

Annual Business Plan (ABP) OPEX

FY 2021-22 submitted by

TP Western Odisha Distribution Ltd



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GLOSSARY

AB SWITCH	Air Break Switch			
AC	Alternating Current			
ADMS	Advanced Distribution Management System			
AMC	Annual Maintenance Contract			
AMR	Automated Meter Reading			
APS	Area Power System			
AT&C	Aggregate Technical and Commercial			
BA	Business Associate			
BCC	Backup Control Centre			
во	Business Output			
BPL	Below Poverty Limit			
BW	Business Warehouse			
CAIDI	Customer Average Interruption Duration Index			
CC	Control Centre			
CPSCC	Central Power System Control Centre			
CRM	Customer Relationship Management			
CSR	Corporate Social Responsibility			
СТ	Current Transformer			
CWIP	Current Work In Progress			
DC	Direct Current			
DCP	Data Collection Point			
DD	Drop Down			
DMS	Distribution Management System			
DSS	Distribution Sub-Station			
DT	Distribution Transformer			
EHT	Extra High Tension			
ELCB	Earth Leakage Circuit Breaker			
FCC	Fuse Call Centre			

FY	Financial Year
GIS	Geographical Information System
Gol	Government of India
GoO	Government of Odisha
GRIDCO	Grid Corporation of Odisha
GSS	Grid Sub Station
НМС	Hub Maintenance Crew
НОТО	Handing over taking over
HT	High Tension
нтст	High Tension Current Transformer
HVAC	Heating, Ventilation and Air Conditioning
IEC	International Electro technical Commission
IED	Intelligent Electronic Devices
IMS	Integrated Management System
IT	Information Technology
JE	Junior Engineer
КМ	Kilo meter
KV	Kilo Volt
KVA	Kilo Volt Ampere
LT	Low Tension
LTCT	Low Tension Current Transformer
LV	Low Voltage
MBC	Metering Billing and Collection
MCC	Master Control Centre
МССВ	Moulded Case Circuit breaker
ММ	Material Management
MMG	Meter Management Group
MPG	Maintenance Planning Group
MPLS	Multi-Protocol Label Switching
MRT	Meter Reading & Testing

MS	Microsoft
MTTR	Mean Time to Repair
MU	Million Unit
MV	Medium Voltage
MVA	Mega Volt Ampere
MW	Mega Watt
NABL	National Accreditation Board for Testing and Calibration Laboratories
NCC	No Current Complaint
O&M	Operation & Maintenance
ODSSP	Odisha Distribution System Strengthening Project
OEM	Original Equipment Manufacturer
OERC	Odisha Electricity Regulatory Commission
OFC	Optic Fiber Cable
OMS	Outage Management System
OPEX	Operational Expenditure
OPGW	Optical Ground Wire
OPTCL	Odisha Power Transmission Corporation Limited
OS	Operating System
ОТ	Operational Technology
РВМС	Performance Based Maintenance Contracts
PC	Personal Computer
PGCIL	Power Grid Corporation of India Limited
PoC	Proofing of Concept
POSH	Policy on Sexual Harassment
PP	Production Planning
PSCC	Power System Control Centre
PT	Potential Transformer
PTR	Power Transformer
PTW	Permit To Work
R&R	Reward & Recognition

RCA	Root Cause Analysis			
SAIDI	System Average Interruption Duration Index			
SAIFI	System Average Interruption Frequency Index			
SAP	System Application and Products			
SBM	Spot Billing Module			
SCADA	Supervisory Control and Data Acquisition			
SD	Sales and Distribution			
SDO	Sub Divisional Officer			
SDM	Sub Divisional Manager			
SHG	Self-help Group			
SLA	Service Level Agreement			
SLDC	State Load Dispatch Centre			
SLMC	System Line Maintenance Crew			
SMC	Substation Maintenance Crew			
SMS	Short Message Service			
SOP	Standard Operating Procedure			
SSL	Secure Sockets Layer			
STS	Sub Transmission System			
TPWODL	TP Western Odisha Distribution Limited			
T&D	Training & Development			
ТВЕМ	TATA Business Excellence Model			
тсос	TATA Code of Conduct			
U/G	Under Ground			
UPS	Uninterrupted Power Supply			
VPN	Virtual Private Network			
WESCO	Western Electricity Supply Company of Orissa Ltd			

Background

Pursuant to the direction of Honb'le Commission vide suomotu proceeding in case no 82/2020 dated 28.12.2020, para 53, TPWODL is supposed to file the Annual Business plan w.r.t. Employee cost, R&M, A&G expenses for the year FY 21-22 within forty five days (45) from the date of effective date i.e. (1.01.2021). Accordingly, the Company had submitted the ABP for O&M expenses plan before Hon'ble Commission on 11th Feb-21. The submission was made through an additional submission to the ARR of Wesco utility vide case no.75 of 2020 with a view that the matter could be heard along with ARR on the scheduled date & time (which was scheduled to be heard on 15th Feb-21).

During the course of hearing on 15th Feb-21, Hon'ble Commission has also instructed to restrict the presentation to the extent of original filing as because the objectors to the main petition might not be aware about the additional submission of the new licensee.

Now Hon'ble Commission in the RST order dt.26.03.2021 has observed as follows;

Para 403 In the meantime TPWODL and TPSODL came into operation w.e.f. 01.01.2021 which is later than the submission of the ARR petition for FY 2021-22. In terms of their respective vesting order, TPWODL and TPSODL have also made additional submission with regard to the O&M cost for the current FY 2020-21 and further projections for FY 2021-22 beyond the ARR projections as per the petitions submitted on 30.11.2020 by the utilities WESCO and SOUTHCO. The Commission in such a scenario will consider such additional submission towards Annual Business Plan of TPSODL and TPWODL and hear the same from different stakeholders before approving the same. In the present order the Commission has taken into consideration the proposal made in the original ARR petition for FY 2020-21.

Due to the change scenario for improving the reliability of power supply, the operation and maintenance cost of the company would undergo some changes on account of new recruitment, additional A&G cost towards MBC, IT automation, Energy Audit, Insurance. Similarly, under R&M, AMC for network assets, repair of Govt funded assets etc. related costs needs to be increased to certain extent.

1. EXECUTIVE SUMMARY

TP Western Odisha Distribution Limited (TPWODL) is incorporated as a joint venture of Tata Power (51%) and Odisha Government (49%) on the Public-Private Partnership (PPP) model. TPWODL took over the license to distribute electricity in the central part of Odisha, which was earlier served by erstwhile WESCO, through a competitive bidding process. TPWODL's utility business shall be governed by the provisions of license issued by Honb'le OERC for distribution and retail supply of electricity in Western 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).

TPWODL license area is spread over a geography of 48,207Sq.Km and serve the registered consumer base of 2.07 million. TPWODL procures power from GRIDCO, which is a state owned company, engaged in the business of purchase of electricity in bulk from various generators located inside Odisha and the state share of power from Central generators for supply in all power distribution utilities, including TPWODL. It receives electrical power at a sub transmission voltage of 33KV from **O**disha **P**ower **T**ransmission **C**ompany 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 17 Divisions, 57 Sub-division and 202 Sections, which manages the commercial, and O&M activities in order to serve its consumer.

In FY 19-20, against the total input energy of 7524 MU, billed energy was 6115 MU resulting into billing efficiency of around 81.26%. Out of this 6115 MU billed energy, Approximately, 43% of the energy billed in a particular year is supplied to Domestic Consumers while EHT and HT Consumers contributing to 26% and 31% of the total billing (in terms of units) respectively. In terms of Revenues, Domestic Consumers contribute to around 34% while EHT and HT Consumers 33% and 33% respectively.

During the initial understanding, it is observed that the inherited power distribution network is not compliant up to requisite statutory standards at most of the places and it is in a dilapidated state. Distribution lines are lengthy and most of the feeders are of radial nature. Even some of the span have under-rated / uneven sized conductor thus compromising the circuit capacity as per the lowest capacity of the conductor available in the network even if for a small section. O/H network have worn out conductors, poor Earthing, damaged / tilted poles/ accessories resulting into abnormal sag. As a result, safety clearances are compromised at many locations,

which possess threat to the safety of employees, public at large and animals. Similarly, 33/11KV Primary substation and 11/0.415 kV Distribution Substations are in very deteriorated condition. In Primary Substations few faulty equipment exists which are either bypassed or removed and supply is being managed without proper switching devices resulting into escalation of faults / cascade tripping to upstream devices thereby impacting the large consumer base. In Distribution Substations the Air Break Switch, HG/DO Fuse units, LV Protection devices and DC system are not functioning at most of the locations. Apart from this, earthing system in Primary Substation, Distribution Substation and Lines are in deteriorated condition. Fuse arrangements installed at Distribution Substations are installed at lower height and exposed thereby creating a potential safety hazard for human being and animals. It is very hazardous for employees to work on such system.

33/11 kV Primary Substation's (PSS) boundary walls are broken and there is no fencing to the outdoor switchyards. This makes the PSS unsafe for stray animals and any unauthorized entry. Apart from this, earthing system is in a very poor condition; many breakers and CTs are bypassed resulting into non- availability of basic protection system.

One of the burning problem observed is the presence of a large number of non-metered and defective meters resulting into poor billing efficiency. Additionally, Meters installed at consumer premises are of mix type such as electro-mechanical meters, consumer owned meters, electronic meters etc. Meter sealing to ensure revenue protection from unauthorized access to electricity is another area, which needs to be emphasized.

The level of hygiene and sanitation at the work place is appalling. Office buildings are very old which may needs to be strengthen. Infrastructure of the offices requires revamping to ensure conducive work environment, additional space for new employees and visiting consumer.

To address the above key challenges and to safeguard the assets along with consumer interest, substantial investment is required. This will enhance the reliability, reduction in AT&C losses, safe environment and efficiency improvement along with customer satisfaction.

<u>1.1 Major issues</u>

The major issues associated which are inherited from erstwhile WESCO and are mentioned below:

A. Dilapidated network and Safety:

TPWODL has taken over the assets of erstwhile WESCO on "as is where is" basis. These assets are not in good operating condition and in a large number of cases, the required safety equipment are not in place. Further, the network is in dilapidated condition and not compliant to statutory guidelines and poses threat to safety of employees, public and animals at large.

One of the major reason is absence of structured preventive maintenance and systematic investment for past many years. The overall overhead network is radial in nature having 11KV circuits with average length of 90-100 kms and 33KV circuits 60-80KM. 33KV & 11KV circuits have underrated, uneven sized & worn out bare conductors with extremely long span lengths. The LV circuits are also very long and radial. Both HV & LV circuits have a large number of damaged /bent/tilted poles, poor workmanship in jointing & jumpers compromised safety clearances and are devoid of guard wires on road crossing. 11/0.415 kV Distribution Substations (DSS) have no fencing the LT side fuse box/MCCB box are missing, earthing system is in very bad condition, most of the AB switches are bypassed, DD/HG fuse are bypassed/broken. 33/11KV PSS do not have compound wall/fencing, poor earthing system. HT switchgear equipment like Circuit Breakers, Isolators, CT, PT, LA are either non-functional or not provided. Relay control panels are either bypassed or non-functional. The protection panels are not maintained properly.

As a result of above, the interruption at 11KV & 33KV feeder level is too high with respect to present Indian utility standards.

Further, due to lack of maintenance, failure rate of Distribution Transformer is very high at 5.8% of total Volume. Year wise DT failure data is as below,

DTR	FY 2017-18	FY 2018-19	FY 2019-20	April -2020 to DEC-2020
Up to 315 KVA	3197	3200	3124	2759
500 KVA	36	22	26	21
630 KVA	4	3	2	3
750 KVA	1	0	3	0
1000 KVA	3	4	1	4
Total	3241	3229	3156	2787

B. Safety Statistics:

The Scarce resources and lack of preventive maintenance has led to delay in response on Safety Hazards reported by Public and employees

	YEAR WISE FATAL/NON-FATAL ACCIDENT REPORT						
	Human		Total	Animal			Total
Year	Fatal	Non- Fatal	Human	Fatal	Non- Fatal	Total Animal	Victim
15-16	22	8	30	10	0	10	40
16-17	12	6	18	5	1	6	24
17-18	10	0	10	5	0	5	15
18-19	12	1	13	3	0	3	16
19-20	20	6	26	7	8	15	41
20-21							
upto Jan-21	11	6	17	10	2	12	29
Total	87	27	114	40	11	51	165

Due to non-availability of required PPE, there are several incidents occurred while carrying out the operation and maintenance activities on network. Similarly the desired testing tools are not available resulting sever incidences. The available PPE's and testing instruments are not up to the standard and not maintained

C. High Aggregate Technical and Commercial (AT&C) Losses

The reported AT&C Losses for FY 2019-20 is 28.56% with Billing Efficiency of around 78% and Collection Efficiency as 91.6%. The problem is compounded with tariff is not cost reflective as it is based on lower than the actual AT&C losses. It is consequently required that the actual AT&C losses be expeditiously reduced to ensure a commercially viable Distribution Utility.

One of the major reason for low Billing Efficiency is leakages in meter reading process clubbed with inaccurate or no recording of reading in meter due to faulty/no meter in approximately 3.53 lakh.

D. Limited Customer Touch Points and Inefficient Processes:

Limited customer touch point and non-availability of dedicated work force for timely customer service delivery lead to customer dis-satisfaction as Customer has to spend time, money and effort in visiting the office for registering basic complaints. Further, insufficient avenues for payment of electricity bill has compelled the company to do the door-to-door collection.

The process related with New Connection, Complaint Processing, Bill Correction, Attribute Change are currently being processed manually. This practice leads to undue delay in processing of customer request, updating of customer payment/record, and reconciliation of material and inconsistency of data in system.

Customers need to do follow up visits for processing or query about the status leading to customer dissatisfaction. Therefore, in line with the motto of "Mo Sarkar" initiative of GoO needs to be dovetailed with existing regulatory guideline aiming to ease out the process value chain related with Time, Cost and Procedures as new connection is the beginning of customer life cycle and prime reflection of service delivery by DISCOM. Further, processes also need to be reviewed for enhancing the service delivery during customer life cycle.

Delay in assessment, rectification of in-correct bills, and inordinate delay in replacement of defective meters is resulting in provisional billing for long period. Further, defined recovery process was not followed judicially, and connections are not disconnected in time on account of non-payment has led to accumulation of Significant Arrears.

