

Detailed Management Structure & Staff Deployment Plan

Submitted By

TPNODL

TP Northern Odisha Distribution Ltd



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1.0 Executive Summary

TP Northern Odisha Distribution Limited (TPNODL) has been created as a joint venture of Tata Power and Odisha Govt. TPNODL has received license to operate in the erstwhile NESCO distribution area. TPNODL has laid out an ambitious plan to improve reliability of power supply, enhance customer services and implement cutting edge technology to meet the business requirements for safe operations and reduction in Aggregate Technical and Commercial losses. Tata Power has already deployed around 25 executives including Senior Management team who are experts in different fields of distribution functions. This team has assessed the existing processes and resource capabilities. Key challenges before the organization and their proposed action plans are:

- Sharp decline in manpower over last 7 years clubbed with significant increase in consumer base and Input energy. Over last 5 years 891 number of employees (29% of total base) have superannuated with no single recruitment. During this same period the number of consumers have grown from 13 Lakh to 20 Lakhs (54% growth). Consequentially the input energy has grown by 8%. Over the same period, 73 nos of new 33/11 kV substations have been added, 604 kms of 33 kV and 10628 kms of 11 kV network has been added. This bandwidth crunch has resulted in overall neglect to network operation, maintenance and improvisation, Commercial management, theft control and governance. As a result the network trippings & failures have increased by 41 %, AT&C loss has gone up by 5 % (over last 3 years not considering one time Govt arrear payment of Rs 86 Cr last year). If this is not restricted at this point with appropriate resource infusion, it will go into a freefall which will be beyond control. The following points further elaborate the current scenario.
- Existing Network is in a dilapidated condition and non-Compliant to Statutory and Safety requirements. The Safety assurance Structure is completely missing. Going forward, it shall be our endeavour to establish sound Safety Management Systems in Operations and Commercial functions and also establish an accredited Safety Training Centre. Minimum resources required for assurance of safety have been considered appropriately in plan.
- The network is extremely dilapidated due to lack of improvement initiative and investment over many years which, clubbed with scarcity of operations resources, has led to focus only on Breakdown maintenance rather than Preventive maintenance. Due to absence of basic equipment like Lightning Arrestors, LV side protection of Distribution Transformers, badly corroded & damaged Poles, sagging and lower capacity conductors with multiple joints, there are abnormally high number of faults and interruptions which jeopardises operations even in mild KalaBaishakhi instances. Further, due to defective AB Switches & switchgears, lack of HV & LV isolation in Transformers, etc the 33 kV feeders have to be tripped disrupting huge number of consumers every time even for low level consumer

service line repair works. Significant efforts shall be taken to ensure availability of 24x7 breakdown teams for consumers at Circles, Divisions, Sub Division levels as applicable. The Section level which is the foundation and operational center for all operational and commercial activities is completely devoid of resources. Resources required for creating the preventive maintenance and strengthening of breakdown maintenance have also been considered appropriately in plan for improvement of reliability of the 33 kV, 11 KV and LT network structure.

- Certain requirements of mature Distribution utilities like Network Engineering and Planning, Sub-Transmission System maintenance, Network Protection management, Project field monitoring, Civil maintenance etc are completely missing and need to be created. These have been considered in the resource plan.
- The existing systems are devoid of any advanced technological interventions. TPNODL shall ensure operationalization of SCADA for control and monitoring of 33 KV network and 11 KV in phased manner. It shall also require highly skilled and competent resources to establish Power System Control Centres (PSCC) and Engineering & Quality functions to usher in process automation, technology improvements and process innovations to improve network reliability and safety This would require induction of a highly skilled team of Engineering, PSCC and SCADA professionals.
- Due to lack of resources, the Commercial function specific skills & competencies have also lost focus due to exigencies of attending to breakdowns only. The major activities of meter reading, billing and collection is entrusted to number of local incompetent agencies which has resulted in around 40% provisional billing and only around 35% consumer coverage. This has given rise to huge volume of arrears and rampant theft of energy all across. Further there is absolutely no concept of consumer care in the Company. Thus, there is a need to create a revamped commercial organisation upto the Section level. To improve customer experience, Customer Care Centres and dedicated Call Centres shall be established, processes on New Connections, Billing, Payment windows, and SAP enabled processes would be created. This shall ensure satisfaction and seamless experience for the consumers.
- AT&C loss reduction efforts shall require all round focus on replacement of around 2.6 lakh meters in FY 22, implementing smart metering, ensuring 100 per cent meter reading based billing, formation of dedicated revenue collection and recovery teams to ensure 100% consumer coverage for collection.
- Establishment of dedicated Enforcement & Assessment bandwidth is required to curb the rampant theft of energy. This will require development of benchmarked commercial practices to analyse metering data, technology interventions for timely detection and assessment of theft and faulty meters, reconciliation of recoverable amounts. Further implementation of Smart Distribution

transformer metering technologies and indexing of consumers to DTs is required to identify & actioning on loss pockets.

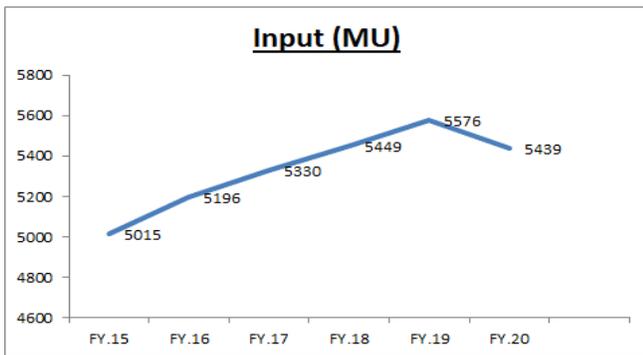
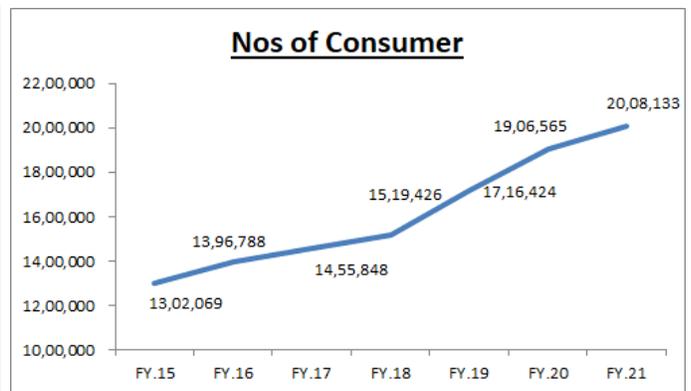
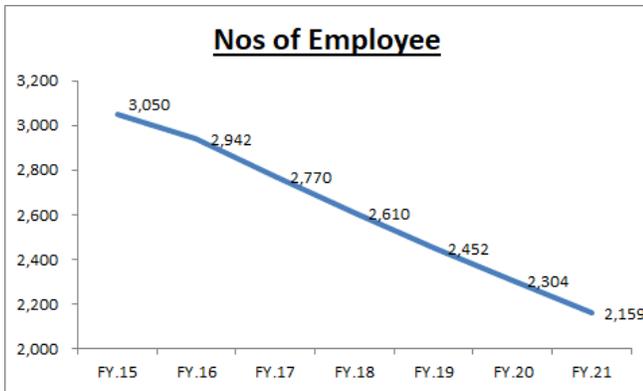
- There is currently no concept of Information Technology & Operation Technology (IT & OT) team in the Company. IT Infrastructure and Technology need to be adopted for improvements in reliability and reduction in losses, we have expedited implementation of the ERP Systems for management of inventories, procurements, Financial Management, HR and projects Management, SAP systems for decentralized billing and collection processes to significantly improve efficiency and reliability. Resource requirement for maintaining IT system and operation technologies like SCADA, GIS, Distribution Management System (DMS) etc has been considered in Resource plan. These resources will be required in phased manner in next two years.
- Other important functions including Finance, Stores, HR & Administration etc. and other support functions are having negligible bandwidth and need to be firmly and professionally established to meet employee and organizational aspirations.
- The existing resources need to be exposed to the best in class technology and competency development interventions to enhance productivity and career growth. As part of the talent management process, TPNODL is exploring to train and develop experienced and competent linemen and workers into supervisors and Junior Managers.

