL, OG & Long length LT	P1
94	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-I	CHARIKULI DTR	100	100	0.08	0.5	6	5.02	0.002	0.17	77.30	1.29	OL, OG & Long length LT	P1
95	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-II	BAKSARI DTR	100	100	0.30	1	6	5.50	0.002	0.17	70.61	1.42	OL, OG & Long length LT	P1
96	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-II	UTTAR NARABANI	100	100	0.30	1	5	4.74	0.002	0.17	81.80	1.22	OL, OG & Long length LT	P1
97	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-II	SALIKOTA ROAD SIDE DTR	100	100	0.12	0.1	6	5.63	0.002	0.17	68.98	1.45	OL, OG & Long length LT	P1
98	Baleshwar	JED	SDO BHOGRAI	ESO CHANDANESWAR	BAD SORISA 100KVA	100	100	0.20	1	6	5.44	0.002	0.17	71.39	1.40	OL, OG & Long length LT	P1
99	Bhadrak	BSED	SDO ASURALI	ESO ASURALI	250 KVA DTR DHUSURI MARKET	100	100	-	1	5	4.30	0.002	0.17	90.19	1.11	OL, OG & Long length LT	P1
100	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	NUABAZAR MILBARI DTR	250	100	0.10	0.10	13	11.70	0.005	0.17	33.17	3.01	OL, OG & Long length LT	P1
101	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	JAGANNATH COLLEGE	100	100	0.20	0.3	6	5.31	0.002	0.17	73.15	1.37	OL, OG & Long length LT	P1
102	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	100KVA NEAR SHANTI BAR	100	100	0.20	0.2	8	7.41	0.003	0.17	52.38	1.91	OL, OG & Long length LT	P1
103	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	CONVENT SCHOOL SIDE	100	100	-	0.2	6	5.03	0.002	0.17	77.14	1.30	OL, OG & Long length LT	P1
104	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	BIRISPUR TR 4	100	100	0.03	0.4	5	4.35	0.002	0.17	89.30	1.12	OL, OG & Long length LT	P1
105	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	JHADESWAREPUR	100	100	0.10	0.2	5	4.40	0.002	0.17	88.13	1.13	OL, OG & Long length LT	P1
106	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	RAJPUR BASTI HERO SHOWROOM	250	100	0.10	0.3	13	11.57	0.005	0.17	33.53	2.98	OL, OG & Long length LT	P1
107	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-I	100KVA SASANBAD PANDA BADI	100	100	0.05	0.3	5	4.53	0.002	0.17	85.62	1.17	OL, OG & Long length LT	P1
108	Baleshwar	JED	-	ESO CHANDANESWAR	PASAR BINDHA DTR	100	100	0.30	1	5	4.56	0.002	0.17	85.09	1.18	OL, OG & Long length LT	P1
109	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	GADSAI DTR	100	100	0.15	0.4	5	4.34	0.002	0.17	89.34	1.12	OL, OG & Long length LT	P1
110	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	BEHERASAIH DTR	100	100	0.05	0.3	6	5.05	0.002	0.17	76.78	1.30	OL, OG & Long length LT	P1
111	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	D.P PUR	100	100	0.05	0.7	6	5.11	0.002	0.17	75.93	1.32	OL, OG & Long length LT	P1
112	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	MUNTUNIA	100	100	0.02	0.5	5	4.75	0.002	0.17	81.67	1.22	OL, OG & Long length LT	P1
113	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	100KVA GURUDASPUR	100	100	0.25	0.5	6	5.28	0.002	0.17	73.58	1.36	OL, OG & Long length LT	P1
114	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	KHANABAD DTR	100	100	0.15	0.4	6	5.35	0.002	0.17	72.57	1.38	OL, OG & Long length LT	P1
115	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	MATHURANATH	100	100	0.05	0.7	5	4.39	0.002	0.17	88.47	1.13	OL, OG & Long length LT	P1
116	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	SIKHARPUR-2	100	100	0.25	0.2	5	4.42	0.002	0.17	87.89	1.14	OL, OG & Long length LT	P1
117	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	CHAMARGAN	100	100	0.02	0.5	7	6.35	0.003	0.17	61.14	1.64	OL, OG & Long length LT	P1
118	Baleshwar	JED	SDO JALESWAR	ESO HATIGARH	SORDIHA DTR	100	100	0.08	0.15	5	4.59	0.002	0.17	84.51	1.18	OL, OG & Long length LT	P1
119	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	AMBUJA	63	100	0.20	0.9	6	5.60	0.002	0.17	69.31	1.44	OL, OG & Long length LT	P1
120	Baleshwar	JED	SDO BHOGRAI	ESO CHANDANESWAR	N.M PADIA	63	100	0.30	1	4	3.49	0.002	0.17	111.16	0.90	OL, OG & Long length LT	P1
121	Baleshwar	JED	SDO JALESWAR	ESO NAMPO	PATNA SAHI	63	100	0.50	0.9	3	2.88	0.001	0.17	134.97	0.74	OL, OG & Long length LT	P1
122	Baleshwar	JED	SDO JALESWAR	ESO JALESWAR-II	63 KVA BHAGMARI	63	100	0.12	0.2	3	3.08	0.001	0.17	125.94	0.79	OL, OG & Long length LT	P1
123	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-I	63 KVA DARUHA	63	100	-	0.8	4	3.38	0.001	0.17	114.85	0.87	OL, OG & Long length LT	P1
124	Baleshwar	JED	SDO BHOGRAI	ESO CHANDANESWAR	63 KVA BARABATIA NIMATPUR	63	100	0.30	1	6	5.27	0.002	0.17	73.63	1.36	OL, OG & Long length LT	P1
125	Baleshwar	JED	SDO BHOGRAI	ESO DEHURDA	63 KVA GANESWARPUR	63	100	0.30	0.5	4	3.23	0.001	0.17	120.14	0.83	OL, OG & Long length LT	P1
126	Baleshwar	JED	SDO BHOGRAI	ESO KAMARDA-I	100 KVA TARINI CHAKA	100	100	0.05	2	6	5.23	0.002	0.17	74.21	1.35	OL, OG & Long length LT	P1

Annexure-AA Addition New DTRs along with Associated HT/LT lines

SL No.	Circle	Division	Sub-division	Section	Name of existing DTR /Location for which additiona DT is proposed	Exisitng DTR Capacity(KVA)	Proposed DT capacity (KVA)	Req. 11 KV line to charge the DT (In km)	Req. LT AB cable line (In km)	Additional Load due to Load Shift & LG Accomodaiton (kVA)	Total Load added (kW)	Benefit from new load in Rs. Cr.	Cost of Scheme in Rs. Cr.	Pay Back Period	% Annual Return	Justification for requirement	Priority
127	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	AKAS DAS HOUSE SIDE	100	100	0.20	1	6	5.64	0.002	0.17	68.87	1.45	OL, OG & Long length LT	P1
128	JAIPUR	JRED	SDO DUBURI	ESO DUBURI	UPERTAMAKA	100	100	0.80	1	5	4.73	0.002	0.17	82.00	1.22	OL, OG & Long length LT	P1
129	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	BARIK CLINIC GALI	100	100	0.20	0.8	5	4.24	0.002	0.17	91.58	1.09	OL, OG & Long length LT	P1
130	JAIPUR	JRED	SDO JAIPUR ROAD	ESO DALA	KRISHNA BIHAR	100	100	0.20	0.9	5	4.13	0.002	0.17	94.04	1.06	OL, OG & Long length LT	P1
131	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	PRIYA DARSINI ROAD	100	100	0.30	0.8	4	4.02	0.002	0.17	96.51	1.04	OL, OG & Long length LT	P1
132	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	PANCHAMUKHI HANUMAN TEMPLE	100	100	0.30	0.6	4	3.60	0.002	0.17	107.83	0.93	OL, OG & Long length LT	P1
133	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	CHANDAMA NUASAH	100	100	0.50	0.75	4	3.59	0.002	0.17	108.06	0.93	OL, OG & Long length LT	P1
134	JAIPUR	JRED	SDO PANIKOILI	ESO PANIKOILI	MASUDPUR	100	100	0.60	0.7	4	3.49	0.002	0.17	111.05	0.90	OL, OG & Long length LT	P1
135	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	SWEEPER COLONY-1	100	100	0.30	0.5	4	3.46	0.002	0.17	112.02	0.89	OL, OG & Long length LT	P1
136	JAIPUR	JRED	SDO JAIPUR ROAD	ESO DALA	OM KARESWAR TEMPLE	250	100	0.40	0.6	9	8.36	0.004	0.17	46.42	2.15	OL, OG & Long length LT	P1
137	JAIPUR	JRED	SDO JAIPUR ROAD	ESO CHORDA CHAKKA	BANK OF INDIA SIDE	250	100	0.40	0.8	9	7.97	0.003	0.17	48.71	2.05	OL, OG & Long length LT	P1
138	JAIPUR	JTED	SDO BINJHARPUR	ESO BINJHARPUR NO-I	DHAL SAHI	100	100	0.05	0.4	4	3.45	0.002	0.17	112.43	0.89	OL, OG & Long length LT	P1
139	JAIPUR	JTED	SDO JAIPUR TOWN	ESO JAIPUR TOWN NO-I	KALIMEGHA-100 KVA	100	100	0.05	0.6	3	3.12	0.001	0.17	124.45	0.80	OL, OG & Long length LT	P1
140	JAIPUR	JTED	SDO JAIPUR TOWN	ESO JAIPUR TOWN NO-I	KAPILSWAR-100 KVA	100	100	0.10	0.5	3	2.81	0.001	0.17	137.93	0.72	OL, OG & Long length LT	P1
141	BARIPADA	UED	SDO UDALA	ESO KAPTIPADA	NUADIHA 100KVA	100	100	0.30	1	4	4.00	0.002	0.17	96.96	1.03	OL, OG & Long length LT	P1
142	BARIPADA	UED	SDO KHUNTA	ESO KHUNTA	BALIMUNDULU 100KVA	250	100	0.60	1	12	10.70	0.005	0.17	36.27	2.76	OL, OG & Long length LT	P1
143	BARIPADA	UED	SDO UDALA	ESO UDALA	ADIVASISAH 100KVA	100	100	0.50	0.75	5	4.28	0.002	0.17	90.67	1.10	OL, OG & Long length LT	P1
144	BARIPADA	UED	SDO UDALA	ESO UDALA	STRUCTURE SIDE	250	100	0.40	0.8	12	11.25	0.005	0.17	34.51	2.90	OL, OG & Long length LT	P1
145	BARIPADA	UED	SDO UDALA	ESO UDALA	JAGANNATH TEMPLE	100	100	0.40	0.8	6	5.54	0.002	0.17	70.04	1.43	OL, OG & Long length LT	P1
146	BARIPADA	UED	SDO UDALA	ESO UDALA	NUASAH 100KVA	100	100	0.60	0.9	6	5.76	0.003	0.17	67.40	1.48	OL, OG & Long length LT	P1
147	BARIPADA	UED	SDO UDALA	ESO UDALA	RABIPADA IPDS	100	100	0.40	0.8	6	5.78	0.003	0.17	67.10	1.49	OL, OG & Long length LT	P1
148	BARIPADA	UED	SDO UDALA	ESO UDALA	MAUSI MAA CHHOKO	100	100	0.30	0.85	7	6.63	0.003	0.17	58.56	1.71	OL, OG & Long length LT	P1
149	Baleshwar	SED	SDO SORO	ESO SORO NO-I	ICE FACTORY DTR	100	100	0.10	0.5	6	5.76	0.003	0.17	67.39	1.48	OL, OG & Long length LT	P1
150	Baleshwar	SED	SDO SORO	ESO ANANTAPUR	BAHICHANDA GHATA	100	100	0.10	1	6	5.44	0.002	0.17	71.32	1.40	OL, OG & Long length LT	P1
151	Baleshwar	SED	SDO MARKONA	ESO BALIKHANDA	BALIKHAND MARKET	100	100	0.10	0.5	6	5.51	0.002	0.17	70.42	1.42	OL, OG & Long length LT	P1
152	Baleshwar	SED	SDO BAHANAGA	ESO BAHANAGA	TALAPADHI DTR	100	100	0.20	1	6	5.63	0.002	0.17	68.93	1.45	OL, OG & Long length LT	P1
153	Baleshwar	SED	SDO MARKONA	ESO ANANTAPUR	SAJANPUR DTR	100	100	0.10	1	7	6.72	0.003	0.17	57.73	1.73	OL, OG & Long length LT	P1
154	Baleshwar	SED	SDO SORO	ESO SORO NO-II	SARSANKH MARKET	63	100	0.10	0.6	5	4.21	0.002	0.17	92.23	1.08	OL, OG & Long length LT	P1
155	JAIPUR	KUED	SDO DHARMASALA	ESO NEULPUR	GUARANGA	100	100	-	-	4	3.92	0.002	0.17	98.98	1.01	OL, OG & Long length LT	P1
156	JAIPUR	KUED	SDO KUAKHIA	ESO KUAKHIA	SANA KAMPEI 63KVA	63	100	-	-	3	2.47	0.001	0.17	157.30	0.64	OL, OG & Long length LT	P1
157	JAIPUR	KUED	-	ESO MATHASAH	MADHUBAN HAT 63 KVA	63	100	-	-	3	2.43	0.001	0.17	159.54	0.63	OL, OG & Long length LT	P1
158	JAIPUR	KUED	SDO KUAKHIA	ESO KUAKHIA	NATIPUR PALASAH -100 KVA	100	100	-	-	4	3.83	0.002	0.17	101.29	0.99	OL, OG & Long length LT	P1
159	JAIPUR	KUED	SDO KUAKHIA	ESO KUAKHIA	NARASINGPUR-100 KVA	100	100	-	-	4	3.74	0.002	0.17	103.72	0.96	OL, OG & Long length LT	P1
160	JAIPUR	KUED	SDO KUAKHIA	ESO SUJANPUR	MANGALA MARKET 63 KVA	63	100	-	-	3	2.34	0.001	0.17	166.05	0.60	OL, OG & Long length LT	P1
161	JAIPUR	KUED	SDO KUAKHIA	ESO MATHASAH	MANTIRI HANUMAN MANDIRA	63	100	-	-	3	2.34	0.001	0.17	166.14	0.60	OL, OG & Long length LT	P1
162	JAIPUR	KUED	SDO KUAKHIA	ESO MATHASAH	BHAGIRATHAPUR	63	100	-	-	3	2.32	0.001	0.17	167.27	0.60	OL, OG & Long length LT	P1
163	JAIPUR	KUED	SDO DHARMASALA	ESO NEULPUR	NEAR STATE BANK -100 KVA	100	100	-	-	4	3.59	0.002	0.17	108.25	0.92	OL, OG & Long length LT	P1
164	Baripada	UED	KHUNTA	MANATRI	SIKULA	63	100	-	-	6	5.25	0.002	0.17	73.92	1.35	Overload as per EAG	P1
165	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	AKAS DAS HOUSE SIDE-100 KVA	100	100	0.2	1	6	5.64	0.002	0.17	68.87	1.45	Load Diversion to Mitigate OL	P1
166	JAIPUR	JRED	DUBURI	ESO DUBURI	UPER TAMAKA	100	100	0.8	1	5	4.73	0.002	0.17	82.00	1.22	Load Diversion to Mitigate OL	P1
167	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	HANUMAN GALI-2-100 KVA DTR	100	100	0.3	0.4	5	4.63	0.002	0.17	83.83	1.19	Load Diversion to Mitigate OL	P1
168	Baripada	UED	Udala	UDALA	MAUSI MAA CHHOKO 100KVA	100	100	-	-	7	6.63	0.003	0.17	58.56	1.71	Overload as per EAG	P1
169	Baripada	UED	Udala	UDALA	UDALA NEW BY GANESH TEMPLE	100	100	-	-	7	6.57	0.003	0.17	59.08	1.69	Overload as per EAG	P1
170	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	BARIK CLINIC GALI-100 KVA DTR	100	100	0.2	0.8	5	4.24	0.002	0.17	91.58	1.09	Load Diversion to Mitigate OL	P1
171	Baripada	UED	Udala	UDALA	RELANCE PETROL PUMP	100	100	-	-	7	6.14	0.003	0.17	63.26	1.58	Overload as per EAG	P1
172	JAIPUR	JRED	JRED	ESO DALA	KRISHNA BIHAR 100 KVA	100	100	0.2	0.9	5	4.13	0.002	0.17	94.04	1.06	Load Diversion to Mitigate OL	P1
173	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	PRIYA DARSINI ROAD-100 KVA	100	100	0.3	0.8	4	4.02	0.002	0.17	96.51	1.04	Load Diversion to Mitigate OL	P1
174	Baripada	UED	Udala	UDALA	RABIPADA IPDS 100KVA	100	100	-	-	6	5.78	0.003	0.17	67.10	1.49	Overload as per EAG	P1
175	Baripada	UED	Udala	UDALA	MENDHAKHAI IPDS 100KVA	100	100	-	-	6	5.52	0.002	0.17	70.32	1.42	Overload as per EAG	P1
176	Baripada	UED	KHUNTA	KHUNTA	HANUMAN TEMPLE 100KVA	100	100	-	-	6	5.47	0.002	0.17	70.94	1.41	Overload as per EAG	P1
177	Baripada	UED	Udala	UDALA	KRUSHAK MARKET	100	100	-	-	6	5.35	0.002	0.17	72.59	1.38	Overload as per EAG	P1
178	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	PANCHAMUKHI HANUMAN TEMPLE-100 KVA	100	100	0.3	0.6	4	3.60	0.002	0.17	107.83	0.93	Load Diversion to Mitigate OL	P1
179	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	CHANDAMA NUASAH-100 KVA DTR	100	100	0.5	0.75	4	3.59	0.002	0.17	108.06	0.93	Load Diversion to Mitigate OL	P1
180	Baripada	UED	Udala	UDALA	GAYATRIMANDIR(BPL)	100	100	-	-	6	5.15	0.002	0.17	75.35	1.33	Overload as per EAG	P1
181	JAIPUR	JRED	PANIKOILI	ESO PANIKOILI	MASUDPUR -100 KVA	100	100	0.6	0.7	4	3.49	0.002	0.17	111.05	0.90	Load Diversion to Mitigate OL	P1
182	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	SWEEPER COLONY	100	100	0.3	0.5	4	3.46	0.002	0.17	112.02	0.89	Load Diversion to Mitigate OL	P1
183	JAIPUR	JTED	BINJHARPUR	ESO BINJHARPUR NO-I	DHAL SAHI-KVA	100	100	50	400	4	3.45	0.002	0.17	112.43	0.89	Overload as per EAG	P1
184	JAIPUR	JRED	JRED	ESO DALA	OM KARESWAR TEMPLE 250 KVA	250	100	0.4	0.6	9	8.36	0.004	0.17	46.42	2.15	Load Diversion to Mitigate OL	P1
185	Baleshwar	BED	Supply I	No II	GOLAPOKHARI IPDS-3	100	100	-	-	6	5.36	0.002	0.17	72.39	1.38	Low Voltage Mitigation	P1
186	Baripada	UED	Udala	UDALA	HIGH SCHOOL PADIA 100KVA	100	100	-	-	5	4.71	0.002	0.17	82.41	1.21	Overload as per EAG	P1
187	Baripada	UED	KHUNTA	Badasahi	TALAPADA 100KVA	100	100	-	-	5	4.69	0.002	0.17	82.80	1.21	Overload as per EAG	P1
188	JAIPUR	JRED	JRED	ESO CHORDA CHAKKA	BANK OF INDIA SIDE-250	250	100	0.4	0.8	9	7.97	0.003	0.17	48.71	2.05	Load Diversion to Mitigate OL	P1

Annexure-AB Surveillance of PSS through CCTV

Sr No	Circle	Division	Locations	Priority
1	Balasore	BED	Rameswarmandir Substation	P1
2	Balasore	CED	Durgadevee Substation	P1
3	Balasore	CED	Ajodhya Substation	P1
4	Balasore	JED	Bartana Substation	P1
5	Balasore	SED	Bisnupur Substation	P1
6	Balasore	SED	Ada Substation	P1
7	Baripada	BPED	Stadium Substation	P1
8	Baripada	BPED	Raghunathpur Substation	P1
9	Baripada	BPED	Sapanichua Substation	P1
10	Baripada	BPED	Bhaliasole Substation	P1
11	Baripada	BPED	Saragachida Substation	P1
12	Baripada	BPED	Randasahi Substation	P1
13	Baripada	BPED	Gaon amarda Substation	P1
14	Baripada	UED	Ambadali Substation	P1
15	Baripada	UED	Nudhudiha Substation	P1
16	Baripada	RED	Kantabani Substation	P1
17	Baripada	RED	Asanbani Substation	P1
18	Baripada	RED	Gorumahisani Substation	P1
19	Baripada	RED	Angarpada Substation	P1
20	Baripada	BPED	Sirsa Substation	P1
21	Baripada	BPED	Salabanisahi Substation	P1
22	Jajpur	JRED	Mantira Substation	P1
23	Bhadrak	BNED	Asura Substation	P1
24	Bhadrak	BNED	Matto Substation	P1
25	Bhadrak	BNED	Bilana Substation	P1
26	Bhadrak	BSED	Manjuri Road Substation	P1
27	Jajpur	JRED	Duburi Substation	P1
28	Jajpur	JRED	Chorda Substation	P1
29	Jajpur	JTED	Jajpur Town Substation	P1
30	Jajpur	JTED	Mansara Substation	P1
31	Keonjhar	KED	Raisuan Substation	P1
32	Keonjhar	KED	Naranpur Substation	P1
33	Keonjhar	JOED	Ukhunda Substation	P1
34	Keonjhar	KED	Khiritangari Substation	P1
35	Keonjhar	KED	Suakati Substation	P1
36	Keonjhar	AED	Rekutia Substation	P1
37	Keonjhar	AED	Salabani Substation	P1

Annexure-AC Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, keonjhar				
Sr No	Circle	Division	Locations	Priority
1	Balasore	BED	Central Balasore Store	P1
2	Jajpur	JRED	Jajpur Store	P1
3	Keonjhar	KED	Keonjhar Store	P1
4	Baripada	BPED	Betnoti Store	P1
5	Balasore	CED	Ajodhya Scrap Store	P1

Annexure-AD Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)					
Sr No	Circle	Division	Office Name/Job Description	Office Category	Priority
1	Jajpur	Jajpur	Jajpur Circle Office	Circle	P1
2	Baripada	Baripada	Baripada Circle Office	Circle	P1
3	Balasore	Balasore	Balasore Circle Office	Circle	P1
4	Baripada	UED	Udala Division office	Division	P1
5	Balasore	BTED	Basta Division Office	Division	P1
6	Jajpur	KUED	Kuakhia Division Office	Division	P1
7	Jajpur	JTED	Jajpur Town Division Office	Division	P1
8	Balasore	JED	Sub-Divn.Jaleswar	SDO	P1
9	Balasore	JED	Sub-Divn.Bhograi	SDO	P1
10	Balasore	SED	Sub-Divn. Khaira	SDO	P1
11	Baripada	UED	Sub-Divn. Khunta	SDO	P1
12	Baripada	RED	Sub-Divn. Karanjia	SDO	P1
13	Bhadrak	BNED	Sub Divn-Dhamra	SDO	P1
14	Bhadrak	BSED	Sub-Divn. Dhamanagar	SDO	P1
15	Jajpur	JTED	Sub-Divn. -I Jajpur Town	SDO	P1
16	Jajpur	JTED	Sub-Divn. Dasarathpur	SDO	P1
17	Jajpur	KUED	Sub-Divn. Kuakhia	SDO	P1
18	Jajpur	KUED	Sub-Divn. Dharamasala	SDO	P1
19	Keonjhar	AED	Sub-Divn. Ghatagaon	SDO	P1
20	BALASORE	JED	ESO CHANDANESWAR	Section	P1
21	BALASORE	SED	ESO GOPALPUR	Section	P1
22	BHADRAK	BNED	ESO DHAMARA	Section	P1
23	BHADRAK	BSED	ESO DHAMANAGAR	Section	P1
24	BHADRAK	BSED	ESO BHANDARI POKHARI-I	Section	P1
25	BHADRAK	BSED	ESO BONTH	Section	P1
26	JAJPUR	JRED	ESO BAITARANI ROAD	Section	P1
27	JAJPUR	JTED	ESO JAJPUR TOWN NO-I	Section	P1
28	JAJPUR	JTED	ESO JAJPUR TOWN NO-II	Section	P1
29	JAJPUR	JTED	ESO JAJPUR TOWN NO-III	Section	P1
30	JAJPUR	JTED	ESO DASARATHPUR	Section	P1
31	JAJPUR	JTED	ESO MANGALPUR	Section	P1
32	JAJPUR	JTED	ESO BINJHARPUR NO-II	Section	P1
33	JAJPUR	KUED	ESO BRAHAMABARDA	Section	P1
34	Baripada	RED	ESO BISOI	Section	P1
35	Balasore	BED	DT Workshop at Balia	Workshop	P1
36	Baripada	RED	HOTT Centre Rairangpur	HOTT	P1
37	Balasore	BED	HOTT Centre Balasore (Ext)	HOTT	P1
38	Bhadrak	BNED	MRT Office cum Store(Bhadrak)	MRT	P1
39	Jajpur	JRED	Jajpur Road	Canteen	P1
40	Keonjhar	AED	Anandapur	Canteen	P1
41	Balasore	SED	Soro	Canteen	P1
42	Jajpur	KUED	Kuakhia	Canteen	P1
43	Jajpur	JRED	Enforcement Office at Jajpur Road	Enforcement Office	P1
44	Balasore	JED	STS Office Jaleswar	STS	P1
45	Baripada	BPED	STS Office Baripada	STS	P1
46	Bhadrak	BNED	Bhadrak	MMG Store	P1
47	Baripada	BPED	Baripada	MMG Store	P1
48	Keonjhar	KED	Keonjhar	MMG Store	P1
49	Jajpur	JRED	Meter Testing Lab at Jajpur Road	MRT Lab	P1
50	Balasore	BED	Auditorium Building Balia	Auditorium	P1
51	Balasore	CED	Barampur	PSS Store Shed	P1
52	Balasore	SED	Dungura	PSS Store Shed	P1
53	Balasore	SED	Khantapara	PSS Store Shed	P1
54	Balasore	SED	Bahanaga	PSS Store Shed	P1
55	Baripada	RED	Karanjia PSS	PSS Store Shed	P1
56	Baripada	RED	Tiring PSS	PSS Store Shed	P1
57	Balasore	JED	Laxanath PSS	PSS Store Shed	P1

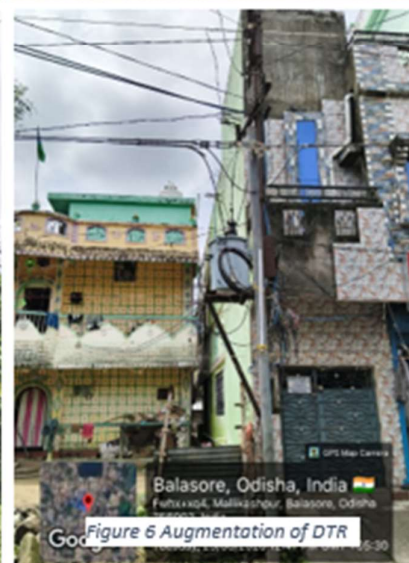
Annexure-AD Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office and others)

Sr No	Circle	Division	Office Name/Job Description	Office Category	Priority
58	Balasore	JED	Ranakotha PSS	PSS Store Shed	P1
59	Balasore	JED	Jayrampur PSS	PSS Store Shed	P1
60	Baripada	BPED	Bangriposhi	PSS Store Shed	P1
61	Baripada	BPED	Tikarpada	PSS Store Shed	P1
62	Baripada	BPED	Sankhabhaga	PSS Store Shed	P1
63	Baripada	UED	Ambadali	PSS Store Shed	P1
64	Baripada	UED	Damasahi	PSS Store Shed	P1
65	Keonjhar	KED	Saharpada Section	PSS Store Shed	P1
66	Keonjhar	KED	Sec 1 2 & 3 Sec	PSS Store Shed	P1
67	Bhadrak	BNED	Kundibag PSS	PSS Store Shed	P1
68	Bhadrak	BSED	Bondh section office	PSS Store Shed	P1
69	Bhadrak	BNED	Dhamra section office	PSS Store Shed	P1
70	Bhadrak	BSED	Bhandari pokhari I	PSS Store Shed	P1

8. Appendix-4:

8.1 Annexure 1: Sample Photographs related to dilapidated network & civil infrastructure





8.2 Annexure 2: CEA regulations

CEA regulations (Measures relating to Safety and Electric Supply – 2010 / 2023)

41. Connection with earth-

The following conditions shall apply to the connection with earth of systems at voltage normally exceeding 125 V but not exceeding 650 V, namely: -

- (i) neutral conductor of a 3-phase, 4-wire system and the middle conductor of a 2-phase, 3-wire system shall be earthed by not less than two separate and distinct connections with a minimum of two different earth electrodes or such large number as may be necessary to bring the earth resistance to a satisfactory value both at the generating station and at the sub-station.
- (ii) Neutral conductor shall also be earthed at one or more points along the distribution system or service line in addition to any connection with earth which may be at the consumer's premises.

58 (1) No conductor of an overhead line, including service lines, erected across a street shall at any part thereof be at a height of less than—

- For lines of voltage not exceeding 650 volts—5.8 meters
- For lines of voltage exceeding 650 volts but not exceeding 33 kV-6.5 metres

58 (2) No conductor of an overhead line, including service lines, erected along any street shall at any part thereof be at a height less than—

- For lines of voltage not exceeding 650 volts—5.8 metres
- For lines of voltage exceeding 650 volts but not exceeding 33 kV—5.8 meters

58 (3) No conductor of an overhead line, including service lines, erected elsewhere than along or across any street shall be at a height less than—

- For lines of voltage up to and including 11000 volts, if bare-4.6 meters.
- For lines of voltage up to & including 11,000 volts, if insulated—4.0 meters.
- For lines of voltage exceeding 11,000 volts—but not exceeding 33 kV---5.2 meters.

60. Maximum interval between supports-

All conductors shall be attached to supports at intervals not exceeding the safe limits based on the ultimate tensile strength of the conductor and the factor of safety specified under regulations 57. Provided that in the case of overhead lines carrying conductors of voltage not exceeding 650 V when erected in, over, along or across any street, the interval shall not, without the consent in writing of the Electrical Inspector, exceed 65 meters.

69. Lines crossing or approaching each other and lines crossing- Street and road.

- ii) Guarding shall be provided where lines of voltage not exceeding 33 kV cross a road or street.
- (iii) Where an overhead line crosses or is in proximity to another overhead line, guarding arrangements shall be provided so to guard against the possibility of their coming into contact with each other.

69. Guarding-

- (1) Where guarding is required under these regulations the following shall be observed namely:
 - a) Every guard-wire shall be connected with earth at each point at which its electrical continuity is broken.
 - b) Every guard-wire shall have an actual breaking strength of not less than 635 kg and if made of iron or steel, shall be galvanized.
 - c) Every guard-Wire or cross-connected systems of guard-wires shall have sufficient current-carrying capacity to ensure them rendering dead, without risk of fusing of the guard-wire or wires, till the contact of any live wire has been removed.

72. Earthing-

- 1. All metal supports and all reinforced and pre-stressed cement Concrete supports of overhead lines and metallic fittings attached thereto, shall be either permanently and efficiently earthed by providing a continuous earth wire and securely fastening to each pole and connecting with earth ordinarily at three points in every km with the spacing between the points being as neatly equidistant as possible or each support and the metallic fitting attached thereto shall be efficiently earthed.
- 2. Metallic bearer wire used for supporting insulated wire of overhead service lines of

voltage not exceeding 650 V shall be efficiently earthed or insulated.

3. Each stay-wire shall be similarly earthed unless insulator has been placed in it at a height not less than 3.0 metres from the ground.

Statutory guidelines (CEA – Technical Standards for Construction of Electrical Plants and Electric Lines, 2010) in respect of Lines and its associated Poles and Towers, Span Length, Erection of Poles, and Stay.