E. No IT Infrastructure:

Presently there is no captive IT resources and infrastructure available in TPWODL. In the absence of formal IT department, local vendors as and when required manage all IT facilities.

As of now billing and collection process is managed through third party solution managed by OPTCL/GRIDCO DMU team. Mailing system is outdated and most of employees are using Gmail (business) or personal email ID is created on Gmail, Yahoo etc.

F. Human Resource:

The most significant challenge at TPWODL related to Human Resource are

- a. An aging workforce.
- b. Lack of required skill set.

- c. Shortage of Competent Manpower.
- d. Pending legal cases and non-compliances.
- e. Poor Gender Diversity.

a. An aging workforce

TPWODL will inherit all existing manpower of WESCO in line with license agreement. Presently, there are 479 executives and 1883 non-executives are there with average age is 44 years. Non-induction of any new manpower during last one decade has increased the average age. Representation of women employees are very less at 5%. In executive cadre, more than 16.5% employees are in age range of 54-60 yrs. while for non-executives it is at 25% (approx.). These employees are working in areas of O&M, Commercial, finance, administration etc. The employees strength mentioned below is inclusive of erstwhile WESCO and Tata Power.

b. Lack of required skill set

In absence of structured Training and Development program, employees have limited option to enhance their competency level in this fast-changing business environment. Competency enhancement in terms of internal job rotation either horizontal or vertical movement is also not visible. Fresh competency also did not enter to workforce during last one decade and this has destabilized the workforce demography at WESCO including technical competency. For example,

in technical cadre (Non-Executive), more than 30% employees are less than 10th qualified. There are around 500 ITI technical employees (Non-Executives) but only few (approx. 40-50 may have supervisory license). This indicates poor state of technical competency. More so, in order to enhance network reliability, network safety, fast resolution of operational and commercial complaints, many new functions like Power System Control Centre (PSCC), Quality, Engineering, Consumer services, safety, security, CSR, Training & Development etc. needs to be started. In addition to this, many new technologies are to be adopted for better control and faster resolution of issues like SAP, SCADA, Mobile Apps, and GIS etc. for which appropriate competencies are required. Hence, it is essential to upgrade competency level of existing employees to work in new functions and on new technology platforms.

c. Shortage of Competent Manpower

On manpower font, acute shortage of manpower is very much visible and reason of massive employee dissatisfaction. At Sub- Division level mostly, one single officer is working as SDO and SDM simultaneously. In Grid operation also, five or six manpower available against approved / designed number of nine. WESCO was not allowed to induct fresh manpower during last ten years. Total approved manpower as per vesting order is 4209 while presently there are 2200 (approx.

includes contractual manpower). This establish the massive shortage of manpower at WESCO and real challenge for seamless operation.

d. Pending legal cases and non-compliances

It has been reported that several legal cases involving commercial, HR, contractual and other issues are pending before various courts/forums (supreme court/high court/APTEL/NHRC/OHRC/OERC/NCLT/Lower courts/state and district consumer commissions/ Labor Tribunal/Permanent lock Adalat/ombudsman etc.). Most of the pending cases are filed against the licensee. In some cases involving major financial as well policy decisions, cases are filed by licensee against adverse decision of courts/forums/tribunals/authorities.

The pending commercial and contractual matters involve financial involvement of around Rs.120 Cr. on the erstwhile WECSO utility. Majority of cases pertain to assessment u/Sec. 126 of the Electricity Act, 2003, compensation against electrocution accident / claims of consumers / contractor / service providers, Statutory Authorities and HR issues.

Besides above, cases relating to regulatory assets involving financial implication of Rs. 4500 Cr., (Case won by erstwhile WESCO, NESCO and SOUTHCO before ATE) is pending before The Honb'le Supreme Court for decision.

Regular monitoring of cases and proper handling of the case matter has definite positive impact in terms of financial gains to the tune of around Rs. 30Cr. This gain has also been reflected in revenue generation.

Major challenge is growing number of cases in respect of electrocution accidents which are pending before NHRC/OHRC and civil courts.

Show cause notice given by DG GST Intelligence Bhubaneswar on total other Income (i.e open accesses, meter rent, DPS, reliability charges, theft collection & bad debts recovered) as per the Financials for the period from April 14 to June 2017 for non-deposit of service tax as per proviso of service tax act, the matter was heard by GST & CX Commissionerate, Rourkela and in his order dt 30.12.2020 raised the demand of Rs.39.40 Crore u/s 73(2) read with provision to Sec. 73(1) of Finance Act 1964, with recovery of interest u/s 75 of Finance act 1994, and also imposed penalty of Rs.39.40 Crore under Section 78 of the Finance act 1994.

e. Poor Gender Diversity

On Gender diversity, overall ratio is at approx. 5%, which is very low. It is essential to ensure adequate representation of women employees in the workforce across all cadre.

G. Poor Civil Infrastructure:

TPWODL have offices in all the five circles and subdivisions. Some of them are owned and others are on rented property. The office space is currently crowded and haphazardly planned for seating arrangements, moreover, most of the circulation area has been occupied with files, documents etc.

The furniture available at offices are very old and are in non- serviceable condition. New furniture planned to be procured for various offices, Customer Care Centres, Call Centres, etc.

Currently the stores are located centrally at Burla, Bolangir, Rajgangpur and Kesinga. The stores are in dilapidated condition. These stores need urgent refurbishment and proper indoor stacking arrangement.

Due to shortage of fund and staff, the administrative activities such as housekeeping, deployment of Security at all offices are not being carried out. Hence, the offices are not maintained up to the mark.

H. Governance challenges:

Currently process related with Material Management, Maintenance Management, Meter Installation, Complaint Management, Customer services and financial management are being practiced without standardization. These practices leads to undue delay in processing of customer request, updation of customer payment / record, reconciliation of material and inconsistency of data capturing. It is proposed to carryout extensive business process re-engineering (BPR) in all areas of the distribution business along with automation to meet the multiple objectives of enhancing efficiency, productivity, consumer delight and governance practices.

TPWODL has identified the most critical issues across the spectrum through in-depth study and has worked diligently to propose the most suitable and feasible action plan to address the issues. It has also prioritized the list of measures with the most impactful measures taking the highest priority for implementation

1.2 Key focus areas

A. Network refurbishment and Structured Maintenance for enhancing Safety:

To Improve Safety of public through refurbishment of lines & Distribution Substations through structured planning so also as to adhere statutory requirements. Improving response time and frequency of interruptions by following good preventive maintenance practices and putting up a dedicated team.

It is proposed to carry out technical survey of the 33KV & 11KV feeders to identify defects and carry out refurbishment to improve the reliability performance. Refurbishment of feeders will comprise of placement of replacement of dangerous towers/poles, provision of intermediate towers/poles, replacement of worn out / undersize conductor, replacement of other defective accessories, and strengthening of earthing of towers/poles, installation of HT spacers in high sag lines. The refurbishment will also involve restoration of safety clearances in line with existing regulations. Similarly, refurbishment of 33/11KV Primary Substation and Distribution Substation is also planned to improve the safety of the human being & animals.

B. Aggregate Technical and Commercial (AT&C) Loss Reduction:

In FY 20 – 21, Target of AT&C loss is fixed to 28.56% and TPWODL is striving to achieve this target by taking various measures. Reducing losses by replacing defective/faulty meters (Approx. 3.53 Lacs), testing of meters and installation of Smart Distribution Transformer (DT) meter is key indicator. Meter procurement and installation at faster rate is one of the priority areas. This will help in reducing provisional billing and ensure correct recording of consumption.

Further, for ensuring timely and accurate meter reading, it is proposed to shift from existing flat rate contract to performance based contract for MBC (Metering, Billing and Collection) in order to enhance the productivity of meter readers, billing and collection. Further, introduction of Optical Character Read (OCR) based reading will ensure correctness and quality of meter reading and billing.

In addition to above, performance based contract for collection will help in enhancing the realization of current as well as old dues. Further, strategizing to motivate customers for payment either at Counter or On-line in order to systematically shift from Door to Door collection to other mode of payments like Payment Counter, Online Payment, and Mobile Wallet etc.

Similarly, in rural area, services of Self Help Group (SHG) will be enhanced for meter reading, collection and promoting energy conservation initiatives.

C. Introduction of Customer Touch Points and Customer Centric Processes:

It is proposed to establish new/upgraded existing payment cum customer care centres at Division/Sub-Division/Section with better facilities for enhancing customer experience. These centres will be manned by dedicated staff in order to provide single window solution to customers.

Introduction of new payment avenues will help in increasing payments at counters clubbed with dedicated recovery marshals at section level will help in reducing the accumulated live as well as disconnected dues through focused collection/recovery drives. Further, to reduce the dues, dispute

redressal drive will be initiated for rectifying the bills or resolving the customer queries.

Call Centre infrastructure is proposed to be upgraded to adequate seats for improving the connectivity, registration of complaints like No current, Billing error etc. and request like New connection, Attribute change etc., providing status and query response over the call. This will help in providing easy access to utility for complaint redressal as well as new connection etc. Additionally, proactive communication through SMS during various stages like Bill Generation, Complaint Registration, and Due Date Reminder etc. is also proposed.

In addition to above customer touch point, the organization structure and processes will be reviewed and revised to enhance the customer centricity, efficient and effective process execution and control leading to enhancement in customer experience during the life cycle from New Connection to disconnection.

D. Technology adoption:

Key technological interventions to manage Customer Care, Meter to Cash processes, ERP and SCADA are planned to be implemented in phased manner. This will be done through IPDS scheme, which is underway and other reinforcement. One of the priorities is to set up secured and robust IT infrastructure at TPWODL, which is missing at this time. Similarly, other interventions like Smart metering, Analytics, Smartphone based spot billing are being considered to unleash full potential of technology and reap the consequent benefits. TPWODL is also planning to establish reliable communication network that will act as a backbone for other technological initiatives. This will help in improving the process efficiency and ensure better services to our end users.

E. Human Resource Plan:

A consolidated Human Resource Strategy (Short term and Long term) is being developed keeping in mind existing challenges and future expectation towards building an organization of engaged workforce, structured talent management, a culture of high performance and excellence apart from creating a conducive Industrial Relation atmosphere.

Progressive employee centric people policies shall be the backbone of TPWODL towards ensuring highly engaged and high performing workplace. TPWODL will be exploring and adopting best practices & policies with the Tata group including its other distribution.

TPWODL with the focus on enhancing diversity in its workforce and women empowerment through various policy guidelines. Keeping in mind continuous learning and acquiring niche skills, TPWODL shall be implementing training & development policy for continuous competency enhancement of existing workforce. Use of online e-learning module shall be encouraged to ensure maximum participation of its employees.

Identification and nurturing of high potential employees shall be priority for management towards

ensuring successors in pipeline. Every year, all critical position shall be identified along with high potential employees. Potential of every employees shall be assessed, and training needs shall be identified through gap analysis. Specific program shall be designed and executed for their competency enhancement.

Structured employee grievance redressal mechanism shall be set up with an objective of speedy resolution of employee issue and building a culture of care across the organization.

F. Strengthening of Civil infrastructure:

To ensure safe, hygienic, well ventilated and spacious working environment for employees as well as consumers, various proposals are recommended like renovation of existing buildings to enhance the additional seating capacity for employees; renovation of old buildings to enhance the structural strength and enhance the life of the buildings; renovation of the stores to improve the safety & security of the material kept inside the badly damaged sheds / roofs. Further, it is also planned to provide additional workstations, conference tables to ensure employee friendly work environment.

The ultimate goal of DISCOM is to provide reliable, quality and uninterrupted services to the Consumers at optimal tariff with efficient customer services delivery.

Phase manner linkage to be along with vesting order reference.

The key objectives of the proposed sale of the Utility to a prospective purchaser were as follows:

- To bring about improvement in operational efficiencies and to reduce overall Aggregate Technical & Commercial ("AT&C") Losses, and ease the burden of inefficiency on its consumers;
- ii. To improve the quality of service to its consumers, including improving the quality, security and reliability of the supply system and to make available electricity at a competitive price;
- iii. To bring in effective and professional management of the Utility through hiring and deployment of efficient, experienced and seasoned senior staff and distribution experts;
- iv. To effectively plan and effect the collection of Past Arrears from consumers, in lieu of an incentive;
- v. To ensure necessary capital investments to support future demand growth, improvement to the distribution system, and leverage on technology to bring in interventions in the metering, billing and collection procedures;

vi. To ensure consumer indexing, and in implementing robust energy accounting and auditing processes into the functioning of the Utility;and

To bring in and implement best practices in distribution & retail supply to enhance productivity of its employees and enhance growth and opportunities in the sector

1.3 OPEX Expenditure

Brief summary of OPEX with particulars is appended:

EMPLOYEE EXPENSES							
Cost Heads	Description / Number	Proposed for FY22 (Rs Cr)	Remarks				
Salaries, Wages, Allowances & Benefits	Existing 2418 employees cost	295.23	Salary / Wages for existing employees				
Contribution to / Provision for P.F, Pension	To be deposited in PF, Pension Trust	132.31	Employee benefit.				
Arrears of 7th Pay Commission	Shall be paid in line with GoO directives.	38.31	Old arrears.				
New Employees & deputation850 new employees and others		82.19	New employees and others.				
HR service expenses (Transfer, Recruitment, Joining, L&D, Engagement, Insurance, CLA, Audit compliance etc.		4.00	Different HR services.				
Training & Training & Development Training expenses for employees in the area of safety, PSCC, GIS, SAP, IT, maintenance process and new technology		5.00	Employee development.				
Insurance Employee medical / accident insurance		14.70	Employee benefit.				
Outsource in areas of MBC and consumer services		52.81	Outsource charges.				
Total		624.55					

- A. Since 2011, there has been no recruitment for erstwhile WESCO in spite of large number of reduction due to retirement/death/separation.
- B. As mentioned in vesting order para 45 (a), table no-6, total 4209 manpower will be deployed.

In FY-21 approved employees cost by OERC was Rs.361.02 Cr. We proposed Rs. 624.55 Cr. for FY-22 considering proposed new 850 no's of employees as mentioned above.