In view of the above-mentioned facts, TPNODL have examined the existing structures across Corporate office, Circle offices, Division Offices, Sub-Division Offices & section offices. To fulfill Organizational goals and expectations of all stakeholders the existing Departments have been re-engineered functionally and structurally. It shall build synergy and seamless integration amongst operation and commercial functions thereby creating employee mobility, capability, and career growth opportunities. Comprehensive revised resource requirements have been mentioned department wise and function wise (attached). Existing manpower of erstwhile NESCO have been mapped in this new structure and manpower gap analysis has been carried out as shown in table below:

Cadre	Operation Services	Projects	IT&OT	HR & Admin.	Fin & Acts	IA, R & Legal	CEO Office	C&MM	Commercial Services	Total (in Nos.)
Required manpower										
Senior Management/ Specialist	20	3	3	6	4	4	2	4	8	54
Middle Management	76	9	7	25	21	5	1	3	25	172
Junior Management	823	122	117	14	23	15	1	21	346	1482
Non Exe Staff	1546	0	0	34	0	0	0	26	146	1752
Total Required	2465	134	127	79	48	24	4	54	525	3460
Existing – Executive	274	11	2	15	46	14	2	15	63	442
Existing – Non Exe	1546	0	0	34	0	0	0	26	146	1752
Existing Total	1820	11	2	49	46	14	2	41	209	2194
Deficit	645	123	125	30	2	10	2	13	316	1266
Recruitment plan										
Up to March'22	371	40	45	14	2	6	1	16	141	636
2022-23	183	55	53	11	0	3	1	3	114	420
2023-24	91	28	27	5	0	1	0	0	58	210
Total	645	123	125	30	2	10	2	13	316	1266

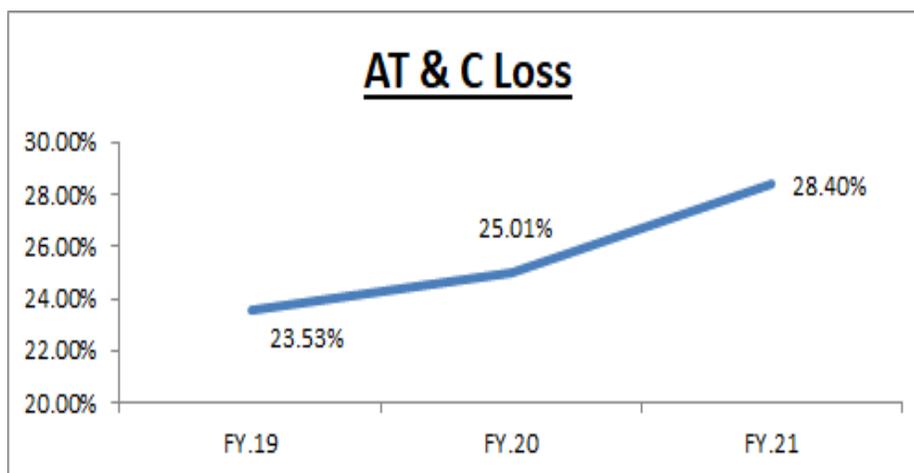
2.0 Background

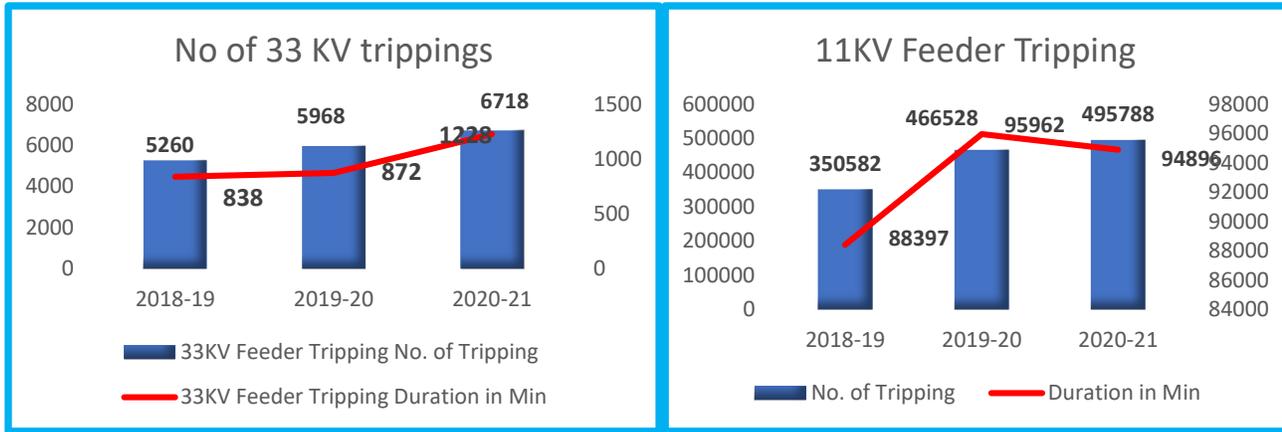
Over the last seven years since 2015, there has been steady decline in manpower due to superannuation. This period also saw significant increase in consumer base and Input energy. Further significant volume of additional network was added during this period due the various improvement schemes funded by the Government of India and Government of Odisha. 891 number of employees (29% of total base) have superannuated with no single recruitment. During this same period the number of consumers has grown from 13 Lakh to 20 Lakh (54% growth). Consequentially the input energy has grown from 5015 MUs to 5439 Mus (8% growth ignoring fall in Mus in FY 21 due to COVID-19 scenario). Over the same period, 73 nos of new 33/11 kV substations have been added (51% increase in base), 604 kms of 33 kV (27% increase in base) and 10628 kms of 11 kV network (40% increase in base) has been added. The bandwidth crunch has been unable to meet the expectations of the increase in consumer base, increase in network assets which resulted in overall neglect to network operation, maintenance and improvisation, absolute lack of Commercial management, theft control and governance. The trend of the above changes are shown below:



Year	33/11 KV Sub-station	33 Kv. Line (CKT Km.)	11Kv Line (CKT Km.)	LT Line (CKT Km.)
FY.15	144	2264	26441	45481
FY.16	148	2313	28883	50836
FY.17	152	2316	29379	51344
FY.18	169	2331	30273	52951
FY.19	188	2546	30993	54277
FY.20	204	2651	35850	64364
FY.21	217	2868	37069	66300

As a result the network trippings & failures have increased by 28 % in 33 kV and 41% in 11 kV, 9% increase in transformer failures and AT&C loss has gone up by 5 % over last 3 years (not considering one time Rs 86 Crs Govt arrears payment received last year). The downtrend of Network performance and AT&C is shown below:



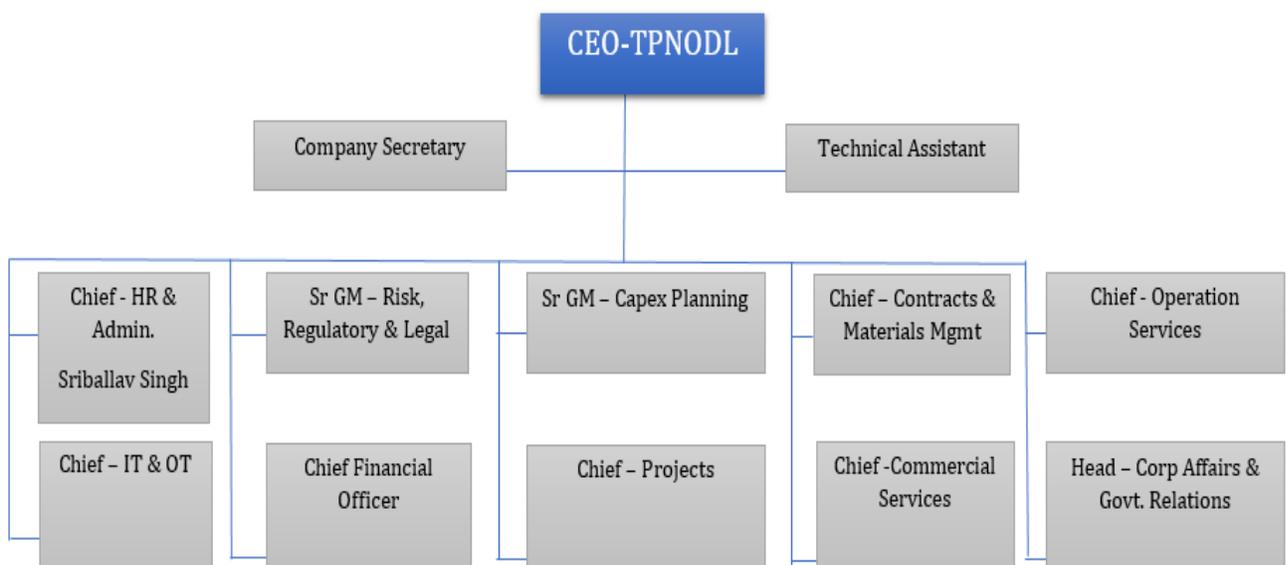


If this is not restricted at this point, with appropriate resource infusion, it will go into a freefall which will be beyond control

2.1 Proposed Overall TPNODL Organisation Structure

In order to bring in focused approach to drive the changes and further improvements, experts from Tata Power Group Companies has been infused in the Senior management level of TPNODL as Chiefs of various functions. Simultaneously, experienced senior leaders from existing erstwhile NESCO Utility have been also retained to leverage on their experience and expertise. The proposed Overall TPNODL Organisation Structure is shown below:

Organization Structure- Leadership (Corporate)