95. Supports (Poles and Towers)-

1. The supports shall be poles or narrow based lattice towers with fully galvanized structure as per site requirement.
2. Poles may be used for 33 kV, 22 kV, 11 kV and LT lines (lines below 500 V) as per requirement. The poles shall be pre-cast concrete (PCC) pole, pre-stressed cement concrete (PSCC) pole, steel joist, rail pole or steel tubular pole as required, provided PCC and PSCC poles shall not be used at cut-points and as end poles.
3. Poles shall conform to relevant IS as the case may be.
4. Concrete poles shall be preferred in plain areas.
5. In hilly areas appropriate snow or ice loading shall be considered for design of poles and towers.
6. For locations involving long spans or higher clearances on account of crossing of power or communication lines or a railway line, specially designed poles/lattice towers may be used.
7. For angles of deviation of more than 10-degree, double pole structure shall be used.
8. The height of the pole above the ground level, length of pole below ground and working load shall be decided taking into consideration wind zone, terrain, topography, and the statutory clearances required to be maintained and these shall conform to relevant IS.

96. Line Span-

1. Line span shall be decided taking into consideration topography, wind pressure, type of support, conductor configuration and ultimate tensile strength of conductor.

2. The span shall be within the range specified by IS.
3. Uniform span shall be maintained as far as possible between consecutive pole structures.
4. While constructing a line, if a road crossing occurs at mid span, then a pole shall be placed on one side of the road so as to avoid mid span at the road crossing.
5. While crossing another power line, the lower voltage line shall be underneath. The lower line shall normally not cross at mid span of the upper line.
6. While placing poles on high ground, shorter poles can be used while maintaining proper ground clearance at the middle of the span.
7. Poles shall normally not be placed along the edges, cuts, or embankments of creeks and streams.
8. At all the places where the new line crosses over roads or another existing line, adequately earthed guard wire mesh below the line shall be provided to avoid the conductor of the new line falling over the areas below, in case of any break. In cases where the line passes below an existing line, the guard wire mesh shall be provided above the new line under construction.

97. Erection of Poles-

Erection of poles shall be carried out in accordance with the provisions of relevant IS.

98. Factor of Safety-

The supports shall be suitable for the wind loads as per relevant IS. The minimum factor of safety for supports shall be as per Central Electricity Authority (Measures Relating to Safety and Electricity Supply), Regulations as and when these are notified by the Authority.

100. Stay Arrangements-

1. To prevent tilting of a pole from its normal position due to abnormal wind pressure and deviation of alignment, the pole shall be kept in position by stays. The stays shall be provided at:
 - a. Angle locations.
 - b. Dead end locations.
 - c. Tee off points.

- d. Steep gradient locations.
 - e. cut- point.
 - f. Along the straight run at minimum two locations in 1 km.
2. Galvanized iron stay wires and stay rods of adequate size shall be used. The individual wire used to form "stranded stay-wire" shall have a minimum tensile strength complying with relevant IS. For double pole structure, four stays along the line, two in each direction and two stays along the bisection of the angle of deviation or as required depending on the angle of deviation shall be provided.
 3. When two or more stays are provided on the same pole, each stay shall be grouted entirely separate from the other.
 4. The angle between the pole and stay wire shall be about 45 degrees and in no case, it shall be less than 30 degrees.
 5. Stays shall be anchored by either providing base plates, angle iron or rail.
 6. Stay wires shall be connected to the pole with a Porcelain Guy Strain Insulator. The standard Guy Strain insulators shall be as per relevant IS. The Porcelain insulator shall be inserted in the stay wire at a height of minimum 3 m vertically above the ground level. The strain insulators shall be free from defects, thoroughly vitrified and smoothly glazed.
 7. Wooden insulators shall not be used for stay/guy wire.

99. Earthing of Poles-

1. All metallic supports shall be permanently and effectively earthed. The Earthing arrangement shall conform to relevant IS.
2. Metal cross arms and insulator pins for PCC and PSCC poles shall be bonded together and normally earthed at every pole for 33 kV or 22 kV or 11 kV lines and at every 5th pole for lines below 500 volts.
3. The support on each side of a road crossing, railway crossing or river crossing shall be earthed.
4. Normally coil Earthing shall be provided except for locations involving railways, telegraph line, power line crossings and special structures where pipe/rod type Earthing shall be provided. Whenever the electric lines pass close to a well or a permanently moist place,

an earth should be provided in the well or the marshy place and connected to the electric line pole.

5. All steel poles on which switches, transformers, fuses etc. are mounted shall be earthed.
6. All poles above 650 volts, irrespective of inhabited areas, shall be earthed. For poles below 650 V guarding with continuous earth-wire shall be provided invariably, connected to earth at three equidistant points in one km.

101. Protective Guard-

Guard wire shall be used where an overhead line crosses or is in proximity to any telecommunication line or any other overhead line and in populated localities. Every guard wire shall be connected to earth wherever its electrical continuity is broken. The minimum factor of safety for stay wires, guard and bearer wires shall not be less than 2.5 based on ultimate strength of the wire.

71. Fencing and Approach Arrangement-

Fencing shall be provided around the sub- station. A metalled approach road to transport the equipment should be provided leading from the main road.

77. Transformer Mounting Structure-

1. The transformer shall be mounted on a single pole, H pole structure or on a plinth depending upon site requirements, size and weight of the transformer.
2. Direct single pole mounting shall be used for transformers up to 25 kVA only.
3. The transformers of more than 25 kVA and up to 250 kVA can be mounted on H pole structure or on plinth. Transformers above 250 kVA shall be mounted on plinth only.
4. The structures shall be provided with anti-climbing devices and danger board.
5. The plinth shall be higher than the surroundings. The plinth foundation shall be of concrete.
6. Plinth mounted distribution sub-stations shall be adequately protected by fencing so as to prevent access to the equipment by unauthorized persons, animals and shall be provided with standard danger boards. The enclosure shall permit free circulation of air on all sides.

8.3 Annexure 3: Cost Estimate for Network Safety and Operational Resilience Enhancement:

Annexure 3: Cost Estimate for Safety Improvement including fire extinguishers in existing office Buildings			
SL No.	Item Description	Proposed Quantity	Amount for FY28(in Cr.)
1	Mobile Sub Station 400 KVA 11/0.4kV Trolley Mounted DTR	7	1.65
2	FDA system PSS.	55	1.1
3	Ariel Tower Wagon Vehicle Mounted	10	3.01
4	Perimeter Intrusion Detection System (PIDS)	20	1.94
5	FRP Stick for Discharge clamp	150	0.5
6	Simulation /Training centre for the Vulnerable Network Condition	16	0.12
7	Arc Flash Suite	16	0.08
8	Auto clean agent extinguisher for IT server room.	16	0.032
9	Foldable Ladder with Platform	5	0.02
19	Sand bucket with PVC cover	400	0.012
Total Cost in Cr.			8.47

8.4 Annexure 4: Network Safety and Operational Resilience Enhancement:

Sr. No.	Circle	Divison	Mobile Sub Station 400 KVA 11/0.4kV Trolley Mounted DTR	Ariel Tower Wagon Vehicle Mounted
1	Balasore	BED	2	2
2	Balasore	CED	2	1
3	Balasore	BtED	2	1
4	Balasore	SED	2	1
5	Balasore	JED	2	1
6	Baripada	BPED	2	2
7	Baripada	RED	2	1
8	Baripada	CED	2	1
9	Bhadrak	BNED	2	2
10	Bhadrak	BSER	2	1
11	Jajpur	JTED	2	2
12	Jajpur	JRED	2	1
13	Jajpur	KuED	2	1
14	Keonjhar	AED	2	1
15	Keonjhar	KED	2	2
16	Keonjhar	JoED	2	1
Total Requirement			32	21

8.5 Annexure 5: Cost Estimate for Fencing of Distribution Substations:

Annexure-5 Fencing of Distribution substations					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Clearing Vegetation :- Clearing jungle i	M2	14.78	9067.3	134014.5
2	E/W in exc. in all kinds of soil(0-1.5m)	M3	229.68	3951.6	907598.0
3	Providing and filling sand under floor	M3	1194	619.2	739292.6
4	S and L machine crushed 65 mm stone :- S	M3	2856.65	928.4	2652036.7
5	P & L PCC M10(1:3:6) grade :- Providing	M3	5989.1	515.6	3087926.1
6	P & L PCC M15(1:2:4) grade :- Providing	M3	6181.19	491.6	3038846.1
7	P& L 1st class Brickwork(below plinth) :	M3	6107.31	1914.7	11693794.7
8	P& L 1st class Brickwork(above plinth) :	M3	6255.07	2996.9	18745950.6
9	P & L 12 mm thk internal plaster :- Prov	M2	361	34426.3	12427904.4
10	P & L waterproof cement base paint :- P	M2	159.58	34426.3	5493753.4
11	P & L Synthetic enamel paint :- Providin	M2	209.13	1447.1	302622.8
12	P/F/E Str steel (rolled / plate sec)	TON	105000	53.3	5600385.0
13	P/F/E MS gate	TON	105000	54.9	5762715.0
14	Providing and fixing G I barbed wire	M	33.49	34970.5	1171162.7
Total Cost of materials					7,17,58,002.7
GST @ 18% of Sub-Total					1,29,16,440.5
Sub-Grand Total					8,46,74,443.1
Per DTR Cost					8,46,74,443.1
Total Cost in Cr.					8.47

8.6 Annexure 6: Cost Estimate for Fire wall for PTR between the PTRs:

Annexure-6 Cost Estimate for Fire wall for PTR between the PTRs					
Sl. No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Exc in soil, 0-1.5m	M3	232	750.0	174000.0
2	Prvd & placng rmc m25 for raft	M3	7550	150.0	1132500.0
3	Prvd & placng rmc m25 for columns	M3	7720	75.0	579000.0
4	Prvd & placng rmc m25 for beams and slabs	M3	7720	75.0	579000.0
5	PCC, M15 in leveling course	M3	6275	50.0	313750.0
6	Reinforcement, hysd bars	TON	100800	44.1	4447800.0
7	Prvd & const brick masonry, 230mm	M3	6300	472.0	2973600.0
8	Prov sand faced plaster, 18mm	M2	450	3750.0	1687500.0
9	Paint, exterior plastic emulsion	M2	220	3750.0	825000.0
Total Cost of materials					1,27,12,150.0
GST @ 18% of Sub-Total					22,88,187.0
Sub-Grand Total					1,50,00,337.0
Total cost in Cr					1.5

8.7 Annexure 7: Cost Estimate for LT extension for legacy long service cable cases /to reduce technical losses and improve supply reliability:

Annexure-7 Cost Estimate for LT extension for legacy long service cable cases /to reduce technical losses and improve supply reliability

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S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	1.1KV LT AB Cable 4x50+1x50+1x16mm2	Mtr	228.0	74881	1,70,72,868.0
2	9 mtr long 300 kg PSC pole	No	3630.0	2181	79,17,030.0
3	RCC base Plate for PSC pole	No	422.0	2181	9,20,382.0
4	Danger Plate	No	120.3	2181	2,62,374.3
5	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	112.8	656.3	74,013.3
6	GI barbed wire anticlimbing device	Kg	120.3	6543	7,87,122.9
7	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	112.8	2625.1	2,96,053.3
8	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	300.7	2181	6,55,913.9
9	Suspension Clamp with EYE hook for ABC	No.	511.3	1526.7	7,80,540.6
10	Eye Hook for AB cable for dead end point	No.	90.2	654.3	59,030.9
11	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	97.7	654.3	63,951.3
12	LT Stay Set (Complete)	Set	781.9	727	5,68,455.8
13	LT Stay Insulator	No	45.1	727	32,795.0
14	LT Stay clamp	Pair	781.9	727	5,68,455.8
15	7/12 SWG Stay Wire	Kg	112.8	7270	8,19,910.6
16	Earthing of Support (Coil Type)	EA	249.6	2181	5,44,399.4
17	PIPE HDPE SIZE 25 MM	Mtr	35.2	6543	2,30,482.5
18	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	8.9	4362	38,871.0
19	LT Distribution Box Polycarbonate	No	920.3	1526.7	14,05,083.1
20	Cap cable end for ABC	EA	114.3	3271.5	3,73,779.4
21	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	120.3	17448	20,98,994.4
22	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	60.2	13086	7,87,122.9
23	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	60.2	21810	13,11,871.5
24	Cable 1.1kv Al 4CX25 Sq.mm Armoured	Mtr	229.0	4580.1	10,48,842.9
25	Gland for 1.1kv Al 4X25 Sq.mm	EA	180.8	1526.7	2,75,954.7
26	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	14.2	4362	61,736.4
27	25x6 mm GI flat	Kg	112.78	4362	4,91,946.4
27	GI Nut , Bolt & Washer of different sizes	Kg	117.3	908.75	1,06,587.3
28	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr	50.3	20356	10,24,366.5
29	Tie Plastic Black size 7.6mmX380mm	EA	7.0	2908	20,273.9
30	Tie Plastic size 9mmX265mm	EA	23.4	4362	1,02,116.5
Total Cost of materials					4,08,01,326.7
Stock, Storage & Insurance i.e 3%					12,24,039.8
Sub Total					4,20,25,366.5
Contingency @ 3%					12,60,761.0
Tools & Plants @ 2%					8,40,507.3
Transportation @ 7.5%					31,51,902.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					31,82,152.0
Erection PSC Pole @ 20%					-
Sub Total					5,04,60,689.3
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)

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1	Fixing of complete LT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation , supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No	2301.5	727	16,73,190.5
2	Installation/Erection of 9 MTR PSC Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, Includes and civil work. The scope also includes providing of all civil material for concreting . Transportation, loading and unloading of Pole from Nearest division/store/site office to site(maximum upto 3KM), Excavation for grouting, including concreting as per standards and drawings. Concreting to be done with PCC-1:1.5:3. of size - 500x500x1500 and ,Padding 500x500x150mm. Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing	No	5172.4	2181	1,12,81,004.4
Total Civil Part					1,29,54,194.9
Sub-Total					6,34,14,884.2
Other Over Head (Including Supervision charges)@ 6%					38,04,893.0
Sub-total					6,72,19,777.2
GST @ 18% of Sub-Total					1,20,99,559.9
CESS @ 1% of Sub-Total					6,72,197.8
Sub-Grand Total					7,99,91,534.9
Inspection Fee					-
Drawing Approval					-
Grand Total					7,99,91,534.9
Grand Total in Cr.					8.0

8.8 Annexure 8: Cost Estimate for New Meter Testing Lab:

Annexure-8 Cost Estimate for New Meter Testing Lab					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Automatic 20 postion Single Meter Phase test bench along with OEM software	EA	1,00,00,000	2	2,00,00,000
2	Automatic 20 postion Three Phase Meter test bench along OEM software	EA	1,50,00,000	1	1,50,00,000
3	3 Ph Phantom loads	EA	3,40,000	1	3,40,000
4	20 kVA UPS (10 kVA + 10 kVA)	EA	7,50,000	2	15,00,000
5	Portable refrence meter with source cum load along with self Power via rechargable battery of class 0.02 direct mode LED display for intermediate testing of test bench	EA	20,00,000	1	20,00,000
6	Single Phase Tamper Simulator	EA	10,00,000	1	10,00,000
7	Three Phase Tamper Simulator	EA	35,00,000	1	35,00,000
6	Three phase 50 Amp RLC load bank for real load testing	EA	9,00,000	1	9,00,000
7	4K PTZ Camera for recording of suspect case inspection	EA	1,00,000	1	1,00,000
8	AC / DC / Permanent Magnet with power source	EA	5,00,000	1	5,00,000
9	Sound Level Meter	EA	20,000	1	20,000
10	Digital Barometer	EA	3,000	1	3,000
11	Digital Stop watch	EA	8,000	1	8,000

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Annexure-8 Cost Estimate for New Meter Testing Lab					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
12	Temperature and humidity data logger	EA	20,000	1	20,000
13	Lux Meter	EA	15,000	1	15,000
14	Gauss Meter	EA	35,000	1	35,000
15	Digital Multi / Clamp Meter	EA	20,000	1	20,000
16	Digital EMF Meter	EA	15,000	1	15,000
17	AC Current & Voltage Data Logger	EA	45,000	1	45,000
18	Digital Earth Tester	EA	80,000	1	80,000
19	Cordless screw driver kit power and Hand tool Kit	EA	9,000	10	90,000
20	Blower with Vacuum cleaner	EA	5,000	1	5,000
21	Hot air gun	EA	2,000	1	2,000
22	Wire less 2.4 GHz 2D barcode cum QR code Scanner	EA	4,000	3	12,000
23	ACPI tamper Jig	EA	2,500	1	2,500
24	DCPI tamper Jig	EA	2,500	1	2,500
25	35 KV ESD Tamper Jig	EA	5,000	1	5,000
26	Jammer Tamper Jig	EA	2,500	1	2,500
27	DC Injection tamper Jig	EA	2,500	1	2,500
28	Other Tools & tackels	EA	7,000	1	7,000
29	Calibration of Instruments	EA	10,00,000	1	10,00,000
30	Lab Construction Cost	EA		1	-
Total Cost of materials					4,62,32,000
Total Cost in Cr.					4.6

8.9 Annexure 9: Cost Estimate for Overhead to Underground conversion at crossings:

S. No.	Description	UoM	Quantity for FY28	Amount for FY28 (in Cr.)
A	Overhead to Underground conversion at crossings	EA	30	5.00
Total Cost in Cr.				5.0

A. Cost Estimation for Laying of 33kV U/G XLPE Cable

Annexure-9A Road Crossing "OH to UG" for 33kV					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	33kV AL 3Cx400 Sqmm XLPE Cable armoured	Mtr	3165	4000	1,26,60,000.0
2	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(outdoor type)	No	11900	32	3,80,800.0
3	Lightning Arrester (30kV,10kA) (Station Class,Class 2)	EA	4443	32	1,42,176.0
4	Communicable FPI 33KV O/H	Set	30675	4	1,22,700.0
5	50x6 mm GI flat	Kg	72	429.44	30,919.7
Total Cost of materials					1,33,36,595.7
Stock, Storage & Insurance i.e 3%					4,00,097.9
Sub Total					1,37,36,693.6
Contingency @ 3%					4,12,100.8

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Tools & Plants @ 2%					2,74,733.9
Transportation @ 7.5%					10,30,252.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					69,689.4
Erection PSC Pole @ 20%					-
Sub Total					1,55,23,469.6
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Laying of PIPE HDPE 200 MM DIA PN8 , PE 80 through HDD method .Scope of work also includes making Trenchless ducts with 200 mm Dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, (Providing parabolic graph included in the scope)	Mtr	2970	4000	1,18,80,000.0
2	BA will provide necessary Tools, Machinery, Manpower for laying of 33KV & 11KV 3C Cable (70sqmm to 630Sqmm) in Trench or HDPE Pipe/Hum Pipe	Mtr	115	4000	4,61,016.9
3	Supply and Installation of cable Route marker including transportation from site/tent, excavation, refilling, disposing of malba, flooding with water, ramming/compacting of foundation as per specifications and drawing.	EA	1035.59	8	8,284.7
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	8	40,800.0
Total Civil Part					1,23,90,101.7
Sub-Total					2,79,13,571.3
Other Over Head (Including Supervision charges)@ 6%					16,74,814.3
Sub-total					2,95,88,385.6
GST @ 18% of Sub-Total					53,25,909.4
CESS @ 1% of Sub-Total					1,23,901.0
Sub-Grand Total					3,50,38,196.0
Inspection Fee					-
Drawing Approval					-
Grand Total					3,50,38,196.0
Grand Total in Cr.					3.5

B. Cost Estimation for Laying of 11kV U/G XLPE Cable

Annexure-9B Road Crossing "OH to UG" for 11kV					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	11kV AL 3CX400 Sqmm XLPE Cable armoured	Mtr	2375	2000	47,50,000.0

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2	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable (outdoor type)	No	2900	16	46,400.0
3	Lightning Arrester (12kV,10kA) DH Class	EA	1960	16	31,360.0
4	Communicable FPI 11KV O/H	Set	30675	2	61,350.0
5	50x6 mm GI flat	Kg	72	214.72	15,459.8
Total Cost of materials					49,04,569.8
Stock, Storage & Insurance i.e 3%					1,47,137.1
Sub Total					50,51,706.9
Contingency @ 3%					1,51,551.2
Tools & Plants @ 2%					1,01,034.1
Transportation @ 7.5%					3,78,878.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					15,920.7
Erection PSC Pole @ 20%					-
Sub Total					56,99,091.0
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Laying of PIPE HDPE 200 MM DIA PN8 , PE 80 through HDD method .Scope of work also includes making Trenchless ducts with 200 mm Dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, (Providing parabolic graph included in the scope)	Mtr	2970	2000	59,40,000.0
2	BA will provide necessary Tools, Machinery, Manpower for laying of 33KV & 11KV 3C Cable (70sqmm to 630Sqmm) in Trench or HDPE Pipe/Hum Pipe	Mtr	115	2000	2,30,508.5
3	Supply and Installation of cable Route marker including transportation from site/tent, excavation, refilling, disposing of malba, flooding with water, ramming/compacting of foundation as per specifications and drawing.	EA	1035.59	4	4,142.4
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power, Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC, and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	4	20,400.0
Total Civil Part					61,95,050.8
Sub-Total					1,18,94,141.8
Other Over Head (Including Supervision charges)@ 6%					7,13,648.5
Sub-total					1,26,07,790.4
GST @ 18% of Sub-Total					22,69,402.3
CESS @ 1% of Sub-Total					61,950.5
Sub-Grand Total					1,49,39,143.1
Inspection Fee					-
Drawing Approval					-
Grand Total					1,49,39,143.1

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Grand Total in Cr. 1.5

8.10 Annexure 10: Cost Estimate for Intermediate poles for vulnerable location:

Annexure-10 Cost Estimate for Intermediate poles for vulnerable location

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	10 mtr long 300 kg PSC pole	No	3630	5960	2,16,34,800.0
2	Danger Plate	No	180	5960	10,72,800.0
3	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	1793.4	1,29,122.2
4	GI barbed wire anticlimbing device	Kg	74	17880	13,23,120.0
5	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	7173	5,16,488.8
6	11kV,5kN pin insulator polymer	No	140	17880	25,03,200.0
7	11kV V cross Arm (GI)	No	851	5960	50,71,960.0
8	GI Back Clamp for 11kV 'V' Cros Arm	No	140	5960	8,34,400.0
9	11kV F Clamp	No	135	5960	8,04,600.0
10	Earthing of Support (Coil Type)	EA	164	5960	9,77,440.0
11	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	1561.5	1,15,552.5
12	GI Nut , Bolt & Washer of different sizes	Kg	74	8642	6,39,508.0
Total Cost of materials					3,56,22,991.5
Stock, Storage & Insurance i.e 3%					10,68,689.7
Sub Total					3,66,91,681.3
Contingency @ 3%					11,00,750.4
Tools & Plants @ 2%					7,33,833.6
Transportation @ 7.5%					27,51,876.1
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					14,40,783.7
Erection PSC Pole @ 20%					-
Sub Total					4,27,18,925.2
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Installation/Erection of 10 MTR PSC Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation,Includes and civil work. The scope also includes providing of all civil material for concreting . Transportation, loading and unloading of Pole from Nearest division/store/site office to site(maximum upto 3KM), Excavation for grouting, including concreting as per standards and drawings.Concreting to be done with PCC- 1:1.5:3. of size - 500x500x1800 and ,Padding 500x500x150mm.Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing	No	5747	5960	3,42,52,120.0
2	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for	CUM	5247	120.69	6,33,260.4

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	mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.				
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	5960	1686680
Total Civil Part					3,65,72,060.4
Sub-Total					7,92,90,985.6
Other Over Head (Including Supervision charges)@ 6%					47,57,459.1
Sub-total					8,40,48,444.7
GST @ 18% of Sub-Total					1,51,28,720.0
CESS @ 1% of Sub-Total					8,40,484.4
Sub-Grand Total					10,00,17,649.2
Inspection Fee					-
Drawing Approval					-
Grand Total					10,00,17,649.2
Grand Total in Cr.					10.0

8.11 Annexure 11: Cost Estimate for Gravel Filling and S-Yard Development in PSS & Water logging & Cable Trench:

Annexure-12 Gravel Filling, S-Yard Development, Water logging & Cable Trench in PSS					
Sl. No.	Item Description	Proposed Qty	UoM	Unit Rate in Rs.	Amount (in Cr.)
1	E/W in exc. in all kinds of soil(0-1.5m)	910	M3	229.68	208898.07
2	Hiring Excavator (JCB or equivalent)	26	D	11330.83	298133.84
3	P&L fine sand in plinth level etc: - P	2962	M3	1194.00	3536240.75
4	S and L 20 mm down aggregate: - Supplying	309	M3	2856.65	881366.38
5	S and L machine crushed upto 65 mm stone	848	M3	2856.65	2423795.12
6	P & L PCC M15(1:2:4) grade: - Providing	1406	M3	6181.19	8693481.47
7	P & L precast RCC covers of M25 grade :-	86	M3	7960.00	683197.99
8	Prov, binding and placing HYSD Bars :- P	54	TON	98505.00	5362512.54
9	P& L 1st class Brickwork(below plinth) :	1413	M3	6107.31	8627658.05
10	P & L 12 mm thk internal plaster :- Prov	8057	M2	361.00	2908423.79
11	P & L Exterior quality paint	7230	M2	216.71	1566743.21
12	P & L Synthetic enamel paint :- Providin	579	M2	209.13	121111.65
13	P/F/E Str steel (rolled / plate sec)	13	TON	105000.00	1406230.90
14	P,S&F chain link fencing :- Providing ,	1407	M2	384.17	540383.35
15	P&L M-25 grade of CC pavement. :- Provid	1485	M3	7500.00	11139535.23
16	Demolish Brickwork at any height :- Demo	177	M3	750.00	132690.10
17	Demolish Plaster at any height :- Demoli	447	M2	142.83	63902.83

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18	P & F concrete paver blocks 80mm :- Prov	4593	M2	1089.00	5001866.77
19	P/F/E MS gate	3	TON	105000.00	292849.66
20	P&F 12 mm dia PVC Tap Heavy duty :- Supp	79	EA	199.00	15708.11
21	P&F UPVC pipe SCH-40 for 25 mm Dia :- P	2255	M	348.25	785274.51
22	P&F PVC 75mm dia pipe :- Providing and f	163	M	447.75	73042.70
23	P&F PVC 110mm dia pipe :- Providing and	316	M	506.53	159932.22
24	Supply and filling Borrowed soil	312	M3	519.00	161766.52
Total Cost of materials					5,50,84,745.76
GST @ 18% of Sub-Total					99,15,254.24
Sub-Grand Total in Cr.					6.5

8.12 Annexure 12: Cost Estimate for Conversion of LT Bare conductor to AB Cable:

S. No.	Description	UOM	Quantity for FY28	Amount for FY28 (in Cr.)
A	4x95+1x95+1x16 Sqmm LT AB Cable	Km	156.1	19.25
B	4x50+1x50+1x16 Sqmm LT AB Cable	Km	211.9	19.25
Total Cost in Cr.			368	38.5

A. Cost Estimate Conversion of LT Bare to 4x95+1x95+1x16 Sqmm LT AB Cable

Annexure-12A Conversion of LT Bare conductor to 4x95+1x95+1x16mm² AB cable

Conversation of LT Bare conductor to 4x95+1x95+1x16mm²(considering 29 nos. existing pole "Min 35% pole are rusted & damage condition"+ 14 nos. intermediate pole) total = 33 poles

Out of 14 nos. proposed pole, considering 22 nos. straight point and 11 nos. angular point. In Existing line considering 30% angular point (7 nos. pole) and 70% straight point. (29 nos.) i.e. in Total Line Straight point pole - 22 nos.; Angular pole - 11 nos.

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	1.1KV LT AB Cable 4x95+1x95+1x16mm ²	Mtr	422	159959	6,75,02,698.0
2	9 mtr long 300 kg PSC pole	No	3630	2174	78,91,620.0
3	Danger Plate	No	180	5125	9,22,500.0
4	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	1542	1,11,029.9
5	GI barbed wire anticlimbing device	Kg	74	5125	3,79,242.6
6	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	6168	4,44,119.7
7	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	240	6833	16,39,968.0
8	Suspension Clamp with EYE hook for ABC	No.	193	3417	6,59,403.8
9	Eye Hook for AB cable for dead end point	No.	75	1708	1,28,122.5
10	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	217	1708	3,70,701.1
11	LT Stay Set (Complete)	Set	736	2019	14,85,910.4
12	LT Stay Insulator	No	19	2019	38,359.1
13	LT Stay clamp	Pair	350	2019	7,06,615.0

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14	7/12 SWG Stay Wire	Kg	79	20189	15,94,931.0
15	Earthing of Support (Coil Type)	EA	164	2174	3,56,568.8
16	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37.0	5125	1,89,621.3
17	LT Distribution Box Polycarbonate	No	920.0	3572	32,86,148.0
18	Cap cable end for ABC	EA	139.0	3106	4,31,839.6
19	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	127.51	17860	22,77,264.8
20	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	63.75	7144	4,55,417.3
21	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	63.75	3572	2,27,708.6
22	Cable 1.1kV Al 4CX25 Sq.mm Armoured	Mtr	229.0	7144	16,35,930.2
23	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	13.8	3572	49,292.2
24	25x6 mm GI flat	Kg	72	7454	5,36,716.8
25	GI Nut , Bolt & Washer of different sizes	Kg	74	10250	7,58,485.2
26	Tie Plastic size 9mmX265mm	EA	316.0	9318	29,44,488.0
Total Cost of materials					9,70,24,702.0
Stock, Storage & Insurance i.e 3%					29,10,741.1
Sub Total					9,99,35,443.1
Contingency @ 3%					29,98,063.3
Tools & Plants @ 2%					19,98,708.9
Transportation @ 7.5%					74,95,158.2
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					87,86,648.5
Erection PSC Pole @ 20%					-
Sub Total					12,12,14,021.9
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	776.5	39,60,150.0
2	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	CUM	5247	44.02	2,30,972.9

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3	Fixing of complete LT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation , supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No	3050	2019	61,57,645.0
4	Erection of 9 MTR PSC Pole including loading and unloading, transportation .Concreting to be done with PCC-1:1.5:3. of size - 500x500x1500 & Padding 500x500x150mm.Scope of work also includes 5 days curing & zebra painting (In Black & Yellow Strips/Zebra)	No	5172	2174	1,12,44,001.7
5	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole,transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth,ramming including removal & disposal of malba	No.	950	1553	14,75,350.0
6	Dismantling of ACSR/AAAC 34/55 mm ² from overhead line,recoiling,loading,transportation,unloading and stacking at a proper place in safe position/site store	Mtr	7	155300	10,87,100.0
7	Laying/ Stringing/Mounting of 1.1KV AL/CU AR XLPE/PVC Control cable upto 10sqmm having multiple core .Scope of work also includes providing necessary Tools, Machinery, Manpower.BA will provide necessary cable ferruling, connectors, lugs & cable gland at both end of terminations.	Mtr.	17	244597.5	40,52,441.6
8	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	15374.7	30,74,940.0
9	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	19413	1,16,478.0
10	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	2174	6,15,242.0
Total Civil Part					3,13,99,079.3
Sub-Total					15,26,13,101.2
Other Over Head (Including Supervision charges)@ 6%					91,56,786.1
Sub-total					16,17,69,887.2
GST @ 18% of Sub-Total					2,91,18,579.7
CESS @ 1% of Sub-Total					16,17,698.9
Sub-Grand Total					19,25,06,165.8
Inspection Fee					-
Drawing Approval					-
Grand Total					19,25,06,165.8
Grand Total in Cr.					19.25

B. Cost Estimate Conversion of LT Bare to 4x50+1x50+1x16 Sqmm LT AB Cable

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Annexure-12B Conversion of LT Bare conductor to 4x50+1x50+1x16mm² AB cable

Conversion of LT Bare conductor to 4x50+1x50+1x16mm²(considering 29 nos. existing pole "Min 35% pole are rusted & damage condition"+ 14 nos. intermediate pole) total = 33 poles

Out of 14 nos. proposed pole, considering 22 nos. straight point and 11 nos. angular point. In Existing line considering 30% angular point (7 nos. pole) and 70% straight point. (29 nos.) i.e. in Total Line Straight point pole - 22 nos. ; Angular pole - 11 nos.