As per vesting order case no: C-82-2020 dated 28.12.2020, total manpower strength will be 4209 as below,

Type of Employee	Total Number of Employees		New Employee to be added in FY22	New Employee to be added FY23	New Employee to be added FY24
Executive	1826	535	700	400	191
Non- Executive	2383	1883	150	150	200
Total	4209	2418	850	550	391

Repair and maintenance expense

Description	Proposed Cost for FY22 (Rs Cr)	Remarks
33KV Grid Substation and Lines- AMC	16.00	Annual maintenance contract for maintenance of 33KV substations and lines along with maintenance vehicles, safety tools across all 17 divisions for maintaining of 280 no's 33KV Grid Sub-stations, Power Transformer and 1023 KM of 33KV line on yearly basis.
33KV Grid Substation and Line -Material	20.00	Consumable material like poles, conductor, insulator, jointing kit and other maintenance related material for 280 no's 33KV Grid Sub- stations, Power Transformer and 1023 KM of 33KV line on yearly basis.
11KV Distribution sub Station ,Lines and LT equipment - AMC	131.00	Annual maintenance contract for maintenance of 11KV and LT equipment's along with maintenance vehicles, safety tools across all 202 no's of section for maintaining of 64500 no's of DT's and 44297 CKT KM of 11KV line, 53837 CKT KM of LT line, FCC on yearly basis.

Description	Proposed Cost for FY22 (Rs Cr)	Remarks
11KV Distribution sub Station ,Lines and LT Equipment and EM -Material	39.00	Consumable material like poles, conductor, insulator, jointing kit and other maintenance related material for 202 no's of section for maintaining of 64500 no's of DT's, 44297 CKT KM of 11KV line, 53837 CKT KM of LT line, FCC on yearly basis
Safety Expenses	2.25	Consumable safety related material and repairing of safety tools & tackles etc.
PSCC, SCADA, GIS	2.04	Administration & communication expenses, consumable material for existing ODSSP SCADA enabled substations.
Transformer and Other equipment Repairs	8.00	Repair charges for approx 1000 no's of DTR and PTR's.
Civil repairs & Maintenance	10.00	Repairs of civil related works along with materials.
IT related Expenses	3.00	Communication charges, license charges, repair charges for IT related equipment.
Store related Material Handling charges	3.00	Deployment of crane/hydra and manpower for loading/unloading and shifting of material within store and from stores to site.
Total	234.29	

In FY-21 OERC approved R&M cost of Rs. 92.24 Cr.

As per vesting order Section-53 (d) states "with regards to R&M expenses, the Commission shall allow in the Aggregate Revenue Requirement, R&M expenses incurred on the existing assets transferred to TPWODL as well as assets created out of grants which are not reflected in the books of WESCO utility subject to prudence check by the Commission, as per existing practice".

The total estimated expenditure planned for Repairs & Maintenance (R&M) is Rs. 234.29 Cr as shown in above table. Network needs urgent maintenance related activities along with huge quantum of material. Preventive maintenance is to be started at the earliest. TPWODL felt to start AMC contract immediately for 11KV, 33KV line maintenance.

Asset value mentioned in the vesting order is Rs. 1885 Cr (own asset). TPWODL have taken over and maintaining asset commissioned under government approved schemes valuing of Rs. 2527

Cr (RGGVY – Rs. 1366 Cr, ODSSP – Rs. 930 Cr, DDUGJY – Rs. 138 Cr and IPDS – Rs. 93 Cr) for which work has been completed and taken over by TPWODL.

TPWODL will maintain total asset value of Rs. 4412 Cr. for which TPWODL propose Rs. 234.29 Cr as R&M expenditure in line with the R&M entitlement. Moreover Rs. 100 Cr government asset are under verge of completion by March 2021 which will be taken over and maintained by TPWODL.

Administrative and general expenses

Particulars	Proposed cost for fy-	Remark
	22 (Rs in Cr)	
Property related expenses and insurance Communication	12.52	 a) Insurance charges of Rs. 8.00 Cr (0.18% of total asset) is planned to cover b) Incremental rental charges due to additional setup c) Licensee fee – Rs. 1.90 Cr Additional charges due to mobile and IT requirement
Professional charges	9.14	Delta increment
Conveyance & travelling	9.35	Additional cost for movement of officers for carrying out day to day work
Meter reading, billing & collection (MBC)	55.22	Additional cost of Rs. 20Cr (Approx.) to improve and streamline the coverage area under Meter reading, Billing & collection (MBC) and arrear recovery. Moreover, we are proposing from bimonthly to monthly billing cycle in rural area for approx. 8 lacs consumers
Expenses for advertising, watch	21.53	Additional expenses increases

Annual Business Plan (ABP) for FY 21-22 towards O&M Expenses				
Particulars	Proposed cost for fy- 22 (Rs in Cr)	Remark		
& ward, electricity charges, vigilance, fees, books printing, customer care services, training and misc.		due to strengthening of vigilance activity, additional customer care centre, and better customer service delivery		
Material related expenses	0.82	Taxes and duties		
AMR, energy audit, prepaid metering, meter testing lab, media	11.32	Service charges for AMR, prepaid metering, meter testing lab, metering activity, energy audit requirement and cess on building & construction and installation (@1%)		
House keeping	5.00	Maintaining proper hygiene and upkeeping of guest houses, offices, customer care centres & call centres.		
Call centre	0.50	Maintenance of call centre.		
Security	2.50	To deploy security at offices, collection centres, guest houses and other important areas.		
Grand total	129.51			

In FY-21 OERC approved A&G cost of Rs. 52.80 Cr. We propose Rs. 129.51 Cr. Which are minimum requirement to start the improvement process of MBC, call centre, housekeeping, AMR, energy audit, meter testing lab, vigilance activity.

1. It is submitted that the estimated OPEX cost have been worked out based on Zero based budgeting approach and the details of the same is provided in the relevant section.

2. It is submitted that O&M expenditure, at-least in the initial years, need to be allowed at actuals considering that significant expenditure is required to be incurred under each of the

three heads (Establishment Costs, R&M and A&G) in view of the years of neglect of network and maintenance activities.

The allowance of increase in OPEX cost is proposed to be incurred with due prudence and through the norm stipulated by the Commission.

The expenditure estimated for R&M and A&G for the period of 3 month (01.01.2021 to 31.03.2021) is within the approved budget of erstwhile WESCO for FY-21.However the staff expenditure is expected to increase by Rs 6.0 Cr.

2. EXISTING SYSTEM

2.1 TPWODL Profile:

TPWODL, a Joint Venture of Tata Power Company Limited and Odisha Government, commenced its power distribution operations in Western Odisha area from 1st Jan 2021. TPWODL is responsible for supplying power supply to 2.07 million customers comprising of industrial, commercial and residential customers. TPWODL operational area is spread across 48,207 Sq.KM covering nine revenue districts of Western Odisha, namely Sundargarh, Jharsuguda, Sambalpur, Deogargh, Bargarh, Sonepur, Naupada, Bolangir and Kalahandi. For effective operations, the entire license area is split into five circles, which are further divided into 17 Divisions, 57 Sub divisions and 202 Sections. Most of the commercial and technical activities are managed at sub-divisions and sections level, which are interface points for customers and utility.

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

Circle Name	Division Name	Area in Sq. km	Sub Division Name
Sambalpur Circle	SED – SAMBALPUR	2380	SDO-I, AINTHAPALI, SBP
			SDO-II, KHETRAJPUR, SBP
			ELECTRICAL SUB DIVISION , BURLA
			ELECTRICAL SUB-DIVISION , HIRAKUD
	SEED – SAMBALPUR	4400	SDO-I, HUTAPARA
			SD0-II, DHANUPALI
			SDO-RENGALI
			SDO, RAIRAKHOL
	JED – JHARSUGUDA	990	SDO No-1, JHARSUGUDA
			SDO No-2, JHARSUGUDA
			SDO, KUCHINDA
	BED – BRAJRAJNAGAR	1200	SDO,BRAJRAJNAGAR
			SDO,BELPAHAR
	DED – DEOGARH	2780	SDO,DEOGARH
Rourkela Circle	RSED – ROURKELA	1980	SDO No –I, ROURKELA
			SDO No -5, ROURKELA
			SDO No -7, ROURKELA
		1020	SDO No -2, ROURKELA

Annual Business Plan (ABP) for FY 21-22 towards O&M Expenses				
Circle Name	Division Name	Area in Sq. km	Sub Division Name	
			SDO. No-3, ROURKELA	
	RED – ROURKELA		SDO No – 4,ROURKELA	
			SDO No -6, ROURKELA	
	SED – SUNDARGARH	3920	SDO,SUNDARGARH	
			SDO, UJALPUR	
	SED – RAJGANGPUR	2950	SDO-I,RAJGANGPUR	
			SDO-II, Rajgangpur	
			SDO,KALUNGA	
			SDO, KUARMUNDA	
	BED –BARGARH	2060	SDO No-I, BARGARH	
			SDO No-II, BARGARH	
			SDO,BHATLI	
			SDO,BHEDEN	
Bargarh Circle			SDO,ATABIRA	
			SDO,BARPALLI	
	BWED – BARGARH	3830	SDO,PADAMPUR	
			SDO,PAIKMAL	
			SDO,SOHELA	
	BED – BOLANGIR	3240	SDO – I, BOLANGIR	
			SDO – II, BOLANGIR	
			SDO,TUSURA	
			SDO,LOISINGHA	
Bolangir Circle,	SED – SONEPUR	2280	SDO,SONEPUR	
			SDO,BINKA	
			SDO, B.M.PUR	
	TED – TITILAGARH	3340	SDO-I, TITILAGARH	
			SDO-II, TITILAGARH	

Annual Business Plan (ABP) for FY 21-22 towards O&M Expenses				
Circle Name	Division Name	Area in Sq. km	Sub Division Name	
			SDO, KANTABANJI	
			SDO, PATNAGARH	
Bhawani-Patna Circle	NED – NUAPARA	3852	SDO, NUAPARA	
			SDO, KHARIAR ROAD	
			SDO, KHARIAR	
	KEED – KALAHANDI	4790	SDO NO-I, BHAWANIPATNA	
			SDO NO-II, BHAWANIPATNA	
			SDO, NARLA	
			SDO, KESINGA	
	KWED – KALAHANDI	3195	SDO, JUNAGARH	
			SDO, DHARMAGARH	
			SDO,CHARBAHAL	

2.2 Network Condition

A. No Current Complaints:

At present customers of TPWODL are visiting to their respective Division / Sub Division / Section office for registering supply related complaints. However, while visiting to these offices, Customers have to spend time, money and effort in registering basic complaint like No Power Supply, Billing issues etc. Considering the vast geographical area, it is difficult to attend the complaints during night hours and even this becomes terrible in rural area. This leads to increase in restoration time and customer dissatisfaction as well. Moreover, In Division/Sub-Division/Section Office, no dedicated official is available for customer interaction. At section office, limited manpower available to attend these complaints and therefore customers have to rely on private electricians which resulted into unsafe act from customer part.

Apart from the consumer footfall to these offices, Customer can also register their complaints through Call center. However, due to limited lines, customers are not able to connect to the call center for registering the complaints.

B. Poor Maintenance Management:

There is acute shortage of manpower for operation and maintenance of the network. There is no structured, and documented maintenance system in place for feeders and substation equipment. There is no preventive or condition based maintenance program for timely identification and removal of defects to maintain the efficiency of the equipment and for planning the replacement actions. Likewise 33KV feeders, there is no dedicated 24X7 breakdown crew to attend breakdowns and preventive maintenance crew for upkeep of substations. As a result, the sub-division officer has to assemble manpower both from HT Maintenance and sections (sometimes from OEMs and contractors) to attend breakdowns. At times, it becomes difficult to restore power supply if the breakdown happened during odd hours resulting into delays and customer dissatisfaction.

Since there is no structured maintenance system, and testing of equipment is not done, the internal health of various power distribution equipment is not known. Many of the equipment especially power transformers are more than 25 years old. The physical condition of some equipment is also reported to be bad.

As a result of above, the interruption at 11 kV feeder level is too high writ present Indian Utility standards. The table below gives a snapshot of 33 KV & 11 kV feeder tripping recorded at the 33/11 kV Substations in different Circles.



In one year total tripping are at a staggering 2.90 Lacs

C. Poor Health / upkeep of Transformers

Many of the transformers are more than 25 years old and have extremely low insulation resistance

values. Due to non-availability of Capacitance and Tan Delta measurement equipment, it is not known if the transformers are on the verge of abrupt failure. Similarly, there is no dissolved gas analysis of furan analysis being done on power transformers, which can help to check incipient faults.

The failure rate of distribution transformers is more than 5.8% as of date. The DTs are repaired by local repairers and quality of workmanship is reported to be bad. Failure of DTs cause power outage to all customers fed from the DT. It also takes time to replace faulty DT thus increasing the equipment downtime.



Trend as shown in above graph suggests that there is decreasing trend in Distribution Transformers failure but still it is very high figure which needs to be brought down to less than 1%.



Failure rate of power transformers is not that high but many power transformers are ported to have extremely poor insulation resistance values increasing the possibilities of their abrupt failure in case if remedial actions are not taken. There is no hot standby power transformers available for

replacement in case of exigency.

Failure of power transformer results huge area outage along with major drawback in customer satisfaction. The failure rate of power transformer is also significantly high and never shows a gradual decrease showing major operational inefficiencies. It should be taken care of that the failures of DT and PTR results in huge OPEX which is again burden on and utility and ultimately on the stakeholders

D. AT&C Loss

Major reason for high AT&C losses are listed below:

a) Defective Meters:

No Meter, Mechanical Meter in network lead to inaccurate or no recording of meter reading. Currently, 3.53 Lakhs meter need to be replaced in phased manners details are as follows:

- 1. 2.88 Lacs defective meters and 0.65 Lacs unmetered connections are leading to loss of revenue to utility due to provisional billing and erroneous bills.
- 2. Many of Mechanical Meters exist in network, which are prone to getting sluggish over a period of time during its life cycle, registers inaccurate consumption and are prone to tampering due to simple design.
- 3. Currently customer bought meter are installed during energization of connection leading to non-standardization of meters and lack of Anti tamper features.

b) Meter Reading and Spot Billing:

Meter reading is assigned to Meter reading agencies across Division /Sub-division on fixed cost basis per reading in TPWODL area and business Associates have deployed their manpower for reading. Meter reader visit consumer site for a period of 15 days i.e. from 7th to 22nd of every month, based on reading route sequence assigned to the Meter Readers. Readers capture and punch the reading in spot billing application, which prints and delivers the spot bill to the consumer during the same visit.