TPNODL Hierarchy	Description
Chief	Chief is the authority overall responsible for two or more functions comprising of many Departments and groups. Normally, one or more Heads and many HoDs are reporting to a Chief. Examples are CFO, CHRO, Chief Operations, Chief Commercials etc.
Head	Heads are responsible for one or more functions comprising of Departments & their HoD.
HoD (Head of the Department)	Head of Department is accountable for one or more specialised Departments and normally report to Heads.
HoG (Head of Group)	Head of Groups is accountable for group functions comprising of teams.
Team Lead	Team Leaders lead small teams who assign tasks assigned to a Group
Lead Engr./ Associate	Lead Engineers/Lead associates are individual contributors or member of teams.
Team Member	Team members are individual contributors in non-executive cadre

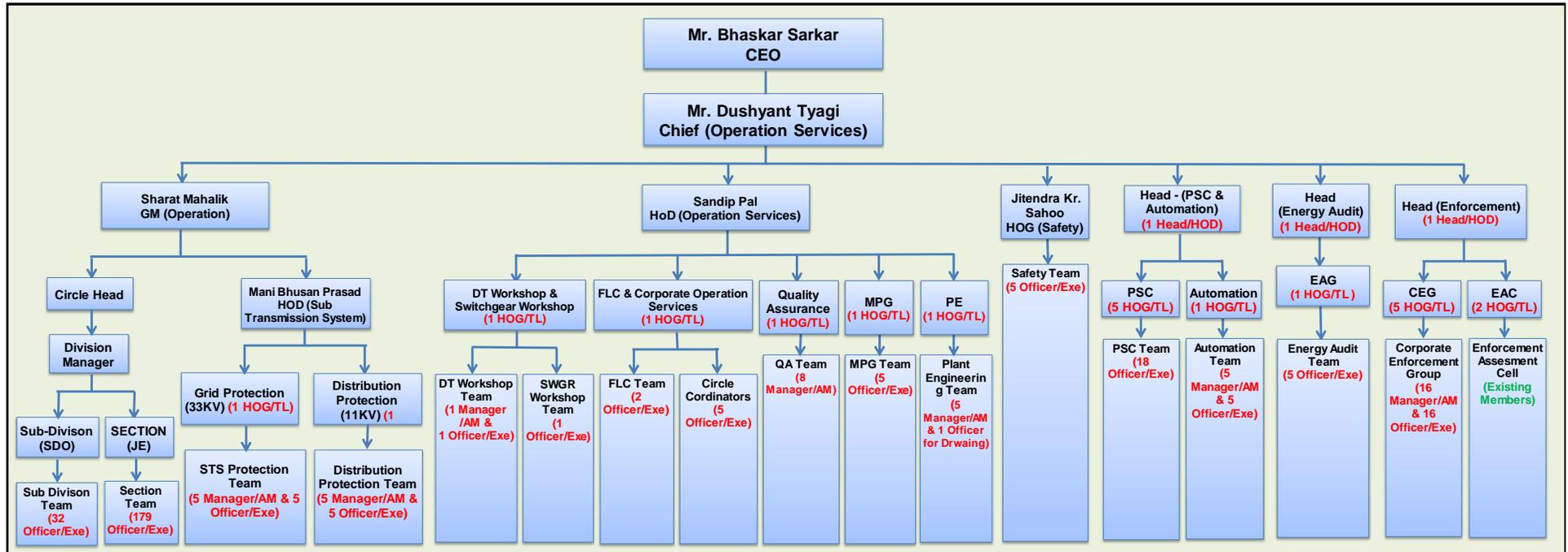
3.0 Proposed Resource Plan for Operations

TPNODL serves a Population of 99.75 Lacs (as per 2011 Census) with Customer Base of 20.02 Lakh and a vast Distribution Area of 27,857 Sq. Km. At present the TPNODL is facing major challenges of High AT&C loss level of 25%, poor power supply reliability, massive equipment failure, safety & dismal consumer services. There is limited technological interventions & most of the processes are completely manual & lacks standardisation. The existing Network (33/11/0.4KV) is in a shabby & dilapidated condition, which is a major concern for ensuring power reliability & Safety. The number of tripping in a day are alarmingly high. Average tripping in a day are more than 1000 as compared to just 20/day in Tata Power, Delhi for almost same number of 11 kV and 33 kV feeders taken together.

Safety is a major concern at TPNODL. In last 5 years, average fatal accidents have been as high as 40 whereas in 20-21 a total of 46 fatal accidents took place. The major reasons are related dilapidated network which is not complaint to safety and statutory requirements; non availability of adequate staff for preventive maintenance and attending to network issues related to safety; lack of awareness about safe work practices amongst manpower due to absence of safety structure.

At TP Northern Odisha Distribution Limited, the major focus shall be on providing reliable power supply, enhanced customer services, reducing the existing AT&C losses of 25% in a systematic manner & ensuring safety .All this will be achieved by upgrading the present distribution infrastructure, adopting new technologies and provide various digital services & one stop solution to our customers. In addition, TPNODL shall ensure to follow the legacy of parent Organisation & other group companies in terms of total quality management, process improvement, operational excellence, IT implementation. Keeping in view of the above points there is a need for re-engineering the existing structure of TPNODL & introduce new modules for an efficient & smooth operational prospect. The detailed organizational structure with proposed changes is given in the following paragraphs:

Organization Structure- Operations (Corporate)



- Required manpower for FY-22 is highlighted in Red in attached Organogram.

Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	19	16	3
HOG/Team Lead	MD2/ME1	74	57	17
Team Lead	ME2	141	72	69
Lead Engineer/ Associate	ME3/ ME4	649	125	524
Grand Total		883	272	613

3.1 Safety

To effectively manage the Safety management system safety is essential in the business for providing a safe and healthy working environment to the people, community, and animals.

Our company will prosper when it's structure safety department focus on their employee's health and safety.

The need for electrical energy which has grown drastically high, due to advancement in technology. This advancement has equally brought about high risks of electrical accidents, due to unsafe working condition and unsafe practices at work. There are many circumstances that can lead to an electrical accident. Hence, the need to reduce the accident at workplace become a necessity to increase productivity and making environment safe for the workers. Causes for these incidents include inattention through repetition, unexpected and inexperience, lack of knowledge of safe practice and overconfidence workforce. We can eliminate a large percentage of these injuries and death through the application/use of Standard safety processes and SOP's, world class modern PPE's, new technology of safety tool/electrical practices. The first stage in electrical hazard effective management process is to identify the associated hazards in different tasks related to electrical activity. The Power Distribution Sector being a highly manpower intensive Organization so a need of Structured Safety Lateral that can ensure Standard Safety Practices to build a Safety culture across the organization.

Overall, we will manage our business easier and more effectively, and we will reduce the number of potential accidents (the costs associated with correcting and recovering from these accidents). Health and safety management systems can positively influence our business in numerous ways, both direct and indirect. Here are more benefits due positives of implementing a health and safety management system.

Benefit of having this department:

- Hazards identification that could lead to prevent electrical accidents.
- Assessment of hazards surrounding electrical works/task to protect wild life and community.
- Recommend Control measures necessary to curtail the electrical accident likely to occur will be in place.
- Plan Recovery measures in place in case the control measures fail.
- Plan Workers education through organising training on safety in an electrical environment.
- Reduce chances of accidents
- Continual improvement of safety in the organisation.
- Prevent animal and public accidents.
- Increase productivity.

- Increased compliance.
- High productivity.
- More profit in business.
- Protecting our employees.
- Increasing employee satisfaction.
- Increasing Customer satisfaction.
- Generating positive public reputation of the organisation.
- Lowering insurance premium
- Obtaining more finance easily
- Attracting business
- Adhering to corporate social responsibility
- Accountability
- Transparency
- Ethical behaviour
 - Respect for stakeholder interests
- Respects for the rule of law
- Respect for international norms of behaviour
- Respect for human rights

Skill set required for working in this department:

- Conversant with safety standards and procedures.
- Interpersonal skill
- Listening skill.
- Focus on execution.
- Presentation and analytical skill
- Takes personnel ownership.
- Eager to learn new things and keep him/herself updated with latest improvement on safety.
- Leadership quality
- Ability to motivate people.
- Innovative to improve new standard and practices

3.2 Sub-transmission System (STS)

At present, ownership of entire network starting right from 33KV feeders emanating from OPTCL Grid Substations to customer energy meters rests with sections headed by a Junior Engineer and his team. Typically, a JE is having 2-3 technicians and 4-5 lineman/helpers. Equipment Maintenance & Relay Testing (E&MR) department extends support to section staff for maintenance of 33/11KV primary substations. Due to improper structure and inadequate setup, only bare minimum breakdown maintenance of 33KV system is resorted to. As such condition of network is extremely dilapidated. As per the available interruptions data, each 33 kV feeder experiences about 240 tipping/annum which is exorbitantly high and would have damaged the breakers badly. Similarly, the interruption of equipment in 33/11KV substations are also on higher side. There is no adequate workforce available for maintenance and upkeep of 33KV system. Since the 33KV system is backbone of TPNODL's network, the same needs proper attention in ensuring quality and reliable supply.