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	1.1KV LT AB Cable 4x50+1x50+1x16mm ²	Mtr	228	217433	4,95,74,724.0
2	9 mtr long 300 kg PSC pole	No	3630	2955	1,07,28,102.0
3	Danger Plate	No	180	6966	12,53,934.0
4	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	2096	1,50,923.5
5	GI barbed wire anticlimbing device	Kg	74	6966	5,15,506.2
6	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	8385	6,03,694.0
7	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	240	9288	22,29,216.0
8	Suspension Clamp with EYE hook for ABC	No.	193	4644	8,96,330.6
9	Eye Hook for AB cable for dead end point	No.	75	2322	1,74,157.5
10	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	217	2322	5,03,895.7
11	LT Stay Set (Complete)	Set	736	2744	20,19,804.8
12	LT Stay Insulator	No	19	2744	52,141.7
13	LT Stay clamp	Pair	350	2744	9,60,505.0
14	7/12 SWG Stay Wire	Kg	79	27443	21,67,997.0
15	Earthing of Support (Coil Type)	EA	164	2955	4,84,685.6
16	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37.0	6966	2,57,753.1
17	LT Distribution Box Polycarbonate	No	920.0	4855	44,66,876.0
18	Cap cable end for ABC	EA	139.0	4222	5,86,984.7
19	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	127.51	24277	30,95,496.5
20	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	63.75	9711	6,19,050.8
21	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	63.75	4855	3,09,525.4
22	Cable 1.1kV Al 4CX25 Sq.mm Armoured	Mtr	229.0	9711	22,23,921.6
23	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	13.8	4855	67,003.1
24	25x6 mm GI flat	Kg	72	10133	7,29,561.6
25	GI Nut , Bolt & Washer of different sizes	Kg	74	13933	10,31,012.4
26	Tie Plastic size 9mmX265mm	EA	316.0	12666	40,02,456.0
Total Cost of materials					8,97,05,258.7
Stock, Storage & Insurance i.e 3%					26,91,157.8
Sub Total					9,23,96,416.5
Contingency @ 3%					27,71,892.5
Tools & Plants @ 2%					18,47,928.3
Transportation @ 7.5%					69,29,731.2
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					75,99,000.9
Erection PSC Pole @ 20%					-
Sub Total					11,15,44,969.5
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)

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1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	1056	53,83,050.0
2	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	CUM	5247	59.85	3,14,033.0
3	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	20898.9	41,79,780.0
4	Fixing of complete LT line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts BA will do the excvation , supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No	3050	2744	83,70,115.0
5	Erection of 9 MTR PSC Pole including loading and unloading, transportation .Concreting to be done with PCC-1:1.5:3. of size - 500x500x1500 & Padding 500x500x150mm.Scope of work also includes 5 days curing & zebra painting (In Black & Yellow Strips/Zebra)	No	5172	2955	1,52,85,429.0
6	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole,transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth,ramming including removal & disposal of malba	No.	950	422	4,00,900.0
7	Dismantling of ACSR/AAAC 34/55 mm ² from overhead line,recoiling,loading,transportation,unloading and stacking at a proper place in safe position/site store	Mtr	7	211100	14,77,700.0
8	Laying/ Stringing/Mounting of 1.1KV AL/CU AR XLPE/PVC Control cable upto 10sqmm having multiple core .Scope of work also includes providing necessary Tools, Machinery,	Mtr.	16.57	332483	55,08,502.4

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	Manpower.BA will provide necessary cable ferruling, connectors, lugs & cable gland at both end of terminations.				
9	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	18999	1,13,994.0
10	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	2955	8,36,378.2
Total Civil Part					4,10,33,503.4
Sub-Total					15,25,78,472.9
Other Over Head (Including Supervision charges) @ 6%					91,54,708.4
Sub-total					16,17,33,181.2
GST @ 18% of Sub-Total					2,91,11,972.6
CESS @ 1% of Sub-Total					16,17,331.8
Sub-Grand Total					19,24,62,485.7
Inspection Fee					-
Drawing Approval					-
Grand Total					19,24,62,485.7
Grand Total in Cr.					19.25

8.13 Annexure 13: Cost Estimate for Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material.

Annexure-13 Testing equipment for Meter, Meter Reading, HT/LT RSM & other testing & monitoring material

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs)
1	Online Live Testing Kit	EA	30,00,000	4	1,20,00,000
2	Leakage Current Testing Clamp on Meter	EA	32,000	17	5,44,000
3	Digital Clamp Multimeter (0 - 600 A)	EA	10,000	50	5,00,000
5	Load Box for on site setting	EA	10,000	17	1,70,000
6	HV Tester (MTL Scope Enhancement)	EA	50,000	1	50,000
7	IR Tester (MTL Scope Enhancement)	EA	50,000	1	50,000
Total Cost in Cr.					1.3

8.14 Annexure 14: Cost Estimate of Replacement/Addition of network component in 33/11kV Primary Substation:

Annexure 14: Cost Estimate of Replacement/Addition of network component in 33/11kV Primary Substation

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	VCB 33KV O/D 1250A	EA	263629	50	1,31,81,454.5
2	VCB 11KV O/D 1250A	EA	195397	80	1,56,31,793.6
3	CT 33KV 1P Oil Cooled 800-400-200/1-1-1 A	EA	40551	90	36,49,600.8

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4	CT 11KV 1P O/C CTR 800-400-200/1-1-1A	EA	33220	150	49,83,003.0
5	PT 33KV O/D Oil Filled	EA	24028	30	7,20,831.6
6	PT 11KV 1P	EA	16198	35	5,66,919.5
7	Isolator 33KV 1250A Double Break W/O ES	SET	61895	50	30,94,771.5
8	Isolator 33KV 1250A Double Break W/ ES	SET	67244	20	13,44,881.8
9	Isolator 11KV 1250A Double Break W/O ES	SET	47150	80	37,72,036.1
10	Isolator 11KV 1250A Double Break W/ES	SET	51000	30	15,30,000.0
11	Conductor 232 SQMM AAA	Mtr	260	1000	2,60,000.0
12	Cable Control 1.1KV CU 12CX2.5 Sqmm ARM	Mtr	344	2000	6,88,000.0
13	Cable Control1.1KV CU10CX2.5 Sqmm ARM PVC	Mtr	330	2000	6,60,000.0
14	Cable Control 1.1KV CU 4CX2.5 Sqmm ARM	Mtr	196	5000	9,80,000.0
15	Cable Control 1.1KV CU2Cx2.5 Sqmm ARM PVC	Mtr	68	500	34,000.0
16	Cable 11KV AL 3CX400 Sqmm XLPE ARM	Mtr	2375	2000	47,49,160.0
17	Cable 33KV AL 3CX400 Sqmm XLPE ARM	Mtr	3165	1000	31,65,250.0
18	LA 30KV 10KA Polymer Station Class CL-3	EA	7670	100	7,67,000.0
19	LA 12KV 10KA Polymer Station Class CL-2	EA	2602	200	5,20,400.0
20	WPB Pole 150x150 MM 11M 30.89KG/M	EA	34095	50	17,04,750.1
21	Battery SMF Lead Acid 24V 150 AH	EA	37782	20	7,55,645.8
22	Battery SMF Lead Acid 48V 150 AH	EA	84600	20	16,92,000.0
23	Battery Charger Thyrstr Base 24V/40 ADCDB	EA	188124	10	18,81,237.3
24	Battery Charger Thyrstr Base 48V/40 ADCDB	EA	228195	10	22,81,950.0
25	Junction Box CT	EA	5000	100	5,00,000.0
26	Junction Box PT	EA	4500	50	2,25,000.0
27	ACDB Panel 440 V	EA	136133	2	2,72,265.2
28	11KV Switchboard AIS	PSS	12900000	1	1,29,00,000.0
29	33KV Switchboard GIS	PSS	12900000	1	1,29,00,000.0
30	JT for 3Cx400mm ² 11KV XLPE Cable (Outdoor type)	EA	17186	10	1,71,860.0
31	JT for 3Cx400mm ² 11KV XLPE Cable (Indoor type)	EA	11795	10	1,17,949.0
32	JT for 3Cx400mm ² 33KV XLPE Cable (Outdoor type)	EA	27186	10	2,71,860.0
33	JT for 3Cx400mm ² 33KV XLPE Cable (Indoor type)	EA	21795	10	2,17,950.0
34	Refurbishment of breaker foundation	EA	22220	45	9,99,900.0
35	Smart water Evacuation System	EA	150000	20	30,00,000.0
36	Moisture ingress prevention in 33/11kv PSS	EA	350000	1	3,50,000.0
Total Cost of materials					9,65,41,569.8
Stock, Storage & Insurance i.e 3%					28,96,247.1
Sub Total					9,94,37,816.9
Contingency @ 3%					29,83,134.5
Tools & Plants @ 2%					19,88,756.3
Transportation @ 7.5%					74,57,836.3
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					29,00,376.9
Erection Other @ 10%.					41,43,027.9
Sub Total					11,89,10,948.8
Other Over Head (Including Supervision charges) @ 6%					71,34,656.9
Sub-total					12,60,45,605.7
GST @ 18% of Sub-Total					2,26,88,209.0
CESS @ 1% of Sub-Total					12,60,456.1
Grand Total					14,99,94,270.8
Grand Total in Cr.					15.0

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8.15 Annexure 15: Cost Estimate for Phasing out of Vulnerable PTRs (34 Nos):

Annexure-15: Cost Estimate for Phasing out of Vulnerable PTRs (34 Nos)					
Sl. No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	SITC of 8 MVA Power Transformer	EA	1.6	25	40.0
2	SITC of 5 MVA Power Transformer	EA	1.23	9	12.3
Grand Total in Cr. included GST					52.3

8.16 Annexure 16: Cost Estimate for Testing equipment for PSS:

Annexure 16: Cost Estimate for Testing equipment for PSS:					
SL NO	Item Details	UoM	Qty	Unit Price including GST	Amount (in Rs.)
1	SFRA	EA	1	1708640	17,08,640
2	DFRA	EA	1	2926400	29,26,400
3	PD Camera	EA	2	1416000	28,32,000
4	DGA KIT	EA	1	2832000	28,32,000
5	2KVA Portable Diesel Generator	EA	16	40710	6,51,360
6	Online power quality molnitoring system	EA	1	708000	7,08,000
7	Clamp-on type Earth resistance tester (25x5;50X6)	EA	8	35400	2,83,200
8	Digital Multimeter	EA	6	3451.5	20,709
9	Elcometer	EA	4	46657.2	1,86,629
10	Laser Distance tester	EA	16	5900	94,400
11	Concrete Test Hammer	EA	16	17700	2,83,200
12	Digital Testing Panel with all accessories up to 1 MVA (Frequency Meter, Voltmeter, Ammeter, Motorised Variac, CT, PT for DVDF)	Set	1	1604800	16,04,800
13	Leakage Clamp-On Meter	EA	3	106200	3,18,600
14	Oil Testing Kit or BDV Tester	EA	1	59000	59,000
15	Hydraulic Coil Press Machine/ Coil Compacting Machine	EA	1	94400	94,400
16	Hand Tool Box	EA	4	11800	47,200
17	Core Loss Tester - VCL	EA	1	70800	70,800
18	Clamp on Meter	EA	5	23600	1,18,000
19	Insulation tester (Megger)	EA	1	94400	94,400
20	Turns Ratio Meter	EA	1	118000	1,18,000
Total Cost in Rs. (Including GST)					1,50,51,738
Total Cost in Cr.					1.5

8.17 Annexure 17: Cost Estimate for Earthing system of all PSS:

Annexure-17 Earthing system of all PSS					
Sl. No.	Item Description	Unit	Unit Rate in Rs.	Qty	Amount (in Rs.)
1	Borewell Earthing: - 1. GI Earthing Electrode Pipe in Pipe Design Outer Pipe (B-Class): - Dia 50mm, Length 3 Meter, Wall Thickness: 3.2mm Inner Pipe: - 25 mm Wall thickness 2mm Inner Space filled with graphite mold. 2. BFC Compound: - Graphite & Bentonite Based, 50 kg.	EA	24000	25	6,00,000.00

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	3. Installation: - Borewell Machine 4. Includes Poly Plastic Chamber and Display Board				
2	Deep Bore Earthing- 1. GI Earthing Electrode Pipe in Pipe Design Outer Pipe (B-Class): - Dia 50mm, Length 6 Meter, Wall Thickness: 3.2mm Inner Pipe: - 25 mm Wall thickness 2mm Inner Space filled with graphite mold. 2. BFC Compound: - Graphite & Bentonite Based, 100 kg. 3. Installation: - Borewell Machine 4. Includes Poly Plastic Chamber and Display Board	EA	30000	29	8,70,000.00
3	Deep Bore Earthing-1. GI Earthing Electrode Pipe in Pipe Design Outer Pipe (B-Class): - Dia 50mm, Length 9 Meter, Wall Thickness: 3.2mm Inner Pipe: - 25 mm Wall thickness 2mm Inner Space filled with graphite mold. 2. BFC Compound: - Graphite & Bentonite Based, 150 kg. 3. Installation: - Borewell Machine 4. Includes Poly Plastic Chamber and Display Board	EA	36000	49	17,64,000.00
4	Equipment earthing at PSS	EA	12000	440	52,80,000.00
Total Cost of materials					85,14,000.00
GST @ 18% of Sub-Total					15,32,520.00
Grand Total					1,00,46,520.00
Grand Total in Cr.					1.0

8.18 Annexure 18: Cost Estimate for Construction of new control room building for PSS:

Annexure-18: Cost Estimate for Construction of new control room building for PSS					
Sl. No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Construction of New Control Room Building for PSS	EA	60,53,269	7	4,23,72,881
Total Cost of materials					4,23,72,881.4
GST @ 18% of Sub-Total					76,27,118.6
Grand Total					5,00,00,000.0
Grand Total in Cr.					5.0

8.19 Annexure 19: Cost Estimate for 33 KV Conductor up gradation

S. No.	Description	UOM	Quantity for FY28	Amount for FY28 (in Cr.)
A	33 kV Conductor Upgradation with 232 Sqmm AAAC	Ckm	111.4	25.94
Total Cost in Cr.				25.9

A. Cost Estimate for 33 kV Conductor Upgradation with 232 Sqmm AAAC.

Annexure-19 33 KV Overhead conductor up gradation with 232 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),13 mtr	No	32110.34	2006	6,44,16,553.07

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2	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	17226	13,43,605.54
3	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	12732	9,93,099.74
4	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	8426	6,57,198.36
5	Fish Plate GI 50X8 MM, 0.280M EACH PC	No	47.58	2675	1,27,266.98
6	Danger Plate	No	180	3121	5,61,708.00
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	939	67,607.17
8	GI barbed wire anticlimbing device	Kg	74	7802	5,77,311.00
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	9390	6,76,071.75
10	33kV,10kN pin insulator polymer	No	398	8693	34,59,853.80
11	33kV V cross Arm (GI)	No	1701	2898	49,28,987.70
12	GI Back Clamp for 33kV 'V' Cros Arm	No	140	2898	4,05,678.00
13	Top bracket 100X50X5mm GI channel	No	78	2898	2,26,020.60
14	33kV H/W fitting(B&S) 90KN,4 Bolt	Set	631	2006	12,65,849.10
15	33kV Disc insulator (B&S) 90KN polymer	No	289	2006	5,79,762.90
16	Earthing of Support (Coil Type)	EA	164	2006	3,29,000.40
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	2891	2,13,918.47
18	PG Clamp for 232 mm ² AAAC conductor	No	1832.93	2006	36,77,040.87
19	GI Nut , Bolt & Washer of different sizes	Kg	74	6988	5,17,105.71
20	H.T. Stay clamp	Pair	260	892	2,31,816.00
21	H.T. Stay set (Complete)	Set	1434	892	12,78,554.40
22	H.T. Stay Insulator	No	87	892	77,569.20
23	7/8 SWG Stay Wire	Kg	75	9808	7,35,570.00
24	AAA conductor,232 mm ²	Km	181650	344.38	6,25,56,717.83
Total Cost of materials					14,99,03,866.60
Stock, Storage & Insurance i.e 3%					44,97,116.00
Sub Total					15,44,00,982.59
Contingency @ 3%					46,32,029.48
Tools & Plants @ 2%					30,88,019.65
Transportation @ 7.5%					1,15,80,073.69
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					85,65,871.80
Erection PSC Pole @ 20%					-
Sub Total					18,22,66,977.22
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 33kV line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts.BA will do the excvation, supply of 0.5Cum C.C foundation 1:2:4 size (500mmx500mmx800mm)	No.	3200	892	28,53,120.00
2	Erection of 13 Mtr long WPB Pole including loading & unloading,transportation,providing & laying of 1:1.5:3,M20 Grade C.C-500x500X2200 mm& cooping of 500x500x450	No	7000	2006	1,40,42,700.00

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	mm,includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra)				
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	2006	5,67,726.3
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole,transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth,ramming including removal & disposal of malba	No.	950	1115	10,59,250.00
5	Dismantling of ACSR/AAAC 80/100/148/232 mm2 from overhead line,recoiling,loading,transportation,unloading and stacking at a proper place in safe position/site store	Mtr	13	344381	44,76,946.50
6	Dismantling of insulator with pin,disc type including loading,transportation ,unloading and stacking at a proper place in a safe position /Site store	EA	8.28	10031	83,056.68
7	Dismantling/Removal of V cross arm from pole including loading,transportation ,unloading and stacking of dismantled material at a proper place in safe position at site store	EA	42.34	3344	1,41,584.96
8	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	27863	1,67,178.00
Total Civil Part					2,33,91,562.44
Sub-Total					20,56,58,539.66
Other Over Head (Including Supervision charges)@ 6%					1,23,39,512.38
Sub-total					21,79,98,052.04
GST @ 18% of Sub-Total					3,92,39,649.37
CESS @ 1% of Sub-Total					21,79,980.52
Sub-Grand Total					25,94,17,681.93
Inspection Fee					-
Drawing Approval					-
Grand Total					25,94,17,681.93
Grand Total in Cr.					25.9

8.20 Annexure 20: Cost Estimate for 11 KV Conductor up gradation:

S. No.	Description	UOM	Quantity for FY28	Amount for FY28 (in Cr.)
A	11 KV Conductor up gradation with 100 Sqmm	Ckm	99.3	15.87
B	11 KV Conductor up gradation with 100/148 Sqmm Covered	Ckm	29.7	5.71
Total Cost in Cr.				21.6

A. Cost Estimate for Up-gradation of 11kV OH Lines with 100 Sqmm Bare Conductor

Annexure-20A 11 KV Overhead conductor up gradation with 100 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)

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1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27301	1390	3,79,37,219.5
2	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	11932	9,30,698.5
3	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	8819	6,87,907.6
4	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	5836	4,55,233.0
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	377	17,957.4
6	Danger Plate	No	180	2162	3,89,088.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	650	46,830.6
8	GI barbed wire anticlimbing device	Kg	74	5404	3,99,896.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	6504	4,68,306.3
10	11kV,5kN pin insulator polymer	No	140	6022	8,43,024.0
11	11kV V cross Arm (GI)	No	851	2007	17,08,127.2
12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	2007	2,81,008.0
13	11kV F Clamp	No	135	2007	2,70,972.0
14	H/W fitting(B&S) 70KN,3 Bolt	Set	412	1390	5,72,515.2
15	11kV Disc insulator (B&S) 70KN polymer	No	150	1390	2,08,440.0
16	Earthing of Support (Coil Type)	EA	164	1390	2,27,894.4
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	2002	1,48,178.6
18	PG Clamp for 100 mm2 AAAC conductor	No	924	1390	12,84,587.9
19	GI Nut , Bolt & Washer of different sizes	Kg	74	4840	3,58,192.6
20	H.T. Stay clamp	Pair	260	618	1,60,576.0
21	H.T. Stay set (Complete)	Set	1434	618	8,85,638.4
22	H.T. Stay Insulator	No	87	618	53,731.2
23	7/10 SWG Stay Wire	Kg	77	6794	5,23,107.2
24	AAA conductor,100 mm2	Km	78410	239	1,87,04,548.7
Total Cost of materials					6,75,63,678.3
Stock, Storage & Insurance i.e 3%					20,26,910.3
Sub Total					6,95,90,588.6
Contingency @ 3%					20,87,717.7
Tools & Plants @ 2%					13,91,811.8
Transportation @ 7.5%					52,19,294.1
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					28,84,350.8
Erection PSC Pole @ 20%					-
Sub Total					8,11,73,763.0
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts BA will do the excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	617.6	19,14,560.0
2	Erection of 11 Mtr long WPB Pole including loading & unloading,transportation,providing & laying of	No	6200	1389.6	86,15,520.0

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	1:1.5:3,M20 Grade,C.C-500x500X1800 mm & cooping of 500x500x450 mm,includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra)				
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	1390	3,93,256.8
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole,transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth,ramming including removal & disposal of malba	No.	950	772	7,33,400.0
5	Dismantling of insulator with pin,disc type including loading,transportation ,unloading and stacking at a proper place in a safe position /Site store	EA	8.28	6948	57,529.4
6	Dismantling of ACSR/AAAC 80/100 mm ² from overhead line, recoiling,loading,transportation,unloading and stacking at a proper place in safe position/site store	Mtr	9.32	238548	22,23,267.4
7	Dismantling/Removal of V cross arm from pole including loading,transportation ,unloading and stacking of dismantled material at a proper place in safe position at site store	EA	42.34	772	32,686.5
8	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	19300	1,15,800.0
Total Civil Part					1,40,86,020.1
Sub-Total					9,52,59,783.1
Other Over Head (Including Supervision charges)@ 6%					57,15,587.0
Sub-total					10,09,75,370.1
GST @ 18% of Sub-Total					1,81,75,566.6
CESS @ 1% of Sub-Total					10,09,753.7
Sub-Grand Total					12,01,60,690.4
Inspection Fee					-
Drawing Approval					-
Grand Total					12,01,60,690.4
Grand Total in Cr.					12.0

Annexure-20A 11 KV Overhead conductor up gradation with 148 sq.mm AAAC

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27301	398	1,08,60,266.2
2	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	3416	2,66,430.5
3	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	2525	1,96,926.9
4	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	1671	1,30,319.3
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	108	5,140.7

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6	Danger Plate	No	180	619	1,11,384.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	186	13,406.2
8	GI barbed wire anticlimbing device	Kg	74	1547	1,14,478.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	1862	1,34,061.8
10	11kV,5kN pin insulator polymer	No	140	1724	2,41,332.0
11	11kV V cross Arm (GI)	No	851	575	4,88,984.6
12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	575	80,444.0
13	11kV F Clamp	No	135	575	77,571.0
14	H/W fitting(B&S) 70KN,3 Bolt	Set	412	398	1,63,893.6
15	11kV Disc insulator (B&S) 70KN polymer	No	150	398	59,670.0
16	Earthing of Support (Coil Type)	EA	164	398	65,239.2
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	573	42,419.0
18	PG Clamp for 148 mm ² AAAC conductor	No	988	398	3,93,102.0
19	GI Nut , Bolt & Washer of different sizes	Kg	74	1386	1,02,539.6
20	H.T. Stay clamp	Pair	260	177	45,968.0
21	H.T. Stay set (Complete)	Set	1434	177	2,53,531.2
22	H.T. Stay Insulator	No	87	177	15,381.6
23	7/10 SWG Stay Wire	Kg	77	1945	1,49,749.6
24	AAA conductor,148 mm ²	Km	116360	68	79,46,108.0
Total Cost of materials					2,19,58,346.9
Stock, Storage & Insurance i.e 3%					6,58,750.4
Sub Total					2,26,17,097.4
Contingency @ 3%					6,78,512.9
Tools & Plants @ 2%					4,52,341.9
Transportation @ 7.5%					16,96,282.3
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					10,95,245.4
Erection PSC Pole @ 20%					-
Sub Total					2,65,39,479.9
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	176.8	5,48,080.0
2	Erection of 11 Mtr long WPB Pole including loading & unloading, transportation, providing & laying of 1:1.5:3, M20 Grade, C.C-500x500x1800 mm & cooping of 500x500x450 mm, includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra)	No	6200	397.8	24,66,360.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	398	1,12,577.4

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4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole, transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth, ramming including removal & disposal of malba	No.	950	221	2,09,950.0
5	Dismantling of insulator with pin, disc type including loading, transportation, unloading and stacking at a proper place in a safe position /Site store	EA	8.28	1989	16,468.9
6	Dismantling of ACSR/AAAC 80/100 mm ² from overhead line, recoiling, loading, transportation, unloading and stacking at a proper place in safe position/site store	Mtr	9.32	68289	6,36,453.5
7	Dismantling/Removal of V cross arm from pole including loading, transportation, unloading and stacking of dismantled material at a proper place in safe position at site store	EA	42.34	221	9,357.1
8	Dismantling of Steel Structure, Nuts & Bolt including loading, transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	5525	33,150.0
Total Civil Part					40,32,396.9
Sub-Total					3,05,71,876.8
Other Over Head (Including Supervision charges)@ 6%					18,34,312.6
Sub-total					3,24,06,189.5
GST @ 18% of Sub-Total					58,33,114.1
CESS @ 1% of Sub-Total					3,24,061.9
Sub-Grand Total					3,85,63,365.5
Inspection Fee					-
Drawing Approval					-
Grand Total					3,85,63,365.5
Grand Total in Cr.					3.8

B. Cost Estimate for Up-gradation of 11kV OH Lines 148 Sqmm Covered Conductor

Annexure-20B 11 KV Overhead conductor up gradation with 148 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.), 11 mtr	No	27301	90	24,57,073.8
2	Top Channel 100X50X5mm, 9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	773	60,278.4
3	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	571	44,553.6
4	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	378	29,484.0
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	24	1,163.0
6	Danger Plate	No	180	140	25,200.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	42	3,033.1
8	GI barbed wire anticlimbing device	Kg	74	350	25,900.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	421	30,330.7
10	11kV, 5kN pin insulator polymer	No	140	390	54,600.0
11	11kV V cross Arm (GI)	No	851	130	1,10,630.0

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12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	130	18,200.0
13	11kV F Clamp	No	135	130	17,550.0
14	Earthing of Support (Coil Type)	EA	164	90	14,760.0
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	130	9,597.1
16	GI Nut , Bolt & Washer of different sizes	Kg	74	314	23,199.0
17	H.T. Stay clamp	Pair	260	40	10,400.0
18	H.T. Stay set (Complete)	Set	1434	40	57,360.0
19	H.T. Stay Insulator	No	87	40	3,480.0
20	7/10 SWG Stay Wire	Kg	77	440	33,880.0
20	Conductor Covered 11KV 148 Sqmm AAA	Km	242000	15	37,38,900.0
21	Non Metallic Ties 11KV (For covered conductor)	EA	110	270	29,700.0
21	IPC for 148 sq.mm AAA conductor (For covered conductor)	EA	550	90	49,500.0
22	Deadend Clamp for 11KV 148Sqmm Covered Conductor	EA	1089	90	98,007.3
22	Midspan Joint for 148 Sqmm AAAC XLPE Covered Conductor	EA	594	15	8,909.7
Total Cost of materials					69,55,689.7
Stock, Storage & Insurance i.e 3%					2,08,670.7
Sub Total					71,64,360.4
Contingency @ 3%					2,14,930.8
Tools & Plants @ 2%					1,43,287.2
Transportation @ 7.5%					5,37,327.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					4,52,530.1
Erection PSC Pole @ 20%					-
Sub Total					85,12,435.5
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	40	1,24,000.0
2	Erection of 11 Mtr long WPB Pole including loading & unloading, transportation, providing & laying of 1:1.5:3, M20 Grade, C.C-500x500X1800 mm & cooping of 500x500x450 mm, includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra)	No	6200	90	5,58,000.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	90	25,470.0
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole, transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth, ramming including removal & disposal of malba	No.	950	50	47,500.0
5	Dismantling of insulator with pin, disc type including loading, transportation , unloading and stacking at a proper place in a safe position /Site store	EA	8.28	450	3,726.0

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6	Dismantling of ACSR/AAAC 80/100 mm ² from overhead line, recoiling, loading, transportation, unloading and stacking at a proper place in safe position/site store	Mtr	9.32	15450	1,43,994.0
7	Dismantling/Removal of V cross arm from pole including loading, transportation, unloading and stacking of dismantled material at a proper place in safe position at site store	EA	42.34	50	2,117.0
8	Dismantling of Steel Structure, Nuts & Bolt including loading, transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	1250	7,500.0
Total Civil Part					9,12,307.0
Sub-Total					94,24,742.5
Other Over Head (Including Supervision charges)@ 6%					5,65,484.6
Sub-total					99,90,227.1
GST @ 18% of Sub-Total					17,98,240.9
CESS @ 1% of Sub-Total					99,902.3
Sub-Grand Total					1,18,88,370.2
Inspection Fee					-
Drawing Approval					-
Grand Total					1,18,88,370.2
Grand Total in Cr.					1.1

C. Cost Estimate for Up-gradation of 11kV OH Lines 100 Sqmm Covered Conductor

Annexure-20B 11 KV Overhead conductor up gradation with 100 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.), 11 mtr	No	27301	445	1,21,37,944.6
2	Top Channel 100X50X5mm, 9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	3818	2,97,775.3
3	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	2822	2,20,094.8
4	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	1867	1,45,651.0
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	121	5,745.4
6	Danger Plate	No	180	692	1,24,488.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	208	14,983.4
8	GI barbed wire anticlimbing device	Kg	74	1729	1,27,946.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	2081	1,49,833.8
10	11kV, 5kN pin insulator polymer	No	140	1927	2,69,724.0
11	11kV V cross Arm (GI)	No	851	642	5,46,512.2
12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	642	89,908.0
13	11kV F Clamp	No	135	642	86,697.0
14	Earthing of Support (Coil Type)	EA	164	445	72,914.4
15	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	641	47,409.5
16	GI Nut , Bolt & Washer of different sizes	Kg	74	1549	1,14,603.1
17	H.T. Stay clamp	Pair	260	198	51,376.0
18	H.T. Stay set (Complete)	Set	1434	198	2,83,358.4

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19	H.T. Stay Insulator	No	87	198	17,191.2
20	7/10 SWG Stay Wire	Kg	77	2174	1,67,367.2
20	Conductor Covered 11KV 100 Sqmm AAA	Km	131000	76	99,98,313.0
21	Non Metallic Ties 11KV (For covered conductor)	EA	110	1334	1,46,718.0
21	IPC for 100 sq.mm AAA conductor (For covered conductor)	EA	550	445	2,44,530.0
22	Deadend Clamp for 11KV 100Sqmm Covered Conductor	EA	1089	445	4,84,156.1
22	Midspace Joint for 100 Sqmm AAAC XLPE Covered Conductor	EA	594	74	44,013.9
Total Cost of materials					2,58,89,254.1
Stock, Storage & Insurance i.e 3%					7,76,677.6
Sub Total					2,66,65,931.7
Contingency @ 3%					7,99,978.0
Tools & Plants @ 2%					5,33,318.6
Transportation @ 7.5%					19,99,944.9
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					13,62,897.7
Erection PSC Pole @ 20%					-
Sub Total					3,13,62,070.9
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	197.6	6,12,560.0
2	Erection of 11 Mtr long WPB Pole including loading & unloading, transportation, providing & laying of 1:1.5:3, M20 Grade, C.C-500x500x1800 mm & cooping of 500x500x450 mm, includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra)	No	6200	444.6	27,56,520.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	445	1,25,821.8
4	Dismantling of 9/8 Mtr. PCC/Joist Pole (Serviceable Pole) after digging the pit & taking out the pole, transportation & stacking the pole at a proper place in safe position & refilling the pit with loose earth, ramming including removal & disposal of malba	No.	950	247	2,34,650.0
5	Dismantling of insulator with pin, disc type including loading, transportation, unloading and stacking at a proper place in a safe position /Site store	EA	8.28	2223	18,406.4
6	Dismantling of ACSR/AAAC 80/100 mm ² from overhead line, recoiling, loading, transportation, unloading and stacking at a proper place in safe position/site store	Mtr	9.32	76323	7,11,330.4
7	Dismantling/Removal of V cross arm from pole including loading, transportation, unloading and stacking of dismantled material at a proper place in safe position at site store	EA	42.34	247	10,458.0
8	Dismantling of Steel Structure, Nuts & Bolt including loading, transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	6175	37,050.0

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Total Civil Part	45,06,796.6
Sub-Total	3,58,68,867.5
Other Over Head (Including Supervision charges)@ 6%	21,52,132.0
Sub-total	3,80,20,999.5
GST @ 18% of Sub-Total	68,43,779.9
CESS @ 1% of Sub-Total	3,80,210.0
Sub-Grand Total	4,52,44,989.5
Inspection Fee	-
Drawing Approval	-
Grand Total	4,52,44,989.5
Grand Total in Cr.	4.5