In this process, the gaps are listed below:

- Constraint of existing billing system allows to complete the billing cycle within 15 days beginning from 7th to 22nd of the month. Therefore, meter reader is engaged limited to 15 days in each month leading to non-adherence of monthly wages to meter reading staff.
- No robust quality check parameters are available in spot billing system prone to wrong readings/bills.

• High no. of pending assessment cases leading to non-payment of bills and customer disputes

In addition to above, customer indexing is not available leading to variety of problems like nonavailability of proper location of consumer as well as details about the Poles, Transformer etc.

c) Collection Process:

Limited payment collection counters are available at Division/Sub-Division/Section level for customers to deposit the bills. At these counters, the cashiers collect the payment in cash and cheque, thereafter, issue manual cash receipt to customers. Currently, the due dates are scheduled in short window of 7 days duration due to which long queue at payment counters during due dates is visible. This leads to customer dis-satisfaction as customer has to spend time for energy bill payment.

Beside above avenues, Business Associates (BAs) have been deployed for door-to-door collection by visiting the customer premise and issue manual receipt & system based receipt.

Following are the challenges in this process:

- Door-to-Door collection has become the norms of payment collection over a period of time. Under such scenario, customers are not inclined/encouraged to make regular payment by visiting office/using online payment avenues which otherwise is the norm of payment in utility sector. This practice lead to accumulation of arrear.
- 2. Manual cash receipt posting in system is prone to error as multiple entries at different level are being done manually. Further, it also delays the posting of credit in customer's account.
- 3. Manual reconciliation of payment is error prone leading to customer dispute.
- 4. Retention and Storage of Hard Copy Receipt occupies considerable space in Division Office.

d) Meter Testing Lab:

At present, there are 4 Meter test labs having testing bench capacity as 10 no's Three/Single phase meters at individual locations. These are located at Burla, Bolangir, Rajgangpur and Rourkela. However, all of these are in dilapidated condition. Considering the high volume of new meter requirement & defective mass meter replacement activity along with geographical constraints the existing setups are not sufficient and needs expansion. In addition, existing labs are not NABL accredited

E. Obsolete Technology:

a) Absence of new technology – GIS, SCADA and PSCC

Operational efficiencies when matched with Technological applications, results into great face change for a utility. As far as technology is concerned erstwhile WESCO had undertaken few projects under Govt. funded schemes but could not managed it well resulting into defeating the very purpose of the scheme.

Currently there is no concept of Centralized Power System Control Centre or Area Power System Control Centre along with GIS & SCADA

b) Information Technology

TPWODL is going to leverage the power of Information Technology to provide best in class services to the consumers and improving efficiency through automation of certain processes.

To run IT system efficiently, well designed data center with DR / secondary site is necessary. Accordingly, a captive data center with state-of-the-art equipment and facilities is proposed in next phase between FY22 – FY23.

Existing website of TPWODL is hosted on a service provider's environment and same needs to be migrated to the data center owned / managed by the utility for security reasons and to meet further integration needs. The current website is a static one and for enhancing customer satisfaction and engagement, this needs to be converted into responsive dynamic website, which can be accessed on variety of devices and mobile.

Apparently, many employees of erstwhile WESCO are using GMAIL as their internal communication mailing platform, which is being migrated, to Microsoft Outlook for security and integrity needs. In order to achieve seamless integration, establishing Single Sign On (SSO) and enabling windows login-based authentication for all enterprise applications, Active Directory (AD) web services would need to be in place.

A robust and reliable communication system will be the foundation to support business applications like IT, Operations, Commercial and Customer care services. Communication Network will be required to support value added services like Video applications (Video Conferencing), Enterprise services, Commercial - ERP, CRM, Payment Gateway etc. It is proposed to develop a robust, reliable, resilient, scalable and secure Communication system in a phased manner. Cases where various mission critical IT & OT applications and data traffic between (Grids/Offices) is required, communication technology shall be deployed through IP/MPLS VPN system. In digital utility there is need to strengthen cyber security while increasing digital coverage.

To enable employees to work on automated systems, various type of servers would be required for running the applications.

Metering, Billing and Collection (MBC) is the backbone for utility business functions and same will be implemented for customer relationship management, billing and other commercial processes. To enable employees to work on automated systems, front-end computing devices (Laptop and Desktop along with UPS) would be required for the employees. All these locations will be equipped with PCs, Printers, Scanners, etc.

IT systems will be implemented to provide end-to-end solutions for important business functions viz Commercial, Operations, Finance, HR and Administration etc.

To meet above-mentioned requirement, a robust IT infrastructure is required to be developed well supported by state-of-the-art equipment, capital expenditure of Rs. 42.02 Cr.

F. Human Resource:

TPWODL will inherit all existing manpower of WESCO in line with license agreement. Presently, there are 479 executives and 1883 non-executives are there with average age is 44 years. Due to non-induction of any new manpower during last one decade has increased the average age to 44 years. Representation of women employees are very less at 5%. In executive cadre, more than 16.5% employees are in age range of 54-60 yrs. While for non-executives it is at 25% (approx.). These employees are working in areas of O&M, Commercial, finance, administration etc.

G. Poor Civil Infrastructure :

TPWODL currently have offices in all the five circles and subdivisions but largely they are rented so a huge expenditure is involved in paying rent of the civil assets. Majority of the buildings are really in very bad shape and requiring maintenance / major refurbishment. Currently the Offices at Burla are accommodating office and associated services staff. The challenges exists in TPWODL using current buildings and infrastructure is to accommodate more employees and providing a hygienic, well ventilated and spacious working environment with minimum expenditure. It may also be noted that no annual repairs or refurbishment in all office buildings have been made in recent years, hence, immediate rehabilitation of the said buildings is required. Stores are also in very bad shape. Water loggings observed. It was also learnt that theft of material is also an issue in the store. Store function is far from the world-class practice of inventory management.

3. PROPOSED INITIATIVES
As we emerge in the function of TPWODL, it is obvious we need to mitigate the challenges faced by erstwhile WESCO to contribute towards Odisha by making it a world class distribution utility. In the journey towards excellence in the first financial year i.e. FY 21-22 we vow to mitigate part of the challenges mentioned in previous section by initiating few steps, which is to be discussed in coming consecutive sections.

3.1 Network Refurbishment

As discussed in executive summary and existing challenges section that major drawback is the dilapidated network which if not attended will not only impacted the reliability of power supply but also continue the accidents to happen. Therefore, a systematic network refurbishment activity would be required to initiate immediately after take over.

A. Repair / Servicing of circuit breakers:

Existing manpower is able to carry out minor repair but for major repairs, OEM service engineer is called. Until now, many of the circuit breakers were under warrantee but the same is now over and it is difficult to avail the services of OEMs during exigency. Many of the circuit breakers are reported bypassed due to defects.

TPWODL therefore intends to establish rate contract with the following circuit breaker manufacturers / authorized dealers for deputation of service engineer on call basis and procurement of circuit breaker spares for a period of three years.

Make	33 KV	11KV
AREVA	33	14
BHEL	15	33
C&G	3	6
JYOTI	3	4
E&R	7	8
EASUN REYROLLE	12	5
L&T	20	16
SCHNEIDER	56	-
TOSHIBA	3	-
GEC ALSTHOM	2	-
ABB	8	5
POPULAR	4	-
VIJAY	62	4
MEGAWIN	11	5
STELMEC	5	-
SIEMENS	-	31
Total	244	131

A. Structured Maintenance:

The most modern organizations now-a-days implement centralize maintenance planning and decentralize maintenance execution for optimization of cost, efforts, reducing reworks, and maximizing the assets life. In order to improve the maintenance management, TPWODL is planning to form centralize Maintenance Planning Group (MPG) under Sub-Transmission System with the responsibility of establishing a process driven approach for planning, scheduling, monitoring and analysing maintenance program. The Maintenance Planning Group will be centrally located and work based on outage data captured by power system control. MPG will have the following roles & responsibilities

- i. Planning, Scheduling and Monitoring of Maintenance Activities
- ii. Material and Services Management
- iii. Reliability Analysis
- iv. Technology adoption for system improvement

Maintenance planning group will establish the documented procedures for operation, maintenance and breakdown management. In addition, they will ensure the availability of annual maintenance plan for sub-transmission and distribution system (preventive and condition based) and to carry out maintenance in structured manner, they will prepare and implement the maintenance checklists for all power distribution equipment to guide maintenance activities. They will also analyse each tripping and identify the root cause analysis so that either SOPs can be revised or training can be provided depending on the action point derived from the RCA. This arrangement will help transformation of maintenance management system in TPWODL.

TPWODL will gradually implement condition based maintenance system to optimize maintenance costs and efforts. Condition Monitoring Tools such as infrared cameras for hot spot detection, Ultrasonic Equipment to detect incipient faults in indoor switchgear, Dissolved Gas Analyser to detect problems in power transformers and Partial Discharge Measurement equipment to detect problems in cable system, will help to ensure highest equipment availability.

Maintenance Planning Group will also monitor the network availability, reliability parameters such as SAIDI, SAIFI, CAIDI, by capturing and analysing outage data and plan corrective actions to improve the system reliability. MPG will also monitor health of power transformers in STS and shall plan actions to extend the life of this capital-intensive equipment.

In TPWODL, currently there are close to 2000 manpower available for operations activity after leaving aside some manpower for commercial works. We shall utilize the services and experience of the existing employees of TPWODL in their area of expertise especially FCC and Breakdown Maintenance.

For balance manpower, we need to place Annual maintenance contracts with provision of vehicles.

B. Performance Based Maintenance Contracts for LT, 11KV, 33KV feeders along with PSS and DSS equipment:

Annual Maintenance Plan along with standard checklist for inspection of LT, 11KV & 33KV feeders along with PSS & DSS equipment will be prepared and rolled out for FY-22. Condition based maintenance systems such as dissolved gas analysis, thermography and ultrasonic detection system will be used to identify the maintenance requirements. As there is acute shortage of manpower in TPWODL and also since expert manpower is not available, annual maintenance contracts will be established with expert market agencies for all 5 circles. The network shall be inspected regularly to identify the defects and attend breakdowns in quick time, and perform maintenance activities to enhance system reliability.

The Performance Based Maintenance Contract will also include 24X7 BreakdownsCrews for restoration of 33KV feeders and substation equipment.

The key deliverables of AMC are as follows,

- Carrying out condition based assessment of the system elements like overhead lines, PSS equipment (Thermo vision scanning, earth resistance measurements etc.) as per schedule.
- Reporting of defects to the concerned engineer and planning for attending to the defects on priority.
- To carry out frequency based maintenance to avoid failure of the feeder/ equipment thus ensuring higher reliability – target – 100 %
- > To carry out frequency based testing of equipment
- Reporting of MIS on regular basis in shared format
- > Attending to the breakdown within stipulated period Target- 100 %
- Attending the defective / faulty equipment in stipulated time frame ensuring NO equipment is kept bypassed
- Record updation including SLD, Equipment data in stipulated time frame
- Keeping good level of House keeping
- No Safety Violation No Incident
- Maximising GRID availability (above 98 %) thereby making system more reliable,
- > Periodical check-up tools and tackles.

Attending No current complaints at fuse call centres.

Besides, preventive maintenance activities will be performed as per the maintenance plan and schedule prepared by TPWODL.

a. Maintenance of DC system at 33/11KV primary substations

Maintenance and upkeep of substation DC system is highly specialized job. Separate maintenance contract shall be established for substation DC system comprising of battery bank and battery chargers, as the same requires higher knowledge and competency. The contractor will maintain the substation DC system once in a month and attend the breakdowns on 24X7 basis. Like Substations and Feeders, TPWODL will establish performance based maintenance contract for DC system.

This arrangement will also help to reduce number of breakdowns, reduce equipment downtime, reduce unserved energy, increase in the life of assets, reduce/eliminate accidents, and improve customer satisfaction.

b. Testing, Overhauling, and Reconditioning of Transformers

There are more than 10 numbers of power transformers and nearly 1000 numbers of distribution transformers stored in Burla stores. There are many transformers **j**/rgat site. The condition of these transformers is to be evaluated. These transformers are stored for more than 4-5 years and can't be used unless tested/overhauled/reconditioned. TPWODL is planning to procure the services of expert market agency for testing, overhauling, and reconditioning of power and distribution transformers at transformer repair workshop and sites. The activities are planned to be performed by manpower supply by the service contractor.

c. Repair / Servicing of Load Tap Changers of Power Transformers

TPWODL intends to establish rate contract for maintenance and upkeep of load tap changers through the original equipment manufacturer (OEM). The rate contract would include the hiring charges of services of competent engineer on per day basis for overhauling of tap changer to make them operational through mechanical and electrical (both local, and remote).

d. Procurement of Materials / Spares for upkeep of Network

TPWODL is arranging for periodic inspection and maintenance of 33KV feeders, 33/11KV substations, Spares for primary equipment such as Power Transformers and Circuit Breakers etc., and Secondary Equipment such as relays, battery chargers, batteries, AC distribution boards etc. to improve safety and reliability of power supply. Most of the maintenance materials are not available in stores as a result equipment downtime is high. In emergency, the material is taken

from business associates at higher cost for low quality materials.

Maintenance of feeders and substation equipment will also help to reduce the numbers of accidents / incidents.

Availability of materials in stores will help to reduce numbers of breakdowns, reduce equipment downtime, reduce unserved energy, and reduction is accidents.

3.2. AT&C Loss Reduction

A. Proposed Initiatives for accurate and timely Meter Reading:

Meter reading, billing and collection being a monthly activity with reflection to customer service delivery, it demands highest priority with respect to Quality and accurate service delivery. The same will not be feasible without adoption of technology in whole value chain of reading, billing and collection.

It is also proposed to change the billing frequency from bimonthly to monthly for approx. 8 Lacs consumers in view of standardizing ease of operation.

In order to improve meter reading, billing, collection cycle, the present reading cycle is planned to be staggered across full month in place of 15 days prevailing practice with due changes in the billing system.