In order to ensure proper maintenance and upkeep of 33KV system, it is proposed to reorganize the present structure and establish a separate structure for maintenance and upkeep of 33KV system by setting up a separate Sub-transmission System. In the proposed structure of Sub Transmission System (STS); there shall be dedicated teams for maintenance of lines (Specialized Line Maintenance Crew, SLMC), maintenance of Substations (Substation Maintenance Crew, SMC) and Breakdown Maintenance team (Hub Maintenance Crew, HMC). There shall be two teams each in five circles for SMC and one team of SLMC at each divisions who shall work on only preventive maintenance of lines and substation equipment. So, there shall be 16 teams for preventive maintenance of lines and 12 teams for maintenance of substations (3 teams for Baripada & Balasore each, rest have 2 each). Since geography is very wide spread at TPNODL; there shall be 1 HMC team in each of the five circle(2 in Balasore being main town) who shall work round the clock in three shift to ensure extremely prompt restoration. On overall basis there shall be 6 HMC teams across the geography of TPNODL.

Benefit of having this department:

- Smooth operation of 33KV system
- Periodic maintenance of all 33KV power distribution equipment
- Increase in reliability of 33KV system
- Reduction in accidents / incidents
- Improvement of 33KV system through technological interventions
- Optimization of operational expenditure

Skill set required for working in this department:

- Knowledge of sub-transmission system operations
- Knowledge of 33KV power distribution planning, construction, and maintenance work processes

- Knowledge of advanced condition monitoring systems
- Knowledge of reliability standards
- Knowledge of quality improvement tools
- Analytical skills

3.3 Protection & Testing

Protection of a network is an integral part of the network itself and its performance secures network stability, mal operation affects reliability, MTTR and no operation can cease life of an equipment/ living being in case of an abnormal condition. This department shall be responsible for ensuring quality in existing protection and testing formats and will bring in futuristic technologies in the network to upgrade the existing protection & testing practices to the world class mark.

This department shall ensure proper protection setting calculation, protection setting adoption, logic configuration. This department will closely work with all other departments like Engineering & Quality, Safety, System, CPSCC, Distribution, Procurement, Meter Management Group, Energy Audit, Project etc. to devise network constituents, safety standards in respect of protection, equipment health, NOP feasibility, load ability of network, maintenance perspective, enabling meter installation, erection and commissioning of new stations, providing charging clearances for new and existing jobs, bringing in modern technologies, carrying out technical sessions etc.

Benefit of having this department:

- Tripping co-ordination.
- Change management from stop gap arrangement to focused protection & testing team.
- Life expectancy of the existing asset and assurance of best quality in new installations.
- Monitoring equipment health
- Critical analysis and feedback in respect of maintenance.
- Prompt action in case of faults
- Conditional clearances on equipment charging

Skill set required for working in this department:

- Electrical Engineering.
- Experience in protection and testing related activities.
- Ability in interpreting testing results and analytical ability with past trends.

- Eager to learn new things and keep him/herself updated with latest in every respect of protection & GSAS standards
- A must hands on experience/ want to do practical citation/ illustration with adopted knowledge in engineering/ training/ past learning.

3.4 Distribution Services

This department is comprised of majorly Technical Analysis Group (Corporate Operation Service), Transformer & Switchgear Workshop, FLC, Quality Assurance, Maintenance Planning & Plant Engineering Group.

Technical Analysis Group (Corporate Operation Services)

Brief Description of department:

At the current scenario, the Operation & Maintenance of distribution network starting from the 33/11 KV substation up to the Low voltage (220 V) at consumer's premises is being looked after by Sections which headed by a JE with a team of 4-5 line staff .

Due the improper & inadequate team structure the sectional team is broadly engaged in only attending breakdowns & No Power Complaints. The critical activities like operational planning, Fault analysis, preventive maintenance etc. are very dismal at this moment & the distribution network is in a very shabby & dilapidated condition, which is a major concern for ensuring power reliability & Safety. As per available records the 11 KV network experienced more than 3 lakh major tripping in FY 20-21.

This department shall be responsible for providing analysis reports on break down/No Power Supply & guiding the divisions to enable the high network Up time & best reliability of the power system, reducing the MTTR of breakdowns & No Power Complaints, preparing concept notes, introducing the latest & best in class technology available in the power distribution sector, annual maintenance planning at 11 KV level , ensure optimal utilization of the network, driving theme based maintenance activities, carrying out bid analysis, Improving the workmanship & skillset of technocrats.

In order to ensure improved reliability indices (SAIDI, SAIFI) better & systematic maintenance and upkeep of power distribution system, it is proposed to reorganize the present structure and establish a separate structure for Technical analysis with adequate & experienced resources.

Benefit of having this department:

- Preventive Maintenance of all Power distribution network & enhancement lifetime of equipment.
- Increase in reliability of Power Distribution system.

- Ensuring Safety & reduction in accidents / incidents
- Improvement of Power Distribution system through technological interventions
- Optimization of operational expenditure.
- Improved Consumer Satisfaction.
- Capacity Building of the existing resources.

Skill set required for working in this department:

- Knowledge of power distribution network, construction, operation and maintenance work processes.
- Excellent analytical, communication and liaison skills required for both internal & external customers.
- Technical & business writing skills.
- Knowledge of Power reliability standards.
- Understanding of CEA, statutory documents, BIS, IEC, engineering codes, standards, specifications, etc.
- Hands on experience on various tools like bar charts, Gantt charts, WBS etc.
- Eager to learn new things and keep him/herself updated with latest in distribution sector

Transformer & Switchgear Workshop

Brief Description of department:

Distribution transformer workshop already exist in TPNODL but with limited manpower mainly with outsource employees. Distribution transformer is the heart for the utility & hence, maintaining inventory of repaired transformers is of paramount importance & at the same time, timely repairing of faulty transformers as & when basis is also of utmost important. In line with this, we are going to establish a full fledge transformer workshop at TPNODL very soon. Furthermore, installation of Ring Main Unit (RMU), Auto-recloser and sectionalisers along the network has already been planned in view of N-1 redundancy in our network. Whenever these switchgears will come in force, attending day to day issues will also come into the count with respect to the timely resolution and availability of skilled workforce for the same. Keeping these parameters in mind with respect to RMUs, Autorecloser, Sectionalisers & LT Switchgears across TPNODL to ensure uninterrupted power supply to the end consumers, Switchgear Workshop group is being proposed.

TPNODL will gradually develop condition-based maintenance for 11 kV switchgears as well to optimize maintenance cost and efforts.

Benefit of having both these groups:

1. To ensure prompt support for resolution of Transformer, RMU & LT switchgear related complaints.
2. To ensure timely repairs of DT, RMUs/ Switchgears received at the workshop.
3. Managing day to day activities & deploy team members to meet site requirement.
4. Preparing & Maintaining of MIS for DT Failure, LT-HT Switchgear Failure.
5. Enhancement of Life of DT & Switchgears.

Skill set required for working in this department:

1. Fundamental knowledge and application of equipment like DT, RMU, Switchgear panel, LT ACB, Auto closure & Sectionalizer etc.
2. Knowledge of maintenance & trouble shooting procedures of DT, RMU, FRTU panel, ACB etc.
3. Ability to identify fault/repeat faults and develop/co-develop solutions for preventive action.
4. Ability to replacement spare, testing of equipment & knowledge of standards

Fault Location Cell (FLC)**Brief Description of department:**

At present we have very limited underground cable network in all the circles, Balasore, Bhadrak, Baripada, Jajpur Road & Keonjhar. Majorly in road crossing & railway track crossing. But we are going to convert many overhead circuit to underground in upcoming time just in view of reliable power supply to the valuable customer base. Underground network remains unaffected even in adverse weather condition. Thus, underground Cable Network will form a vital part of network and thereby it becomes imperative that this network always remains healthy. At present, to maintain the existing & forthcoming underground cable network, there is no dedicated team.

Hence, to maintain robust underground cable network across TPNODL by ensuring timely fault locations, rectifications and timely resolution of underground cable fault complaints thereby keeping the downtime on account of faults to a bare minimum and thus ensuring uninterrupted supply of power to the consumers of TPNODL, FLC department is proposed.

Benefit of having this department:

1. To ensure timely pre-location and pinpointing (detection) of the underground cable fault, further timely rectification of these faults by deploying designated personnel for excavation and jointing through safe/ standard work practices while ensuring quality of workmanship at the same time.

2. To analyse the failures in the underground cable network and implement corrective action to avoid recurrence.
3. To recommend on the underground cable network augmentation/ old sick cable replacement to bring down the failure rate of the underground cable network.
4. To ensure the availability of Underground Cable Fault locating systems and also the availability of jointing accessories for underground cable fault rectification.
5. To revise the specifications of Underground Cables/Accessories as and when required, perform pre dispatch Inspections of Underground Cables at vendors' factory, technical evaluation of bids with respect to underground cables and accessories.
6. To formulate and revise of Operating Instructions, Work Instructions for ensuring safe execution of various functions of the group.