8.21 Annexure 21: Cost Estimate for Installation of HV Protection:

Sl. No.	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Installation of HV Protection upto 100 KVA	Nos.	254	10.85
B	Installation of HV Protection above 100 KVA	Nos.	63	5.85
Total			317	16.7

A. Cost Estimate for Installation of HV Protection upto 100 KVA DSS.

Annexure-21A Installation of HV Protection upto 100 KVA					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	LT Distribution Box for 100 KVA S/S.	EA	31086	254	78,95,844.0
2	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	254	23,06,320.0
3	Lightning Arrester (12kV,10kA) DH Class	No	1960	762	14,93,520.0
4	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1456	254	3,69,874.8
5	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93	762	71,094.6
6	AAA conductor,100 mm ²	Km	78410	6.10	4,77,987.4
7	Cable 1.1kV Al 1CX150 Sq.mm Un-armoured	Mtr	162	8128	13,16,736.0
8	CABLE 1.1KV AL 4CX150 SQMM ARM	Mtr	850	3810	32,38,500.0
9	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	14478.0	11,29,284.0
10	Transformer Base GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	15240.0	11,88,720.0
11	LTDB Mounting Support Angle 100X50X5mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	38100.0	29,71,800.0
12	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	38100.0	29,71,800.0
13	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	10155.9	7,92,163.0
14	DD Fuse Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	10155.9	7,92,163.0
15	Transformer Belting angle (50X50X6) mm 2800 mm long 2 nos. (7.14 Kg./Mtr.)with side angle	Kg	78	12694.9	9,90,203.8

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16	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	1133.5	88,411.1
17	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1673.9	1,30,561.1
18	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1673.9	1,30,561.1
19	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78	1469.0	1,14,580.7
20	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	443.5	34,591.8
21	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	388.6	30,312.4
22	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	1465.3	1,14,295.4
23	H/W fitting(B&S) 70KN,3 Bolt	Set	412	762	3,13,944.0
24	11kV Disc insulator (B&S) 70KN polymer	No	150	762	1,14,300.0
25	50x6 mm GI flat	Kg	72	8382	6,03,504.0
26	25x6 mm GI flat	Kg	72	5588	4,02,336.0
27	GI Nut , Bolt & Washer of different sizes	Kg	74	6350	4,69,900.0
28	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37	13716	5,05,051.0
29	Lug AL Crimping 150 Sqmm XLPE One Hole	EA	207	2032	4,20,899.5
30	Energy Meter Installation (Smart Meter) with BOX	LS	15608.59	254	39,64,581.9
31	Connector Mini Wedge 25 Sqmm to Dog	EA	1063	762	8,09,857.5
Total Cost of materials					3,62,53,697.9
Stock, Storage & Insurance i.e 3%					10,87,610.9
Sub Total					3,73,41,308.8
Contingency @ 3%					11,20,239.3
Tools & Plants @ 2%					7,46,826.2
Transportation @ 7.5%					28,00,598.2
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					37,34,130.9
Erection PSC Pole @ 20%					-
Sub Total					4,57,43,103.3
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	1270	64,77,000.0
2	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	5080	2,76,22,844.4
3	Supply and erection of double Compression Flameproof Type Glanding for armored cable3.5/4C 120-185 SQMM	EA	2230	254	5,66,420.0

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	including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells				
4	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	762	1,52,400.0
5	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	1016	12,46,632.0
6	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	508	33,02,000.0
7	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	1270	8,45,820.0
8	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	7620	45,720.0
9	Dismantling of three phase DD Fuse/ fuse set arrangement fitted on structure (price per set) including removal of all Electric/Earth connections, loading, transportation, unloading and staking at a proper place in safe position/BA site store	EA	668.64	254	1,69,835.6
10	Dismantling of Lightning Arrester(LA) 9KV 5KA including removal of all Electric/Earth connections etc., loading, transportation, unloading and staking at a proper place/ site and finally at TPNODL store as per instruction of EIC.	EA	162.12	762	1,23,535.4
Total Civil Part					4,05,52,207.4
Sub-Total					8,62,95,310.7
Other Over Head (Including Supervision charges)@ 6%					51,77,718.6
Sub-total					9,14,73,029.4
GST @ 18% of Sub-Total					1,64,65,145.3
CESS @ 1% of Sub-Total					4,05,522.1
Sub-Grand Total					10,83,43,696.8
Inspection Fee					-
Drawing Approval					-
Grand Total					10,83,43,696.8
Grand Total in Cr.					10.8

B. Cost Estimate for Installation of HV Protection above 100 KVA DSS.

Annexure-21 B Installation of HV Protection above 250 KVA					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)

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1	ACB LT 400 A	EA	113390	86	97,51,540
2	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	43	3,90,440
3	Lightning Arrester (12kV,10kA) DH Class	No	1960	129	2,52,840
4	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1456	43	62,616.6
5	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93	129	12,035.7
6	AAA conductor,100 mm2	Km	78410	1.032	80,919
7	Cable 1.1kV Al 1CX300 Sq.mm Un-armoured	Mtr	311	2752	8,55,872
8	Cable 1.1KV AL 4CX300 SQMM ARM	Mtr	1572.0	2580	40,55,760
9	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	8600	6,70,800
10	Transformer Base GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	8600	6,70,800
11	LTDB Mounting Support Angle 100X50X5mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	6450	5,03,100
12	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	6450	5,03,100
13	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	1075	83,850
14	DD Fuse Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	1075	83,850.0
15	Transformer Belting angle (50X50X6) mm 2800 mm long 2 nos. (7.14 Kg./Mtr.)with side angle	Kg	78	2149.1	1,67,632.9
16	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	180.6	14,086.8
17	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	283.4	22,103
18	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	283.4	22,103
19	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78	245.1	19,117.8
20	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	75.1	5,856.1
21	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	65.8	5,131.6
22	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	245.1	19,118
23	H/W fitting(B&S) 70KN,3 Bolt	Set	412	129	53,148
24	11kV Disc insulator (B&S) 70KN polymer	No	150	129	19,350
25	50x6 mm GI flat	Kg	72	1505	1,08,360
26	25x6 mm GI flat	Kg	72	2150	1,54,800
27	GI Nut , Bolt & Washer of different sizes	Kg	74	2150	1,59,100
28	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	2322	85,500.8
29	Lug AL Crimping 300 Sqmm XLPE One Hole	EA	207.1	344	71,254.6
30	Energy Meter Installation (Smart Meter) with BOX	LS	19307.59	43	8,30,226.4
31	Connector Mini Wedge 25 Sqmm to Dog	EA	1062.8	129	1,37,101.9
Total Cost of materials					1,98,71,513.8
Stock, Storage & Insurance i.e 3%					5,96,145.4
Sub Total					2,04,67,659.2
Contingency @ 3%					6,14,029.8

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Tools & Plants @ 2%					4,09,353.2
Transportation @ 7.5%					15,35,074.4
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					20,46,765.9
Erection PSC Pole @ 20%					-
Sub Total					2,50,72,882.5
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	215	10,96,500
2	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	860	46,76,308
3	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 240-300 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	3840	43	1,65,120
4	Supply and erection of double Compression Flameproof Type Glanding for armoured cable 1C Above 300 to 400 SQMM up to 1000sqmm including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227.48	172	2,11,126.6
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	989	1,97,800.0
6	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX300 sqmm	No	8069.5	86	6,93,977
7	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	215	1,43,190
8	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	1720	10,320
9	Dismantling of three phase DD Fuse/ fuse set arrangement fitted on structure (price per set) including removal of all Electric/Earth connections, loading, transportation,	EA	668.64	43	28,751.7

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	unloading and staking at a proper place in safe position/BA site store				
10	Dismantling of Lightening Arrester(LA) 9KV 5KA including removal of all Electric/Earth connections etc., loading, transportation, unloading and staking at a proper place/ site and finally at TPNODL store as per instruction of EIC.	EA	162.12	129	20,913.5
Total Civil Part					72,44,007.0
Sub-Total					3,23,16,889.6
Other Over Head (Including Supervision charges)@ 6%					19,39,013.4
Sub-total					3,42,55,902.9
GST @ 18% of Sub-Total					61,66,062.5
CESS @ 1% of Sub-Total					72,440.1
Sub-Grand Total					4,04,94,405.5
Inspection Fee					-
Drawing Approval					-
Grand Total					4,04,94,405.5
Grand Total in Cr.					4.0

Annexure-21 B Installation of HV Protection with 1W RMU Single Breaker for above 250 KVA

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply of 11kV RMU 1WAY 630A SINGLE BREAKER MOUDLE+AUXPT	EA	414079	20	82,81,571
2	Supply of 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 9kA and SC rating of Armour in kA- 9kA)	M	912	400	3,64,744
3	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, HT UG Cable kits	EA	10517	40	4,20,675
4	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, HT UG Cable kits	EA	16205	40	6,48,180.8
5	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (2.5x8 mtr. For mesh formation, 5x2 mtr. for DTR Nutral, (1.3+4.5) mtr. For DTR Body, 0.500 mtr for LTDB, 3 mtr. for Fencing, 10 mtr. For RMU, 10 mtr. For LA) (Each 59.3 x 2.36= 139.95 Kg)	KG	111	708	78,588.0
6	HT & LT Cable Supporting Channel(GI) 100 X 50 X 6 MM GI Channel(GI) (2000 mm long)(9.56 Kg./Mtr., 2 No's.) (Each 2x2x9.56x2= 76.48 Kg)	KG	111	1529.6	1,69,786
7	HT & LT Cable Supproting Angle(GI), 50x50x6mm.GI 4.5Kg./mtr., each Angle(GI) length 2 mtr., 4 nos Angle(GI) required = (4.5x4x2x2= 72 Kg)	KG	111	1440	1,59,840
8	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 mtr .Long	EA	1554.0	40	62,160
9	GI Nuts & Bolts of Assorted size	KG	115	40	4,618
10	3Ph Smart Meter	EA	4717	20	94,339
Total Cost of materials					1,02,84,501.0
Stock, Storage & Insurance i.e 3%					3,08,535.0
Sub Total					1,05,93,036.0
Contingency @ 3%					3,17,791.1
Tools & Plants @ 2%					2,11,860.7

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Transportation @ 7.5%					7,94,477.7
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					10,59,303.6
Erection PSC Pole @ 20%					-
Sub Total					1,29,76,469.1
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Erection of 11kV RMU 1WAY 630A SINGLE BREAKER MOUDLE+AUXPT	EA	14475	20	2,89,500
2	Prefabricated RCC foundation of 11kV RMU	EA	26000	20	5,20,000
3	Laying, Commissioning & Testing of 11kV, 3Core, 95sqmm, XLPE insulation (extruded type) UG cable by open trench method.	M	100.17	400	40,068
4	Erection of Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, aluminium UG cable kits	EA	1944.328 32	80	1,55,546.3
5	PCC ratio 1:3:6(M-10 Grade) For DSS Area (3.5X3.5X0.1)= 1.225 Cu. mtr.	M3	5247.477	24.5	1,28,563.2
6	Construction Earthing chamber including installation of earthing pipe. Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	EA	3784.73	40	1,51,389
7	GIS coordinate mapping, drawing preparation and submission of the same for DTR, ABS, ARC, Sectionalizer, RMU etc	EA	1000	20	20,000
8	Painting of Pole in Black & Yellow strips/Zebra - SITC	EA	283	40	11,334
Total Civil Part					13,16,400.3
Sub-Total					1,42,92,869.4
Other Over Head (Including Supervision charges)@ 6%					8,57,572.2
Sub-total					1,51,50,441.6
GST @ 18% of Sub-Total					27,27,079.5
CESS @ 1% of Sub-Total					13,164.0
Sub-Grand Total					1,78,90,685.0
Inspection Fee					-
Drawing Approval					-
Grand Total					1,78,90,685.0
Grand Total in Cr.					1.7

8.22 Annexure 22: Cost Estimate for Installation of LV Protection:

Sl. No	Description	UoM	Quantity for FY28	Amount for FY28 (in Cr.)
A	Installation of LV Protection	Nos	1116	18.00
Total				18.0

A. Cost Estimate for installation of LV Protection's

Annexure-22 Installation of LV protection 11KV/0.415 KV Distribution Substation (DSS) 100 KVA DTR

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S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	LT Distribution Box for 100 KVA S/S.	EA	31086	993	3,08,68,398
2	Cable 1.1kV Al 1CX150 Sq.mm Un-armoured	Mtr	162	31776	51,47,712
3	CABLE 1.1KV AL 4CX150 SQMM ARM	Mtr	850	11916	1,01,28,600
4	25x6 mm GI flat	Kg	72	24825	17,87,400
5	GI Nut , Bolt & Washer of different sizes	Kg	74	2979	2,20,446
6	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.82	1986	73,124.5
7	Lug AL Crimping 150 Sqmm XLPE One Hole	EA	207.13	7944	16,45,441
8	GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	99300	77,45,400
9	GI Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	99300	77,45,400
Total Cost of materials					6,53,61,921.2
Stock, Storage & Insurance i.e 3%					19,60,857.6
Sub Total					6,73,22,778.9
Contingency @ 3%					20,19,683.4
Tools & Plants @ 2%					13,46,455.6
Transportation @ 7.5%					50,49,208.4
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					67,32,277.9
Erection PSC Pole @ 20%					-
Sub Total					8,24,70,404.1
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	993	50,64,300.0
2	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	2979	5,95,800.0
3	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	4965	33,06,690.0

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4	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	993	22,14,390.0
5	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	3972	48,73,644.0
6	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	1986	1,29,09,000.0
Total Civil Part					2,89,63,824.0
Sub-Total					11,14,34,228.1
Other Over Head (Including Supervision charges)@ 6%					66,86,053.7
Sub-total					11,81,20,281.8
GST @ 18% of Sub-Total					2,12,61,650.7
CESS @ 1% of Sub-Total					11,81,202.8
Sub-Grand Total					14,05,63,135.4
Inspection Fee					-
Drawing Approval					-
Grand Total					14,05,63,135.4
Grand Total in Cr.					14.0

B. Cost Estimate for installation of LV Protection's

Annexure-22A Installation of LV protection 11KV/0.415 KV Distribution Substation (DSS) Above 100 KVA DTR					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	ACB LT 400 A	EA	113390	123	1,39,46,970
2	Cable 1.1kV Al 1CX300 Sq.mm Un-armoured	Mtr	311	2952	9,18,072
3	Cable 1.1KV AL 4CX300 SQMM ARM	Mtr	1572.0	2460	38,67,120
4	GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	12300	9,59,400
5	GI Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	18450	14,39,100
6	50x6 mm GI flat	Kg	72	4305	3,09,960
7	GI Nut , Bolt & Washer of different sizes	Kg	74	3075	2,27,550
8	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	6642	2,44,571.9
9	Lug AL Crimping 300 Sqmm XLPE One Hole	EA	207.1	984	2,03,821.4
Total Cost of materials					2,21,16,565.4
Stock, Storage & Insurance i.e 3%					6,63,497.0
Sub Total					2,27,80,062.3
Contingency @ 3%					6,83,401.9
Tools & Plants @ 2%					4,55,601.2
Transportation @ 7.5%					17,08,504.7
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					22,78,006.2
Erection PSC Pole @ 20%					-
Sub Total					2,79,05,576.4

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Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	123	6,27,300.0
2	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	369	73,800.0
3	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	615	4,09,590.0
4	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	123	2,74,290.0
5	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	492	6,03,684.0
6	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	246	15,99,000.0
Total Civil Part					35,87,664.0
Sub-Total					3,14,93,240.4
Other Over Head (Including Supervision charges)@ 6%					18,89,594.4
Sub-total					3,33,82,834.8
GST @ 18% of Sub-Total					60,08,910.3
CESS @ 1% of Sub-Total					35,876.6
Sub-Grand Total					3,94,27,621.7
Inspection Fee					-
Drawing Approval					-
Grand Total					3,94,27,621.7
Grand Total in Cr.					3.9

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8.23 Annexure 23: Cost Estimate for Installation of Auto Reclosure:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Installation Auto Recloser/ Sectionalizer for 11kV	Nos	232	25.00
B	Installation Auto Recloser/ Sectionalizer for 33kV	Nos	23	5.00
Total				30.0

A. Cost Estimate for Installation of Auto Reclosure for 11kV

Annexure-23A Installation of 11kV Auto Reclosure					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27301	464	1,26,67,580.5
2	11kV Auto Reclosure	EA	552255	232	12,81,23,206.4
3	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	232	21,06,560.0
4	Lightning Arrester (12kV,10kA) DH Class	No	1960	696	13,64,160.0
5	25x6 mm GI flat	Kg	72	5800	4,17,600.0
6	Danger Plate	No	180	464	83,520.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	139.6	10,052.5
8	GI barbed wire anticlimbing device	Kg	74	1392	1,03,008.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	558.5	40,209.9
10	11kV,5kN pin insulator polymer	No	140	696	97,440.0
11	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	10999.0	8,57,924.1
12	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	10202.4	7,95,789.7
13	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	11154.1	8,70,019.5
14	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	9276.3	7,23,550.5
15	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	1035.3	80,753.4
16	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1528.9	1,19,252.6
17	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	405.1	31,595.6
18	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	355.0	27,686.9
19	Fish Plate 50x8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	378.07	17,988.4
20	H/W fitting(B&S) 70KN,3 Bolt	Set	412	1392	5,73,504.0
21	11kV Disc insulator (B&S) 70KN polymer	No	150	1392	2,08,800.0
22	Earthing of Support (Coil Type)	EA	164	464	76,096.0
23	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	121.6	8,996.0
24	PG Clamp for 100 mm ² AAAC conductor	No	924	1392	12,86,806.6
25	GI Nut , Bolt & Washer of different sizes	Kg	74	2784	2,06,016.0

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26	H.T. Stay clamp	Pair	260	928	2,41,280.0
27	H.T. Stay set (Complete)	Set	1434	928	13,30,752.0
28	H.T. Stay Insulator	No	87	928	80,736.0
29	7/10 SWG Stay Wire	Kg	77	9280	7,14,560.0
30	AAA conductor,100 mm2	Km	78410	3.48	2,72,866.8
Total Cost of materials					15,35,38,311.4
Stock, Storage & Insurance i.e 3%					46,06,149.3
Sub Total					15,81,44,460.7
Contingency @ 3%					47,44,333.8
Tools & Plants @ 2%					31,62,889.2
Transportation @ 7.5%					1,18,60,834.6
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					
Erection Other @ 10%.					10,69,160.2
Erection PSC Pole @ 20%					-
Sub Total					17,89,81,678.5
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100.00	928	28,76,800.0
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	464	28,76,800.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	464	1,31,312.0
4	Installation, Testing and commissioning of 11kv auto reclosure Unit on existing structure as per specification including loading, unloading, shifting/transportation from site/tent up to 10KM. Scope of work also includes earthing, jumpering/connection.	EA	49000	232	1,13,68,000.0
5	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-Bolt , 40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or	No	5100	696	35,49,600.0

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	other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.				
Total Civil Part					2,08,02,512.0
Sub-Total					19,97,84,190.5
Other Over Head (Including Supervision charges)@ 6%					1,19,87,051.4
Sub-total					21,17,71,241.9
GST @ 18% of Sub-Total					3,81,18,823.6
CESS @ 1% of Sub-Total					2,08,025.1
Sub-Grand Total					25,00,98,090.6
Inspection Fee					-
Drawing Approval					-
Grand Total					25,00,98,090.6
Grand Total in Cr.					25.0

B. Cost Estimate for Installation of Auto Reclosure for 33kV

Annexure-23B Installation of 33kV Auto Reclosure					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27301	46	12,55,837.7
2	33kV Auto Reclosure	EA	1200000	23	2,76,00,000.0
3	Isolator 33KV 800Amp w/o earth switch	EA	80000	23	18,40,000.0
4	Lightning Arrester (30kV,10kA) (Station Class,Class 2)	EA	4443	69	3,06,567.0
5	25x6 mm GI flat	Kg	72	1150	82,800.0
6	Danger Plate	No	180	46	8,280.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	13.8	996.6
8	GI barbed wire anticlimbing device	Kg	74	138	10,212.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	55.4	3,986.3
10	33kV,10kN pin insulator polymer	No	398	69	27,462.0
11	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	1840.0	1,43,520.0
12	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	1840.0	1,43,520.0
13	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	1840.0	1,43,520.0
14	ISO Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	1840.0	1,43,520.0
15	ISO Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	102.6	8,005.7
16	ISO Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	151.6	11,822.5
17	ISO Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	40.2	3,132.3
18	ISO Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	35.2	2,744.8

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19	Fish Plate 50x8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	37.48	1,783.3
20	33kV H/W fitting(B&S) 90KN,4 Bolt	Set	631	138	87,078.0
21	33kV Disc insulator (B&S) 90KN polymer	No	289	138	39,882.0
22	Earthing of Support (Coil Type)	EA	164	46	7,544.0
23	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	12.1	891.8
24	PG Clamp for 100 mm2 AAAC conductor	No	924	138	1,27,571.3
25	GI Nut , Bolt & Washer of different sizes	Kg	74	276	20,424.0
26	H.T. Stay clamp	Pair	260	92	23,920.0
27	H.T. Stay set (Complete)	Set	1434	92	1,31,928.0
28	H.T. Stay Insulator	No	87	92	8,004.0
29	7/10 SWG Stay Wire	Kg	77	920	70,840.0
30	AAA conductor,100 mm2	Km	78410	4.60	3,60,686.0
Total Cost of materials					3,26,16,479.5
Stock, Storage & Insurance i.e 3%					9,78,494.4
Sub Total					3,35,94,973.9
Contingency @ 3%					10,07,849.2
Tools & Plants @ 2%					6,71,899.5
Transportation @ 7.5%					25,19,623.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					3,63,172.8
Erection PSC Pole @ 20%					-
Sub Total					3,81,57,518.4
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Fixing of complete 33KV line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts BA will do the excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3200	92	2,94,400.0
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)X1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	46	2,85,200.0
3	Installation, Testing and commissioning of 33kV auto reclosure complete Unit (LA,isolator,PT,CRP etc) on existing structure as per specification including loading, unloading, shifting/transportation from site/tent up to 10KM. Scope of work also includes earthing, jumpering/connection.	EA	38000	23	8,74,000.0
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per	No	5100	69	3,51,900.0

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IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power, Nuts-Bolt, 40mm dia 3 Mtr GI pipe & PVC Pipe PCC, and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover (earth resistance measurement and with in limit to be achieved by BA). Scope of work also includes leveling & ramming of earth and removal of extra malba.				
Total Civil Part				18,05,500.0
Sub-Total				3,99,63,018.4
Other Over Head (Including Supervision charges)@ 6%				23,97,781.1
Sub-total				4,23,60,799.5
GST @ 18% of Sub-Total				76,24,943.9
CESS @ 1% of Sub-Total				18,055.0
Sub-Grand Total				5,00,03,798.4
Inspection Fee				-
Drawing Approval				-
Grand Total				5,00,03,798.4
Grand Total in Cr.				5.0

8.24 Annexure 24: Cost Estimate for Installation of 33kV & 11kV RMUs:

Sl. No	Description	UOM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Supply & Installation RMU 4 Way O/D at 11 KV	Nos	8	1.79
B	Supply & Installation RMU 3 Way O/D at 11 KV	Nos	8	1.63
C	Supply & Installation RMU 4 Way O/D at 33 KV	Nos	5	2.62
Total				6.0

A. Cost Estimate for installation of 11kV 4W RMUs

Annexure-24A Installation of 11kV 4W RMU					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	RMU 11kV 4 Way 2x630A BKR O/D LLVV	EA	1123040	8	89,84,320.0
2	WPB 160x152 (30.44KG/Mtr.), 11 mtr	No	27301	16	4,36,813.1
3	Top Channel 100X50X5mm, 9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	412	32,148.5
4	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	305	23,761.9
5	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	202	15,724.8
6	50x6 mm GI flat	Kg	72	200	14,400.0
7	25x6 mm GI flat	Kg	72	200	14,400.0
8	Danger Plate	No	180	40	7,200.0
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	12	866.6
10	GI Nut, Bolt & Washer of different sizes	Kg	74	40	2,960.0
11	11kV AL 3Cx400 Sqmm XLPE Cable armoured	Mtr	2375	560	13,30,000.0
12	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable (indoor type)	No	8260	24	1,98,240.0

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13	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(outdoor type)	No	2900	24	69,600.0
14	160 mm diameter, PE 80- PN8	Mtr	522.0	48	25,056.0
15	Lug AL Crimping 95 Sqmm XLPE Single hole	EA	92.1	32	2,945.6
16	AAA conductor,100 mm2	Km	78410	0.8	62,728.0
Total Cost of materials					1,12,21,164.5
Stock, Storage & Insurance i.e 3%					3,36,634.9
Sub Total					1,15,57,799.4
Contingency @ 3%					3,46,734.0
Tools & Plants @ 2%					2,31,156.0
Transportation @ 7.5%					8,66,835.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					1,85,403.2
Erection PSC Pole @ 20%					
Sub Total					1,31,87,927.6
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	128	6,96,008.7
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	16	99,200.0
3	Sign writing on cable compartment of 11kV RMU as per details mentioned in the scope of work and specification (price per leg) (including Supply of paint)	EA	165.7	8	1,325.7
4	Construction of 3-way/4-way/5way RMU Plinth with Brick, Mortar, 12 mm cement plaster.Scope includes excavation of earth for foundation and supply of raw material i.e. sand, cement, bricks and removal of extra malba if any	LS	28000	8	2,24,000.0
5	Installation, Testing and Commissioning of 11/33kV 3-way /4-way/5way Ring Main Unit (RMU) on existing structure/foundation as per .Specification including grouting & HT Cable Connections,earthing Connections & minor site modifications. Scope of work excludes earthing chamber and construction of foundation.	EA	12000	8	96,000.0
6	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	48	9,600.0

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7	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	5	25,500.0
Total Civil Part					11,51,634.4
Sub-Total					1,43,39,562.0
Other Over Head (Including Supervision charges)@ 6%					8,60,373.7
Sub-total					1,51,99,935.7
GST @ 18% of Sub-Total					27,35,988.4
CESS @ 1% of Sub-Total					11,516.3
Sub-Grand Total					1,79,47,440.5
Inspection Fee					-
Drawing Approval					-
Grand Total					1,79,47,440.5
Grand Total in Cr.					1.7

B. Cost Estimate for installation of 11kv 3W RMUs

Annexure-24B Installation of 11kv 3W RMU					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	RMU 11kv 3 Way 2x630A BKR O/D LVV	EA	953220	8	76,25,760
2	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27301	16	4,36,813.1
3	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	412	32,148.5
4	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	305	23,761.9
5	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	202	15,724.8
6	50x6 mm GI flat	Kg	72	200	14,400
7	25x6 mm GI flat	Kg	72	200	14,400
8	Danger Plate	No	180	40	7,200
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	12	866.6
10	GI Nut , Bolt & Washer of different sizes	Kg	74	40	2,960
11	11kv AL 3CX400 Sqmm XLPE Cable armoured	Mtr	2375	560	13,30,000
12	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(indoor type)	No	8260	24	1,98,240
13	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(outdoor type)	No	2900	24	69,600
14	160 mm diameter, PE 80- PN8	Mtr	522.0	48	25,056
15	Lug AL Crimping 95 Sqmm XLPE Single hole	EA	92.1	32	2,945.6

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16	AAA conductor,100 mm2	Km	78410	1.2	94,092.0
Total Cost of materials					98,93,968.5
Stock, Storage & Insurance i.e 3%					2,96,819.1
Sub Total					1,01,90,787.6
Contingency @ 3%					3,05,723.6
Tools & Plants @ 2%					2,03,815.8
Transportation @ 7.5%					7,64,309.1
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					1,88,633.7
Erection PSC Pole @ 20%					-
Sub Total					1,16,53,269.7
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	128	6,96,064.0
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)X1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	16	99,200.0
3	Construction of 3-way/4-way/5way RMU Plinth with Brick, Mortar, 12 mm cement plaster.Scope includes excavation of earth for foundation and supply of raw material i.e. sand, cement, bricks and removal of extra malba if any	LS	28000	8	2,24,000.0
4	Sign writing on cable compartment of 11kV RMU as per details mentioned in the scope of work and specification (price per leg) (including Supply of paint)	EA	165.7	8	1,325.7
5	Installation, Testing and Commissioning of 11/33kV 3-way /4-way/5way Ring Main Unit (RMU) on existing structure/foundation as per .Specification including grouting & HT Cable Connections,earthing Connections & minor site modifications. Scope of work excludes earthing chamber and construction of foundation.	EA	12000	8	96,000.0
6	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	48	9,600.0
7	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing	No	5100	40	2,04,000.0

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	compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.				
Total Civil Part					13,30,189.7
Sub-Total					1,29,83,459.4
Other Over Head (Including Supervision charges)@ 6%					7,79,007.6
Sub-total					1,37,62,467.0
GST @ 18% of Sub-Total					24,77,244.1
CESS @ 1% of Sub-Total					13,301.9
Sub-Grand Total					1,62,53,012.9
Inspection Fee					-
Drawing Approval					-
Grand Total					1,62,53,012.9
Grand Total in Cr.					1.6

C. Cost Estimate for installation of 33kV 4W RMUs

Annexure-24C Installation of 33kV 4W RMU					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	RMU 33kV 4 Way 2x630A BKR O/D	EA	3018066	5	1,50,90,330.0
2	WPB 160x152 (30.44KG/Mtr.),13 mtr	No	32110	10	3,21,103.4
3	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	258	20,092.8
4	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	190	14,851.2
5	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	126	9,828.0
6	50x6 mm GI flat	Kg	72	125	9,000.0
7	25x6 mm GI flat	Kg	72	125	9,000.0
8	Danger Plate	No	180	25	4,500.0
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	8	541.6
10	GI Nut , Bolt & Washer of different sizes	Kg	74	25	1,850.0
11	33kV AL 3Cx400 Sqmm XLPE Cable armoured	Mtr	3165	350	11,07,750.0
12	Heat shrinkable jointing kit for 3Cx400 mm ² 33KV XLPE Cable(indoor type)	No	11340	15	1,70,100.0
13	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(outdoor type)	No	11900	15	1,78,500.0
14	160 mm diameter, PE 80- PN8	Mtr	522	30	15,660.0
15	Lug AL Crimping 95 Sqmm XLPE Single hole	EA	92.05	20	1,841.0
16	AAA conductor,148 mm2	Km	116360	0.75	87,270.0
Total Cost of materials					1,70,42,218.0
Stock, Storage & Insurance i.e 3%					5,11,266.5
Sub Total					1,75,53,484.6
Contingency @ 3%					5,26,604.5
Tools & Plants @ 2%					3,51,069.7

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Transportation @ 7.5%					13,16,511.3
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					1,67,970.8
Erection PSC Pole @ 20%					-
Sub Total					1,99,15,640.9
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	80	4,35,040.0
2	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete of size - 500(B)x500(W)x2200(H) , and cooping of 500(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	7000	10	70,000.0
3	Construction of 3-way/4-way/5way RMU Plinth with Brick, Mortar, 12 mm cement plaster.Scope includes excavation of earth for foundation and supply of raw material i.e. sand, cement, bricks and removal of extra malba if any	LS	28000	5	1,40,000.0
4	Sign writing on cable compartment of 11kV RMU as per details mentioned in the scope of work and specification (price per leg) (including Supply of paint)	EA	165.7	5	828.5
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	30	6,000.0
6	Installation, Testing and Commissioning of 33kV 3-way / 4-way/5Way Ring Main Unit (RMU) on existing structure/foundation as per .Specification including grouting & HT Cable Connections,earthing Connections & minor site modifications. Scope of work excludes earthing chamber and construction of foundation..BA will provide necessary control cable ferruling, control cable schedule, connectors, lugs & cable gland at both end of terminations of control cable.	EA	14000	5	70,000.0
7	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other	No	5100	25	1,27,500.0

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	suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.				
				Total Civil Part	8,49,368.5
				Sub-Total	2,07,65,009.5
				Other Over Head (Including Supervision charges)@ 6%	12,45,900.6
				Sub-total	2,20,10,910.1
				GST @ 18% of Sub-Total	39,61,963.8
				CESS @ 1% of Sub-Total	2,20,109.1
				Sub-Grand Total	2,61,92,983.0
				Inspection Fee	-
				Drawing Approval	-
				Grand Total	2,61,92,983.0
				Grand Total in Cr.	2.6