To improve the quality of meter reading, reduction in provisional billing and timely generation of bills, performance based contract is proposed with following conditions in place of giving flat rate contract:

- Meter Readers will be engaged in Meter reading activity for full Month. This shall in turn ensure the entitlement of full month wages of the reading staff.
- Additional information related to Theft and other Premises conditions will be captured from site.
- All Spot Bill and Non Spot Bill customers meter reading will be catered along with bill distribution to Non- Spot billing customers.
- To reduce the provisional billing, multiple follow up reading will be ensured.
- This contract will encompasses the Door to door Collection and Bill distribution along with Meter reading & Spot Billing.

In addition to above, following initiatives are planned to be rolled out to enhance Meter Reader productivity.

• Incentive scheme & Quarterly R&R awards to each Meter reader for Exceptional/Good

Performance based on high productivity, better normal reading & less number of customer complaints.

- Monitoring of Time Stamp & GPS data of Meter Readers so that per day productivity of meter reader can be increased and gaps can be identified.
- Safety Equipment's will be provided to BA Staff such Tester, Gum for Notices pasting, Duster for cleaning meter display, rain coats & Boots in Water logging areas, Collapsible Ladder for Meter at height cases to ensure 100 % safety.
- The possibility of providing cycle/two wheelers for covering large area will be explored.

In order to reduce the issues pertaining to quality of meter reading and customer complaints pertaining to meter reading issues due to human errors, Optical Character Read (OCR) is proposed. Which will ensure high level of accuracy in existing meter reading and billing system.

Steps involve in OCR is as follows:

- 1. The photograph shall be captured by Meter Reader from meter display unit which will be automatically saved in background with converted reading results.
- 2. The converted reading will be displayed to meter reader, meter reader either accept the converted reading or punch the reading and application compares punched reading with the converted reading. If there is a mismatch, it will ask for re-punching of meter reading.
- 3. After re-entering the reading, application will generate the bill on the punched reading and flag the cases for quality check at the backend in case it is different from converted reading.

B. Self Help Group:

Govt. of Odisha (GoO) has approved Self Help Groups in Energy Franchise Agreement (SEFA) for collection of Energy Revenue and allied activates in Rural Area. In-line with GoO direction, SHG shall be explored on pilot basis for Meter Reading and Billing in addition to existing Collection activity in rural area of TPWODL.

Productivity and Quality of meter reading brought by SHG along with Collection activity will be reviewed in order to identify the impediments which comes in the way of completing the process in a timely manner. Accordingly, necessary interventions will be planned to role out in a systematic for effective compliance to the process and evaluating possibility of enhancing the scale of SHG engagement in near future.

C. Consumer Indexing:

Consumer Indexing (CI) is proposed for identifying exact location of the consumer through which

feeder, or transformer, or circuit number and or pole consumer is being supplied or what is the consumption pattern of a particular segment of a consumer. Accordingly, database of Consumers to be developed based on the outcome of door- to-door survey and the consumers related records available.

With the Help of Consumer Indexing, Route planning/ walking Sequence of meter readers can be planned which will help in more productivity of meter readers in same working hours and Collection management. Further, it will help in proper tracking and updating of un-authorized and un-registered connections in to billing database.

The information about physical condition of meter, Operational status of meter, Sealing Status/theft/ Anomalies can be identified which will result in AT&C loss Reduction.

C. Proposed Initiatives for enhancing Collection and motivating customers to make payment at counter or online:

Payment process is a monthly activity, it demands highest priority with respect to timely and accurate updation of customer payment. The same will not be feasible without digitization of complete process.

Maintaining a high cash flow in the business is one of the top priority and to ensure regular and timely collection of electricity bills through cost effective mechanism, following initiatives have been identified:

1) Regular Door to Door Collection:

Customers are habitual to make the payment after knocking by collector. Thus, door to door collections process will be continue. However, instead of issuing the manual receipt to customer which is prone to errors, receipt will be issued through cash collection application for ensuring accurate and timely posting of payment in system.

- 2) Introduction of New Payment Channels/Avenues
 - 1. Tie up with Bank and Post Office for accepting payment will be done in order to provide multiple avenues for timely payment by customers.
 - 2. Collection by visiting Gram Panchayat on defined date (after loudspeaker announcement) through Section/Sub-Division team will be initiated.
 - 3. Mobile App with option for online payment will be proposed in addition to UPI interface in Bill Format (SBM/Non-SBM) for payment.

3) Motivational Schemes for Counter and On-line payment

To reduce Door to Door collection and improve the collection at counter and enhance the online payment following motivational schemes will be introduced:

- 1. Introduction of Pay and Win scheme for Online Payment to motivate the consumers for Digital Mode.
- 2. Introduction of Reward for Payment at Counter (in Village Area) in different division on Quarterly Basis.
- 3. Tie up with wallets will be explored for providing exclusive discounts to our customers for increasing the collection through online mode.
- 4) Creating Awareness about usage of Existing Online/Wallets/Card options

To enhance the payment through online mode, awareness program in following ways will be introduced:

- 1. Display of existing Online/Wallets/Card options at Division, Sub-Division and Section Offices through Video, Banners, and Posters will be initiated.
- 2. Information will be placed on website and mobile application.
- 3. Offer's details will be printed on the bill and SMSs will be send to customers regarding all available options of payment along with online Payment Link.

D.Testing of meters in field after Installation:

To ensure the statutory guidelines of testing of meters in field, and to address the meter testing on consumer request against fast/slow meter complaints, facilities needs to be developed in all divisions of TPWODL. In addition to consumer complaints, meters will also be tested to ensure proper working of meters in field. All HT CT Meters installed at 33 KV and 11 KV voltage level will be tested once a year and all LT CT Meters installed at 415V level will be tested once in three years.

To perform this activity in field, below mentioned equipment are required to be procured in addition to already available equipment.

3.3 Human Resource Plan:

Human Resources

People strategy of TPWODL has been prepared keeping in mind various challenges, employee grievances, risk involved and aspiration to convert this loss-making organization into an engaged, high performing organization. TPWODL has prepared a booklet on Human Resource plan and can be referred for complete manpower planning. All strategic objectives have been bucketed under four broad categories,

Approach of People Management at TPWODL.



Capacity & Infrastructure

Strategic Workforce Planning

TPWODL will inherit all existing manpower of WESCO in line with license agreement. In order to enhance network reliability, network safety, fast resolution of operational and commercial

complaints, many new functions like PSCC, Quality, Engineering, Consumer services, safety, security, CSR, Training & Development etc. to be started. In addition to this, many new technologies also to be implemented for better control and fast resolution of issues like SAP module, SCADA, Mobile Apps, GIS etc.

Hence, it is essential to upgrade competency level of existing employees of WESCO to work in new function and in new technology platforms. However, due to absence of fresh recruitment for last few years, option must be explored to induct competency through new recruitment or transfer from internal divisions.

Hence, while planning for manpower, TPWODL shall evaluate following aspects.

- Formation of new organization structure & Manpower requirements
- Assessment of existing manpower and their competency level
- Annual separation trend, attrition analysis & age distribution in each function / work level
- Critical competency requirement due to new technology adoption
- Transfer of competent employees from other division of Tata Power
- List of activities can be outsourced to competency third party agencies.

Based on detail analysis of above-mentioned factors, TPWODL has developed its short term and long-term manpower plan. It is estimated that 850 manpower must be recruited to fulfil the requirement.

Infrastructure Planning:

In order to successfully manage more than 3213 permanent manpower and more than 6000 business associates, TPWODL must implement appropriate technology to manage recruitment, payroll administration, statutory compliances, trust management, recognition etc. SAP HR Module apart from few other online platforms like Legatrix (to monitor compliances) and employee portal for internal communication, performance management system, travel management, guest house management to be installed in phases at TPWODL. Employees shall be equipped with Laptop / smart phone etc. wherever applicable. Some of the major activities planned for the year is mentioned below

- Issuing laptop and smart phone to all executives along with SAP license
- SAP HR (Payroll) module shall be implemented and shall ensure that centralized payroll system runs for all employees
- E-learning platform shall be created or tied up with reputed e-learning agency to impart behavioural training

- Portal shall be launched to facilitate various employee services like payroll, leave management, reimbursement, Performance management, Travel and Guest house management
- All existing office building needs (All Circle office to cover in first year while Division and Sub Division Office shall be covered in subsequent years) to be renovated at least with 3S standard. Few important locations like Corporate Office, Consumer Centre, Laboratory, SCADA centre etc. to be developed at 5S standard
- To provide adequate training to newly inducted employees / associates, suitable training centre in each Circle office and at Corporate office to be developed

Capability Development

Continuous Upgradation of competency is the key success factor in this continuously changing business environment and technological revolution. It is applicable to TPWODL also considering changes in business philosophy, new technology adoption and changing organizational structure. Competency mapping shall be conducted across all positions and training program shall be designed and deliver through in-house development of training Centre or sending executive to Tata Power (Delhi or Mumbai). Use of online e-learning training module shall be encouraged across all category of employees. Online e-learning module shall cover mostly behavioural training, Safety, Ethics etc. while technical training shall be imparted through training centres.

Considering diverse employee demography, capability development strategy at TPWODL needs to be customized keeping in mind changing business demands? Various types of training shall be finalized based on leadership discussion and presented through schematic diagram.



Safety Capability:

Each employees / associate at TPWODL shall be imparted basic safety induction training at the time of joining. E-learning module for safety induction shall be covered for 100% employees later. In addition to this for long-term training strategy, safety related training needs shall be identified for all employees based on job profile and this should be done in coordination with Safety department at the beginning of the year. Based on Training needs identification (TNI), annual training calendar shall be prepared for both employees and associates. Endeavour would be to cover maximum safety training through online while specific trainings can be conducted through training centre. Ownership of 100% compliance will be with divisional safety function while HR team will provide adequate support in conducting these training.

Technical Competency Development

Technical competencies are backbone for TPWODL operation since entire value proposition is linked with safe power distribution across 48,207 sq. km of WESCO area. Hence, training needs for technical operation shall be finalized during finalization of annual goal setting for all employees. At least one such needs must be identified for each employee. Based on TNI, annual training plan shall be freeze and faculties can be identified internally within TPWODL or from T&D cluster (Mumbai & Delhi). External faculties also can be invited based on critical requirement

Behavioural Competency development

TPWODL being consumer driven business, behavioural competencies are also equally (if not more) important for TPWODL employees. Depending on job profile and goal for the year, one or two behavioural training needs shall be identified for each employee during annual goal setting. Newly developed Tata Power competency model shall be used as baseline during finalizing training needs.

Divisional HR Team shall ensure completion of maximum behavioural training needs through assigning courses at Gyankosh. This newly developed online e-learning platform has complete flexibility with respect to time, location and TPWODL must utilize this platform. Only in case of highly specific behavioural training, external trainer of repute shall be invited to impart training to TPWODL employees.

Organizational Training Needs & Focus Group Training (FGT)

TPWODL being part of Tata Group, is also responsible to uphold Tata values and implement various Tata management philosophies towards making it a consumer driven and performanceoriented organization apart from maintaining governance standard of Tata Group. In this context, various organizational capabilities are required to be developed for its managers and employees like TCOC / POSH / SAP / IMS / Risk Management System / TBEM etc. Apart from this, various statutory requirements need to be complied by TPWODL being separate legal entity. In this context, training on First Aid, POSH, TBEM, Labour Laws etc. must be imparted to all or focus group employees. Hence, separate training needs in Focus Group shall be identified every six months. Execution of such Focus Group training shall be done mainly through Gyankosh or hiring external faculties if needs be arise.

Leadership Competency Development:

Leadership in pipeline is always critical agenda keeping in mind multi-fold growth aspect of TPWODL, keeping in mind regular separation of experienced employee and formation of various functions. Hence, keeping in mind broad manpower planning, opportunity for junior employees and keeping manpower cost within desired limit, TPWODL must strategize in developing successors for critical positions for its future requirements. Process would comprise identification of critical position and identification of successors at the beginning of each year, identifying gaps in competencies and intervention of effective training program.

Training Plan FY 21

Type of Training	Target Group	Population Target	Training Method
Safety Induction	All employees	100%	Online / Classroom
Tata Code of Conduct / POSH	All employees	100%	Online / Classroom
Consumer Delight	Front Executives	100%	Class Room
SAP Modules	All SAP users – All Executives	100%	Class Room
Best Practices	Key Executives	Circle Heads / Division Heads	Visit to Delhi / Mumbai
SCALE – Tata Values	All Executives	100%	Class Room

Culture Building

Building desired culture is the most crucial agenda for leadership team in a newly formed organization like TPWODL. Culture is a set of rules, regulations which evolve through trial and error and shared meaning among key stakeholders. In this context, there are many cultural elements which TPWODL must focus while few specific elements are core to the organization concerned. Considering business objective, consumer expectation and employee productivity, TPWODL has identified following six elements are core cultural elements and wish to build on these elements towards making TPWODL a performance oriented & consumer centric utility across power sector.



Value System

Tata Power has adopted SCALE value system means Safety, Agility, Care, Respect, Ethics & Diligence. Every employees / associate of TPWODL shall be aligned with this value system. Appropriate communication, training on value system shall be imparted to each employee on regular basis apart from joining induction. Those values shall be reinforced through every possible intervention like Town hall, sharing stories, leadership interaction etc. Demonstration of such values must be recognized while monitoring system shall be strengthened to ensure that such values are not deviated by any members.

Specific to Ethics, all employees must sign and acknowledge Tata Code of Conduct (TCoC) at the time of joining. Regular training and reinforcement on TCoC shall be conducted to uphold ethical standard of Tata Group. All employees / associates must be trained on Prevention of Sexual Harassment (POSH) module to ensure free and safe workplace for women colleagues.

Safety is also the core value of Tata Power and Tata Power has adopted ZERO tolerance at workplace safety including at TPWODL. All employees / associates shall be trained in various safety modules as applicable based on job requirement before actual deployment. Regular reinforcement in safety competency must be ensured through various training or workshop. Demonstration of good safety practices must be recognized while ignorance in safety will not be tolerated.