Skill set required for working in this department:

1. Knowledge about different type of cables & their constructions.
2. Detail working knowledge of FLC equipment's like pinpointing of fault, route tracing skills and cable identification skills.
3. Knowledge of network components like DT, RMU, HVDS, Grid Architecture, switch gear panels, HT Metering Cubicles.
4. Fault Identification and troubleshooting skills for rectification and restoration of equipment's. Basic knowledge of OEM manuals & drawings.
5. Knowledge about Factory Acceptance Test (FAT) details as per IS/IEC Standards of equipment's. Test Procedures and results interpretation as per GTP/Standards. Knowledge of routine and type tests of equipment's.

Maintenance Planning Group

At present, there is no preventive maintenance systems in place for 33KV and below power distribution equipment. As a result, the interruptions are on very higher side. In order to increase the availability of network system, improvement of maintenance practices is desirable, TPNODL is planning to form a centralize Maintenance Planning Group (MPG). This group will be responsible for establishing a process driven approach for planning, scheduling, monitoring, and analysis of maintenance programs in TPNODL. The key roles of this department will be as under

- Planning, Scheduling and Monitoring of Maintenance Activities
- Material and Services Management.
- Reliability Analysis

- Technology adoption for system improvement

TPNODL will gradually implement condition-based maintenance system to optimize maintenance costs and efforts. The MPG gradually will use SAP Plant Maintenance Module to streamline the maintenance activities. MPG will also monitor the reliability parameters such as SAIDI, SAIFI, and MAIFI etc.

Benefit of having this department:

- Focused asset management
- Planning, scheduling, and monitoring of maintenance activities.
- Analysis of maintenance programs for effectiveness
- Improved system reliability and hence less outages for customers
- Improved productivity.
- Reduced chances of accidents / incidents

Skill set required for working in this department:

- High analytical ability.
- Knowledge of asset lifecycle management.
- Understanding of engineering codes, standards, specifications.
- Knowledge of quality improvement tools.
- Knowledge of reliability standards
- Knowledge of online and offline condition monitoring systems
- Knowledge of modern technologies for enhancing the performance of power distribution system.

Plant Engineering

The designing of power distribution network is an important aspect to ensure trouble free completion of defined service life of network element. Since we are in regulated business, this group becomes important and its responsibility is to provide right design layout with selection of right equipment having detailed technical specification and installation drawings. This department will have two groups one for electrical and metering related jobs and another for Civil engineering part. Both groups will do the detailed engineering which involves standardization of specifications for all equipment / civil structure that are to be procured / constructed by TP Northern Odisha Limited to ensure that desired quality can be ensured from various OEMs, Suppliers and Business associates. While preparing the specification, all relevant statutory and technical standards are to be followed. Apart from specification preparation, this group shall be responsible for preparation of Installation drawings for project execution to ensure all statutory /

technical standards laid down under various regulations must be followed. This group will also capture the feedback from all stakeholders and site constraints and provide solution to the field teams to resolve the constraints.

This team will also be responsible to evaluate the capability and capacity of bidders to supply material & services as per laid down specifications and drawings. This group in coordination with operation and Quality assurance will carry out factory visit to assess the capability of its works in terms of quality, safety, process and machineries

This team shall also work in close coordination with network planning group to scan the market and introduce efficient equipment in the network.

Benefit of having this department:

- Detailed engineering in time bound manner.
- Procurement of quality material with available detailed technical specifications.
- Clarity among OEMs and Business associates about the requirement & specification.
- High efficiency of asset.
- Compliance to Statutory & Regulatory guidelines.

Skill set required for working in this department:

- High analytical ability and technically sound.
- Deep Understanding of Sub-transmission and distribution system equipment.
- Good knowledge of relevant IS, IEC, REC, CBIP standards, other standards, Indian Electricity Rules, Supply Codes and Performance Regulations, CEA regulations.
- Knowledge of constructional details, technical parameters, applications and operation of Equipment.
- Eager to learn new things and keep him/herself updated with latest in distribution sector.

Quality Assurance

Quality Execution & Installation of equipment/assets in power distribution network is of paramount importance for the reliable power supply, failure mitigation & asset life enhancement. Hence this Quality assurance group becomes an important part of the organisation and its responsibility is to take care about the right & quality execution of any activity as per the technical specification and installation drawings as freezed by Plant Engineering Team. This group will also have the responsibility to check the quality of incoming materials just to ensure that desired quality can be ensured from various OEMs, Suppliers and Business associates. While verifying the site execution job, all relevant statutory and technical standards

are to be followed. This group will also carry out the in-house inspection work and also check for site constraints and provide solution to the field teams to resolve the constraints.

This team shall also work in close coordination with plant engineering group to ensure that all the laid down specifications & drawings are followed during work execution at site.

Benefit of having this department:

- In-house inspection of work executed in entire TPNODL network.
- Quality check during & after work execution.
- Quality check for incoming materials.
- Compliance to Statutory & Regulatory guidelines.

Skill set required for working in this department:

- Good Technical Knowledge of Material & Services.
- Deep Understanding of Sub-transmission and distribution system equipment.
- Field experience for STS & Distribution network.
- Knowledge of technical installations, applications and operation of Equipment.
- Eager to learn new things and keep him/herself updated with latest in distribution sector.

3.5 Power System Control Centre

As per Orissa Grid Code (OGC) Regulations 2006, Clause 2.5 outlines the role of Distribution License, as per the code one of the functions of the Distribution License is to establish Distribution System Operation & Control Centre. The clause is reproduced below:

“Establish Distribution System Operation & Control Centre (DSOCC) at a strategic location near the geographical center and load center of the Distribution Licensees’ Area of Supply, having adequate communication facilities. The DSOCC shall be manned round the clock with the required staff during emergency periods. It shall take appropriate action in response to grid warnings as decided by the Distribution Licensee and convey suitable instructions to the operating staff. It shall take timely action in response to grid warnings as per standard instructions laid down by the Distribution Licensee in this regard and if necessary, issue appropriate instructions in addition, if a particular situation warrants. The SLDC / ALDC shall intimate the Distribution Licensee through DSOCC, regarding significant deviations of final schedules of State generators and CGS on overall merit order. The DSOCC shall undertake suitable load management and curtailment.”

Power System Control Centre is thus being set up for Tata Power Northern Odisha Distribution Ltd.

Centralized Operations

Remote Monitoring & Controlling of the Network Operations of the License area will be effected centrally through SCADA for improvement in restoration times and improving the availability. With the introduction of PSCC, all the Permit To Work (PTW) will be issued centrally and uniformly across the license area. Centralized outage management & planning would be carried out from PSCC, Real Time Power Management and day ahead scheduling will also form a part of the operations. The overall functions of PSCC are depicted below:

1. Various functions envisaged from PSCC but not limited to areas under:
 - (a) Real Monitoring & Control of 33 and 11 kV Network
 - (b) Day Ahead Scheduling, Real Time Monitoring & Control of Power
 - (c) Planning & Outage Management
 - (d) Reliability Analysis & Reporting
 - (e) Voltage Control
 - (f) Institutionalization of Safety Procedures at HT level
 - (g) Coordination with State Load Dispatch Centre
 - (h) Contingency Planning
 - (i) Demand Estimation

3.6 Automation

Brief Description of department:

This department shall be responsible to meet all the customer expectation by infusion of right technology such as State of the art SCADA, Advanced Distribution Management System, Outage Management System, Geographical Information System, communication technology, Cyber Security implementation, Numerical technology for Sub-Station automation system for ensuring real-time visibility of the entire network for faster decision making, fault analysis and ensuring reliability and availability of the network and equipment.

Geographical information System (GIS) Group will be responsible for mapping all assets of distribution network in Geographical system and will maintain this system to incorporate all network related changes in system. GIS data will be used for future network planning and energy audit, detail consumer indexing will help in reduction of losses and load management.

Supervisory control and data acquisition system (SCADA) Group: this group will be responsible for implementation and maintenance of SCADA system which is planned for implementation in TPNODL in next three years. SCADA system will control entire network and will manage real time data of network related to outage and demand.

Substation Automation group: this group will be responsible of maintaining Remote terminal units and other related signals units in Grid station automation equipment which provide data to remote centralised SCADA system.

The responsibility of the team will be to prepare concept note, detailed project report, specification, test plans, check list, carrying out bid analysis, vendor and technology selection, procurement of hardware and software, ensuring proper implementation, testing and managing of the system for 100% availability.

Based on conformance to the required specifications vide defined test plans, this group shall carryout Factory Inspection Test (FAT) and Site Acceptance Test (SAT) before handing over the system for operational use.