8.25 Annexure 25: Cost Estimate for Installation of FPIs for 11kV Lines:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Communicable FPI 33kV & 11kV OH Line	Set of 3	614	3.0
	Total			3.0

A. Cost Estimate for installation of FPIs

Annexure-25: Cost Estimate for Installation of FPIs for 11kV Lines					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Communicable FPI 33kV & 11kV OH Lines	Set	30675	614	1,88,34,450
	Total Cost of materials				1,88,34,450
	Stock, Storage & Insurance i.e 3%				5,65,033.5
	Sub Total				1,93,99,483.5
	Contingency @ 3%				5,81,984.5
	Tools & Plants @ 2%				3,87,989.7
	Transportation @ 7.5%				14,54,961.3
	Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%				-
	Erection Other @ 10%.				19,39,948.4
	Erection PSC Pole @ 20%				-
	Sub Total				2,37,64,367.3
	Other Over Head (Including Supervision charges)@ 6%				14,25,862.0
	Sub-total				2,51,90,229.3
	GST @ 18% of Sub-Total				45,34,241.3
	CESS @ 1% of Sub-Total				2,51,902.3
	Sub-Grand Total				2,99,76,372.9
	Inspection Fee				-
	Drawing Approval				-
	Grand Total				2,99,76,372.9
	Grand Total in Cr.				3.0

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8.26 Annexure 26: Cost Estimate for Installation of Line AB Switch/Isolator for 33kV & 11kV:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Installation of Line AB Switch/Isolator for 11kV	Set	67	1.56
B	Installation of Line AB Switch/Isolator for 33kV	Set	48	2.45
Total			115	4.0

A. Cost Estimate for Installation of Line AB Switch/Isolator for 11kV

Annexure-26B: Cost Estimate for Installation of Line AB Switch/Isolator for 33kV & 11kV					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.82	134	36,58,309.9
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 4.5mtr., 2 no's channel required	KG	78	11529	8,99,290.1
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 24 no's required = (24x2.36x0.280)	KG	72	266	19,126.2
4	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr., each channel length 3 Mtr., 2 no's channel required =(7.14x3x2) /AB Switch	KG	78	2870	2,23,881.8
5	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =(9.56x2x0.35) /AB Switch	KG	78	448	34,972.4
6	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =(7.14x0.8x1) /AB Switch	KG	78	383	29,850.9
7	Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 4 no's channel required =(7.14x3x4)	KG	78	5741	4,47,763.7
8	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	78	4235	3,30,366.8
9	Danger Plate, 2 no's.	No.	180	134	24,120.0
10	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	72	40	2,903.1
11	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 5 mtr. For raising)= 23x2.36	KG	72	3637	2,61,846.7
12	GI barbed wire anticlimbing device 3 Kg. Per support, 4 no's qty. required =(4x3kg)	Kg	74	804	59,496.0
13	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 16 no's = (16x0.59x0.510)	KG	72	323	23,224.7
14	Lightning Arrester (12kV,10kA) DH Class	No	1960	201	3,93,960.0
15	AB Switch (11KV,400A.3pole,50Hz)	Set	10972	67	7,35,124.0
16	11 KV pin insulator polymer	No.	140	402	56,280.0
17	H W fitting(B&S) 70KN, 3Bolt	No.	412	402	1,65,624.0
18	Disc insulator (B&S) 70 KN polymer	No.	150	402	60,300.0
19	PG Clamp for 100 sq.mm AAA conductor	NO.	924.43	603	5,57,431.3

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20	AAA conductor,100 mm2	Km	78410	7.37	5,77,881.7
21	GI Nut , Bolt & Washer of different sizes	K.g.	74	1675	1,23,950.0
Total Cost of materials					86,85,703.
Stock, Storage & Insurance i.e 3%					2,60,571.1
Sub Total					89,46,274.
Contingency @ 3%					2,68,388.2
Tools & Plants @ 2%					1,78,925.5
Transportation @ 7.5%					6,70,970.6
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					5,17,821.5
Erection PSC Pole @ 20%					-
Sub Total					1,05,82,380.
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	134	8,30,800.0
2	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	134	37,922.0
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	201	10,25,100.0
Total Civil Part					18,93,822.0
Sub-Total					1,24,76,202.2
Other Over Head (Including Supervision charges)@ 6%					7,48,572.1
Sub-total					1,32,24,774.3
GST @ 18% of Sub-Total					23,80,459.4
CESS @ 1% of Sub-Total					18,938.2
Sub-Grand Total					1,56,24,171.9
Inspection Fee					-
Drawing Approval					-
Grand Total					1,56,24,171.9

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Grand Total in Cr. 1.5

B. Cost Estimate for Installation of Line AB Switch/Isolator for 33kV

Annexure-26A: Cost Estimate for Installation of Line AB Switch/Isolator for 33kV & 11kV

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB(GI) Pole 160x152 (13Mtr. Long, 30.44KG/Mtr.)	No	32110.34	96	30,82,592.6
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 4.5mtr., 2 no's channel required	KG	78	4800.0	3,74,400.0
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 24 no's required = (24x2.36x0.280)	KG	72	190.3	13,702.3
4	Isolator Support Cahnnel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 4.3 Mtr., 2 no's channel required =(2x7.14x4.3)/ Isolator	KG	78	2947.4	2,29,896.6
5	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 4.3 Mtr., 8 no's channel required =(8x7.14x4.3)	KG	78	5894.8	4,59,793.2
6	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 4.927 mtr., 4 nos angle required = (8*4.5*4.927)	KG	78	4256.9	3,32,040.4
7	Isolator Operating Down Pipe Support Cahnnel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no channel required =(1x7.14x0.8)/ Isolator	KG	78	274.2	21,385.7
8	Down Pipe Diagonal Support Angle, 4.5Kg./mtr., each angle length 0.388mtr., 1 no angle required = (1*4.5*0.388)/ Isolator	KG	78	83.8	6,537.0
9	Down Pipe Base Support Angle, 4.5Kg./mtr., each angle length 0.34mtr., 1 no angle required = (1*4.5*0.340)/ Isolator	KG	78	73.44	5,728.3
10	Isolator Support Side Cahnnel 100X50X6mm, 9.56 KG/Mtr., each channel length 0.5 mtr., 2 no's channel required =(2x9.56x0.5)/ Isolator	KG	78	458.9	35,792.6
11	Danger Plate, 2 no's.	No.	180	96	17,280.0
12	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	72	28.9	2,079.8
13	50x6mm GI Flat for earthing, 2.36kg/mtr., (15 Mtr. For L.A, 4 Mtr for Isolator Body, 2.5 mtr. For mesh formation and 5 mtr. For raising)	KG	72	3001.9	2,16,138.2
14	GI barbed wire anticlimbing device 3 Kg. Per support, 4 no's qty. required =(4x3kg)	Kg	74	576	42,624.0
15	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 16 no's = (16x0.59x0.510)	KG	72	231.0912	16,638.6
16	Lightning Arrester(30KV,10KA) (Station Class,class-2)	EA	4443	144	6,39,792.0
17	33 KV 1250 AMP Double break (Turn & twist center rotating) isolator without earth switch with PI(Polymer)	Set	145486.45	48	69,83,349.6
18	33KV pin insulator polymer	No.	398	288	1,14,624.0
19	33kV H/W fitting(B&S) 90KN,4 Bolt	Set	631	288	1,81,728.0
20	33kV Disc insulator (B&S) 90KN polymer	No	289	288	83,232.0
21	PG Clamp for 232 sq.mm AAA conductor	NO.	1832.93	432	7,91,825.8

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22	AAA conductor,232 mm2	Km	181650	4.80	8,71,920.0
23	GI Nut , Bolt & Washer of different sizes	K.g.	74	1200	88,800.0
Total Cost of materials					1,46,11,900.8
Stock, Storage & Insurance i.e 3%					4,38,357.0
Sub Total					1,50,50,257.8
Contingency @ 3%					4,51,507.7
Tools & Plants @ 2%					3,01,005.2
Transportation @ 7.5%					11,28,769.3
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					11,87,518.7
Erection PSC Pole @ 20%					-
Sub Total					1,81,19,058.8
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete concrete of size - 500(B)x500(W)x2200(H) , and cooping of 500(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	7000	96	6,72,000.0
2	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	96	27,168.0
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	144	7,34,400.0
Total Civil Part					14,33,568.0
Sub-Total					1,95,52,626.8
Other Over Head (Including Supervision charges)@ 6%					11,73,157.6
Sub-total					2,07,25,784.4
GST @ 18% of Sub-Total					37,30,641.2
CESS @ 1% of Sub-Total					14,335.7
Sub-Grand Total					2,44,70,761.3
Inspection Fee					-
Drawing Approval					-
Grand Total					2,44,70,761.3

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Grand Total in Cr. 2.4

8.27 Annexure 27: Cost Estimate for Augmentation of Power Transformer:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
B	Augmentation of PTR 8 MVA to 12.5 MVA	Nos.	6	18.50
C	Augmentation of PTR 5 MVA to 8 MVA	Nos.	2	
Total				18.5

A. Cost Estimation for Augmentation of PTR 12.5/16 MVA

Annexure-27A Augmentation of PTR 8 MVA to 12.5 MVA					
S No.	Item Description	Unit	Proposed Qty	Unit Rate in Rs.	Amount (in Cr.)
1	12.5/16 MVA 33/11KV Power Transformer with OLTC	No	6	1,92,15,911	11,52,95,466
2	Lightning Arrester(30KV,10KA) (Station Class, Class-2)	No.	54	4,443	2,39,922
3	AAA conductor,232 mm2	Km	2.1	182	381.47
4	T Clamps for 232 sqmm AAAC	No.	36	1,530	55,083.39
5	50x6 mm GI flat	Kg	1200	72	86,400
Total Cost of materials					11,56,77,252.97
Stock, Storage & Insurance i.e 3%					34,70,317.59
Sub Total					11,91,47,570.56
Contingency @ 3%					-
Tools & Plants @ 2%					-
Transportation @ 7.5%					-
Erection Other @ 10%.					39,324.0
Sub Total					11,56,77,252.97
Sl no	Civil & Services	Unit	Proposed Qty	Unit Rate in Rs.	Amount (in Cr.)
1	ITC of PTR from 12.5 to 20 MVA (Without Farrana/Crane)	No	6	340000	20,40,000.00
2	Dismantling of 33/11kv PTR above 5MVA upto12.5MVA Loading, Transportation within 30 Kms, Unloading of same PTR if Required.	No	6	110000	6,60,000.00
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	90	5100	4,59,000.0
4	Marching of Farrana/Crane beyond 50 KM	Km	100	1664	1,66,400.00
Total Civil Part					33,25,400.00

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Sub-Total	12,25,12,294.61
Other Over Head (Including Supervision charges)@ 6%	73,50,737.68
Sub-total	12,98,63,032.29
GST @ 18% of Sub-Total	2,33,75,345.81
CESS @ 1% of Sub-Total	12,98,630.3
Sub-Grand Total	15,45,37,008.42
Grand Total	15,45,37,008.42
Grand Total in Cr.	15.45

B. Cost Estimation for Augmentation of PTR 8 MVA

Annexure-27B Augmentation of PTR 5 MVA to 8 MVA					
S No.	Item Description	Unit	Proposed Qty	Unit Rate in Rs.	Amount (in Cr.)
1	8MVA 33/11KV Power Transformer with OLTC	No	2	1,04,00,030	2,08,00,060
2	Lightning Arrester(30KV,10KA) (Station Class,class-2)	No.	18	4,443	79,974
3	AAA conductor,232 mm2	Km	0.7	182	127.16
4	T Clamps for 232 sqmm AAAC	No.	12	1,530	18,361.13
5	50x6 mm GI flat	Kg	400	72	28,800
Total Cost of materials					2,09,27,322.28
Stock, Storage & Insurance i.e 3%					6,27,819.67
Sub Total					2,15,55,141.95
Contingency @ 3%					-
Tools & Plants @ 2%					-
Transportation @ 7.5%					-
Erection Other @ 10%.					13,108.0
Sub Total					2,15,68,249.97
Sl no	Civil & Services	Unit	Proposed Qty	Unit Rate in Rs.	Amount (in Cr.)
1	ITC of PTR upto 8 MVA (Without Farrana/Crane)	No	2	300000	6,00,000.00
2	Dismantling of 33/11kv PTR upto 5MVA Loading, Transportation within 30 Kms, Unloading of same PTR if Required.	No	2	75000	1,50,000.00
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	30	5100	1,53,000.0
4	Marching of Farrana/Crane beyond 50 KM	Km	100	1664	1,44,400.00
Total Civil Part					10,69,400.00
Sub-Total					2,26,37,649.97
Other Over Head (Including Supervision charges)@ 6%					13,58,259.00
Sub-total					2,39,95,908.97

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GST @ 18% of Sub-Total	43,19,263.61
CESS @ 1% of Sub-Total	2,39,959.1
Sub-Grand Total	2,85,55,131.67
Grand Total	2,85,55,131.67
Grand Total in Cr.	2.86

8.28 Annexure 28: Cost Estimate for Augmentation of Distribution Transformer:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Augmentation of 25/63 KVA to 100 KVA DTR	Nos.	171	12.31
B	Augmentation of 100 KVA to 250 KVA DTR	Nos.	154	24.48
C	Augmentation of 200/250 KVA to 500 KVA DTR	Nos.	30	8.23
Total			355	45.0

C. Cost Estimation for Augmentation of DTR 25/63 KVA to 100 KVA

Annexure-28A Augmentation of DTR 25/63 KVA to 100 KVA					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	100 KVA,11/0.4KV(Al) Transformer	No	189025	171	3,23,23,275.0
2	LT Distribution Box for 100 KVA S/S.	EA	31086	171	53,15,706.0
3	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	171	15,52,680.0
4	Lightning Arrester (12kV,10kA) DH Class	No	1960	513	10,05,480.0
5	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1456.2	171	2,49,010.2
6	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93.3	513	47,862.9
7	100 Sqmm AAAC Conductor	Km	78410	4.104	3,21,794.6
8	Cable 1.1kV Al 1CX150 Sq.mm Un-armoured	Mtr	162	5472	8,86,464.0
9	CABLE 1.1KV AL 4CX150 SQMM ARM	Mtr	850	2565	21,80,250.0
10	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	9918.0	7,73,604.0
11	Transformer Base GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	9918.0	7,73,604.0
12	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	6511.7	5,07,911.0
13	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	6511.7	5,07,911.0
14	Transformer Belting angle (50X50X6) mm 2800 mm long 2 nos. (4.5 Kg./Mtr.)with side angle	Kg	78	4309.2	3,36,117.6
15	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	763.1	59,520.8
16	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1126.9	87,897.4
17	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1126.9	87,897.4
18	Cantilever Support Channel 75X40X4.8 mm GI Channel (810 m long) (7.14Kg./Mtr)	Kg	78	989.0	77,139.0
19	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	298.6	23,288.1

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20	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	261.6	20,407.1
21	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	986.5	76,946.9
22	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	25650	20,00,700.0
23	LTDB Mounting Support Angle 100X50X5mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	25650	20,00,700.0
24	H/W fitting(B&S) 70KN,3 Bolt	Set	412	513	2,11,356.0
25	11kV Disc insulator (B&S) 70KN polymer	No	150	513	76,950.0
26	50x6 mm GI flat	Kg	72	1026	73,872.0
27	25x6 mm GI flat	Kg	72	1026	73,872.0
28	GI Nut , Bolt & Washer of different sizes	Kg	74	2137.5	1,58,175.0
29	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37	4104	1,51,848.0
30	Lug AL Crimping 150 Sqmm XLPE One Hole	EA	207.14	1368	2,83,361.5
31	Energy Meter Installation (Smart Meter) with BOX	LS	15608.6	171	26,69,068.9
32	Connector Mini Wedge 25 Sqmm to Dog	EA	1062.8	513	5,45,219.0
Total Cost of materials					5,54,59,889.7
Stock, Storage & Insurance i.e 3%					16,63,796.7
Sub Total					5,71,23,686.4
Contingency @ 3%					17,13,710.6
Tools & Plants @ 2%					11,42,473.7
Transportation @ 7.5%					42,84,276.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					16,64,648.7
Erection Other @ 10%.					23,83,071.3
Erection PSC Pole @ 20%					-
Sub Total					6,83,11,867.1
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	855	43,60,500.0
2	Dismantling of existing 11/0.4kV,3 Phase Distribution Transformer 63KVA including removal of HT/LT leads, earth connections & unloading by crane.Scope also includes loading, transportation, unloading & staking at a proper place in safe position/site store	No	1841	171	3,14,811.0
3	Supply and erection of double Compression Flameproof Type Glanding for armored cable3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	684	15,25,320.0

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4	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	684	8,39,268.0
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	3933	7,86,600.0
6	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	855	5,69,430.0
7	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	3420	1,85,97,960.0
8	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	342	22,23,000.0
9	Sign writing on Transformer as per details mentioned in the scope of work and specification (including Supply of paint)	EA	187.2	171	32,009.6
10	Dismantling of Steel Structure, Nuts & Bolt including loading, transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	8550	51,300.0
Total Civil Part					2,93,00,198.6
Sub-Total					9,76,12,065.7
Other Over Head (Including Supervision charges)@ 6%					58,56,723.9
Sub-total					10,34,68,789.7
GST @ 18% of Sub-Total					1,86,24,382.1
CESS @ 1% of Sub-Total					10,34,687.9
Sub-Grand Total					12,31,27,859.7
Inspection Fee					-
Drawing Approval					-
Grand Total					12,31,27,859.7
Grand Total in Cr.					12.3

D. Cost Estimation for Augmentation of DTR 100 KVA to 250 KVA

Annexure-28B Augmentation of DTR 100 KVA to 250 KVA					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	250 KVA,11/0.4KV(Cu) Transformer	No	619789	154	9,54,47,506.0
2	ACB LT 400 A	EA	113390	154	1,74,62,060.0
3	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	154	13,98,320.0
4	Lightning Arrester (12kV,10kA) DH Class	No	1960	462	9,05,520.0
5	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1456.2	154	2,24,254.8
6	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93.3	462	43,104.6
7	100 Sqmm AAAC Conductor	Km	78410.00	3.70	2,89,803.4
8	Cable 1.1kV Al 1CX300 Sq.mm Un-armoured	Mtr	311	4928	15,32,608.0

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9	CABLE 1.1KV AL 4CX300 SQMM ARM	Mtr	1572	4620	72,62,640.0
10	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	8244.54	6,43,074.4
11	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	6157.54	4,80,287.8
12	DD Fuse Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	6157.54	4,80,287.8
13	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	687.23	53,603.6
14	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1014.86	79,159.1
15	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1014.86	79,159.1
16	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78	890.64	69,470.2
17	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	268.88	20,973.0
18	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	235.62	18,378.4
19	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	888.43	69,297.2
20	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	23100	18,01,800.0
21	LTDB Mounting Support Angle 100x50x5mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	23100	18,01,800.0
22	H/W fitting(B&S) 70KN,3 Bolt	Set	412	462	1,90,344.0
23	11kV Disc insulator (B&S) 70KN polymer	No	150	462	69,300.0
24	50x6 mm GI flat	Kg	72	847	60,984.0
25	25x6 mm GI flat	Kg	72	847	60,984.0
26	GI Nut , Bolt & Washer of different sizes	Kg	74	3850	2,84,900.0
27	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37	8316	3,06,212.0
28	Lug AL Crimping 300 Sqmm XLPE One Hole	EA	207.14	1232	2,55,191.1
29	Energy Meter Installation (Smart Meter) with BOX	LS	19307.6	154	29,73,368.9
30	Connector Mini Wedge 25 Sqmm to Dog	EA	1062.81	462	4,91,015.9
Total Cost of materials					13,48,55,407.2
Stock, Storage & Insurance i.e 3%					40,45,662.2
Sub Total					13,89,01,069.4
Contingency @ 3%					41,67,032.1
Tools & Plants @ 2%					27,78,021.4
Transportation @ 7.5%					1,04,17,580.2
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					49,15,546.6
Erection Other @ 10%.					40,59,013.8
Erection PSC Pole @ 20%					-
Sub Total					16,52,38,263.4
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit	No	5100	770	39,27,000.0

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	resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-Bolt , 40mm dia 3 Mtr GI pipe & PVC Pipe PCC , and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover (earth resistance measurement and with in limit to be achieved by BA). Scope of work also includes leveling & ramming of earth and removal of extra malba.				
2	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	3080	1,67,49,040.0
3	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	616	13,73,680.0
4	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	616	7,55,832.0
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr , Nut & Bolt , sealing of the pipe , collar fixing as per specification.	M	200	3080	6,16,000.0
6	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4, Grade PE-63) and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	770	5,12,820.0
7	Construction of Plinth with Brick, Mortar, 12 mm cement plaster and for upto 500KVA transformer as per drawing. Scope of work includes excavation of earth, supply of Civil material for construction, desposal of extra malba as per EIC instruction.	No	28000	154	43,12,000.0
8	Sign writing on Transformer as per details mentioned in the scope of work and specification (including Supply of paint)	EA	187.2	154	28,827.4
9	Dismantling of existing 11/0.4kV, 33/0.4KV, Three Phase Distribution Transformer below 100KVA including removal of HT/LT leads, earth connections and unloading by crane if required. Scope of work also includes loading, transportation, unloading and staking at a proper place in safe position/site store. Transportation with adequate vehicle load/capacity shall be only paid seperately	No	3263.00	154	5,02,502.0

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10	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	7700	46,200.0
Total Civil Part					2,88,23,901.4
Sub-Total					19,40,62,164.8
Other Over Head (Including Supervision charges)@ 6%					1,16,43,729.9
Sub-total					20,57,05,894.7
GST @ 18% of Sub-Total					3,70,27,061.0
CESS @ 1% of Sub-Total					20,57,058.9
Sub-Grand Total					24,47,90,014.7
Inspection Fee					-
Drawing Approval					-
Grand Total					24,47,90,014.7
Grand Total in Cr.					24.4

E. Cost Estimation for Augmentation of DTR 200/250 KVA to 500 KVA

Annexure-28C Augmentation of DTR 250 KVA to 500 KVA					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	500 KVA,11/0.4KV(Cu) Transformer	No	12,25,143	30	3,67,54,290.0
2	ACB LT 400 A	EA	1,13,390	60	68,03,400.0
3	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9,080	30	2,72,400.0
4	Lightning Arrester (12kV,10kA) DH Class	No	1,960	90	1,76,400.0
5	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1,456	30	43,686.0
6	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93	90	8,397.0
7	100 Sqmm AAAC Conductor	Km	78,410.00	0.72	56,455.2
8	Cable 1.1kV Al 1CX300 Sq.mm Un-armoured	Mtr	311	1920	5,97,120.0
9	CABLE 1.1KV AL 4CX300 SQMM ARM	Mtr	1,572	900	14,14,800.0
10	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	1606.1	1,25,274.2
11	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	1199.5	93,562.6
12	DD Fuse Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	1199.5	93,562.6
13	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	133.9	10,442.3
14	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	197.7	15,420.6
15	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	197.7	15,420.6
16	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78	173.5	13,533.2
17	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	52.4	4,085.6
18	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	45.9	3,580.2
19	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	173.1	13,499.5

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20	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	4500	3,51,000.0
21	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	4500	3,51,000.0
22	H/W fitting(B&S) 70KN,3 Bolt	Set	412	90	37,080.0
23	11kV Disc insulator (B&S) 70KN polymer	No	150	90	13,500.0
24	50x6 mm GI flat	Kg	72	360	25,920.0
25	25x6 mm GI flat	Kg	72	360	25,920.0
26	GI Nut , Bolt & Washer of different sizes	Kg	74	750	55,500.0
27	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37	1620	59,940.0
28	Lug AL Crimping 300 Sqmm XLPE One Hole	EA	207	480	99,425.1
29	Energy Meter Installation (Smart Meter) with BOX	LS	19,307.6	30	5,79,227.7
30	Connector Mini Wedge 25 Sqmm to Dog	EA	1,063	90	95,652.5
Total Cost of materials					4,82,09,494.7
Stock, Storage & Insurance i.e 3%					14,46,284.8
Sub Total					4,96,55,779.5
Contingency @ 3%					14,89,673.4
Tools & Plants @ 2%					9,93,115.6
Transportation @ 7.5%					37,24,183.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					18,92,845.9
Erection Other @ 10%.					11,79,886.1
Erection PSC Pole @ 20%					-
Sub Total					5,89,35,484.0
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	150	7,65,000.0
2	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	600	32,62,800.0
3	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	120	2,67,600.0
4	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	240	2,94,480.0
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable	M	200	690	1,38,000.0

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	protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.				
6	Supply & Laying/Mounting and fixing of HDPE Pipe -110 mm Dia (PN-4,Grade PE-63)and sealing of the same for LT/HT Cables. Scope also includes providing and laying all required consumable etc. for collar fixing and sealing of Pipe. (Excavation is excluded)	M	666	150	99,900.0
7	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX300 sqmm	No	8070	60	4,84,170.0
8	Construction of Plinth with Brick, Mortar, 12 mm cement plaster and for upto 500KVA transformer as per drawing.Scope of work includes excavation of earth,supply of Civil material for construction, desposal of extra malba as per EIC instruction.	No	28000	30	8,40,000.0
9	Sign writing on Transformer as per details mentioned in the scope of work and specification (including Supply of paint)	EA	187.2	30	5,615.7
10	Dismantling of existing 11/0.4kV, 33/0.4KV, 250kVA Three Phase Distribution Transformer including removal of HT/LT leads, earth connections and unloading by crane if required. Scope of work also includes loading, transportation, unloading and staking at a proper place in safe position/site store. Transportation with adequate vehicle load/capacity shall be only paid seperately	No	4904	30	1,47,122.5
11	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	3120	18,720.0
Total Civil Part					63,23,408.3
Sub-Total					6,52,58,892.3
Other Over Head (Including Supervision charges)@ 6%					39,15,533.5
Sub-total					6,91,74,425.8
GST @ 18% of Sub-Total					1,24,51,396.6
CESS @ 1% of Sub-Total					6,91,744.3
Sub-Grand Total					8,23,17,566.7
Inspection Fee					-
Drawing Approval					-
Grand Total					8,23,17,566.7
Grand Total in Cr.					8.2

8.29 Annexure 29: Cost Estimate for Conversion of 1Ph DTR to 3Ph DTR along with lines:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Conversion of 1Ph DTR to 3Ph DTR along with lines	Nos.	159	33.65
Total			159	33.7

A. Cost Estimation for Conversion of 1pH to 3pH along with associated lines

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Annexure-29: Cost Estimate for Conversion of 1Ph DTR to 3Ph DTR along with lines					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	100 KVA,11/0.4KV(Al) Transformer	No	189025	159	3,00,54,975.0
1.1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	318	86,81,660.8
2	LT Distribution Box for 100 KVA S/S.	EA	31086	159	49,42,674.0
3	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080	159	14,43,720.0
4	Lightning Arrester (12kV,10kA) DH Class	No	1960	477	9,34,920.0
5	DO Fuse(11KV, 200A 2Pole With Clamp Fitting	Set	1456	159	2,31,535.8
6	DO Fuse link wire 10 A up to 100 KVA DTR	EA	93	477	44,504.1
7	100 Sqmm AAC Conductor	Km	78410.00	3.816	2,99,212.6
8	Cable 1.1kV Al 1CX150 Sq.mm Un-armoured	Mtr	162	5088	8,24,256.0
9	Cable 1.1kV Al 4CX150 Sq.mm Un-armoured	Mtr	850	3975	33,78,750.0
10	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	7155.0	5,58,090.0
11	Transformer Base GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78	10335.0	8,06,130.0
12	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78	5247.0	4,09,266.0
13	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	5565.0	4,34,070.0
14	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78	1113.0	86,814.0
15	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1272.0	99,216.0
16	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78	1272.0	99,216.0
17	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78	954.0	74,412.0
18	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78	277.6	21,653.9
19	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78	243.3	18,975.1
20	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78	917.3	71,547.1
21	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	23850	18,60,300.0
22	LTDB Mounting Support Angle 100X50X5mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78	23850	18,60,300.0
23	H/W fitting(B&S) 70KN,3 Bolt	Set	412	477	1,96,524.0
24	11kV Disc insulator (B&S) 70KN polymer	No	150	477	71,550.0
25	50x6 mm GI flat	Kg	72	954	68,688.0
26	25x6 mm GI flat	Kg	72	954	68,688.0
27	GI Nut , Bolt & Washer of different sizes	Kg	74	3975	2,94,150.0
28	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	8586	3,16,154.0
29	Lug AL Crimping 150 Sqmm XLPE One Hole	EA	207	1272	2,63,304.0
30	Energy Meter Installation (Smart Meter) with BOX	LS	19307.6	159	30,69,906.8
31	Connector Mini Wedge 25 Sqmm to Dog	EA	1062.8	477	5,06,958.0
Part - B	HT Line				

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S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	954	2,60,44,982.3
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	10335.0	8,06,130.0
3	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	6054.7	4,72,268.2
4	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	4273.9	3,33,365.8
5	Straight Cross Arm Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 1.2 mtr.	Kg	78	3180	2,48,040.0
6	Straight Cross Arm Top Channel 100X50X5mm, 9.56 KG/mtr, each channel length 0.306 Mtr.	Kg	78	2742.6	2,13,922.1
7	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	47.6	259.1	12,328.3
8	Danger Plate	No	180	1113	2,00,340.0
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	1113	80,136.0
10	GI barbed wire anticlimbing device	Kg	74	2862	2,11,788.0
11	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	1148.2	82,672.9
12	11kV,5kN pin insulator polymer	No	140	2862	4,00,680.0
13	11kV V cross Arm (GI)	No	851	795	6,76,545.0
14	GI Back Clamp for 11kV 'V' Cros Arm	No	140	795	1,11,300.0
15	Top bracket 100X50X5mm GI channel	No	78	795	62,010.0
16	H/W fitting(B&S) 70KN,3 Bolt	Set	412	954	3,93,048.0
17	11kV Disc insulator (B&S) 70KN polymer	No	150	954	1,43,100.0
18	Earthing of Support (Coil Type)	EA	164	954	1,56,456.0
19	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	252.8	18,707.9
20	PG Clamp for 100 mm2 AAAC conductor	No	924.4	954	8,81,906.2
21	GI Nut , Bolt & Washer of different sizes	Kg	74	3132	2,31,790.2
22	H.T. Stay clamp	Pair	260	636	1,65,360.0
23	H.T. Stay set (Complete)	Set	1434	636	9,12,024.0
24	H.T. Stay Insulator	No	87	636	55,332.0
25	7/10 SWG Stay Wire	Kg	77	6360	4,89,720.0
26	AAA conductor,100 mm2	Km	78410	147.4	1,15,57,085.1
27	50x6 mm GI flat	Kg	72	954	68,688.0
Part - C		LT Line			
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	9 mtr long 300 kg PSC pole	No.	3630	4770	1,73,15,100.0
2	LT Stay Set (Complete)	Set	736	1431	10,53,216.0
3	LT Stay Insulator	No	19	1431	27,189.0
4	LT Stay clamp	Pair	350	1431	5,00,850.0
5	7/12 SWG Stay Wire	Kg	79	14310	11,30,490.0
6	LT Accessories with Eye hook and Clamp				-