People Policies

People policies shall be backbone of TPWODL towards ensuring highly engaged and high performing workplace. However, existing service rules / standing order as applicable to WESCO employees but TPWODL will explore and adopt best practices & policies from its other division like Delhi and Mumbai. Some of the important policies are proposed to be implement at TPWODL includes:

- 1. Tata Code of Conduct (TCoC), Tata Power Safety policy
- 2. Prevention of Sexual Harassment at Workplace (POSH)
- 3. Rewards & Recognition policy (Online), Fun at Workplace
- 4. Higher Education Policy
- 5. Diversity & Inclusion
- 6. Policy on Grievance Redressal, Whistle Blower Policy etc.
- 7. Training & Development (Specifically online e-learning training module)

These are some policies, which would be implemented in phases with an objective of creating a safe & highly engaged workplace. TPWODL also would like to focus more on women representation in its workforce and women empowerment through various policy guidelines. Taking benefits of digital world, TPWODL shall implement various IT & IT enabled services (like web-based services, mobile app, SAP, GIS, SCADA etc.) for better consumer services. Accordingly, TPWODL shall formulate IT and Laptop orientated policies for its employees (specifically for executives). Keeping in mind continuous learning and acquiring niche skills, TPWODL shall implement training & development policy continuous competency enhancement of existing workforce. Use of online e-learning module shall be encouraged to ensure maximum participation of its employees.

High Performance & Talent Management

Building a culture of high performance is a need of survival in this competitive business world.

Financial model of TPWODL has further necessitated higher productivity level and increasing bar of performance. Hence, performance management at TPWODL shall be conducted through online and annual increment / promotion of employees shall affected through annual assessment of Key result areas and Key Behaviour Attributes. Continuous monitoring of performance shall be conducted through continuous feedback. High performers shall be recognized during annual increment or career progression. Identification and nurturing of high potential employees are core to the people perspective of TPWODL. Every year, all critical position shall be identified along with high potential employees. Potential of every employees shall be assessed, and training needs shall be identified through gap analysis. Training plan shall be designed and executed during the year and efforts shall be ensured to promote all high potential employees at TPWODL. Employees shall be exposed to different job profile through internal job rotation policy.

Business Excellence

Tata Power always believe in excellence in its every operation. Taking the legacy of 100 years of rich culture, Tata Power is gearing for next 100 years through "theme" Tata Power 2.0. To achieve this challenging target and contribute Tata Power, TPWODL shall adopt Tata Business Excellence Model (TBEM) in near future. TPWODL will review all its processes and execute towards ensuring higher level of consumer delight and other business results in line with TBEM format. Some of the important initiatives under TBEM would be Quality Circle, LASER, Enterprise Process Module (EPM) development for all processes, Employer branding, Innovation council formation, Divisional Quality Index (DQI) etc./

Volunteering

Care for community is one of the core values of Tata Power and TPWODL also wish to initiate various community service related initiatives in areas of education, health, livelihood, women empowerment etc. These initiatives will give opportunity to employees in their inherent desire to giving back to society.

Engagement

Creating an enabling workplace environment and facilitating full utilization of employee potential are key strategic advantage of Tata Power. Hence, TPWODL also wish to create such working environment so that employees / associates' engagement level reach to benchmark level. TPWODL wish to implement engagement model like Aon Hewitt and drive various engagement initiatives in areas of intellectual areas, fun at workplace, social & sports engagement, employee recognition, leadership communication. TPWODL wish to ensure that all its employees work at highest level of engagement and raise its excellence level on regular basis

Culture Building Initiatives are tabled below:

Initiatives	Short Term Activities				
Employee	Structured Leadership communication (Town hall, Digital				
Engagement	Communication, Meet your CEO)				
	Rewards & Recognition to employees				
	Social Engagement, Sports calendar, Cultural Clubs, Ladies Club,				
	Grievance Redressal Mechanism, Focus Group Discussion				
Values	Implementing Tata Value System (SCALE) and reinforcing at every				
	level of hierarchy				
	Ethics Structure & Committee formation, Local Ethics Councilor, POSH				
	committee & representative finalize, Annual Ethics calendar				
	Adequate communication / awareness on Ethics / POSH with display				
People Policies	Mentioned earlier				
Talent Management	Competency mapping for Executives				
	Competency Mapping for non-executives (Long term)				
	Competency mapping of Grid Operators (Outsource)				
	Job Description, KRA of All Executives, Non- Executives planned for Long term.				
	Succession Plan for employees retiring during next 3 years				
Business Excellence	L3 level process finalization – Only key processes; Balance processes				
	planed for long term				
	Participate in Tata Business Excellence Model (TBEM) in long term				
	Quality Circle, Innovation council formation				
Employee	One blood donation camp to be conducted				
Volunteering					
	Tree Plantation in each circle to be organized				
	School Education through volunteering – One school during FY 21 and				
	at least one school in each sub division planned in long term.				

Compliance

TPWODL will adopt two interlinked approaches to manage its statutory requirements as below.

Part 1: TPWODL as Independent legal entity and applicability of all acts including that of Principal Employer. Accordingly, legal ownership of compliances for all vendors engaged by TPWODL as

Principal Employer. All compliances for TPWODL will be monitored through Legatrix software and shall be ensured all compliances timely.

Part 2: TPWODL will engage many business associates and separate cell shall be set up to monitor compliances under various laws through online. Strict monitoring measures will be set up to ensure not only compliances but also to workers exploitation apart from workplace governance.

Major Compliance related Activities are tabled below

Compliances / Initiatives	Activities
Registration under RPFC for PF and ESI	
Registration as Principal Employer (CLA)	Contract Labor Act (Abolition) 1970
Registration as Principal Employer	Building & Other Construction Workers Act 1996
Registration in Employment Exchange	
Online compliance Monitoring Software	New Software to be purchased
Compliance data of agencies to be verified for workers	One third party shall be engaged to monitor online compliances for all workers like Min wages, PF, ESI , Labour Welfare etc.

A separate booklet on Human Resource Plan has been enclosed along with this document.

4. OPERATION AND MAINTENANCE EXPENSES

4.1 Employee Expenses

Total 2362 employees of erstwhile WESCO has been transferred to TPWODL through vesting order, which includes 479 executives. Tata Power has already deployed around 56 executives including Senior Management team who are experts in different fields of distribution functions. This team has assessed the existing processes and resource capabilities. Based on detail analysis and subsequent organization design, TPWODL wish to reinforce existing team with additional 1291 manpower (all are in executive cadre). Function-wise proposed structure, mapping with existing manpower has been explained in detail in TPWODL Human Resource Plan which is attached. However, TPWODL wish to recruit 850 new employees in FY22, 550 in FY23 and 391 in FY24. Total Cost of manpower including erstwhile WESCO employees and newly recruited employees shall be Rs. 624.55 Cr. for the period April 2021 to March 2022. Hence, Hon'ble Commission is requested to approve the said employee cost for FY 2021-22. TPWODL will provide requisite documents to Hon'ble Commission for undertaking a prudence check of the aforesaid expenses as when directed.

The proposed Employee Expenses is inclusive of existing and new employees.

Cost Heads	Description / Number	Proposed for FY22 (Rs Cr)	Remarks
Salaries, Wages, Allowances & Benefits	Existing 2418 employees cost	295.23	Salary / Wages for existing employees
Contribution to / Provision for P.F, Pension	To be deposited in PF, Pension Trust	132.31	Employee benefit.
Arrears of 7th Pay Commission	Shall be paid in line with GoO directives.	38.31	Old arrears.
New Employees & deputation	850 new employees and others	82.19	New employees and others.
HR Operation	HR service expenses (Transfer, Recruitment, Joining, L&D, Engagement, Insurance, CLA, Audit compliance etc.	4.00	Different HR services.
Training & Development	Training expenses for employees in the area of safety, PSCC, GIS, SAP, IT, maintenance process and new technology	5.00	Employee development.

Annual Business Plan (ABP) for FY 21-22 towards O&M Expenses					
Cost Heads	Description / Number		Remarks		
		(Rs Cr)			
Insurance	Employee medical / accident insurance	14.70	Employee benefit.		
Outsource	Outsource in areas of MBC and consumer services	52.81	Outsource charges.		
Total		624.55			

4.2 Repair & Maintenance (R&M) Expenses

As explained earlier the existing network of WESCO area is deprived of maintenance due to lack of manpower, material and other support processes. In view of maintaining reliable power supply to end consumers and to ensure safety of human being and animals the timely routine of equipment is vital.

Presently entire system ranging from 33KV feeders to LT distribution network are maintained by limited staff with the help of minimal outsourced staff. The existing staff are handling not only technical aspects but also managing commercial activities such as bill distribution, bill collection etc.

The Junior Managers are responsible for attending breakdowns occurring in 33KV and 11KV systems with the limited manpower available at each section. For major breakdowns, contract manpower is hired on need basis as per the available OSOR's.

The scarce resources and lack of maintenance has resulted in large number of accidents in previous years. System need huge quantity of material and proper AMC to ensure the network is progressively moving towards normalcy.

In the absence of sufficient support staff at sub-divisions/sections level, the MTTR for 33 kV & 11 kV breakdown is comparatively high. Due to scarce manpower, breakdowns in many sub-divisions / sections are unattended and systems are kept in bypassed condition. In FY22 R&M expenses will be Rs. 234.29 Cr.

Our Plan towards systematic maintenance:

The TPWODL licensed area is spread across approximately 48,207 sq. km area with forests and hills making it very difficult to maintain the network with existing manpower, leaving them in the mode of run and repair. There is no approach of preventive maintenance as mentioned in earlier sections making the network weaker with each passing year. The network conditions are also

mentioned along with evidence in photographs in earlier part of the document.

In light of the above facts mentioned, our planning to address these burning issues is through discrete approach, i.e. focusing each problem separately and addressing them separately so that cumulative effect be huge in terms of enhanced safety, sustained reliability, minimized failure rate and happy customers.

In order to achieve above quality in supply and to ensure performance assurance according to power supply code we envisage to form following functions whose working and budget is given below

A. Safety Expenses:

Safety being the integral and foremost part in any industry, a major allocation should be there to ensure safety in largely spreading geographical area. Number of safety incidents and existing safety T&Ps indicate that there is a huge scope of improvement along with the mechanism in which existing workforce work at every site. Accordingly seeing the present practices building safety practices should be geared up. TPWODL is also planning to strengthen the safety by providing PPEs, FFEs, T&P, and testing equipment to the maintenance crews. By strengthening of safety system, the accident rate is expected to be reduced significantly. The allocated tentative budget for safety expenses is given below,

S. No.	Particulars	Amount (In Cr)	Remark
1	Procurement of PPE	0.30	PPE procurement
2	Safety Capability Building		
а	Competency Training recommended by Corp Safety - External (for Safety Advisors)	0.10	
b	Provision for fees to attend Safety Seminar / Conferences , when advised by Corporate safety, HR	0.20	
С	Safety Capability building based on learnings of Incident investigations / Safety observations / Audit points etc.	0.30	
	Sub-Total 0.6		
3	Safety Promotional Activity /Reward & Recognition		

Operations Expenses for Safety FY 22

S. No.	Particulars	Amount (In Cr)	Remark
а	Gift Items / Vouchers as per R & R Policy incl Safety Maestro award- Own Employees - Rs 1500/ per award	0.04	
b	Gift Items / Vouchers as per R & R Policy - 0.03		
с	Celebration of National Safety Day/Fire Safety week/ Electrical safety week- Campaigning material & celebration	0.12	(Banners, posters, badges, token gifts)
d	Safety Theme camp again	0.02	
	Sub-Total	0.21	
4	Public Safety initiatives		Safety awareness through FM radio(1.5 L) + PA system procurement
а	Safety Awareness through Local TV Channel	0.18	
b	Safety Awareness through Local New paper	0.12	Monthly One @100000
с	Safety Awareness through Public Address system	0.10	PA System including Audio message.
d	Safety Awareness through SMS for all register consumer	0.10	SMS@ Rs.0.11
	Sub-Total	0.50	
5	AMC for fire safety assets	0.05	Installation Fire detection system in store and godown
6	3rd Party Safety Audit by external consultant	0.10	
7	Preparation of Safety posters, training materials, hand-outs, etc, Lesson Learned short animation Clip for LTI	0.10	Flex poster to display at Circle, DM & Panchayat office

S. No.	Particulars	Amount (In Cr)	Remark
8	New Initiatives	0.15	Implementations of New technology
	Sub Total in Cr.	2.00	
	Taxes	0.25	
	Grand Total Yearly OPEX Expenditure in Cr.	2.25	

B. Area Power System:

In erstwhile WESCO, working system there is no dedicated preventive maintenance structure in any form except breakdown maintenance we propose to depute a dedicated team for maintenance of Primary sub-transmission system. The maintenance team shall be deployed in each circle in a structured manner. The details with scope is covered in the sub sequent section no 4.2 in this report.

This team will be assisted by another group Maintenance Planning Group (MPG) that will take care of entire asset mapping of electrical network

a). 33/11KV Primary Substations and 33KV feeders

The detail estimated expenditure of material and services for FY22 are as below:

S. No	Broad Category	Description	Budget (Rs Cr) Including Tax	Justification
		Services Expen	ISES	
1		Annual maintenance contract for Primary Substations & 33KV Feeders	12.17	The rates are based on minimum wages factored with ESI, PF, T&P, Testing Equipment, prevailing
2	STS	Repair / Servicing of DC system at 33/11KV Substations	1.61	vehicle rental charges, and BA profit.
3		Testing/Overhauling/Reconditioning of Transformers	1.30	The budget is based on estimated jobs to be performed, prevailing market rates (, materials / consumables and BA profit

	Pudaot					
S. No	Broad Category	Description	Budget (Rs Cr) Including Tax	Justification		
4		Repair / Servicing of CTR make load tap changers	0.40	The budget is been deep		
5		Repair / Servicing of Circuit Breakers	0.32	The budget is based on estimated quantity and prevailing market rates.		
6		Installation of wedge connectors in feeders and substations	0.20			
		Total Services Cost	16.00			
		Material Expen	ses			
7		Procurement of materials for 33KV overhead & underground feeders	3.00	Material like conductor, cables, connectors, joints, poles, hardware's are considered. The budget is based on estimated quantity and prevailing market rates		
8	STS	Procurement of materials for Power Transformers	4.00	Material Like oil, bushings, accessories, cooling fans, hardware's are considered. The budget is based on estimated quantity and prevailing market rates		
9		Procurement of materials for Circuit Breakers	9.00	CB spares are considered. The budget is based on estimated quantity and prevailing market rates		
10		Procurement of materials for Secondary Plants	4.00	Material like lighting / DC systems, Protection Relays, etc. are considered. The budget is based on estimated quantity and prevailing market rates.		
		Total Material Cost	20.00			
	Total Ma	aterial Cost + Services Cost	36.00			

b). Distribution System & Distribution Services (11KV & 1.1KV Network):

In erstwhile WESCO, working system there is no dedicated preventive maintenance structure in any form except breakdown maintenance. TPWODL proposes to depute a dedicated team for maintenance of Distribution sub-station system. The maintenance team shall be deployed in each circle in a structured manner. The details with scope is covered in the sub sequent section no 4.2 in this report.