Benefit of having this department:

- Availability of entire network data and visibility of complete 33kv and 11 KV network from centralised location for effective decision making and restoring network in case of any fault . This system will ensure there is no overloading and in case of any fault it will guide Operator to restore network from centralised location .Latest Technology evaluation and implementation for real-time monitoring, supervision and Control of electrical network for higher reliability of Power System
- Introducing improved Security and Safety to minimize human errors in operations
- Developing system to enable effective Occurrence Analysis and Quick restoration of power supply,
- Introducing application, latest technology to enhance the asset utilisation by increasing the loading and availability

Skill set required for working in this department:

- Design, Engineering, project execution, maintenance of Operation Technology i.e. SCADA, Sub-Station Automation and Communication System for Sub-Transmission and Distribution network.
- Understanding of O & M / Testing / Erection & Commissioning activities of Automation and Communication system of Operational Technology (Transmission & Distribution) environment preferred.
- Knowledge of development, maintenance and analytical application building on SCADA, Enterprise Historian, Business Intelligence systems

- Eager to learn new things and keeping him/herself abreast with latest technology in Operation technology
- Knowledge & exposure of communication protocols, IIoT systems, knowhow of software languages such as Unix, Linux, C++, VB, Visual studio & RDBMS etc.
- Good analytical, communication and liaison skills. Convincing technically OEMs and internal customers, negotiation skills and business & Technical writing skills.

3.7 Energy Audit Group

Brief Description of this group:

This department shall be responsible to carry energy auditing of the entire TPNODL network. This department shall plan the capex requirements for energy auditing meters at Interface locations, PTRs, 11KV Feeders, Distribution Transformers, and at Interzonal feeders so as to ensure ring fencing of the transmission and distributional network for the purpose of accurate input and loss estimation

The energy audit group shall be responsible for carrying out the following activities

To calculate & circulate of AT&C losses on monthly basis at Organizational, Circle, Division & Section level.

To generate Service Level 1 report on monthly basis and calculate accurate Input for TPNODL This shall include coordination with OPTCL for Main Tariff Meter Data, comparison / analysis of Main Tariff Meter Data with TPNODL's Check Meter Data etc.

To generate Service Level 2 report on monthly basis. This include the input calculation at each geographical level and technical loss estimation for Sub transmission network.

To project DT wise Energy mismatch (Circle, Division & Section level. on a monthly basis, for all the metered DTs and to project 11 kV Feeder wise Energy mismatch (Circle, Division & Section level. on a monthly basis, for all the metered DTs

Benefit of having this department:

- Accurate Input Calculation at company level for the Billing to TPNODL
- Monthly AT&C Calculation at each operational area for better monitoring and control of Loss Reduction measures.

- Data Services like Energy Input, Peak Load, Feeder Load , DT Load reports to Operation and planning department for better planning and Operation.
- Support to Real time Power Management & Energy Efficiency measures

Skillsets Required

- Knowledge of Measurements, Energy Metering, Electrical equipments like CT/PT, Clamp on Meters, Transformers, Power systems.
- Understanding of O & M / Testing / Erection & Commissioning activities of Electrical systems like Meters, CT/PT, Transformers, Energy Meters,
- Design, Planning, project execution, maintenance of Energy Audit Technology i.e. Meter Data Measurement and Communication System
- Eager to learn new things and keeping him/herself abreast with latest technology in Operation technology
- Knowledge & exposure of computer skills like MS Excel, Data Analysis in MS Excel, Meter Softwares ,knowhow of softwares and Advanced data Analysis skills , Data Presentation skills .
- Good analytical, communication and liaison skills. Convincing technically OEMs and internal customers, negotiation skills and business & Technical writing skills.
- Knowledge of Electricity Acts, Metering Regulations and CEA Regulations on energy Auditing

3.8 Enforcement

Curbing Electricity theft is one of the major elements which improves billing efficiency which in turn reduce AT&C losses. In view of the same, existence of Enforcement department come into picture. Major tasks of Enforcement department is to book consumers/non consumers who are indulged in electricity theft. Theft may be by direct tapping from LT network, HT network or via tampering electricity meter. Enforcement team check meter's accuracy at all voltage level to detect theft. Enforcement bookcases as per section 135 and 138 of Indian electricity Act 2003 and as per the rules and regulations of OERC. Enforcement also follow with booked consumers to pay penalty amount and if not paid with in stipulated time, enforcement also take action of lodging FIR against the accused through proper channel. Enforcement works on references provided majorly by meter reading group, metering group, sub-divisions, whistle blowers, informers etc. Enforcement also conduct mass raids in the area having large number of hooking. Enforcement department also responsible for booking of category misuse and other misuse cases reported to TPNODL. Enforcement also keep record of such cases and follow them till conclusion.

Benefit of having this department:

- Improvement in billing efficiency.
- Reduction in AT&C losses.
- Increase in revenue due to reduction of losses.
- Provide feedback to Engineering/ metering team for necessary changes in specifications of meter if needed.
- Provide feedback to operations team for closing the open theft prone network in their area.
- Maintain discipline among consumers.

Skill set required for working in this department:

- Experience in booking electricity thefts.
- Knowledge of Indian electricity Acts 2003 and OERC rules and regulations.
- Knowledge of latest metering technology and tempering methods.
- Expertise in doing hands on testing and analysing results.
- High observation power.
- Should be agile and ready to move anytime.
- Should be able to manage conflicts at site.
- Should be able to handle teams at site.

4.0 Proposed Resource Plan for Commercial

TPNODL licensed area is spread over a geography of 27857 Sq.Km and serve the registered consumer base of 2 million with a peak load of around 882.45 MW. For effective operations, the license area is divided into 5 circles which is further sub divided into 16 Divisions, 50 Sub-divisions and 159 Section Office which manage the commercial and O&M activities in order to serve its consumers.

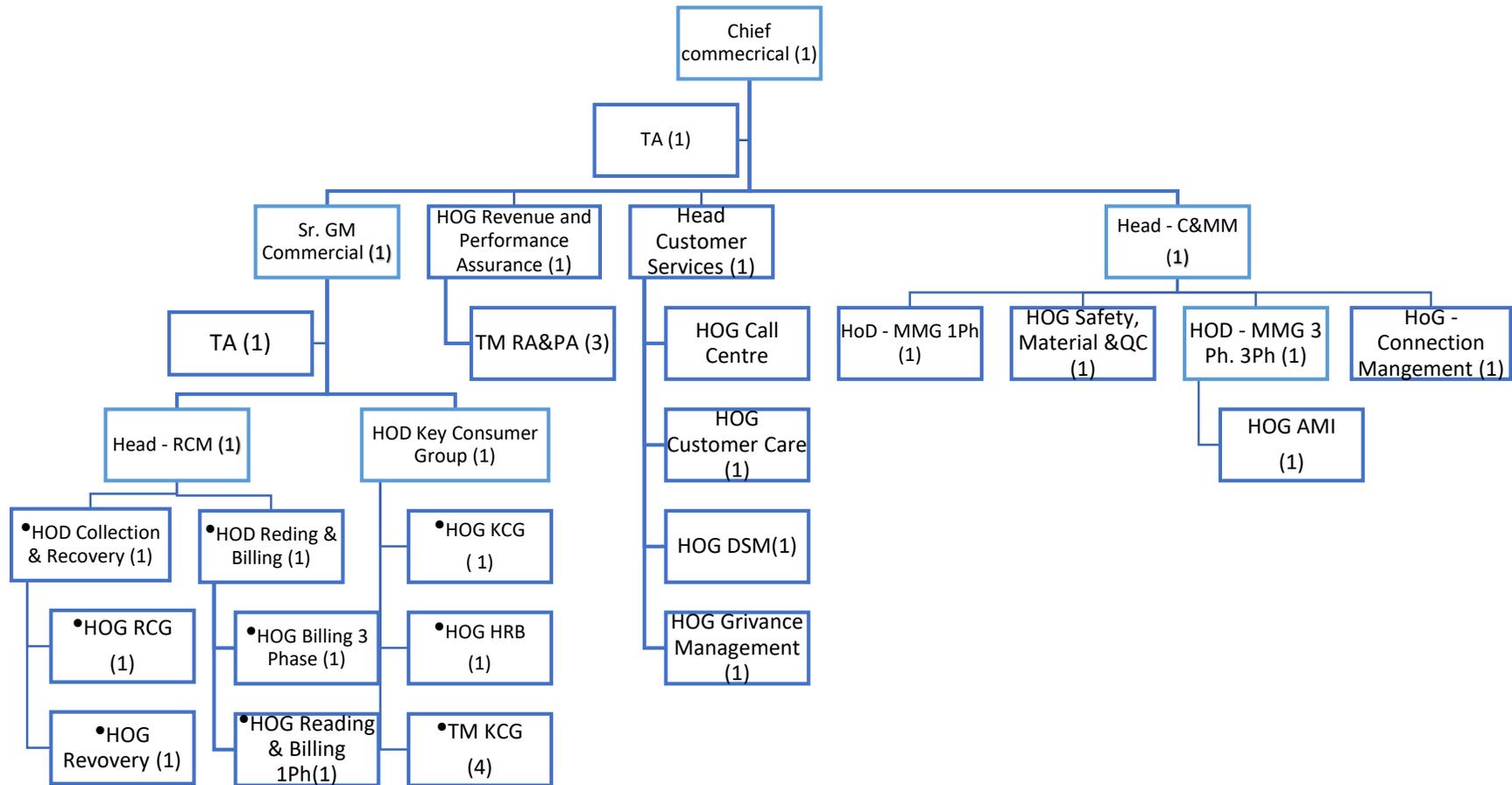
In FY 2020-21, against the total input energy of 4941 MU, billed energy was 3922 MU resulting into billing efficiency of around 79%. Out of this 3922 MU billed energy, approximately, 42% (87% Rural, 13% Urban) of the energy billed in a particular year is supplied to Domestic Consumers with Commercial and Industrial Consumers contributing to 9% and 35% of the total billing (in terms of units) respectively. Balance 14% energy is billed to Railways/Public Street Lighting/Public Water Work/Irrigation and Agriculture etc. In terms of Revenues, Domestic Consumers contribute to around 31%.