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6.i.	Pole clamp for EYE hook for (XLPE Aerial bunched Cable)	Pair	240	6201	14,88,240.0
6.ii.	EYE hook for XLPE Aerial bunched Cable (25-70 sq.mm)	No.	75	2862	2,14,650.0
6.iii.	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable (25-70 sq.mm)	No.	217	2862	6,21,054.0
6.iv.	Suspension Clamp with EYE hook for ABC (25-70 sq.mm)	Pair	193	3339	6,44,427.0
7	1.1KV LT AB Cable 4x95+1x95+1x16mm ²	Mtr	422	39750	1,67,74,500.0
8	LT Distribution Box Polycarbonate	No.	920	3180	29,25,600.0
8	Cable 1.1kv Al 4CX25 Sq.mm Armoured	Mtr	229	4770	10,92,330.0
8	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	13.8	12720	1,75,600.7
8	Insulated piercing connector.Type-A-main 50 to 150 sq.mm & Tap-50 to 150 sq.mm	No.	127.5	3180	4,05,481.8
9	Insulated piercing connector.Type-B-main 25 to 150 sq.mm & Tap-6 to 35 sq.mm	No.	63.8	12720	8,10,900.0
10	Insulated piercing connector.Type-C-main 16 to 95 sq.mm & Tap-1.5 to 16 sq.mm	No.	63.8	3180	2,02,725.0
11	Coil Earthing	No's	164	4770	7,82,280.0
12	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	1249.7	92,480.8
13	Danger plate (LT)	No	180	4770	8,58,600.0
14	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	72	1435.3	1,03,341.1
15	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	74	14310.0	10,58,940.0
16	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	72	5741.2	4,13,364.4
17	GI Nut , Bolt & Washer of different sizes (0.5 Kg/ Pole)	Kg	74	2385	1,76,490.0
Total Cost of materials					15,59,89,696.
Stock, Storage & Insurance i.e 3%					46,79,690.9
Sub Total					16,06,69,387.
Contingency @ 3%					48,20,081.6
Tools & Plants @ 2%					32,13,387.8
Transportation @ 7.5%					1,20,50,204.1
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					15,47,831.2
Erection Other @ 10%.					71,64,556.2
Erection PSC Pole @ 20%					-
Sub Total					18,94,65,448.
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	1908	97,30,800.0

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2	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	CUM	5247	96.59	5,06,807.7
3	Fixing of complete HT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	636	19,71,600.0
4	Fixing of complete LT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3050	1431	43,64,550.0
5	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	1272	78,86,400.0
6	Installation/Erection of 9 MTR PSC Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, Includes and civil work. The scope also includes providing of all civil material for concreting . Transportation, loading and unloading of Pole from Nearest division/store/site office to site(maximum upto 3KM), Excavation for grouting, including concreting as per standards and drawings. Concreting to be done with PCC-1:1.5:3. of size - 500x500x1500 and ,Padding 500x500x150mm. Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing	No	5172	4770	2,46,70,601.7
7	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	6042	17,09,886.0

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8	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	3180	1,72,92,840.0
9	Sign writing on Transformer as per details mentioned in the scope of work and specification (including Supply of paint)	EA	187.2	159	29,763.3
9	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	3657	7,31,400.0
9	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	1272	28,36,560.0
10	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	636	7,80,372.0
11	Construction of Plinth with Brick, Mortar, 12 mm cement plaster and for upto 500KVA transformer as per drawing. Scope of work includes excavation of earth,supply of Civil material for construction, desposal of extra malba as per EIC instruction. "If Required"	No	28000	159	44,52,000.0
12	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	318	20,67,000.0
13	Dismantling of existing 11/0.4kV,3 Phase Distribution Transformer 16KVA including removal of HT/LT leads,earth connections & unloading by crane. Scope also includes loading, transportation, unloading & staking at a proper place in safe position/site store	No	1381	159	2,19,565.5
14	Supplying, Laying, spreading and compacting with hand roller stone aggregate of specified sizes: 63 mm to 45 mm size stone aggregate to WBM specifications in uniform thickness, hand picking to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density . .Scope of work also includes of jungle such as grass,small tree,plant etc.	CUM	3000	191	5,72,400.0
15	Dismantling of Steel Structure,Nuts & Bolt including loading,transportation, unloading & staking of dismantled material at a proper place in TPNODL store	Kg	6	6360	38,160.0
Total Civil Part					7,98,60,706.2
Sub-Total					26,93,26,154.8

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Other Over Head (Including Supervision charges)@ 6%	1,34,66,307.7
Sub-total	28,27,92,462.5
GST @ 18% of Sub-Total	5,09,02,643.3
CESS @ 1% of Sub-Total	28,27,924.6
Sub-Grand Total	33,65,23,030.4
Inspection Fee	-
Drawing Approval	-
Grand Total	33,65,23,030.4
Grand Total in Cr.	33.7

8.30 Annexure 30: Cost Estimate for New LT Feeder for overloaded LT feeder mitigation:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	New LT Feeder for overloaded LT feeder mitigation	Km	193.0	26.43
Total			193.0	26.43

A. Cost Estimation for New LT Feeder for Overload LT Feeder Mitigation 4x95+1x95+1x16

Annexure-30A New LT Feeder for overloaded LT feeder mitigation					
Total 30 nos. proposed pole, considering 21 nos. straight point and 9 nos. angular point. Avg span length - 33 Mtr					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	1.1KV LT AB Cable 4x95+1x95+1x16mm ²	Mtr	422.0	147290	6,21,56,380.0
2	9 mtr long 300 kg PSC pole	No	3630.0	4290	1,55,72,700.0
3	Danger Plate	No	180.0	4290	7,72,200.0
4	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72.0	1291	92,942.0
5	GI barbed wire anticlimbing device	Kg	74.0	12870	9,52,380.0
6	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72.0	5163	3,71,768.0
7	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	240.0	4290	10,29,600.0
8	Suspension Clamp with EYE hook for ABC	No.	193.0	3003	5,79,579.0
9	Eye Hook for AB cable for dead end point	No.	75.0	1287	96,525.0
10	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	217.0	1287	2,79,279.0
11	LT Stay Set (Complete)	Set	736.0	1287	9,47,232.0
12	LT Stay Insulator	No	19.0	1287	24,453.0
13	LT Stay clamp	Pair	350.0	1287	4,50,450.0
14	7/12 SWG Stay Wire	Kg	79.0	12870	10,16,730.0
15	Earthing of Support (Coil Type)	EA	164.0	4290	7,03,560.0
16	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	8580	3,15,933.1
17	LT Distribution Box Polycarbonate	No	920.0	3003	27,62,760.0
18	Cap cable end for ABC	EA	139.0	6435	8,94,683.1
19	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	127.5	34320	43,76,143.2
20	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	63.8	25740	16,40,925.0
21	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	63.8	42900	27,34,875.0
22	Cable 1.1kv Al 4CX25 Sq.mm Armoured	Mtr	229.0	9009	20,63,061.0

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23	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	13.8	8580	1,18,447.6
24	25x6 mm GI flat	Kg	72	8294	5,97,168.0
28	GI Nut , Bolt & Washer of different sizes	Kg	74.0	2717	2,01,058.0
29	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr	54.0	28600	15,44,400.0
30	Tie Plastic size 9mmX265mm	EA	316.0	8580	27,11,280.0
Total Cost of materials					10,50,06,512.0
Stock, Storage & Insurance i.e 3%					31,50,195.4
Sub Total					10,81,56,707.3
Contingency @ 3%					32,44,701.2
Tools & Plants @ 2%					21,63,134.1
Transportation @ 7.5%					81,11,753.0
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					89,60,479.5
Erection PSC Pole @ 20%					-
Sub Total					13,06,36,775.3
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	715	36,46,500.0
2	Fixing of complete LT line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts BA will do the excvation , supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No	3050	1287	39,25,350.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	4290	12,14,070.0
4	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	CUM	5247	86.87	4,55,806.9

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5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	12870	25,74,000.0
5	Installation/Erection of 9 MTR PSC Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation,Includes and civil work. The scope also includes providing of all civil material for concreting . Transportation, loading and unloading of Pole from Nearest division/store/site office to site(maximum upto 3KM), Excavation for grouting, including concreting as per standards and drawings.Concreting to be done with PCC- 1:1.5:3. of size - 500x500x1500 and ,Padding 500x500x150mm.Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing	No	5172	4290	2,21,88,025.4
Total Civil Part					3,40,03,752.3
Sub-Total					16,46,40,527.6
Other Over Head (Including Supervision charges)@ 6%					98,78,431.7
Sub-total					17,45,18,959.3
GST @ 18% of Sub-Total					3,14,13,412.7
CESS @ 1% of Sub-Total					17,45,189.6
Sub-Grand Total					20,76,77,561.5
Inspection Fee					-
Drawing Approval					-
Grand Total					20,76,77,561.5
Grand Total in Cr.					20.77

B. Cost Estimation for New LT Feeder for Overload LT Feeder Mitigation 4x50+1x50+1x16

Annexure-30B New LT Line AB Cable 4x50+1x50+1x16 mm2					
Total 30 nos. proposed pole, considering 21 nos. straight point and 9 nos. angular point. Avg span length - 33 Mtr					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	1.1KV LT AB Cable 4x50+1x50+1x16mm2	Mtr	228.0	51500	1,17,42,000.0
2	9 mtr long 300 kg PSC pole	No	3630.0	1500	54,45,000.0
3	Danger Plate	No	180.0	1500	2,70,000.0
4	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72.0	451.4	32,497.2
5	GI barbed wire anticlimbing device	Kg	74.0	4500	3,33,000.0
6	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72.0	1805.4	1,29,988.8
7	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	240.0	1500	3,60,000.0
8	Suspension Clamp with EYE hook for ABC	No.	193.0	1050	2,02,650.0
9	Eye Hook for AB cable for dead end point	No.	75.0	450	33,750.0
10	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	217.0	450	97,650.0

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11	LT Stay Set (Complete)	Set	736.0	450	3,31,200.0
12	LT Stay Insulator	No	19.0	450	8,550.0
13	LT Stay clamp	Pair	350.0	450	1,57,500.0
14	7/12 SWG Stay Wire	Kg	79.0	4500	3,55,500.0
15	Earthing of Support (Coil Type)	EA	164.0	1500	2,46,000.0
16	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	3000	1,10,466.1
17	LT Distribution Box Polycarbonate	No	920.0	1050	9,66,000.0
18	Cap cable end for ABC	EA	139.0	2250	3,12,826.3
19	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	127.5	12000	15,30,120.0
20	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	63.8	9000	5,73,750.0
21	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	63.8	15000	9,56,250.0
22	Cable 1.1kV Al 4CX25 Sq.mm Armoured	Mtr	229.0	3150	7,21,350.0
23	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	13.8	3000	41,415.3
24	25x6 mm GI flat	Kg	72	2400	1,72,800.0
25	GI Nut , Bolt & Washer of different sizes	Kg	74.0	500	37,000.0
26	2C X 4sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr	54.0	10000	5,40,000.0
27	Tie Plastic size 9mmX265mm	EA	316.0	3000	9,48,000.0
Total Cost of materials					2,66,55,263.6
Stock, Storage & Insurance i.e 3%					7,99,657.9
Sub Total					2,74,54,921.5
Contingency @ 3%					8,23,647.6
Tools & Plants @ 2%					5,49,098.4
Transportation @ 7.5%					20,59,119.1
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					20,96,823.9
Erection PSC Pole @ 20%					-
Sub Total					3,29,83,610.6
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	250	12,75,000.0
2	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	1500	4,24,500.0
3	Fixing of complete LT line stay set includes Turn Buckle Assembly,Stay Rod & Stay plate,Stay Insulator,Stay Wire,Stay clamps with Nuts & bolts BA will do the excvation , supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No	3050	450	13,72,500.0

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4	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	4500	9,00,000.0
5	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	CUM	5247	30.38	1,59,403.9
4	Installation/Erection of 9 MTR PSC Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation,Includes and civil work. The scope also includes providing of all civil material for concreting . Transportation, loading and unloading of Pole from Nearest division/store/site office to site(maximum upto 3KM), Excavation for grouting, including concreting as per standards and drawings.Concreting to be done with PCC- 1:1.5:3. of size - 500x500x1500 and ,Padding 500x500x150mm.Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing	No	5172	1500	77,58,050.8
Total Civil Part					1,18,89,454.7
Sub-Total					4,48,73,065.3
Other Over Head (Including Supervision charges)@ 6%					26,92,383.9
Sub-total					4,75,65,449.3
GST @ 18% of Sub-Total					85,61,780.9
CESS @ 1% of Sub-Total					4,75,654.5
Sub-Grand Total					5,66,02,884.6
Inspection Fee					-
Drawing Approval					-
Grand Total					5,66,02,884.6
Grand Total in Cr.					5.66

8.31 Annexure 31: Cost Estimate for Construction of New 33/11kV PSS:

Annexure-31: Cost Estimate for Construction of New 33/11kV PSS					
Sl. No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Construction of New 33/11kV PSS	EA	11.9	2	23.73
Total Cost of materials					23.73

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GST @ 18% of Sub-Total	28.00
Grand Total	28.00
Grand Total in Cr.	28.0

8.32 Annexure 32: Cost Estimate for Addition of 11 kV Lines (O/H + UG) and additional Bay:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Addition of 11 kV Lines O/H	Km	141.3	23.44
B	Addition of 11 kV Lines UG "Double Run"	Km	10.80	16.11
C	11kV Bay at PSS	Nos.	16	2.33
Total				41.88

A. Cost Estimation for Addition of New 11KV O/H Line with 100 Sqmm AAAC

Annexure-32A Construction of 11kV Overhead New Line with 100 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	2900	7,91,61,457.7
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	14112.1	11,00,743.0
3	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	10539.8	8,22,103.0
4	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	6642.7	5,18,132.2
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	47.6	429.6	20,438.4
6	Danger Plate	No	180	2899.6	5,21,928.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	2899.6	2,08,771.2
8	GI barbed wire anticlimbing device	Kg	74	8698.8	6,43,711.2
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	3490.0	2,51,276.8
10	11kV,5kN pin insulator polymer	No	140	6721.8	9,41,052.0
11	11kV V cross Arm (GI)	No	851	2108.8	17,94,588.8
12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	2108.8	2,95,232.0
13	Top bracket 100X50X5mm GI channel	No	78	2108.8	1,64,486.4
14	H/W fitting(B&S) 70KN,3 Bolt	Set	412	1581.6	6,51,619.2
15	11kV Disc insulator (B&S) 70KN polymer	No	150	1581.6	2,37,240.0
16	Earthing of Support (Coil Type)	EA	164	2899.6	4,75,534.4
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	759.7	56,217.4
18	PG Clamp for 100 mm ² AAAC conductor	No	924.4	1581.6	14,62,078.5
19	GI Nut , Bolt & Washer of different sizes	Kg	74	3295	2,43,830.0
20	H.T. Stay clamp	Pair	260	1054.4	2,74,144.0
21	H.T. Stay set (Complete)	Set	1434	1054.4	15,12,009.6
22	H.T. Stay Insulator	No	87	1054.4	91,732.8
23	7/10 SWG Stay Wire	Kg	77	10544	8,11,888.0

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24	AAA conductor,100 mm2	Km	78410	407.3	3,19,33,413.4
25	50x6 mm GI flat	Kg	72	3537.512	2,54,700.9
Total Cost of materials					12,44,48,328.9
Stock, Storage & Insurance i.e 3%					37,33,449.9
Sub Total					12,81,81,778.8
Contingency @ 3%					38,45,453.4
Tools & Plants @ 2%					25,63,635.6
Transportation @ 7.5%					96,13,633.4
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					43,87,501.0
Erection PSC Pole @ 20%					-
Sub Total					14,85,92,002.1
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	1054.4	32,68,640.0
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	2900	1,79,77,520.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	2900	8,20,586.8
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-Bolt , 40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	263.6	13,44,360.0
Total Civil Part					2,34,11,106.8
Sub-Total					17,20,03,108.9
Other Over Head (Including Supervision charges)@ 6%					1,03,20,186.5
Sub-total					18,23,23,295.4

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GST @ 18% of Sub-Total	3,28,18,193.2
CESS @ 1% of Sub-Total	18,23,233.0
Sub-Grand Total	21,69,64,721.5
Inspection Fee	-
Drawing Approval	-
Grand Total	21,69,64,721.5
Grand Total in Cr.	21.70

B. Cost Estimation for Addition of New 11KV O/H Line with 148 Sqmm AAAC

Annexure-32B Construction of 11kV Overhead New Line with 148 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	209	57,05,871.4
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	1017.2	79,340.4
3	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	759.7	59,256.3
4	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	478.8	37,346.4
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	47.6	31.0	1,473.2
6	Danger Plate	No	180	209	37,620.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	209	15,048.0
8	GI barbed wire anticlimbing device	Kg	74	627	46,398.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	251.6	18,111.8
10	11kV,5kN pin insulator polymer	No	140	484.5	67,830.0
11	11kV V cross Arm (GI)	No	851	152	1,29,352.0
12	GI Back Clamp for 11kV 'V' Cros Arm	No	140	152	21,280.0
13	Top bracket 100X50X5mm GI channel	No	78	152	11,856.0
14	H/W fitting(B&S) 70KN,3 Bolt	Set	412	114	46,968.0
15	11kV Disc insulator (B&S) 70KN polymer	No	150	114	17,100.0
16	Earthing of Support (Coil Type)	EA	164	209	34,276.0
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	54.8	4,052.1
18	PG Clamp for 148 mm2 AAAC conductor	No	924.4	114	1,05,385.0
19	GI Nut , Bolt & Washer of different sizes	Kg	74	237.5	17,575.0
20	H.T. Stay clamp	Pair	260	76	19,760.0
21	H.T. Stay set (Complete)	Set	1434	76	1,08,984.0
22	H.T. Stay Insulator	No	87	76	6,612.0
23	7/10 SWG Stay Wire	Kg	77	760	58,520.0
24	AAA conductor,148 mm2	Km	116360	29.4	34,15,747.8
25	50x6 mm GI flat	Kg	72	254.98	18,358.6
Total Cost of materials					1,00,84,121.8
Stock, Storage & Insurance i.e 3%					3,02,523.7
Sub Total					1,03,86,645.5
Contingency @ 3%					3,11,599.4

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Tools & Plants @ 2%					2,07,732.9
Transportation @ 7.5%					7,78,998.4
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%					4,30,990.6
Erection PSC Pole @ 20%					-
Sub Total					1,21,15,966.7
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11KV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	76	2,35,600.0
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	209	12,95,800.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	209	59,147.0
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	19	96,900.0
Total Civil Part					16,87,447.0
Sub-Total					1,38,03,413.7
Other Over Head (Including Supervision charges)@ 6%					8,28,204.8
Sub-total					1,46,31,618.6
GST @ 18% of Sub-Total					26,33,691.3
CESS @ 1% of Sub-Total					1,46,316.2
Sub-Grand Total					1,74,11,626.1
Inspection Fee					-
Drawing Approval					-
Grand Total					1,74,11,626.1
Grand Total in Cr.					1.7

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C. Cost Estimation for Addition of New 11KV U/G Line with 3Cx400 Sqmm XLPE

Annexure-32C UG Cable 3Cx400 sqmm XLPE Cable for 11KV Line					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	11kV AL 3CX400 Sqmm XLPE Cable armoured	Mtr	2375	21550	5,11,81,250.0
2	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(outdoor type)	No	2900	43.1	1,24,990.0
3	Heat shrinkable jointing kit for 3Cx400mm ² 11KV XLPE Cable(Straight Through)	No	15950	64.65	10,31,167.5
4	Lightning Arrester (12kV,10kA) DH Class	EA	1960	64.65	1,26,714.0
5	Communicable FPI 11KV O/H	Set of 3	30675	64.65	19,83,138.8
6	50x6 mm GI flat	Kg	72	538.75	38,790.0
Total Cost of materials					5,44,86,050.3
Stock, Storage & Insurance i.e 3%					16,34,581.5
Sub Total					5,61,20,631.8
Contingency @ 3%					16,83,619.0
Tools & Plants @ 2%					11,22,412.6
Transportation @ 7.5%					42,09,047.4
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					
Erection Other @ 10%.					3,40,394.4
Erection PSC Pole @ 20%					
Sub Total					6,34,76,105.2
SI no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Laying of PIPE HDPE 200 MM DIA PN8 , PE 80 through HDD method .Scope of work also includes making Trenchless ducts with 200 mm Dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, (Providing parabolic graph included in the scope)	Mtr	2970	20731	6,15,71,367.0
2	BA will provide necessary Tools, Machinery, Manpower for laying of 33KV 3C Cable (70sqmm to 630Sqmm) in Trench or HDPE Pipe/Hum Pipe	Mtr	110	21550	23,70,500.0
3	Supply and Installation of cable Route marker including transportation from site/tent, excavation, refilling, disposing of malba, flooding with water, ramming/compacting of foundation as per specifications and drawing.	EA	1035	108	1,11,798.4
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by	No	5100	43.1	2,19,810.0

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	BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.				
Total Civil Part					6,42,73,475.4
Sub-Total					12,77,49,580.5
Other Over Head (Including Supervision charges)@ 6%					76,64,974.8
Sub-total					13,54,14,555.3
GST @ 18% of Sub-Total					2,43,74,620.0
CESS @ 1% of Sub-Total					13,54,145.6
Sub-Grand Total					16,11,43,320.9
Inspection Fee					-
Drawing Approval					-
Grand Total					16,11,43,320.9
Grand Total in Cr.					16.11

D. Cost Estimation for Addition of New 11KV Bay Arrangement in PSS

Annexure-32D Construction of new 11kV Bay at PSS					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	32	8,73,626.2
2	100 x 50 x 6 mm GI Channel For Four pole & inline tapping DP with ISO arrangement.	Kg	78	14400	11,23,200.0
3	75 x 40 x 6 mm GI Channel For FP/DP Belting	Kg	78	5600	4,36,800.0
4	50 x 50 x 5 mm GI Angle	Kg	78	2400	1,87,200.0
5	GI Nuts & Bolts of different sizes with Washer	Kg	74	560	41,440.0
6	33kV Disc insulator (B&S) 120KN polymer	No.	289	192	55,488.0
7	33kV H/W fitting(B&S) 120KN,4 Bolt	No.	631	192	1,21,152.0
8	33kV,10kN pin insulator polymer	No.	398	48	19,104.0
9	H.T. Stay clamp	Pair	260	128	33,280.0
10	H.T. Stay set (Complete)	Set	1434	128	1,83,552.0
11	H.T. Stay Insulator	No	87	128	11,136.0
12	7/10 SWG Stay Wire	Kg	77	1408	1,08,416.0
13	AAA conductor,232 mm2	Km	181.7	3.2	581.3
14	Lightning Arrester (12kV,10kA) DH Class	No	1960	48	94,080.0
15	11KV O/D VCB with CR panel without PT, CT (600-300-150/1-1, 30VA, STC 25KA/3sec, class: 0.5, 5P10) for feeder protection	No.	195397	16	31,26,352.0
16	11KV 1250 AMP isolator with earth switch with PI(polymer)	Set	56905	32	18,20,960.0
17	11KV Outdoor Oil cooled PT (11000/3)(Accuracy class 3P/3p/0.2), burden of 50VA	No	16198	48	7,77,504.0
18	11KV Outdoor Oil cooled CTR 200-400-800/1-1-1A (Accuracy class-PS/0.2S/5P20), Burden 30KVA	No	33220	48	15,94,560.0
19	10 Core 2.5sqmm Un-Armoured cable for control Panel	mtr	282	1600	4,51,200.0
20	4 Core 2.5sqmm Un-Armoured cable for control Panel	mtr	178.5	1600	2,85,616.0
21	T Clamps for 232 sqmm AAAC	No.	1530.1	192	2,93,777.3
22	50x6mm GI flat	Kg	72	1600	1,15,200.0
Total Cost of materials					1,17,54,224.8
Stock, Storage & Insurance i.e 3%					3,52,626.7
Sub Total					1,21,06,851.5

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Contingency @ 3%					3,63,205.5
Tools & Plants @ 2%					2,42,137.0
Transportation @ 7.5%					9,08,013.9
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					1,61,007.1
Erection Other @ 10%					7,64,039.8
Erection PSC Pole @ 20%					-
Sub Total					1,45,45,255.0
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 11kV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts. BA will do the excavation, supply of 0.5 Cum C.C foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	128	396800
2	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3, M20, concrete of size - 500(B)x500(W)x1800(H), and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	32	198400
3	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power, Nuts-Bolt, 40mm dia 3 Mtr GI pipe & PVC Pipe PCC, and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover (earth resistance measurement and with in limit to be achieved by BA). Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	192	979200
4	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	32	9056
4	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	CUM	7300	108	788400
5	Construction of cable trench in PSS	Mtr	6534	240	1568160
Total Civil Part					39,40,016.0
Sub-Total					1,84,85,271.0
Other Over Head (Including Supervision charges)@ 6%					11,09,116.3
Sub-total					1,95,94,387.2
GST @ 18% of Sub-Total					35,26,989.7

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CESS @ 1% of Sub-Total	1,95,943.9
Sub-Grand Total	2,33,17,320.8
Inspection Fee	-
Drawing Approval	-
Grand Total	2,33,17,320.8
Grand Total in Cr.	2.3

8.33 Annexure 33: Cost Estimate for Addition of 33 kV Lines (O/H + UG) and additional Bay:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Addition of 33 kV Lines O/H	Km	58.0	16.12
B	Addition of 33 kV Lines U/G with "Double Run"	Km	18.4	32.10
C	33kV Bay at PSS and RMUs	Nos.	5	1.67
Total				49.89

A. Cost Estimation for Addition of New 33KV O/H Line with 232 Sqmm AAAC

Annexure-33A Construction of 33kV Overhead New Line with 232 sq.mm AAAC					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),13 mtr	No	32110.3	1566	5,02,84,792.4
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 4.4 mtr., 2 no's channel required	Kg	78	9758.8	7,61,190.1
3	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 4.4 Mtr.,5 no's channel required	Kg	78	14577.0	11,37,007.9
4	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 4.9 mtr., 4 nos angle required	Kg	78	10231.2	7,98,033.6
5	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	48	189.0	8,994.2
6	Danger Plate	No	180	1566	2,81,880.0
7	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	1566	1,12,752.0
8	GI barbed wire anticlimbing device	Kg	74	4698	3,47,652.0
9	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	1884.8	1,35,708.3
10	33kV,10kN pin insulator polymer	No	398	4350	17,31,300.0
11	33kV V cross Arm (GI)	No	1701	1334	22,69,134.0
12	GI Back Clamp for 33kV 'V' Cros Arm	No	140	1334	1,86,760.0
13	Top bracket 100X50X5mm GI channel	No	78	1334	1,04,052.0
14	33kV H/W fitting(B&S) 120KN,4 Bolt	Set	631	696	4,39,176.0
15	33kV Disc insulator (B&S) 120KN polymer	No	289	696	2,01,144.0
16	Earthing of Support (Coil Type)	EA	164	1566	2,56,824.0
17	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	410.3	30,361.6
18	PG Clamp for 232 mm ² AAAC conductor	No	1832.9	696	12,75,719.3
19	GI Nut , Bolt & Washer of different sizes	Kg	74	3480.0	2,57,520.0
20	H.T. Stay clamp	Pair	260	464	1,20,640.0

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21	H.T. Stay set (Complete)	Set	1434	464	6,65,376.0
22	H.T. Stay Insulator	No	87	928	80,736.0
23	7/8 SWG Stay Wire	Kg	75	6960	5,22,000.0
24	AAA conductor,232 mm2	Km	181650	179.2	3,25,55,313.0
25	50x6 mm GI flat	Kg	72	3694.6	2,66,011.2
Total Cost of materials					9,48,30,077.7
Stock, Storage & Insurance i.e 3%					28,44,902.3
Sub Total					9,76,74,980.0
Contingency @ 3%					29,30,249.4
Tools & Plants @ 2%					19,53,499.6
Transportation @ 7.5%					73,25,623.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					44,45,122.9
Erection PSC Pole @ 20%					-
Sub Total					11,43,29,475.
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 33kV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts. BA will do the excavation, supply of 0.5Cum C.C foundation 1:2:4 size (500mmx500mmx800mm)	No.	3200	464	14,84,800.0
2	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete concrete of size - 500(B)x500(W)x2200(H) , and cooping of 500(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	7000	1566	1,09,62,000.0
3	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	1566	4,43,178.0
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	116	5,91,600.0
Total Civil Part					1,34,81,578.0
Sub-Total					12,78,11,053.4
Other Over Head (Including Supervision charges)@ 6%					76,68,663.2

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Sub-total	13,54,79,716.6
GST @ 18% of Sub-Total	2,43,86,349.0
CESS @ 1% of Sub-Total	13,54,797.2
Sub-Grand Total	16,12,20,862.8
Inspection Fee	-
Drawing Approval	-
Grand Total	16,12,20,862.8
Grand Total in Cr.	16.12

B. Cost Estimation for Addition of New 33KV U/G Line with 3Cx400 Sqmm XLPE

Annexure-33B UG Cable 3Cx400 sqmm XLPE Cable for 33KV Line					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	33kv AL 3CX400 Sqmm XLPE Cable armoured	Mtr	3165	36800	11,64,72,000.0
2	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(outdoor type)	No	11900	74	8,75,840.0
3	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(Straight Through)	No	25930	110	28,62,672.0
4	Lightning Arrester (30kV,10kA) (Station Class,Class 2)	EA	4443	110	4,90,507.2
5	Communicable FPI 11KV O/H	Set of 3	30675	110	33,86,520.0
6	50x6 mm GI flat	Kg	72	1840	1,32,480.0
Total Cost of materials					12,42,20,019.2
Stock, Storage & Insurance i.e 3%					37,26,600.6
Sub Total					12,79,46,619.8
Contingency @ 3%					38,38,398.6
Tools & Plants @ 2%					25,58,932.4
Transportation @ 7.5%					95,95,996.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					7,98,046.0
Erection PSC Pole @ 20%					-
Sub Total					14,47,37,993.2
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply & Laying of PIPE HDPE 200 MM DIA PN8 , PE 80 through HDD method .Scope of work also includes making Trenchless ducts with 200 mm Dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, (Providing parabolic graph included in the scope)	Mtr	2970	35512	10,54,70,640.0
2	BA will provide necessary Tools, Machinery, Manpower for laying of 33KV 3C Cable (70sqmm to 630Sqmm) in Trench or HDPE Pipe/Hum Pipe	Mtr	115	35512	40,83,880.0
3	Supply and Installation of cable Route marker including transportation from site/tent, excavation, refilling, disposing of malba, flooding with water, ramming/compacting of foundation as per specifications and drawing.	EA	1035.17	184	1,90,471.3
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with	No	5100	4	20,400.0

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earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power, Nuts-Bolt, 40mm dia 3 Mtr GI pipe & PVC Pipe PCC, and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover (earth resistance measurement and with in limit to be achieved by BA). Scope of work also includes leveling & ramming of earth and removal of extra malba.				
Total Civil Part				10,97,65,391.3
Sub-Total				25,45,03,384.5
Other Over Head (Including Supervision charges)@ 6%				1,52,70,203.1
Sub-total				26,97,73,587.6
GST @ 18% of Sub-Total				4,85,59,245.8
CESS @ 1% of Sub-Total				26,97,735.9
Sub-Grand Total				32,10,30,569.2
Inspection Fee				-
Drawing Approval				-
Grand Total				32,10,30,569.2
Grand Total in Cr.				32.10

C. Cost Estimation for Addition of New 33KV Bay Arrangement in PSS

Annexure-35C Construction of new 33kv Bay at PSS					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	12	3,27,609.84
2	WPB 160x152 (30.44KG/Mtr.),13 mtr	No.	32110.3	6	1,92,662.04
3	100 x 50 x 6 mm GI Channel For Four pole & inline tapping DP with ISO arrangement.	Kg	78	1050	81,900.00
4	75 x 40 x 6 mm GI Channel For FP/DP Belting	Kg	78	1050	81,900.00
5	50 x 50 x 5 mm GI Angle	Kg	78	450	35,100.00
6	GI Nuts & Bolts of different sizes with Washer	Kg	74	75	5,550.00
7	33kV Disc insulator (B&S) 120KN polymer	No.	289	36	10,404.00
8	33kV H/W fitting(B&S) 120KN,4 Bolt	No.	631	36	22,716.00
9	33kV,10kN pin insulator polymer	No.	398	9	3,582.00
10	H.T. Stay clamp	Pair	260	24	6,240.00
11	H.T. Stay set (Complete)	Set	1434	24	34,416.00
12	H.T. Stay Insulator	No	87	48	4,176.00
13	7/8 SWG Stay Wire	Kg	75	360	27,000.00
14	AAA conductor,232 mm2	Km	181.7	0.6	108.99
15	Lightning Arrester(30KV,10KA) (Station Class,class-2)	No.	4443	27	1,19,961.00
16	33KV Outdoor VCB - 1600 A with indoor CR panel without PT with outdoor CT (600-300-150/1-1A, 15VA, STC 25KA/3sec, class: 0.5, 5P10) for feeder protection.	No.	263629	3	7,90,887.00
17	33 KV 1250 Amp Double Break (Turn & Twist centre rotating) Isolator with Earth Switch with PI (Polymer)	Set	100000	6	6,00,000.00
18	33kv single phase PT(33kv/v3/110/v3)oil cooled class 0.5/3P,with O/p burden of 100 VA	No	24028.0	9	2,16,252.00