This team will be assisted by another group Maintenance Planning Group (MPG) that will take care of entire asset mapping of electrical network

The Performance Based Maintenance Contract will focus to attend 24X7 breakdowns. Dedicated team of crew will be available for restoration of 11KV Lines and substation equipment. Condition based maintenance systems shall also be introduced to identify the maintenance requirements.

In this Annual Maintenance Contract (AMC), Business Associate (BA) shall undertake full responsibility of safety and assigned works as per AMC terms & conditions. Which includes attending to emergency breakdowns, LT no current complaints carrying out preventive maintenance of these equipment in various Sub-divisions.

The detail estimated expenditure of material and services for FY22 are as below:

S. No.	Broad Category	Description	Budget (Rs. Cr)
1	Distribution	AMC for 11KV and 1.1KV equipment, feeders along with petty material and Vehicle for attending 11KV Breakdown, No current individual complaints, testing of equipment and 11KV planned maintenance for 202 sections.	131.00
2		Distribution Material (O/H) inclusive of HT & LT such as 11KV isolator/AB switches/DO switches, Cross arm, pole, conductor, DTR related consumable material and insulator etc.	38.37
3		Distribution Material (U/G) inclusive of HT & LT such as cable, jointing kit and termination kit.	0.63
	Total		170.00

11KV and LT services and repairing material:

C. Centralized Power System Control Centre (CPSCC):

It is proposed to establish a Power System Control Centre (PSCC) on takeover of the operations of WESCO. The intent of establishment of PSCC is near Real Time Monitoring of 33 kV and 11 kV network operations of the license area. This will give an overall information of the HT network

and ensure availability of network at all times and thereby ensure maximum Power Supply to the consumers of the License area. In the process, a robust communication channel with OPTCL will be established through PSCC. Also, all the operations will be carried out as per the laid down Standards Operating Procedures through pre-established Operating Instructions so as to ensure Safe Operations & institutionalize the process of Permit to Work uniformly across the license area in phase manner. Various Operational Expenses will be incurred to ensure smooth functioning of PSCC.

The budgetary details for PSCC are mentioned as under,

S. No	Particulars	Amount (In Cr)	Further Details
1	Transport, CAD Software Licenses, Printing & Stationary and Lease line for Remote VDU to SLDC/OPTCL	0.45	To establishing PSCC controls, substation visits for feasibility for operations & interaction with 33/11KV PSS team.
4	Digitization of 33KV Line and 33/11KV SLD	0.47	The power system control centre and 33KV PSS and O&M team should be in a common page on "AS is Network Diagram" hence all the present SLD & network diagram will be in digitized for correspondence and sustenance across the network of TPWODL for exchange of information related to routine network operation
7	Training and other Expenses	0.06	External training expenses are Rs.10000 per program. Provision for 12 such trainings is made.
	Total	0.98	

D. Transformer and Other Equipment Repairs:

There are total approx. 64500 transformers are in service in TPWODL entire network across 48,207 Sq.km geographical area. The transformer failure rate observed in TPWODL is 5.8 % per annum. The table below depicting year wise transformer failures for last four years,

Year wise transformer failure

S.No.	TRANSFORMER CAPACITY	FY 2017-18	FY 2018-19	FY 2019-20	Apr'20 to Dec'20
1	8 MVA	4	7	3	4
2	7.5 MVA	0	0	0	0
3	5 MVA	8	12	8	6
4	3.15 MVA	6	9	5	4
5	3 MVA	0	1	0	0
6	2 MVA	0	0	0	0
7	1.6 MVA	1	8	2	0
8	1 MVA	0	0	0	0
	TOTAL POWER TRF.	19	36	18	14
9	1000 KVA	3	4	1	4
10	750 KVA	1	0	3	0
11	630 KVA	4	3	2	3
12	500 KVA	36	22	26	21
13	315 KVA	13	10	17	14
14	250 KVA 33/.4 KV	0	2	7	0
15	250 KVA	67	54	52	39
16	200 KVA	20	19	15	3
17	150 KVA	1	2	0	1
18	100 KVA	762	719	742	542
19	63 KVA	553	580	602	541
20	50 KVA	14	0	3	0
21	25 KVA (3 PHASE)	514	743	1013	1033
22	25 KVA (1 PHASE)	230	131	23	17
23	16 KVA (3 PHASE)	135	109	63	60
24	16 KVA (1 PHASE)	539	566	409	366
25	10 KVA	342	258	176	140
26	100 KVA 33/.4 KV	7	7	2	3
	TOTAL NOS DTR	3241	3229	3156	2787

It is proposed to carry transformer repair activity in house centrally with the help of experience outsource party. The estimated expenditure toward repair of this transformer are listed below

S.No	Description	Estimated Amount (in Lakhs)
1	DT up to 250 KVA	400
2	DT 250 KVA to 1250 KVA	200
3	PTR up to 16 MVA	200
	Total	800

E. Civil:

In entire TPWODL area there are very few buildings except new sub-stations under ODSSP scheme are in very good condition. Majorly all the building offices and sub-station buildings are in very bad condition and requires urgent attention. There is a huge scope for civil work to be done in all the buildings starting from head office. Stores are also in very bad condition. Somewhere it is real threat to work in the depleted building. The toilets are not maintained. On the other hand in majority of the sub- stations are boundary less and plinth of the transformers are real bad shape, which needs immediate attention.

The estimated expenditure requirement for civil job in FY 21-22 are listed below:

S. No.	Description of work	Opex Expenditure (In Cr)
	Repair of office buildings in TPWODL owned buildings in	
1	Circle, Division and Sub-division offices.	
		4.00
2	Structural strengthening & Repair of Store Sheds in	
2	Circle, Division and Sub-division	1.00
3	Toilets/Washrooms renovation in TPWODL owned buildings in Circle, Division and Sub-division offices	3.00
4	Painting of miscellaneous TPWODL buildings	1.00
5	Misc. civil works	1.00
	Total cost	10.00

F. SCADA & Automation System:

At present, The ODSSP scheme has focused on supply of quality power to consumers and intends to address the problem of low voltage in rural areas. The scheme focusses on construction of 33/11 kV Sub-stations in the Wesco; over 142 Nos. of 33/11 kV sub stations has been planned to commission under three phases. Presently these Sub-stations are manned and locally monitored and controlled under the instruction of Area In charge. These substations are lagging in terms of having SCADA connectivity, remote control etc.

However, these substations are automated and equipped with 33/11 kV CRPs, Numerical Relays, VCBs, Battery Charger and Multi-Function Meters (MFMs). All these devices are integrated at sub-station level with Data Concentrator Unit (DCU) or RTU. The numerical relays and Multifunction meters are communicating with RTU over IEC 61850 and Modbus protocol respectively. These RTUs are compatible with communication to any Central/Standalone SCADA System over IEC60870-5-104.

In view of above, these substation will enable and made available for development of Micros SCADA set-up at one of ODSPP 33/11kV PSS. To ensure that the investment made under ODSSP shall be fully utilized for centralized SCADA system.

Additionally, 5 nos. of Rural 33/11KV PSS will be developed based on cost effective innovative approach wherein existing electrical infrastructure will be utilized for model development of Grid substation automation system in rural area across TPWODL/Odisha state.

Objectives:

- 1. Up keeping of existing automation infrastructure deployed under ODSSP.
- 2. Troubleshooting and resolving the standalone Automation system.
- 3. Repair and/or replacement/Upgradation activity.
- 4. Addition and modification or configuration in RTU database as well as in Numerical relays database.
- 5. Preventive and Predictive maintenance of SCADA & Automation system.

Communication Link:

The backbone of the SCADA system is the communication infrastructure that will interconnect various Sub-stations with the Centralized SCADA system. Currently, as there is no communication established hence as a proactive measure and provide real time inputs to network service provider. TPWODL will connect various substation through MPLS technologies.

Objectives:

- 1. To communicate upcoming substation with the SCADA Control centre System.
- 2. Ensuring the tested reliable communication network.
- 3. Base lining for development of robust communication infrastructure.

Substation Automation (Existing):

RTUs, IEDs and Communication equipment are a key component or hardware of Substation Automation System. To keep the substation automation system healthy required regular supervision and maintenance of equipment and hardware.

Objectives:

- 1. Upkeep the hardware inventory to maintain the substation automation system.
- 2. To maintain the SCADA and Automation System for higher availability and reliability.
- 3. To resolve any issues related to RTU failure or RTU communication with IED/Relay.
- 4. To maintain the DCPS system for power-up the RTU and LDMS.
- 5. To maintain the communication system and equipment like Router, Ethernet Switch etc.

ODSSP Substation Automation

The ODSSP substations are SCADA enabled and having RTUs, IEDs and Communication equipment. The IEDs are integrated and communicating to RTUs over IEC61850 communication protocols. To keep the substation automation system healthy required regular supervision and maintenance of equipment and hardware.

Objectives:

- **1.** Upkeep the hardware inventory to maintain the substation automation system.
- 2. To maintain the SCADA and Automation System for higher availability and reliability.
- **3.** To resolve any issues related to RTU failure or RTU communication with IED/Relay.
- **4.** To maintain the DCPS system for power-up the RTU and LDMS.
- **5.** To maintain the communication system and equipment like Router, Ethernet Switch etc.

Support Services:

The Department needs various kinds of Support & Services to run the day-to-day business to meet the organizational goal.

Objectives:

- 1. Training required to develop the skill set to maintain the SCADA and Automation System on our own. Also abreast of various developments, technology adaption and new trends in Power sector.
- 2. Requirement of vehicles for day-to-day travel for resolving the Operational Variances (OVs) on time.
- 3. Various newsletters, magazines and periodicals of the Power Industry would be subscribed for the department for being cognizant of the happenings across the industry.

O&M cost for SCADA implementation:

S.No	Particulars	Qty	Amount (in Cr)	Further Details
1	ODSSP substation interface till full SCADA	20	0.50	This will enable to up keeping of ODSSP substation w.r.t ready for SCADA integration
2	establishment of communication system till full SCADA.	20	0.16	This will be mechanism to develop robust infrastructure for ODSSP PSS.
3	5 nos. of rural substation SCADA enablement	5	0.40	Rural 33/11KV PSS will be developed based on cost effective innovative approach wherein existing electrical infrastructure will be utilized
	Total		1.06	

G. Store related Material Handling charges:

At Present materials is being managed through 4 stores namely:-

- Central Store Burla
- Central Store Rajgangpur
- Central Store Bolangir
- Central Store Kesinga

TPWODL operations is being carried out in geographical area of 48,207 Sq. KM. To support the O&M activity in this vast area it is essential to have a backup of stores.

Stores plays the key role in materials management between user and supplier. To serve our internal customers & facilitate them with enhanced focus on business efficiency & loss reduction

through timely delivery of materials we intend to engage & develop business associate for warehousing & logistics support at TPWODL.TPWODL propose to start door-to-door delivery of material in FY 21-22.

The key focus agenda is as follows

- To deliver Opex category of materials to its division offices on monthly basis after the receipt of requisition
- > Collection of scrap materials on as & when basis from various locations of TPWODL.

For Managing above, we will deploy Minimum of One dedicated Trucks and Crane in each stores and Rate contract for hiring additional similar facilities on call basis as and when required.

The estimated total expenditure for above scope is Rs 3.00 Cr.

H. IT Consumables:

With extensive IT infrastructure being built, the corresponding IT expense requirement is expected to increase significantly under following heads,

- 1. Hardware including accessories and peripheral
- 2. Licenses, Subscription & AMC
- 3. Network & Communication
- 4. IT Support Services

Following expenditure proposed for FY-22,

S. No	Description	Cost (In Cr)
1	Hardware including accessories and peripheral	0.20
2	Licenses, Subscription & AMC	0.25
3	Network & Communication	0.50
4	IT Support Services	2.05
	Total Cost	3.00

I. R&M Expenditure Summary:

The expenditure under Repairs & Maintenance (R&M) category for proposed for FY-22 are appended,

Proposed R&M Expenditure for FY-22

S.No.	Description	Amount (In Cr)
1	33KV Grid Substation and Lines- AMC	16.00
2	33KV Grid Substation and Line -Material	20.00
3	11KV Distribution sub Station ,Lines and LT equipment - AMC	131.00
4	11KV Distribution sub Station ,Lines and LT Equipment and EM - Material	39.00
5	Safety Expenses	2.25
6	PSCC, SCADA, GIS	2.04
7	Transformer and Other equipment Repairs	8.00
8	Civil repairs & Maintenance	10.00
9	IT related Expenses	3.00
10	Store related Material Handling charges	3.00
	Total	234.29

Justification:

The total estimated expenditure planned for Repairs & Maintenance (R&M) is Rs. 234.29 Cr as shown in above table. Network needs urgent maintenance related activities along with huge quantum of material. Culture of preventive maintenance is to be started at the earliest. TPWODL felt to start AMC contract immediately for 11KV, 33KV line maintenance.

Asset value mentioned in the vesting order is Rs. 1885 Cr (own asset). TPWODL have taken over and maintaining asset commissioned under government approved schemes valuing of Rs. 2527 Cr (RGGVY – Rs. 1366 Cr, ODSSP – Rs. 930 Cr, DDUGJY – Rs. 138 Cr and IPDS – Rs. 93 Cr) for which work has been completed and taken over by TPWODL.

TPWODL will maintain total asset value of Rs. 4412 Cr. for which TPWODL propose Rs. 234.29 Cr as R&M expenditure. Moreover Rs. 100 Cr government asset are under verge of completion, which will be taken over and maintained by TPWODL.