Currently, commercial services are provided by manpower posted at Division, Sub-Division and Section Office managed by Divisional Manager (DM). DMs are responsible for operation and commercial activity both but his major focus is in operational activity due to which commercial activities are not monitored properly.

Further, in addition to above, lean commercial structure exist at head quarter level which primarily focusses on policy matters related with commerce. However, the implementation of guidelines issued are implemented by Circle and Division head only at ground level.

In order to have a control of commercial services leading to improvement in parameters like Billing Efficiency, Collection Efficiency and Customer Service, a structure with team at Division, Sub-Division and Section offices need to be established through Circle Commercial Manager at Circle Offices and Customer Services Manager at Division Offices.

Organization Structure- Commercial (Corporate & Back Office)



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	8	6	2
HOG/Team Lead	MD2/ME1	26	26	0
Team Lead	ME2	89	26	63
Lead Engr./Associate	ME3/ ME4	257	5	252
Grand Total		380	63	317

Note: Manpower of Chief Commercial office and RA & PA only has been shown here

4.1 Commercial – Customer Services, New Connection, Meter Reading, Billing & Collection

Customer Service

TPNODL has limited customer touch point and non-availability of dedicated manpower at Division, Sub-Division and Section for timely customer service delivery lead to customer dissatisfaction 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 without system. This practice leads to undue delay in processing of customer request, updation of customer payment/record, and inconsistency of data in system.

Customers need to do follow up visits for processing or query about the status leading to customer dissatisfaction as no dedicated monitoring of customer complaint and centralized follow-up department. In order to improve the customer services delivery, it is proposed have a dedicated customer service structure at Circle, Division, Sub-Division and Section level. Further, in order to provide the customized services, client managers will be deputed for providing services to High End (110 kVA and Above), Medium Revenue like MSME (5kVA to 109kVA) and Govt & Institutional Customer.

In addition to above, Commercial Manager and Dy Commercial Manager at Circle and Division levels will execute all commercial activity like Customer Complaint, Payment Acceptance, Recovery and New Connection etc.

Centralized Call Centre and Performance Assurance Team, Customer Care Team and Key customer group with dedicated team will further ensure better customer experience and satisfaction.

New Connection:

To provide hassle free new connection with convenience and within the regulatory guidelines, TPNODL has decided to revamp the new connection, additional connection, ownership change, load enhancement, load reduction etc., processes. Currently all these cases are being processed de-centrally at Section level, Divisional level. Cases are also moved to Circle level as well as HQ level depending upon the type of cases. Presently, all the cases are primarily processed by the section in-charge. It is observed that considerable delay takes place in releasing connection as section in-charge not only takes care the commercial aspect but also maintaining the reliable supply in the area. The revenue clearance is also primary depend upon the field report of the concern lineman of the section and no system base approach is found available which leads to huge revenue loss due to non-collection of arrear at the time of releasing new connections. In the absence of dedicated team for handling and monitoring customer

request related to new connection, additional connection, ownership change, load enhancement, load reduction cases etc., are being processed with delay leads to dissatisfaction and inconvenience to the customers.

To improve the New Service Connection, additional connection, ownership change, load enhancement, load reduction cases etc., a dedicated team under the aegis of Connection Management is planned by TPNODL. This team will ensure day to day monitoring and tracking along with process simplification and digital technology implementation. The decentralized team at Division will process all cases applying /pending in that particular Division.

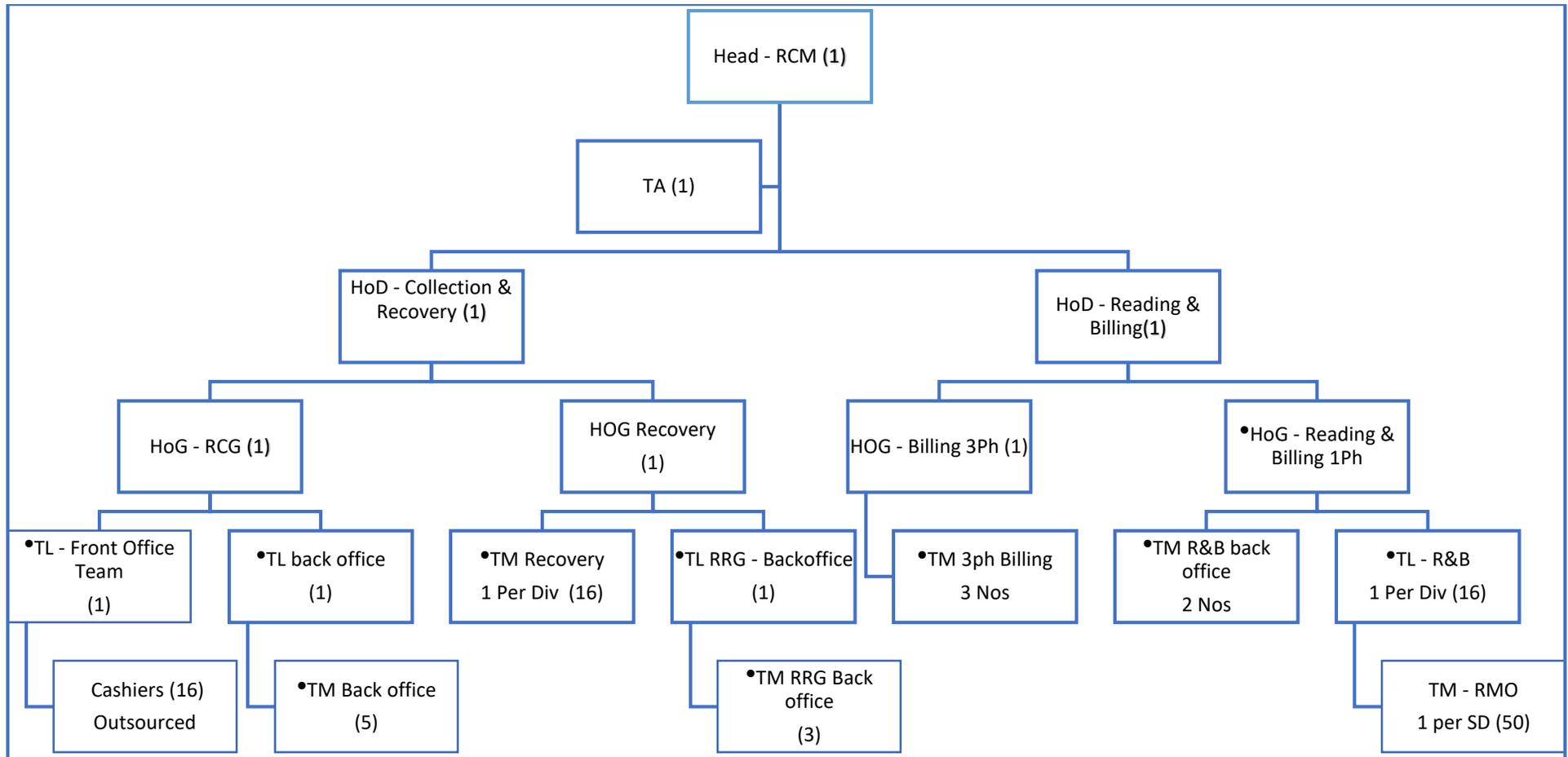
Meter Reading, Billing and Collection

Meter Reading, Billing & Collection as well as Recovery activities in complete revenue cycle management is very important for any power distribution business and same with TPNODL. Commercial processes play important role in reducing AT&C Loss. For a distribution utility, it is to be ensured that each & every commercial process has different strategy and structure. A unique strategy of restructuring of commercial process & department functionality will give us additional benefit in better monitoring, addressing challenges & risk mitigation. It will also help in converting this loss-making organization into an engaged, high performing organization. Restructuring does not mean to spare existing manpower but how effectively utilize resources through employees' engagement initiatives and recruiting experience resources through various channel.

Presently, in TPNODL Spot Meter Reading activities are done by outsourced agencies where franchisees are not engaged and in one of the division franchisee is looking after all MBC activities. For Non-SBM cases, MRT of the Division is involved for reading. EHT billing is being completely looked after by TPNODL employees. There is no dedicated collection/recovery department in TPNODL for monitoring collection & Disconnection activities. At Division level few agencies are involved for collection. There is not standard process across TPNODL.