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19	33KV Outdoor Oil cooled CTR 200-400-800/1-1-1A (Accuracy class-PS/0.2S/5P20), Burden 30KVA	No	40551.0	9	3,64,959.00
20	10 Core 2.5sqmm Un-Armoured cable for control Panel	mtr	282	300	84,600.00
21	4 Core 2.5sqmm Un-Armoured cable for control Panel	mtr	178.5	300	53,553.00
22	T Clamps for 232 sqmm AAAC	No.	1530.1	66	1,00,985.94
23	50x6mm GI flat	Kg	72	810	58,320.00
Total Cost of materials					32,22,882.8
Stock, Storage & Insurance i.e 3%					96,686.5
Sub Total					33,19,569.3
Contingency @ 3%					99,587.1
Tools & Plants @ 2%					66,391.4
Transportation @ 7.5%					2,48,967.7
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					40,730.7
Erection Other @ 10%.					1,96,907.6
Erection PSC Pole @ 20%					-
Sub Total					39,72,153.7
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Fixing of complete 33kV line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts. BA will do the excavation, supply of 0.5Cum C.C foundation 1:2:4 size (500mmx500mmx800mm)	No.	3200	24	76,800.00
2	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete concrete of size - 500(B)x500(W)x2200(H) , and cooping of 500(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	7000	6	42,000.00
3	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	12	74,400.00
4	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode, earthing compound 25Kg bentonide power , Nuts-	No	5100	36	1,83,600.00

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	Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.				
5	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	CUM	7300	20.25	1,47,825.00
6	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	18	5,094.00
7	Construction of cable trench in PSS	Mtr	6534	60	3,92,040.00
Total Civil Part					9,21,759.0
Sub-Total					48,93,912.7
Other Over Head (Including Supervision charges)@ 6%					2,93,634.8
Sub-total					51,87,547.5
GST @ 18% of Sub-Total					9,33,758.5
CESS @ 1% of Sub-Total					51,875.5
Sub-Grand Total					61,73,181.5
Inspection Fee					-
Drawing Approval					-
Grand Total					61,73,181.5
Grand Total in Cr.					0.6

Annexure-3SD Installation of 33kV 4W RMU

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	RMU 33kV 4 Way 2x630A BKR O/D	EA	3018066	2	60,36,132.0
2	WPB 160x152 (30.44KG/Mtr.),13 mtr	No	32110	4	1,28,441.4
3	Top Channel 100X50X5mm,9.56 KG/mtr, each channel length 2.8 Mtr.	Kg	78	103	8,037.1
4	Cross Channel 75X40X6mm, 6.8 KG/mtr, each channel length 2.8 Mtr.	Kg	78	76	5,940.5
5	Cross Angle 50X50X5mm, 4.5 KG/mtr, each angle length 2.8 Mtr.	Kg	78	50	3,931.2
6	50x6 mm GI flat	Kg	72	50	3,600.0
7	25x6 mm GI flat	Kg	72	50	3,600.0
8	Danger Plate	No	180	10	1,800.0
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	3	216.6
10	GI Nut , Bolt & Washer of different sizes	Kg	74	10	740.0
11	33kV AL 3Cx400 Sqmm XLPE Cable armoured	Mtr	3165	140	4,43,100.0
12	Heat shrinkable jointing kit for 3Cx400 mm ² 33KV XLPE Cable(indoor type)	No	11340	6	68,040.0
13	Heat shrinkable jointing kit for 3Cx400mm ² 33KV XLPE Cable(outdoor type)	No	11900	6	71,400.0

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14	160 mm diameter, PE 80- PN8	Mtr	522	12	6,264.0
15	Lug AL Crimping 95 Sqmm XLPE Single hole	EA	92.05	8	736.4
16	AAA conductor,148 mm2	Km	116360	0.3	34,908.0
Total Cost of materials					68,16,887.2
Stock, Storage & Insurance i.e 3%					2,04,506.6
Sub Total					70,21,393.8
Contingency @ 3%					2,10,641.8
Tools & Plants @ 2%					1,40,427.9
Transportation @ 7.5%					5,26,604.5
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					-
Erection Other @ 10%.					67,188.3
Erection PSC Pole @ 20%					-
Sub Total					79,66,256.4
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Cr.)
1	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	32	1,74,016.0
2	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete concrete of size - 500(B)x500(W)x2200(H) , and cooping of 500(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	7000	4	28,000.0
3	Construction of 3-way/4-way/5way RMU Plinth with Brick, Mortar, 12 mm cement plaster.Scope includes excavation of earth for foundation and supply of raw material i.e. sand, cement, bricks and removal of extra malba if any	LS	28000	2	56,000.0
4	Sign writing on cable compartment of 11kV RMU as per details mentioned in the scope of work and specification (price per leg) (including Supply of paint)	EA	165.7	2	331.4
5	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	12	2,400.0
6	Installation, Testing and Commissioning of 33kV 3-way / 4-way/5Way Ring Main Unit (RMU) on existing structure/foundation as per .Specification including grouting & HT Cable Connections,earthing Connections & minor site modifications. Scope of work excludes earthing chamber and construction of foundation..BA will provide necessary control cable ferruling, control cable schedule, connectors, lugs & cable gland at both end of terminations of control cable.	EA	14000	2	28,000.0

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7	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	10	51,000.0
Total Civil Part					3,39,747.4
Sub-Total					83,06,003.8
Other Over Head (Including Supervision charges)@ 6%					4,98,360.2
Sub-total					88,04,364.0
GST @ 18% of Sub-Total					15,84,785.5
CESS @ 1% of Sub-Total					88,043.6
Sub-Grand Total					1,04,77,193.2
Inspection Fee					-
Drawing Approval					-
Grand Total					1,04,77,193.2
Grand Total in Cr.					1.0

8.34 Annexure 34: Cost Estimate for Addition of New DTRs along with Associated HT/LT lines:

Sl. No	Description	UoM	Proposed Qty FY28	FY28 Amount (in Cr.)
A	Addition New DTRs along with Associated HT/LT lines	Nos.	188	32.0
Total			188	32.0

A. Cost Estimate for Addition of New 100 KVA Transformer with Associated Lines

Annexure-34 Addition of New 11/0.4 KV 100 KVA DTR along with Associated HT/LT lines					
S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
Part - A DTR					
1	100 KVA,11/0.4KV(Al) Transformer	No	189025.0	188	3,55,36,700.0
2	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	376	1,02,65,108.3
3	LT Distribution Box for 100 KVA S/S.	EA	31086.0	188	58,44,168.0
4	11kV AB Switch,200A.3pole,50Hz,Vertical Type	Set	9080.0	188	17,07,040.0
5	Lightning Arrester (12kV,10kA) DH Class	No	1960.0	564	11,05,440.0
6	DD Fuse(11KV,200A,3 Pole,50Hz) with PI	Set	6037.0	188	11,34,956.0
7	100 Sqmm AAAC Conductor	Km	78410.0	5.64	4,42,232.4
8	Cable 1.1kV Al 1CX150 Sq.mm Un-armoured	Mtr	162.0	6016	9,74,592.0
9	CABLE 1.1KV AL 4CX150 SQMM ARM	Mtr	850.0	2820	23,97,000.0
10	Top Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78.0	17860	13,93,080.0

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11	Transformer Base GI Channel 100X50X5mm (2800 mm long) (9.56Kg./Mtr) (Each 26.77 Kg)	Kg	78.0	12220	9,53,160.0
12	AB Switch Mounting Channel 75X40X4.8 mm GI Channel (2800 mm long) (7.14Kg./Mtr)	Kg	78.0	9212	7,18,536.0
13	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78.0	9212	7,18,536.0
14	Transformer Belting angle (50X50X6) mm 2800 mm long 2 nos. (7.14 Kg./Mtr.)with side angle	Kg	78.0	11092	8,65,176.0
15	AB Switch Operating Pipe Channel Support 75X40X4.8 mm GI Channel (625 mm long)(7.14Kg./Mtr)	Kg	78.0	1504	1,17,312.0
16	AB Switch Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78.0	1504	1,17,312.0
17	DD Fuse Side Support Channel 75X40X4.8 mm GI Channel(330 mm long)(7.14Kg./Mtr)	Kg	78.0	1504	1,17,312.0
18	Cantilever Support Channel 75X40X4.8 mm GI Channel(810 m long)(7.14Kg./Mtr)	Kg	78.0	1087.3	84,807.8
19	AB Switch Operating Pipe Diagonal Angle Support 50X50X6mm GI(388 mm long)(4.5Kg./Mtr)	Kg	78.0	328.2	25,603.3
20	AB Switch Operating Pipe Diagonal Base Angle Support 50X50X6mm (340 mm long) GI(4.5Kg./Mtr)	Kg	78.0	287.6	22,435.9
21	Cantilever Support Angle 50X50X6mm GI (1282 mm long) (4.5Kg./Mtr)	Kg	78.0	1084.6	84,596.6
22	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78.0	28200.0	21,99,600.0
23	LTDB Mounting Support Angle 75X40X4.8mm GI (3 mtr long) (7.14Kg./Mtr)	Kg	78.0	28200.0	21,99,600.0
24	H/W fitting(B&S) 70KN,3 Bolt	Set	412.0	564	2,32,368.0
25	11kV Disc insulator (B&S) 70KN polymer	No	150.0	564	84,600.0
26	50x6 mm GI flat	Kg	72.0	1692	1,21,824.0
27	25x6 mm GI flat	Kg	72.0	1692	1,21,824.0
28	GI Nut , Bolt & Washer of different sizes	Kg	74.0	4700	3,47,800.0
29	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	37.0	10152	3,75,624.0
30	Lug AL Crimping 150 Sqmm XLPE One Hole	EA	207.0	1504	3,11,328.0
31	Energy Meter Installation (Smart Meter) with BOX	LS	15608.6	188	29,34,414.9
32	Connector Mini Wedge 25 Sqmm to Dog	EA	1062.8	564	5,99,424.3

Part - B HT Line

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	WPB 160x152 (30.44KG/Mtr.),11 mtr	No	27300.8	1316	3,59,27,879.1
2	Top Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 2.3 mtr., 2 no's channel required	Kg	78	9685.8	7,55,489.3
3	Double Pole Belting Channel 75X40X4.8mm.,7.14KG/Mtr.,each channel length 1.66 Mtr.,4 no's channel required	Kg	78	14318.1	11,16,810.2
4	50X50X6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 2.671 mtr., 4 nos angle required	Kg	78	10106.9	7,88,336.6
5	Straight Cross Arm Channel 100X50X5mm, 9.56 KG/Mtr., each channel length 1.2 mtr.	Kg	78	12940.4	10,09,352.4
6	Straight Cross Arm Top Channel 100X50X5mm, 9.56 KG/mtr, each channel length 0.306 Mtr.	Kg	78	3299.8	2,57,384.9

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7	Fish Plate 50X8 mm., 0.97kg/Mtr., each 0.280 mtr. Length	Kg	47.6	306.4	14,576.8
8	Danger Plate	No	180	1316	2,36,880.0
9	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	1316	94,752.0
10	GI barbed wire anticlimbing device	Kg	74	3948	2,92,152.0
11	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	1583.9	1,14,043.5
12	11kV,5kN pin insulator polymer	No	140	3384	4,73,760.0
13	11kV V cross Arm (GI)	No	851	940	7,99,940.0
14	GI Back Clamp for 11kV 'V' Cros Arm	No	140	940	1,31,600.0
15	Top bracket 100X50X5mm GI channel	No	78	940	73,320.0
16	H/W fitting(B&S) 70KN,3 Bolt	Set	412	1128	4,64,736.0
17	11kV Disc insulator (B&S) 70KN polymer	No	150	1128	1,69,200.0
18	Earthing of Support (Coil Type)	EA	164	1316	2,15,824.0
19	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	74	344.8	25,514.6
20	PG Clamp for 100 mm ² AAAC conductor	No	924.4	1128	10,42,757.0
21	GI Nut , Bolt & Washer of different sizes	Kg	74	3703.6	2,74,066.4
22	H.T. Stay clamp	Pair	260	752	1,95,520.0
23	H.T. Stay set (Complete)	Set	1434	752	10,78,368.0
24	H.T. Stay Insulator	No	87	752	65,424.0
25	7/10 SWG Stay Wire	Kg	77	7520	5,79,040.0
26	AAA conductor,100 mm ²	Km	78410.0	174.3	1,36,64,981.2
27	50x6 mm GI flat	Kg	72	5504.64	3,96,334.1

Part - C LT Line

S No.	Item Description	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	1.1KV LT AB Cable 4x95+1x95+1x16mm ²	Mtr	422	47000	1,98,34,000.0
2	9 mtr long 300 kg PSC pole	No	3630	940	34,12,200.0
3	Danger Plate	No	180	940	1,69,200.0
4	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr 1 no	Kg	72	282.8	20,364.9
5	GI barbed wire anticlimbing device	Kg	74	2350.0	1,73,900.0
6	Back Clamp for Barbed wire anticlimbing device 25X3mm. flat, 0.59Kg/Mtr. Flat of 0.510 mtr length 4 no's	Kg	72	1131.4	81,459.6
7	Pole clamp for EYE hook for XLPE Aerial bunched Cable	Pair	240	940	2,25,600.0
8	Suspension Clamp with EYE hook for ABC	No.	193	564	1,08,852.0
9	Eye Hook for AB cable for dead end point	No.	75	376	28,200.0
10	Conductor Dead End Clamp suitable for bare messenger XLPE Aerial bunched cable(25-70 sq mm)	No.	217	376	81,592.0
11	LT Stay Set (Complete)	Set	736	376	2,76,736.0
12	LT Stay Insulator	No	19	376	7,144.0
13	LT Stay clamp	Pair	350	376	1,31,600.0
14	7/12 SWG Stay Wire	Kg	79	3760	2,97,040.0
15	Earthing of Support (Coil Type)	EA	164	940	1,54,160.0
16	PIPE HDPE SIZE 25 MM	Mtr	138.1	2820	3,89,422.9
17	Lug AL 70 Sqmm for 7/8 SWG Wire/Earthing	EA	36.8	1880	69,221.6
18	LT Distribution Box Polycarbonate	No	920	940	8,64,800.0
19	Cap cable end for ABC	EA	139	1880	2,61,391.4

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20	IPC 50-150, 50-150 SQ.MM ST.LT Type A	EA	127.5	7520	9,58,875.2
21	IPC EP 95 LT ABC 16-95 & 1.5-16 SQMM ST.LT Type C	EA	63.8	5640	3,59,550.0
22	IPC KZ 2X150 LTABC 25-150 & 6-35(50) sqmm Type B	EA	63.8	9400	5,99,250.0
23	Cable 1.1kV Al 4CX25 Sq.mm Armoured	Mtr	229	2820	6,45,780.0
24	Lug AL Crimping 25 Sqmm XLPE Single Hole	EA	14	1880	26,320.0
25	25x6 mm GI flat	Kg	72	2726	1,96,272.0
26	GI Nut , Bolt & Washer of different sizes	Kg	74	470	34,780.0
27	2Cx6sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr	54	11750	6,34,500.0
28	2CX10sq. mm. Armoured Aluminium Cable - XLPE Insulated	Mtr	86	4700	4,04,200.0
29	Tie Plastic size 9mmX265mm	EA	316	2820	8,91,120.0
Total Cost of materials					16,57,49,085.
Stock, Storage & Insurance i.e 3%					49,72,472.6
Sub Total					17,07,21,558.
Contingency @ 3%					51,21,646.7
Tools & Plants @ 2%					34,14,431.2
Transportation @ 7.5%					1,28,04,116.9
Erection Transformer/Breaker/WPB/H Pole/Joist Poles @ 5%					18,30,140.1
Erection Other @ 10%.					80,31,561.6
Erection PSC Pole @ 20%					-
Sub Total					20,19,23,454.
Sl no	Civil & Services	Unit	Unit Rate in Rs.	Proposed Qty	Amount (in Rs.)
1	Fixing of complete HT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3100	752	23,31,200.0
2	Fixing of complete LT line stay set includes Turn Buckle Assembly, Stay Rod & Stay plate, Stay Insulator, Stay Wire, Stay clamps with Nuts & bolts BA will do the excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm)	No.	3050	376	11,46,800.0
3	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) , and cooping of 500(B)x500(W)x450(H), Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) as per drawing.	No	6200	1692	1,04,90,400.0
4	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in	CUM	5247	19.04	99,902.9

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	layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.				
5	Erection of 9 MTR PSC Pole including loading and unloading, transportation .Concreting to be done with PCC-1:1.5:3. of size - 500x500x1500 & Padding 500x500x150mm.Scope of work also includes 5 days curing & zebra painting (In Black & Yellow Strips/Zebra)	No	5172	940	48,61,711.9
6	Supply & Installation of Earthing pipe with 40mm dia 3 Mtr long Class-B GI Pipe(Jindal/Tata/Sail/Rinl) with earth chamber as per specification and drawing (Each pit resistance will be measured and recorded and shall be as per IS). Scope include supply of all required material like Earth Electrode,earthing compound 25Kg bentonide power , Nuts-Bolt ,40mm dia 3 Mtr GI pipe & PVC Pipe PCC ,and brick work for earthing chamber (Size: 2'x2') and RCC or other suitable slab cover(earth resistance measurement and with in limit to be achieved by BA).Scope of work also includes leveling & ramming of earth and removal of extra malba.	No	5100	1316	67,11,600.0
7	Supply and Erection of brick wall Fencing with Gate as per specifications .	RM	5438	3760	2,04,46,880.0
8	Sign writing on Transformer as per details mentioned in the scope of work and specification (including Supply of paint)	EA	187.1907	188	35,191.9
9	Supply and erection of double Compression Flameproof Type Glanding for armored cable 3.5/4C 120-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	2230	752	16,76,960.0
10	Supply and erection of double Compression Flameproof Type Glanding for armored cable 1C 150-185 SQMM including making hole in base plate and dressing of cable along with Vermin proofing properly .supply to be done as per spec & approved Make Dowells	EA	1227	752	9,22,704.0
11	Supply and installation including loading , unloading & transportation of HDPE Pipe - 40 mm dia for Wire/Cable protection. Scope also include supply and erection of all required accessories for fixing it with pole/structure such as GI clamp (12X3 mm) at every interval of 1.5 mtr ,Nut & Bolt ,sealing of the pipe ,collar fixing as per specification.	M	200	4324	8,64,800.0
12	Painting of Pole in Black & Yellow strips/Zebra as per specification and indexing/numbering of Poles as per GIS format, scope also include site survey for GIS indexing and supply of ISI marked good quality paint.	EA	283	2632	7,44,856.0
13	Supplying, Laying, spreading and compacting with hand roller stone aggregate of specified sizes: 63 mm to 45 mm size stone aggregate to WBM specifications in uniform thickness, hand picking to proper grade and camber, applying and brooming requisite type of screening / binding	CUM	3000	225.6	6,76,800.0

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	material to fill up interstices of coarse aggregate, watering and compacting to the required density . Scope of work also includes of jungle such as grass,small tree,plant etc.				
14	Supply, Installation of Outdoor Joint Kit for 1.1 kV XLPE AL Cable 4CX150 sqmm	No	6500	376	24,44,000.0
Total Civil Part					5,34,53,806.6
Sub-Total					25,53,77,261.1
Other Over Head (Including Supervision charges)@ 6%					1,53,22,635.7
Sub-total					27,06,99,896.8
GST @ 18% of Sub-Total					4,87,25,981.4
CESS @ 1% of Sub-Total					5,34,538.1
Sub-Grand Total					31,99,60,416.3
Inspection Fee					-
Drawing Approval					-
Grand Total					31,99,60,416.3
Grand Total in Cr.					32.0

8.35 Annexure 35: Cost for Estimate for Automation of Non-ODSSP & SCADA Integration:

Annexure 35: Cost for Estimate for Automation of Non-ODSSP & SCADA Integration:					
S No.	Item Description	Qty	UoM	Unit Price	Amount (in Rs.)
1	RTU 24-48 V with Panel (Urban) with Required Materials	8	EA	4,95,600.00	39,64,800.00
2	RTU 24-48 V with out Panel (Rural)	31	EA	3,49,806.28	1,08,43,994.68
3	FRTU and allied Service for Distribution RMU automation	15	Set	4,14,062.00	62,10,930.00
4	Transducer	100	EA	26,193.19	26,19,319.00
5	MFM	30	EA	16,520.00	4,95,600.00
6	LV Automation	1	Lum	23,60,000.00	23,60,000.00
7	DC -DC converter	150	EA	23,600.00	35,40,000.00
8	Grid Level Security	1	EA	5,90,000.00	5,90,000.00
9	Automation Lab	1	Lum	11,80,000.00	11,80,000.00
10	DC SPD	150	EA	5,900.00	8,85,000.00
11	Ethernet SPD's	500	EA	4,425.00	22,12,500.00
12	Serial SPD	150	EA	4,130.00	6,19,500.00
13	Ethernet Switch (12/24 Port)	25	EA	1,59,160.76	39,79,019.00
14	Separate Earthing for RTU	72	EA	27,612.00	19,88,064.00
15	ITC cost of RTU	54	Lum	82,293.20	44,43,832.80
16	CR Panel for 11KV VCB	10	EA	5,89,690.00	58,96,900.00
17	CR Panel for 33KV/11KV VCB (Duplex)	5	EA	9,60,677.97	48,03,389.87
18	CR Panel for 33KV PTR VCB (Simplex)	5	EA	9,60,677.97	48,03,389.87
19	CR Panel for 33KV VCB (Feeder Panel)	10	EA	5,89,690.00	58,96,900.00
20	Relay Master TRIP 24V DC (E&R)	30	EA	20,056.00	6,01,680.00
21	Relay MASTER TRIP 48V DC (E&R)	10	EA	20,056.00	2,00,560.00
22	Relay Transformer Differential Numerical	10	EA	2,35,004.00	23,50,040.00
23	Relay Over Current & Earth Fault Numerical	61	EA	1,92,930.00	1,17,68,730.00
24	ITC Cost of Relays	65	EA	30,520.00	19,83,800.00
25	Revamping of Panel	10	EA	1,74,400.00	17,44,000.00
Total Cost in Rs.					8,59,81,949.00

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Annexure 35: Cost for Estimate for Automation of Non-ODSSP & SCADA Integration:

S No.	Item Description	Qty	UoM	Unit Price	Amount (in Rs.)
Total Cost in Cr.					8.5

8.36 Annexure 36: Cost for Estimate for Surveillance of PSS through CCTV:

Annexure 36: Cost for Estimate for Surveillance of PSS through CCTV

SI No.	Description	UoM	Qty	Unit Rate	Amount (in Rs.)
1	Wall Mount Rack 19"X9UX600mm	Set	37	10,740.00	3,97,380.00
2	Hard Disk Drive	No	37	38,054.00	14,07,998.00
3	Surveillance SSD-10TB: Tosiba/Seagate	No	37	70,200.00	25,97,400.00
4	General Surveillance Indoor Dome Camera	No	37	14,940.00	5,52,780.00
5	General Surveillance Outdoor Camera	No	37	25,470.00	9,42,390.00
6	Armored Outdoor Cat-6 Cable	M	37	145.00	5,365.00
7	1" PVC Pipe (10Ft each Pipe)	No	37	170.00	6,290.00
8	Cable Casing Channels (7.5FT each Case)	No	37	350.00	12,950.00
9	POE Ethernet Switch	No	37	48,560.00	17,96,720.00
10	3 Core 2.5 sq mm Armored Power Cable ISI	M	37	260.00	9,620.00
11	32Amp DP MCB	No	37	790.00	29,230.00
12	Chemical earthing including 5 ft digging	Set	37	13,550.00	5,01,350.00
13	Surge Protection Device for camera	No	37	1,150.00	42,550.00
14	Installation, testing and commissioning	No	37	2,00,000.00	74,00,000.00
Subtotal Material(A)					1,57,02,023.00
Stock, Storage and Insurance@3% of A					4,71,060.69
Sub- Total-B					1,61,73,083.69
T & P Charges @ 2% of B					3,23,461.67
Contingency @ 3% of B					4,85,192.51
Transportation Charges@7.5% of B					12,12,981.28
Sub-Total C					1,81,94,719.15
Over Head Charges (Including Supervision charges) @6% of C					10,91,683.15
Total D					1,92,86,402.30
Gross Cost					1,92,86,402.30
GST @18%					34,71,552.41
CESS 1%					-
Gross Cost (Inc. GST)					2,27,57,954.71
Gross Cost in Cr.					2.2

8.37 Annexure 37: Cost Estimate for Build & Strengthen DC-DR Infrastructure & End-User IT Hardware:

Annexure 37: Cost Estimate for Build & Strengthen DC-DR Infrastructure & End-User IT Hardware:

S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Amount (in Cr)
1	Laptop for New Joinee and Buy Back laptop	Lumpsum	1	11000000	1.1
3	Desktop for Office Users	Lumpsum	5	50000	0.03
4	UPS (600 VA) for backup of Office Desktop	EA	50	4887	0.02

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5	UPS (1 KVA) for Backup of Network Equipment	EA	20	19947	0.04
6	Office Printers (Stand alone)	EA	5	40245	0.02
7	Flatbet Scanner	EA	5	33033	0.02
8	Multifunction Printer, copier and Scanner	Lumpsum	1	353677	0.04
9	Digital Signage Solution	EA	5	100000	0.05
10	Biometric Attendance Device	EA	5	31113	0.02
11	Biometric Door Lock & sensor	EA	4	55662	0.02
12	VC System and TV and conferencing system	EA	4	200000	0.08
13	Ipad	Lumpsum	2	200000	0.04
14	Network DC Router for PSS Communication	AU	10	1,40,000	0.14
15	Office LAN Setup	Node	50	7,000	0.04
16	Wi-Fi Access Point and Other IT Equipment's with Wi-Fi Controller	AU	20	20,000	0.04
17	CCTV Camera for Offices, Store & Fire Station with AI and VMS software	AU	1	25,00,000	0.25
18	Optical Fiber cable laying for connectivity of offices	KM	10	2,00,000	0.2
19	2 KVA UPS with Battery	EA	5	75,000	0.04
20	Aggregation Router	AU	1	13,00,000	0.13
21	Servers for DC and DR	AU	1	50,00,000	0.5
22	Storage for DC and DR	AU	1	50,00,000	0.5
23	Augmentation/upgradation of existing Hardware for CIS dataset increase	AU	1	20,00,000	0.2
24	SAN Switches	AU	1	15,00,000	0.15
25	Spine - Lief Network Switches	EA	1	30,00,000	0.3
26	TAPE FIBER CHANNEL LIBRARY for DC & DR	EA	1	20,00,000	0.2
27	Hardware for Technology Upgradation	AU	1	20,00,000	0.2
28	42 U Network Rack and Accessories	EA	2	1,00,000	0.02
29	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	1846528	0.18
Total Estimated Cost					4.5

8.38 Annexure 38: Cost Estimate for IT Application & Software:

Annexure 38: Cost Estimate for IT Application & Software:					
S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Amount (in Cr.)
1	MS SQL License 8 Core Std Version	AU	4	8,55,240	0.34
2	Visual Studio (Enterprise Version) 2021	AU	1	1,76,392	0.02
3	Windows Server OS	AU	1	1,00,00,000	1
4	Augmentation/upgradation of CIS solution	AU	1	50,00,000	0.5
5	Oracle Database Enterprise Edition License	AU	1	99,94,836	1
6	RHEL Linux OS	AU	4	5,00,440	0.2
7	RDS License for MS Windows	AU	4	3,16,476	0.13
8	Citrix Virtual Apps and desktops on prem Advanced/ Concurrent	AU	1	10,00,000	0.1
9	Adobe Reader	EA	6	65471	0.04
10	Nitro PDF Editor	EA	6	19446	0.01
11	Ms Office	EA	6	37583	0.02
12	Ms Project	EA	6	43411	0.03

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13	Ms Visio	EA	6	19790	0.01
14	Ad Cal License	EA	50	2808	0.01
15	Cymedist	AU	1	50,00,000	0.50
16	Software for Technology Upgradation	AU	1	25,00,000	0.25
17	Process Automation and AI implementation	AU	1	25,00,000	0.25
18	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	16,51,595	0.17
Total Estimated Cost					4.00

8.39 Annexure 39: Cost Estimate for Cyber security solution:

Annexure 39: Cost Estimate for Cyber security solution					
S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Amount (in Cr)
1	End User Anti-Virus for Laptop & Desktop	AU	1000	3920	0.39
2	Anti-Virus at Data Center Level	AU	50	44400	0.22
3	Firewall	AU	1	5000000	0.5
4	Data Leakage Prevention (Endpoint/Network/CASB)	AU	1	60000000	6
5	Cyber Security Development	AU	1	5000000	0.5
6	Network Ethernet Switches (PoE/Non-PoE) for Offices	AU	50	1,50,000	0.75
7	Network AC Router and Core Router for IT Offices	AU	35	4,00,000	1.4
8	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	35,29,916	0.35
Total Estimated Cost					10.0

8.40 Annexure 40: Cost Estimate for Geographic information system:

Annexure 40: Cost Estimate for Geographic information system					
S. No.	Description	UoM	Qty	Unit cost (INR inclusive of Tax)	Total Amount (in Cr)
1	GIS Data Updating	AU	1	1000000	0.1
2	Additional Small World License	AU	1	2200000	0.22
3	GIS Data Integration with Business application for multiple report generation and automation and additional ESRI license for new development	AU	1	2500000	0.25
3	One Time Implementation Charges for Above Items along with Site Visit & logistics	AU	1	285000	0.03
Total Estimated Cost					0.6

8.41 Annexure 41: Cost Estimate for Operation technologies:

Annexure 41: Cost Estimate for Operation technologies				
Sl. No.	Description	UoM	Proposed Qty	Amount (in Cr.)
1	AMI IT Infrastructure: DC IT infrastructure for HES, MDM and SPM for 3.2 lakh additional Smart Meters (incl. software licence cost), and DR IT infrastructure for MDM and HES for a total of 12 lakh Smart Meters.	AU	320000	10.00
Total Estimated Cost				10.0

8.42 Annexure 42: Cost Estimate for Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, Keonjhar:

Annexure 42: Cost Estimate for Heavy-duty Racking system / Storage solutions for Balasore, Jajpur & Betnoti, Keonjhar.		
Central Balasore Store		
Sr. No.	Work Description	Amount (in Cr.)
1	Warehouse management system(digitalisation) of all stores	0.4
2	storage solutions (Racks and bins)	0.35
3	Flooring in side shed / warehouse	0.3
4	Levelling of Road inside central store-1	0.25
5	Misc	0.25
Jajpur Store		
1	Labour Rest Shed	0.1
2	Drainage facility	0.35
3	Record room	0.1
4	RCC for scrap yard (Mini store)	0.2
5	PCC of balance area Jajpur store	0.3
6	Flooring inside warehouse / shed	0.1
7	storage solutions (Racks and bins)	0.1
8	Surveillance system	0.3
9	Misc.	0.35
Keonjhar Store		
1	Office building (demolishing the old unsafe building)	0.7
2	Misc	0.2
Betnoti Store		
1	Labor / security rest room with toilet and drinking water facility.	0.1
2	Office building	0.4
Ajodhya Scrap Store		
1	Construction of RCC /PCC platform	0.6
2	Office building	0.3
3	Drainage facility	0.25
Total Costing (In Cr.)		6.0

8.43 Annexure 43: Cost Estimate for Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office, and others):

Annexure 43: Cost Estimate for Civil Infrastructure (Office Buildings, PSS, Storage Room, Approach Roads, STS office, and others)					
SI No.	Item Description	Unit	Quantity	Unit Rate in Rs.	Amount (In Cr)
1	Circle Office	EA	2	3	6
2	Division Office	EA	3	2.5	7.5
3	New SDO OFFICE	EA	12	0.35	4.2
4	New Section office	EA	15	0.3	4.5

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5	DT Workshop	EA	1	2.5	2.5
6	HOTT Centre	EA	2	1.1	2.2
7	MRT Office cum Store (Bhadrak)	EA	1	1	1
8	Area Development/ Approach Road for above mentioned offices	AU	1	1	1
9	Enforcement Office at Jajpur	EA	1	1	1
10	Meter Testing Lab	EA	1	1	1
11	Auditorium Building	EA	1	2.5	2.5
12	Store Shed/Store Room	EA	20	0.08	1.6
Total Cost in Cr.					35.0

8.44 Annexure 44: Cost Estimate for Office Administration:

Annexure-44 Cost Estimate for Office Administration					
Sl. No.	Item Description	Unit	Quantity	Unit Rate in Rs.	Amount (in Rs.)
1	Air Conditioners	Nos'	150	50,000	75,00,000
2	Water cooler/Dispenser	Nos'	10	25,000	2,50,000
3	RO (commercial)	Nos'	50	15,000	7,50,000
4	Fan celling / Wall mounted / Pedestal Fan/ Exhaust Fan	Nos'	100	3,000	3,00,000
5	Steel Almirah (6 feet)	Nos'	50	20,000	10,00,000
6	Auditorium Furniture, Furniture, Door Window, Boring & HVAC	LS	1	2,24,00,000	2,24,00,000
7	EV Vehicle	Nos'	2	24,00,000	48,00,000
8	Vehicle- SUV	Nos'	1	30,00,000	30,00,000
9	Cafeteria Canteen	Nos'	4	50,00,000	2,00,00,000
10	Miscellaneous capex	Nos'	1	50,00,000	50,00,000
Total Cost of materials					6,50,00,000.00
Total Cost in Cr.					6.5

8.45 Annexure 45: Proposed PSS:

Sl. No.	Circle	Name of Proposed PSS	Capacity	Detailed Write-Up of requirement
1.	Baripada	Murgabai	2x8 MVA	The proposed PSS, Murgabadi with a capacity of 2x8 MVA Power Transformers (PTRs), will cater to the load currently served by the 11 kV Bhanjpur and 11kv Rural feeders from Stadium PSS, the 11 kV LIC feeder from Takatpur PSS, the 11 kV Kuliana feeder from Raghunathpur PSS, and the 11 kV Kuliana feeder from Kalabadia PSS. Benefit area: Baripada Town Area, Murgabadi, Bhugurkata, Bhanjpur, Purnachandrapur
2.	Bhadrak	Haldidiha	2x8 MVA	The proposed PSS, Haladidiha PSS with a capacity of 2 x 8 MVA will be strategically located to cater to the load pockets presently dependent on Tahasil and Powerhouse PSS. The proposed 11 KV feeders will be planned to distribute the existing load in a balanced manner, broadly considering the following objectives: 1. Bifurcation of the 11 KV Santhia feeder load presently emanating from Tahasil PSS. 2. Bifurcation of the 11 KV Chandan Bazar feeder load presently emanating from Powerhouse PSS. 3. Creation of an additional 11 KV feeder arrangement to facilitate further load bifurcation and network flexibility 4. Reduction of loading on the existing PTRs at Tahasil and Powerhouse PSS. 5. Improvement of voltage profile and reduction in technical losses by reducing the length/loading of the existing 11 KV feeders.