4.3 Administrative & General (A&G) Expenses

A. Meter Reading and Collection Expenses

Currently, meter reading is assigned to Meter reading agencies across Division /Sub Division on fixed cost basis per reading. Meter reader visit consumer site based on reading route sequence allotted to him in a period of 15 days i.e. from 7th to 22nd of every month. Meter reader after punching the reading in spot billing application, deliver the spot bill to the consumer during the same visit. This practice, lead to high average & provisional bills of around 40% as reading is done only for 15 days, and that too without ensuring minimum wages to meter readers and without follow up visit for capturing the reading where it is not obtained during base meter reading. Therefore, it has been proposed to change the reading cycle from 15 days to 30 days and performance-based contract to be placed for ensuring timely meter reading with reduction in provisional bills.

Payment collection counters are provided at Division/Sub-Division level for customers to deposit the bills. Currently, the due dates are schedule in short window of 7 days duration due to which long queue at payment counters during month end is visible. This lead to customer dissatisfaction as customer has to spend time and energy for bill payment.

In addition to payment collection counter, collaboration with telecom service providers shall be explored for accepting electricity payment at their counters along with on-line payment options through Website, Payment Wallets like Paytm etc.

Beside above avenues, Business Associates (BAs) have been deployed for visiting the customer premise for collecting the payment from customer mostly by issuing manual receipt. Knocking at all customers doors during the month is a herculean task with multiple visits to the customers residences, with eventual result of non-payment of bills. Therefore, performance based contract for Door-to-Door collection is proposed for ensuring timely recovery of payment. Further, promotional schemes for online payment and counter payment is also proposed.

S.No.	Category	Cost (Cr.)
1	Reading, Spot Billing	22.72
2	Door to door Payment Collection	16.58
3	Disconnection Notice Distribution and Execution, Payment promotion strategy for online/counter payment, spot collection through SHG, bill distribution and recovery.	7.49
	Total Cost (Without GST)	46.79
	Total Cost with GST	55.22

The Estimated cost is based on price envisaged through open tenders that is under process for FY21-22.

B. Customer Services and Communication Expenses

To improve the customer experience, customer touch points need to be augmented for providing ease of connectivity and single touch point at offices.

Call Centre is a convenient mode for providing service on 24X7 basis thereby customer is not required to go through the hardship of visiting the office. This demands the overhauling of existing infrastructure of call Centre in order to improve the Call Centre connectivity. Keeping in mind to provide ease in customer experience, a unified Call Centre is imperative to be made operational. For this, Rs 8.0 Cr is allocated under A&G head.

Currently, customers visit the office and stand in long queue for making electricity bill payment during due dates. Also, lack of basic amenities for the visiting customers like Seating space, water dispenser etc. at Section, Sub-Division and Division Level is experienced. For better experience at Customer care, operational expenditure of 2.0 Cr. is allocated to provide better logistics at existing Customer care centers.

Currently, SMSs are being send to limited customer that to at the time of Bill Generation. It has been proposed that the communication through SMS and Email need to be enhanced by introducing SMS/Email at following stages leading to enhancement of customer satisfaction. For this, 0.5 Cr is proposed under operational expenditure.

While the Call Centre Cost is as per discovered prices, the other are estimated based on prevailing prices.

S. No.	Cost Component	Proposed cost (Cr)
1	Call Centre(50 seats)	2.00
2	Customer care Centre operations including stationary/printing/computer consumables, postage & courier charges	4.00
3	Miscellaneous charges including SMS	2.00
4	Total	8.00

C. Meter Management Expenses

Further, to ensure high communication percentage of meters installed with Modem already installed in field, there will be need for rectification / Trouble Shooting of modems and allied accessories like SIMS cards, Antennas etc. It is expected that 5% of modems and

accessories will need rectification per month. This activity of modem rectification will be handled through performance contract under guidance of MMG TPWODL.

To operate these meters testing facilities and troubleshooting of modem and SIM, funds are required under operational expenditure and same is mentioned below. These costs are on estimated basis.

S No	Cost Component	Amount (In Cr)	Work Description
1	Deployment of Field Service Executives for New Connection/Attribute Change Services	1.53	New Connection
2	Data Downloading for Non-Communication Cases, Troubleshooting of Modem and SIM Replacement	2.16	AMR
3	Cost of Meter Testing	1.44	Meter testing Lab
4	Refurbishment of Meter Test Bench including NABL accreditation and Calibration of Meter Test Equipment	0.26	Meter testing Lab
5	SIM rental for 4G, Backbone MPLS and FMS Charges for Smart Meters	0.80	Smart Meter
6	Tools and equipment	0.27	New Connection
	Total Cost (Without Tax)	6.46	
	Total Cost (Inclusive of Tax)	7.62	

D. Admin & General Expenses: Other Costs

Expenses on the other Heads have been carefully examined vis-à-vis the costs being currently incurred. A comparison of the same is provided in the Table in the earlier Sections. The increase over the previous year is generally on account of enhanced level of activity, increase in no. of employees resulting in higher A&G Expenses, inflation and incurrence of expenditure on certain activities which were hitherto either non-existent or minimal, such as Insurance, various Company related mandatory expenses relating to requirement of various statutory Audits and compliances, which would entail appointment of various Auditors as well as consultants to facilitate statutory compliances.

a). Insurances:

As per good Risk mitigation practice, and as required by Lenders, the Company is proposing to take various insurances to ensure coverage of its Fixed Assets, Inventories, Moneys & Employees, etc. The significant Insurance covers would include amongst others, Industrial All Risk Insurance for Fixed Assets, Transportation of Goods, Fire & Allied Perils, Burglary, Money Insurance, Directors & Officers Liability, Cyber Security against Data Breach, Loss due to fraud, etc.,

Currently, TPWODL do not have the insurance coverage of the assets & inventory. To secure the assets, the company is planning to take the insurance coverage of all the assets and thereby it will reduce the risk of losses. The estimated value of the coverage will be approx. Rs. 5000 Cr. additionally, other various policies also to be taken like Stores, SFSP & Burglary, Commercial General Liability, Cash Collection Locations cover, Corporate Guard Crime, Public Liability Act, Terrorism. Estimated cost of the coverage will be approx. Rs 8 Cr.

b). Rents, Rates and Taxes:

With increased no. of employees and to ensure proper seating, etc. for the same, additional space is required to be hired until such time that the Company is able to construct its own offices.

c). Legal, Consultancy & Professional Charges:

With vesting of WESCO's Utility in TPWODL, a Company incorporated under the Companies Act, 2013, statutory compliance requirements are going up multi-fold, which would entail additional expenditure on Audit, Consultancy and Professional Fee. In addition to the Annual Statutory Audit including ICFR (Internal Control over Financial Reporting) Audit, the Company is subject to Quarterly Reviews by the Statutory Auditors, Tax Audit, Secretarial Audit, Cost Audit, etc. WESCO was hitherto subject to only the Annual Statutory Audit and that too at significantly discounted fee.

Further, extensive Data cleaning, data – base creation/ reconciliation etc. is required for migration from the basic Tally Accounting System to the SAP ERP entailing additional costs.

With the Company now being a private company, legal expenses are envisaged to increase with the Company becoming more vulnerable to litigation as well as the requirement to more vigorously protect its and its stakeholders interests.

E. House Keeping Expenses:

The offices of the company are in extremely decrepit and shabby condition with virtually no housekeeping. In-order to provide a decent working environment to the employees which is a pre-requisite for ensuring productivity, retention of talent, building employee morale and pride in the Organization, as well as for Consumers and other stakeholders, a separate budget for House Keeping has been proposed.it is proposed to maintain the offices through external parties vide RC for each activities. The estimated expenditure towards housekeeping is Rs 5 Cr for FY 21-22. Total 200 outsourced employees shall be deputed at key offices in phase 1.

F. Security:

Presently security services are deployed at very few locations. To ensure the security of personal and equipment, TPWODL proposed to deploy security through external agencies. The estimated expenditure is Rs. 2.50 Cr. Total 100 outsourced security staffs shall be deputed at key offices in phase 1.

Particulars	Proposed for FY22	
	(In Cr)	
PROPERTY RELATED EXPENSES		
Licence Fees	1.900	
Rent	2.500	
Rates & Taxes including inspection fee	0.120	
Insurance	8.000	
Sub Total :	12.520	
COMMUNICATION		
Telephone & Trunk Call	1.500	
Postage & Telegram	0.072	
Courier charges	0.040	
Sub Total :	1.612	
PROFESSIONAL CHARGES		
Legal expenses	0.320	
Consultancy Charges	5.500	

Administration & General Expenses:

Annual Business	Plan (ABP)) for FY 21-22	towards O&M	Expenses
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ParticularsProposed for FY22 (In Cr)Franchisee Expenses-Collection commission1.860Audit fees and expenses1.000Other Charges0.460Sub Total :9.140CONVEYANCE & TRAVELLING0.300Conveyance expenses0.300Travelling expenses1.000Hire charges of vehicle8.000others0.053Sub Total :9.353OTHER EXPENSES(MBC)1.000Fees & Subscription0.005Books & Periodicals0.010Printing & Stationary0.820Advertisement0.120Watch & ward1.980Electricity Charges2.150
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Meeting Expenses 0.100 Watch & ward 1.980
Watch & ward 1.980
Electricity Charges 2.150
Vigilance activity for rev imp3.200
Expenditure for Customer Care 8.000
Miscellaneous 3.150
Spot billing, Meter reading and bill distribution, Collection55.220&Recovery55.220
Training 2.000
Sub Total : 76.755
MATERIAL RELATED EXPENSES
Clearing & following charges 0.810

Particulars	Proposed for FY22 (In Cr)
Others	0.015
Sub Total :	0.825
AMR Related Activities	2.160
Replacement and shifting of meters & associated charges regarding new connection	1.800
cess on Building & Construction and installation @1%	1.568
Energy Audit	2.500
Prepaid metering running expenses & Smart Meters	1.000
Statutory Meter testing & NABL Accreditation Lab	1.700
Media campaign	0.600
Sub Total :	11.328
House Keeping	5.000
Call Centre	0.500
Security	2.500
Sub Total :	8.000
Grand TOTAL	129.51

Justification:

The benefits to be accrued on the aforesaid Administrative & General (A&G) Expenses has been described in the aforesaid paras.

It is submitted that the approved A&G expenses (Rs. 52.80 Cr) by OERC for FY-21 is grossly inadequate and insufficient considering the actual requirements as detailed above.

The new (Rs.129.51Cr) expenditure such as Insurance, spot billing ,meter reading and bill distribution, new customer care centres, bill collection & recovery, housekeeping and security has been carefully estimated and planned, and it will result in reducing AT&C losses, enhancing productivity and enhancing customer satisfaction to a greater extent.

5. PROCUREMENT PLAN

Procurement plan and policies shall be the backbone of TPWODL towards ensuring highly transparent, competitive, fair and reasonable procedure with ensuring quality. TPWODL will explore and adopt best practices & policies from its other division like Delhi, Mumbai and TPCODL. TPWODL will plan for Centralized procurement of high value items & services. Also, do decentralized procurement for low value and emergency works. More focus will be on annual rate contracts for supply items and longer duration service contracts.

TPWODL shall focus more on optimizing costs, building strong supplier's performance management framework, digitization of vendor life cycle management, bringing better safety culture and enhancing capability and competency of existing and new vendors.

The processes include methodology to select Business Associates based on credentials and past service and / or material quality. Users evaluate all services and materials for quality and performance. Incentive and penalty clauses in the contracts support better quality of delivery. Certain Business Associates are identified based on areas of their core-competency such as call-center, CRC manning and attending low voltage faults in the distribution business. The SLAs with these Business Associates are made with an emphasis on higher performance than standards to enhance customer satisfaction. The quality of customer interaction of front-end staff is monitored and used as a feedback for improvement. Relevant training, based on these feedbacks, are also imparted to them to improve customer experience. The Business Associates through a satisfaction survey and BA meets and actions are taken based on the findings.

6. PRAYER

Prayer:

Pursuant to the direction of Honb'le Commission vide suomotu proceeding in case no 82/2020 dated 28.12.2020, para 53, TPWODL is supposed to file the Annual Business plan w.r.t. Employee cost, R&M, A&G expenses for the year FY 21-22 within forty five days (45) from the date of effective date i.e. (1.01.2021). Accordingly, the Company had submitted the ABP for O&M expenses plan before Hon'ble Commission on 11th Feb-21. The submission was made through an additional submission to the ARR of Wesco utility vide case no.75 of 2020 with a view that the matter could be heard along with ARR on the scheduled date & time (which was scheduled to be heard on 15th Feb-21).

During the course of hearing on 15th Feb-21, Hon'ble Commission has also instructed to restrict the presentation to the extent of original filing as because the objectors to the main petition might not be aware about the additional submission of the new licensee.

Due to the change scenario for improving the reliability of power supply, the operation and maintenance cost of the company would undergo some changes on account of new recruitment, additional A&G cost towards MBC, IT automation, Energy Audit, Insurance. Similarly, under R&M, AMC for network assets, repair of Govt funded assets etc related costs needs to be factored in the ensuing year ARR.

Therefore, the licensee is duty bound to appraise and submit before Hon'ble Commission for consideration of the same and prayed as follows to:

- 1. Admit the Annual Business Plan of FY2021-22 (OPEX).
- Approve the total Operation and Maintenance expenses towards Employee Cost, Repair & Maintenance and Administration & General expenses of Rs.988.35 Crores for the period April 21 to March 22 as proposed by the Utility.
- 3. These Business Plan is being submitted in compliance with directions of the Honourable Commission as Para 45 (e) of the Vesting Order wherein the petitioner has been directed to provide detailed justification of the expenditures:
 - i. Salaries, wages, pension contribution and other employee costs
 - ii. Administrative and General (A&G)expenses
 - iii. Repair and Maintenance (R&M)expenses

The above all expenditures shall be incurred in the first year of operation (i.e. FY21-22). It is submitted that these expenses are estimates based on comprehensive field visit by the team across the utility area and the petitioner has already placed necessary order to certain extent/

is in the process of placing necessary orders for carrying out various initiatives whose cost may turn out to be invariance to the Budgeted estimates. Further, these expenditures and initial year expenditures are likely to be staggered especially for Employee Costs. The estimated cost is based on first year level of activities, which the Honourable Commission shall appreciate, shall be ramped up steadily and shall reach a stable level of activity only in the next couple of years. In view of the above, it is prayed that the initial year estimates or actual expenditure may not be considered as a representative figure or base figure for determination of subsequent years costs.

4. Grant any other relief as deemed fit & proper in the facts and circumstances of this submission

DGM (RA & Strategy) TPWODL