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				6. Improvement in operational flexibility and reliability of the 11 KV distribution network. Benefit area: Purnabazar, Satyabrata math, Santhia, Halide diha, Chandan bazar, kantabania, allapur, pathana mahala, Jhuma masjid, sarkar nagar ,garadapur, beka , Banka chhak.
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8.46 Annexure 46: PTR Loading Details:

Sl. No	Circle	Source GSS	33kV Feeder	33/11kV PSS	PTR Cap (MVA)	Peak Load (MVA)	PTR Loading % (FY26)	PTR Loading % (FY31)	PTR Loading Range (FY31)
1	Keonjhar	Ranki GSS	Telkoi Feeder	Telkoi PSS	3.15	2.0	62.3	83.0	80%-90%
2	Keonjhar	Barbil GSS	Barbil-2/ Sundara Feeder	Sundara (Barbil-2) PSS	8	5.2	65	86.9	80%-90%
3	Balasore	Balasore GSS	Chandipur Feeder	Kalimandir PSS	8	3.5	62	88.4	80%-90%
4	Keonjhar	Palaspanga GSS	Remuli Feeder	Champua PSS	5	1.6	61	80.8	80%-90%
5	Keonjhar	Anandapur GSS	Ramchandrapur Feeder	Sainkul PSS	3.15	1.0	61	81.3	80%-90%
6	Keonjhar	Anandapur GSS	Ghasipura Feeder	Rekutia PSS	3.15	1.2	60	80.4	80%-90%
7	Jajpur	132/33 KV Jajpur Town GSS	Bari Feeder	Bari PSS	5	1.8	64	80.9	80%-90%
8	Jajpur	132/33 KV Jajpur Town GSS	Mangalpur Feeder	Siddheshwar/Sundarim uhin PSS	5	2.8	68	86.3	80%-90%
9	Jajpur	220/132/33 KV Old Duburi GSS	Sukinda Feeder	Solai / Manpur PSS	5	0.6	63	80.6	80%-90%
10	Jajpur	132/33 KV Jajpur Road GSS	Kuakhia Feeder	Vyas Sarovar PSS	5	3.2	63	80.6	80%-90%
11	Jajpur	132/33 KV Jajpur Road GSS	Kuakhia Feeder	Vyas Sarovar PSS	5	3.4	68	87.0	80%-90%
12	Jajpur	132/33 KV Jajpur Road GSS	Salakana Feeder	Dhabalgiri PSS	8	2.6	68	86.4	80%-90%
13	Bhadrak	Bhadrak GSS	33KV Dhamnagar Feeder	Dhamnagar PSS	5	2.2	61	82.6	80%-90%
14	Bhadrak	Bhadrak GSS	33KV Dhamnagar Feeder	Nalanga PSS	1.6	0.8	63	85.4	80%-90%
15	Bhadrak	Bhadrak GSS	33KV Nandapur PSS	Nandapur PSS	5	0.8	62	83.9	80%-90%
16	Bhadrak	Bhadrak GSS	33KV Bhadrak Feeder	Power House PSS	8	0.2	62	83.7	80%-90%
17	Bhadrak	Bhadrak GSS	33KV Bhadrak Feeder	Tahasil PSS	8	1.0	65	87.2	80%-90%

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Sl. No	Circle	Source GSS	33kV Feeder	33/11kV PSS	PTR Cap (MVA)	Peak Load (MVA)	PTR Loading % (FY26)	PTR Loading % (FY31)	PTR Loading Range (FY31)
18	Bhadrak	Balimunda GSS	33KV Bideipur Feeder	Padampur PSS	5	1.6	61	82.1	80%-90%
19	Bhadrak	Chandbali GSS	33KV Jashipur Feeder	Jashipur PSS	5	0.8	64	86.0	80%-90%
20	Baripada	Udala GSS	Udala Feeder	Rathipur / Kaptipada PSS	5	2.0	64	86.9	80%-90%
21	Baripada	Udala GSS	Khunta Feeder	Khunta PSS	3.15	1.9	59	80.8	80%-90%
22	Baripada	Rairangpur GSS	Bahalda Feeder	Bahalda PSS	3.15	0.7	66	89.7	80%-90%
23	Baripada	Bangiriposi GSS	Bangiriposi New Feeder	Kalabadia PSS	1.6	1.0	60	81.2	80%-90%
24	Baripada	Betnoti GSS	Betnoti-I Feeder	Barkand/Muruda PSS	5	1.5	61	83.5	80%-90%
25	Baripada	Betnoti GSS	Betnoti-II Feeder	Baisinga PSS	3.15	1.9	60	81.5	80%-90%
26	Baripada	Baripada GSS	Raghunathpur Feeder	Raghunathpur PSS	5	0.6	65	88.3	80%-90%
27	Baripada	Baripada GSS	Baripada Feeder	Lalbazar PSS	8	3.7	59	80.5	80%-90%
28	Baripada	Baripada GSS	Baripada Feeder	Takatpur PSS	8	4.9	62	84.3	80%-90%
29	Balasore	Somnathpur GSS	NOCCI Feeder	Somnathpur (NOCCI) PSS	5	1.1	60	86.1	80%-90%
30	Balasore	Soro GSS	Gopinathpur Feeder	Gopalpur PSS	3.15	0.8	61	86.5	80%-90%
31	Balasore	Chandipur GSS	Swadhinpada Feeder	Digrainia PSS	5	1.4	59	83.9	80%-90%
32	Balasore	Soro GSS	Gopinathpur Feeder	Bishnupur(Jhadta) PSS	5	2.0	59	83.8	80%-90%
33	Balasore	Soro GSS	Gopinathpur Feeder	Anantapur PSS	3.15	1.5	57	81.7	80%-90%
34	Balasore	Bhograi GSS	Bhograi Feeder	Jagannathpur PSS	8	4.6	58	82.5	80%-90%
35	Balasore	Chandipur GSS	Swadhinpada Feeder	Swadhinpada PSS	12.5	1.8	58	82.4	80%-90%
36	Balasore	Bhograi GSS	New Kamardha Feeder	Bhograi PSS	8	4.9	61	87.1	80%-90%
37	Balasore	Jaleswar GSS	Kamarda Feeder	Kamarda PSS	3.15	1.9	62	88.1	80%-90%
38	Balasore	Jaleswar GSS	Basta Feeder	Hatigarh PSS	5	1.3	59	84.9	80%-90%
39	Balasore	Jaleswar GSS	Basta Feeder	Teghari New PSS	5	1.9	59	84.9	80%-90%
40	Balasore	Basta GSS	Jamsuli Feeder	Langaleswar PSS	5	2.3	62	88.4	80%-90%
41	Balasore	Somnathpur GSS	Nilgiri New Feeder	Bhalukasuni PSS	3.15	1.8	58	82.4	80%-90%
42	Balasore	Balasore GSS	Rupsa Feeder	Rupsa PSS	5	2.9	59	83.9	80%-90%
43	Keonjhar	Palaspanga GSS	Remuli Feeder	Basudevpur PSS	1.6	1.1	71	95.2	90%-100%

Detailed Project Report of Capex Plan FY28

Sl. No	Circle	Source GSS	33kV Feeder	33/11kV PSS	PTR Cap (MVA)	Peak Load (MVA)	PTR Loading % (FY26)	PTR Loading % (FY31)	PTR Loading Range (FY31)
44	Keonjhar	Anandapur GSS	Ramchandrapur Feeder	Ramchandrapur PSS	5	3.6	71	95.0	90%-100%
45	Jajpur	132/33 KV CHANDIKHOLE GSS	KABATBHANDA FEEDER	KABATABANDHA PSS	5	1.1	72	92.1	90%-100%
46	Jajpur	132/33 KV JAJPUR ROAD GSS	KUAKHIA FEEDER	KUAKHIA PSS	5	2.6	75	95.2	90%-100%
47	Jajpur	132/33 KV JAJPUR TOWN GSS	JAJPUR TOWN FEEDER	JAJPUR TOWN PSS	8	2.1	72	91.2	90%-100%
48	Jajpur	220/132/33 KV OLD DUBURI GSS	DAITRARY FEEDER	DUBURI PSS	3.15	1.6	78	99.4	90%-100%
49	Balasore	BALASORE GSS	CHANDIPUR FEEDER	CITY PSS	12.5	2.0	66	94.0	90%-100%
50	Jajpur	132/33 KV JAJPUR ROAD GSS	JAJPUR ROAD FEEDER	CHORDA PSS	10	5.5	75	95.5	90%-100%
51	Bhadrak	BHADRAK GRID	33KV NANDAPUR PSS	SINDOLE PSS	3.15	1.2	70	94.6	90%-100%
52	Bhadrak	SORO GRID	33KV BASUDEVPUR FEEDER	ERAM PSS	5	0.3	67	90.1	90%-100%
53	Bhadrak	BISALPATA GRID	33KV CHAYALSINGH FEEDER	CHAYALSINGH PSS	1.6	1.1	68	92.1	90%-100%
54	Bhadrak	BISALPATA GRID	33KV CHAYALSINGH FEEDER	CHAYALSINGH PSS	1.6	1.1	68	91.4	90%-100%
55	Bhadrak	CHANDBALI GRID	33KV CHANDBALI FEEDER	CHANDABALI PSS	5	2.9	74	99.9	90%-100%
56	Baripada	UDALA GSS	UDALA FEEDER	UDALA PSS	5	2.2	69	94.6	90%-100%
57	Baripada	UDALA GSS	KHUNTA FEEDER	KHUNTA PSS	5	2.2	66	90.4	90%-100%
58	Balasore	AGARPADA GSS	NEW KUPARI FEEDER	KHAIRA PSS	3.15	1.2	70	99.9	90%-100%
59	Balasore	BHOGRAI GSS	BHOGRAI FEEDER	JAGANNATHPUR PSS	5	3.5	70	99.8	90%-100%
60	Balasore	BALASORE GSS	BALASORE-1 FEEDER	SOVRAMPUR PSS	5	1.8	67	96.4	90%-100%
61	Balasore	BASTA GSS	BASTA FEEDER	RAJGHAT PSS	5	3.3	67	95.2	90%-100%
62	Balasore	BALASORE GSS	BALASORE-1 FEEDER	RAMESHWAR MANDIR PSS	5	2.6	68	96.4	90%-100%
63	Balasore	BASTA GSS	BALIAPAL FEEDER	BALIAPAL PSS	5	3.2	64	91.7	90%-100%
64	Balasore	BASTA GSS	BASTA FEEDER	KUSUDHIA PSS	5	3.2	64	91.4	90%-100%
65	Balasore	BASTA GSS	BASTA FEEDER	BASTA PSS	8	2.4	65	92.4	90%-100%

Detailed Project Report of Capex Plan FY28

Sl. No	Circle	Source GSS	33kV Feeder	33/11kV PSS	PTR Cap (MVA)	Peak Load (MVA)	PTR Loading % (FY26)	PTR Loading % (FY31)	PTR Loading Range (FY31)
66	Balasore	CHANDIPUR GSS	NEW SARGAON FEEDER	SRIJUNG PSS	5	0.6	67	96.2	90%-100%
67	Balasore	BALASORE GSS	BALGOPALPUR FEEDER	(REMUNA)BIDYADHARPUR PSS	8	1.3	66	94.3	90%-100%
68	Balasore	BALASORE GSS	RUPSA FEEDER	FULADI PSS	5	1.6	63	90.4	90%-100%
69	Jajpur	132/33 KV CHANDIKHOLE GSS	JARAKA FEEDER	JARAKA PSS	5	4.0	80	102.3	>=100%
70	Balasore	BALASORE GSS	CHANDIPUR FEEDER	GOPALGAON PSS	5	3.7	74	105.3	>=100%
71	Jajpur	132/33 KV CHANDIKHOLE GSS	JARAKA FEEDER	NEULPUR PSS	5	2.6	102	130.0	>=100%
72	Jajpur	132/33 KV JAJPUR ROAD GSS	PANIKOILI FEEDER	PANIKOILI PSS	3.15	2.8	89	112.7	>=100%
73	Balasore	BALASORE GSS	CHANDIPUR FEEDER	KALIMANDIR PSS	8	3.1	89	126.7	>=100%
74	Jajpur	132/33 KV JAJPUR ROAD GSS	PANIKOILI FEEDER	PANIKOILI PSS	5	0.5	98	125.3	>=100%
75	Jajpur	132/33 KV JAJPUR ROAD GSS	JAJPUR ROAD FEEDER	CHORDA PSS	5	4.3	87	110.2	>=100%
76	Bhadrak	BHADRAK GRID	33KV BHADRAK FEEDER	POWER HOUSE PSS	8	4.6	78	105.0	>=100%
77	Bhadrak	BHADRAK GRID	33KV BHADRAK FEEDER	POWER HOUSE PSS	8	2.4	96	129.8	>=100%
78	Bhadrak	BHADRAK GRID	33KV BHADRAK FEEDER	TAHASIL PSS	12.5	1.9	93	126.0	>=100%
79	Bhadrak	BALIMUNDA GRID	33KV BIDEIPUR FEEDER	BIDEIPUR PSS	8	5.4	87	116.7	>=100%
80	Bhadrak	CHANDBALI GRID	33KV CHANDBALI FEEDER	CHANDABALI PSS	5	3.0	79	106.4	>=100%
81	Baripada	RAIRANGPUR GSS	BAHALDA FEEDER	KANTABANI PSS	5	3.7	75	101.8	>=100%
82	Balasore	BALASORE GSS	CHANDIPUR FEEDER	KASHIMABAD PSS	5	3.9	77	110.4	>=100%
83	Baripada	BETNOTI GSS	BETNOTI-I FEEDER	RASAGOBINDAPUR PSS	1.6	1.2	75	102.2	>=100%
84	Baripada	KARANJIA GSS	KARANJIA FEEDER	KARANJIA PSS	3.15	1.8	79	107.9	>=100%
85	Baripada	BARIPADA GSS	BARIPADA FEEDER	LALBAZAR PSS	8	4.4	89	121.8	>=100%
86	Baripada	BARIPADA GSS	BARIPADA FEEDER	TAKATPUR PSS	3.15	2.3	80	108.8	>=100%

Detailed Project Report of Capex Plan FY28

Sl. No	Circle	Source GSS	33kV Feeder	33/11kV PSS	PTR Cap (MVA)	Peak Load (MVA)	PTR Loading % (FY26)	PTR Loading % (FY31)	PTR Loading Range (FY31)
87	Balasore	SORO GSS	Jamujhadi feeder	MARKONA PSS	3.15	0.9	89	127.3	>=100%
88	Balasore	SORO GSS	Soro FEEDER	SORO COLLEGE CHHAK PSS	8	3.8	83	118.8	>=100%
89	Balasore	BHOGRAI GSS	BHOGRAI FEEDER	JAGANNATHPUR PSS	5	4.3	87	123.5	>=100%
90	Balasore	BHOGRAI GSS	BHOGRAI FEEDER	DEHURDA PSS	3.15	1.1	77	109.5	>=100%
91	Balasore	BHOGRAI GSS	BHOGRAI FEEDER	DEHURDA PSS	5	2.4	73	104.9	>=100%
92	Balasore	JALESWAR GSS	KAMARDA FEEDER	NAMPO PSS	3.15	2.4	76	108.8	>=100%
93	Balasore	JALESWAR GSS	KAMARDA FEEDER	KAMARDA PSS	5	2.4	82	117.5	>=100%
94	Balasore	JALESWAR GSS	JALESWAR FEEDER	JALESWAR PSS	5	2.2	73	104.4	>=100%
95	Balasore	BALASORE GSS	BALASORE-2 FEEDER	GANESHWARPUR PSS	8	2.1	77	110.5	>=100%
96	Balasore	JALESWAR GSS	JALESWAR FEEDER	JALESWAR PSS	8	3.5	82	116.6	>=100%
97	Balasore	BASTA GSS	JAMSULI FEEDER	JAMSULI PSS	5	1.0	72	103.4	>=100%
98	Balasore	BASTA GSS	JAMSULI FEEDER	LANGALESWAR PSS	5	1.1	77	110.2	>=100%
99	Balasore	BASTA GSS	BALIAPAL FEEDER	BALIAPAL PSS	3.15	2.5	79	113.1	>=100%
100	Balasore	BASTA GSS	BASTA FEEDER	BASTA PSS	8	3.5	71	101.6	>=100%
101	Balasore	BALASORE GSS	ODANGI FEEDER	CHANUA PSS	8	2.4	101	144.7	>=100%
102	Balasore	BALASORE GSS	ODANGI FEEDER	ODANGI PSS	5	1.2	75	107.7	>=100%



**Certified True Copy of the Resolution passed at the
Board Meeting held on 18th July 2026**

“RESOLVED that Capital Expenditure (capex) of the Company for FY28, be and is hereby approved, as under, subject to the approval of Odisha Electricity Regulatory Commission (OERC):

(₹ in crore)

Sl. No.	Capex Head	FY28
1	Statutory and Safety	53.63
2	Loss Reduction	39.83
3	Reliability	200.11
4	Network Optimisation & Load Growth	275.35
5	Technology and Infrastructure	87.30
	Total	656.22

Note: The Capex cost was exclusive of capitalizable project, employee cost and interest during construction.

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

Certified True Copy
For TP Northern Odisha Distribution Limited

Devendra Prasad
(Company Secretary)

ACS: 39789

Januganj, Remuna Golei, Balasore, Odisha– 756019

TP NORTHERN ODISHA DISTRIBUTION LIMITED

(A Joint Venture of Tata Power and Government of Odisha)

Corporate Office: Januganj, Remuna Golei, Balasore – 756019, Odisha, India

Registered Office: Januganj, Remuna Golei, Balasore – 756019, Odisha, India Tel.: 06782-244336

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Appendix-6:
Cost Benefit Analysis of Power Transformer

Cost Benefit Analysis of Power Transformer:

1. Power Transformer overloading mitigation at Kalimandir Substation

Proposal:

Augmentation of existing 33/11kV, 8 MVA Power Transformer (PTR-2) to 12.5 MVA at Kalimandir 33/11kV Substation in BED division of Balasore circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11kV Kalimandir PSS PTR-1 and 2 are 5.64 MVA & 7.81 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (7.38 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1 & 2 would be 8.05 MVA and 11.15 respectively.
2. PTR-1 & 2 will be loaded up to 100.64% & 139.4 %, w.r.t, the existing transformer capacity of 8 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Kalimandir PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Kalimandir	PTR-1	8	5.64	70.54	7.38%	8.05	100.64
2		PTR-2	8	7.81	97.54		11.15	139.40

Proposed Scenario:

1. Augmentation of PTR-2 from 8 MVA to 12.5 MVA at Kalimandir PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 7.38 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Kalimandir	8	8.05	100.64
2		12.5	11.15	89.21

Cost Benefit Analysis of Power Transformer

Cost Benefit Analysis:

PSS	Load in Summer'26	Load in Summer'31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Kalimandir	13.45	19.2	5.75	5.46	6770987.25	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	3.99	Years
						% Rate of Return	25.08	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.

2. Power Transformer overloading mitigation at Jaleswar Substation:

Proposal:

Augmentation of existing 33/11kV, 5 MVA Power Transformer (PTR-3) to 12.5 MVA at Jaleswar 33/11kV Substation in JED division of Balasore circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11kV Jaleswar PSS PTR-1 ,2 and 3 are 8.14 MVA, 1.74 MVA & 3.51 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (7.38 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1,2 & 3 would be 11.61 MVA, 2.49 MVA and 5 MVA respectively.
2. PTR-1 & 3 will be loaded up to 145.18 % & 100.09, w.r.t, the existing transformer capacity of 8 & 5 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Jaleswar PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Jaleswar	PTR-1	8	8.14	101.68	7.38%	11.61	145.18
2		PTR-2	5	1.74	34.9		2.49	49.82
3		PTR-3	5	3.51	70.11		5	100.09

Proposed Scenario:

1. Augmentation of PTR-3 from 5 MVA to 12.5 MVA at Jaleswar PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth as the load of 8 MVA can be shifted to PTR -3.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Jaleswar	8	11.61	145.18
2		5	2.49	49.82
3		12.5	5	40.04

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer' 26	Load in Summer' 31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Jaleswar	13.39	19.11	5.73	5.43	6735660.36	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	4.01	Years
						% Rate of Return	24.95	%

3. Power Transformer overloading mitigation at Soro college Substation:

Proposal:

Augmentation of existing 33/11kV, 8 MVA Power Transformer (PTR-2) to 12.5 MVA at Soro College 33/11kV Substation in SED division of Balasore circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11kV Soro College PSS PTR-1 & 2 are 3.39 MVA & 7.14 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (7.38 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1 & 2 would be 4.84 & 10.2 respectively.
2. PTR-2 will be loaded up to 127.5 %, w.r.t, the existing transformer capacity of 8 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Soro College PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Soro Collage	PTR-1	8	3.39	42.39	7.38%	4.84	60.52
2		PTR-2	8	7.14	89.31		10.2	127.5

Proposed Scenario:

1. Augmentation of PTR-2 from 8 MVA to 12.5 MVA at Soro college PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth.

Sl no	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Soro Clg	8	4.84	60.52
2		12.5	10.2	81.6

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Soro Collage	10.53	15.04	4.51	4.28	5310809.13	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	5.08	Years
						% Rate of Return	19.67	%

4. Power Transformer overloading mitigation at Chorda Substation:

Proposal:

Augmentation of existing 33/11kV, 10 MVA Power Transformer (PTR-2) to 16 MVA at Chorda 33/11kV Substation in JRED division of Jajpur circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11kV Chorda College PSS PTR-1, 2 and 3 are 4.54 MVA, 8.28 MVA & 4.76 MVA respectively at on of Summer'26. Considering the load growth for 5 years (4.94 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1, 2 & 3 would be 5.77 MVA, 10.55 MVA and 6.06 MVA respectively.
2. PTR-2 & 3 will be loaded up to 105.47 % & 121.23 %, w.r.t, the existing transformer capacity of 10 & 5 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Chorda PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Chorda	PTR-1	8	4.54	56.81	4.94%	5.77	72.13
2		PTR-2	10	8.28	82.83		10.55	105.47
3		PTR-3	5	4.76	95.11		6.06	121.23

Proposed Scenario:

1. Augmentation of PTR-2 from 10 MVA to 16 MVA at Chorda PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth.

SL. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Chorda	8	5.7	72.13
2		16	10.55	65.92
3		5	6.06	121.23

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Chorda	17.58	22.38	4.8	4.56	5652302.4	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	4.78	Years
						% Rate of Return	20.93	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.

5. Power Transformer overloading mitigation at Balashrampadia Substation

Proposal:

Augmentation of existing 33/11kV, 5 MVA Power Transformer (PTR-1) to 12.5 MVA at Balashrampadia 33/11kV Substation in JTED division of Jajpur circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11 kV Jajpur town PSS PTR-1 ,2 and 3 are 5.14 MVA, 5.68 MVA & 5.53 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (4.94 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1,2 & 3 would be 6.55 MVA,7.23 MVA and 7.03MVA respectively.
2. Loading of 33/11 kV Balashrampadia PSS PTR-1 & 2 are 2.38 MVA & 3.49 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (4.94 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1& 2 would be 3.03 MVA and 4.44MVA respectively.
3. PTR-1 of Balashrampadia will be loaded up to 100 %, w.r.t, the existing transformer capacity of 5 MVA in Summer'31 after load shift from Jajpur town PSS.

Existing Summer'26 Loading and projected load at Jajpur town & Balashrampadia PTR:

SL. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Jajpur Town	PTR-1	8	5.14	64.3	4.94%	6.55	81.83
2		PTR-2	8	5.68	70.97		7.23	90.32
3		PTR-3	8	5.53	69.10		7.03	87.89

SL. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Balashrampadia	PTR-1	5	2.38	47.59	4.94%	3.03	60.62
2		PTR-2	5	3.49	69.52		4.44	88.74

Proposed Scenario:

1. Augmentation of PTR-1 from 5 MVA to 12.5 MVA at Balashrampadia PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth along with load addition from Jajpur town PSS.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Jajpur Town	8	3.93	49.10
2		8	7.23	90.32
3		8	7.03	87.89

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Balashramp	12.5	5.65	45.20
2	adia	5	4.44	88.74

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	$E=D*1000*365*24*0.1*1.415$			
Balashra mpadia	5.87	10.09	4.22	4.01	4969315.86	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	5.43	Years
						% Rate of Return	18.4	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.

6. Power Transformer overloading mitigation at Sovrampur Substation

Proposal:

Augmentation of existing 33/11kV, 5 MVA Power Transformer (PTR-2) to 8 MVA at Sovrampur 33/11kV Substation in BED division of Balasore circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11 kV Dehurda PSS PTR-1 & 2 are 4.12 MVA & 3.87 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (7.38 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1 & 2 would be 5.88 MVA and 5.52 MVA respectively.
2. PTR-2 will be loaded up to 110.43 %, w.r.t, the existing transformer capacity of 5 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Sovrampur PTR:

Sl. No.	Name of 33/11kV PSS	PTR	PTR	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
		No.	Rating				Peak Load (MVA)	% of Loading
			(MVA)	Peak Load (MVA)	% of Loading			
1	Sovrampur	PTR-1	8	4.12	51.41	7.38%	5.88	73.44
2		PTR-2	5	3.87	77.35		5.52	110.43

Proposed Scenario:

1. Augmentation of PTR-2 from 5 MVA to 8 MVA at Sovrampur PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Sovrampur	8	5.88	73.44
2		8	5.52	69.02

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Sovram pur	7.98	11.4	3.42	3.25	4027265.46	Total Scheme Cost (incl. Taxes)	1.68	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	4.17	Years
						% Rate of Return	23.97	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.

7. Power Transformer overloading mitigation at Vyasosarovar Substation

Proposal:

Augmentation of existing 33/11kV, 5 MVA Power Transformer (PTR-2) to 8 MVA at Vyassarovar 33/11kV Substation in JRED division of Jajpur circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11 kV Vyasosarovar PSS PTR-1 & 2 are 3.42 & 3.79 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (4.94 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1,2 would be 4.35 & 4.83 respectively.
2. PTR-1 & 2 will be loaded up to 87.05 % & 96.5 % w.r.t the existing transformer capacity of 5 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Vyasosarovar PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Vyasosarovar	PTR-1	5	3.42	68.4	4.94%	4.35	87.05
2		PTR-2	5	3.79	75.83		4.83	96.5

Proposed Scenario:

1. Augmentation of PTR-2 from 5 MVA to 8 MVA at Vyasosarovar PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Vyasosarovar	5	4.35	87.05
2		8	4.83	60.31

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.415			
Vyasosarovar	7.21	9.18	1.97	1.87	2319799.11	Total Scheme Cost (incl. Taxes)	1.68	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	7.24	Years
						% Rate of Return	13.81	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.

8. Power Transformer overloading mitigation at Swadhinpadia Substation

Proposal:

Augmentation of existing 33/11kV, 8 MVA Power Transformer (PTR-2) to 12.5 MVA at Swadhinpadia 33/11kV Substation in BED division of Balasore circle to mitigate overloading condition.

Justification of the Proposal:

Existing Scenario:

1. Loading of 33/11 kV Swadhinpadia PSS PTR-1 & 2 are 7.42 & 4.46 MVA respectively at peak load condition of Summer'26. Considering the load growth for 5 years (7.38 % load growth per year for 5 years), the projected loading of Summer'31 for PTR-1,2 would be 10.58 & 6.37 respectively.
2. PTR-1 & 2 will be loaded up to 84.64 % & 79.56 % w.r.t the existing transformer capacity of 12.5 & 8 MVA in Summer'31.

Existing Summer'26 Loading and projected load at Swadhinpadia PTR:

Sl. No.	Name of 33/11kV PSS	PTR No.	PTR Rating (MVA)	AS IS (Summer'26)		Projected Load growth on YOY basis	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
				Peak Load (MVA)	% of Loading		Peak Load (MVA)	% of Loading
1	Swadhinpadia	PTR-1	12.5	7.42	59.35	7.38%	10.58	84.64
2		PTR-2	8	4.46	55.81		6.37	79.56

Proposed Scenario:

1. Augmentation of PTR-2 from 8 MVA to 12.5 MVA at Swadhinpadia PSS is proposed to meet the full load of the PSS at peak load condition after 5 years load growth as the load of PTR 1 can be adjusted.

Sl. No.	Name of 33/11kV PSS	PTR Rating (Proposed)	Projected Load (5 yrs. Load Growth @ 5 % on YOY) Summer'31	
			Peak Load (MVA)	% of Loading
1	Swadhinpadia	12.5	10.58	84.64
2		12.5	6.37	50.92

Cost Benefit Analysis of Power Transformer:

Cost Benefit Analysis:

PSS	Load in Summer '26	Load in Summer '31	Additional load due to load growth (in MVA)	Total Load Added (in MW)	Benefit on account of Energy Charges from New Loads (in INR) with Load Factor 10%	Calculation	Value	Unit
	A	B	C=B-A	D=C*0.95	E=D*1000*365*24*0.1*1.43			
Swadhinpadia	11.88	16.95	5.07	4.82	5970244.41	Total Scheme Cost (incl. Taxes)	2.7	Cr
						Pay Back Period of Scheme ((F=Total Project Cost/E)	4.52	Years
						% Rate of Return	22.11	%

Benefit to the System and Consumers:

1. Overloading condition on power transformers will be mitigated, reducing stress on the PTR.
2. Accommodating future load growth due to increase in the consumer demand will be achieved.
3. System reliability and operational safety will be improved.
4. Risk of power outage will be reduced.
5. Energy losses will be reduced and the overall system efficiency will be optimised.