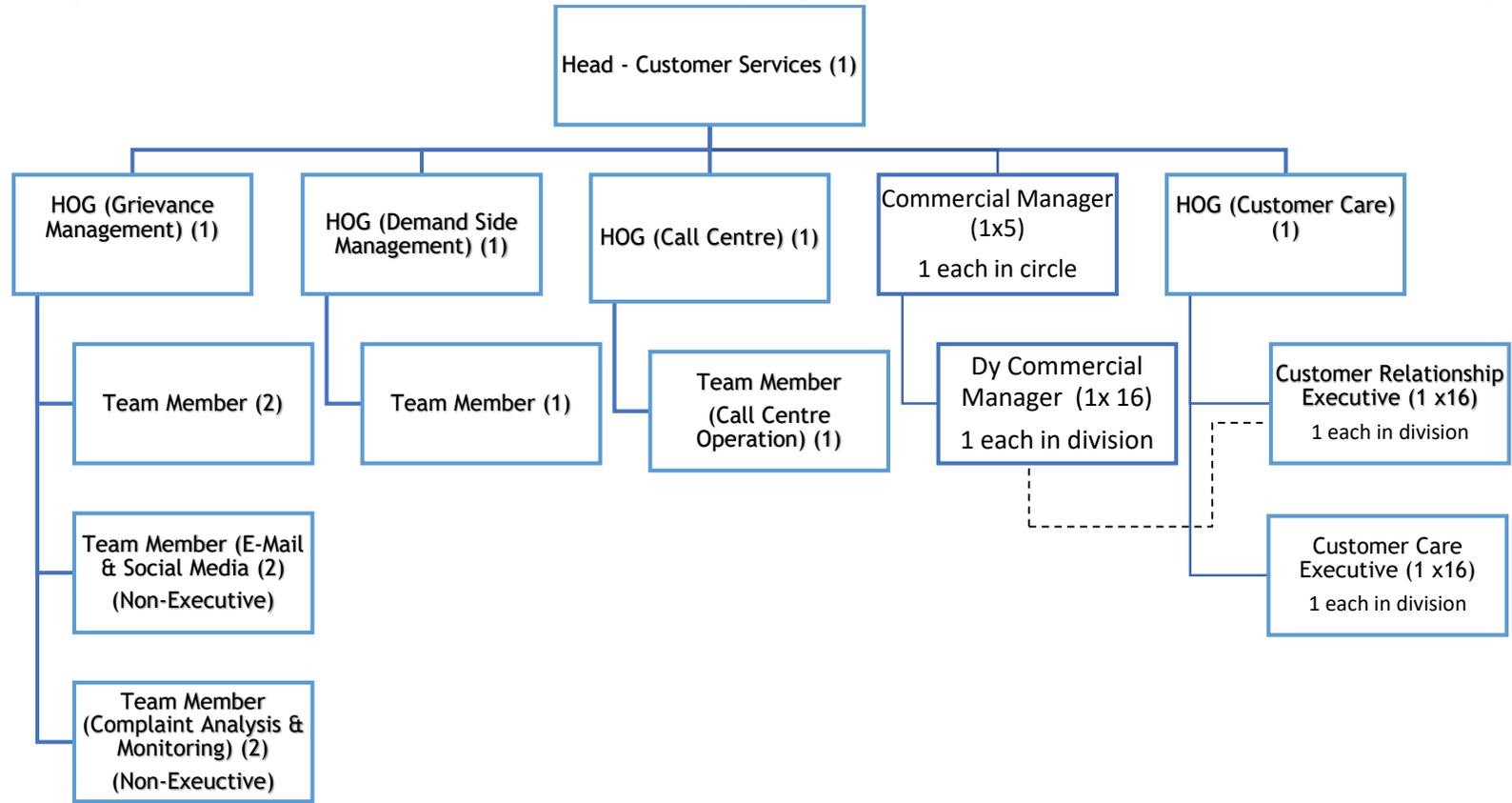
Main pain areas in MBC are – centralize Reading structure is missing, limited Reading & Billing Quality Checks, large no., of house locked cases, no analysis of revenue leakage, poor collection, improper reading scheduling, huge arrear & bill dispute. More than 35% average Billing was done during last FY 2020-21 & collection updation is also done quite late during the month end. Old CREST system is still being using for MBC activities & it has its own limitation. Majority activities are manual & lots of paper work. Keeping in mind above mentioned facts and aspiration towards building a high performing and highly engaged workplace, TPNODL propose to restructure its MBC function as shown here.

Organization Structure- Revenue Cycle Management Corporate + Circle, Division & Sub-Division



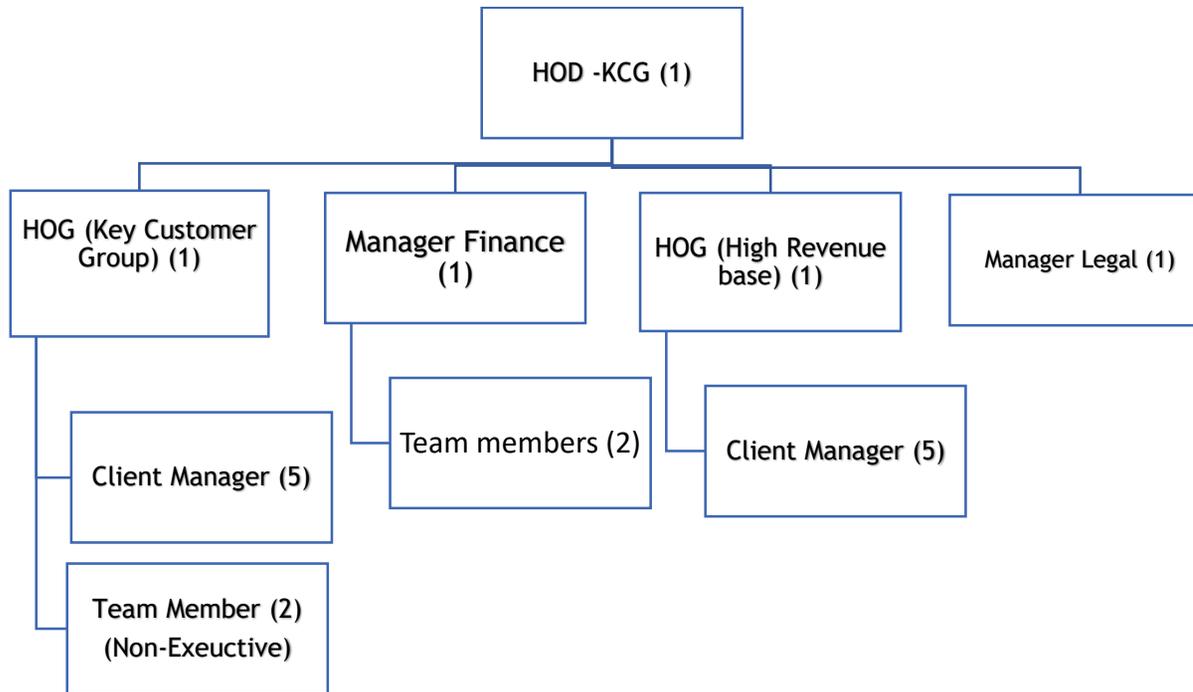
Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	3	3	0
HOG/Team Lead	MD2/ME1	5	21	-16
Team Lead	ME2	32	13	19
Lead Engineer/ Associate	ME3/ ME4	50	5	45
Grand Total		90	42	48

Organization Structure- Customer Service (Corporate + Circle, Division and Sub-Division)



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	1	1	0
HOG/Team Lead	MD2/ME1	5	0	5
Team Lead	ME2	16	1	15
Lead Engineer/ Lead Associate	ME3/ ME4	16	0	16
Grand Total		38	2	36

Organization Structure- Key Consumer Corporate + Circle, Division & Sub-Division



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	1	1	0
HOG/Team Lead	MD2/ME1	2	0	2
Team Lead	ME2	5	0	5
Lead Engineer/ Lead Associate	ME3/ ME4	9	0	9
Grand Total		17	1	16

4.2 Commercial – Meter Management Group (MMG)

People strategy of TPNODL has been prepared keeping in mind various challenges, consumer grievances, safety risk and aspiration to convert this loss-making organization into an engaged, high performing organization. MMG will inherit all existing manpower of erstwhile NESCO in line with license agreement. Presently, there are 40 executives and 60 non-executives with average age is 40 years. Non-induction of any new manpower during last one decade has increased the average age. Representation of women employees are very less at 4%.

Presently, MMG Function is operational for installation and replacement of the meters with CD \geq 5 KW. All 100 employees have been deployed across TPNODL circles. There is no manpower to handle metering activities with CD $<$ 5 KW (Single Phase meters deployment for New connections and Defective meters) in Metering Function. Currently, this activity of meter installation with CD $<$ 5 KW is being handled by operations staff, where this activity is a low priority task.

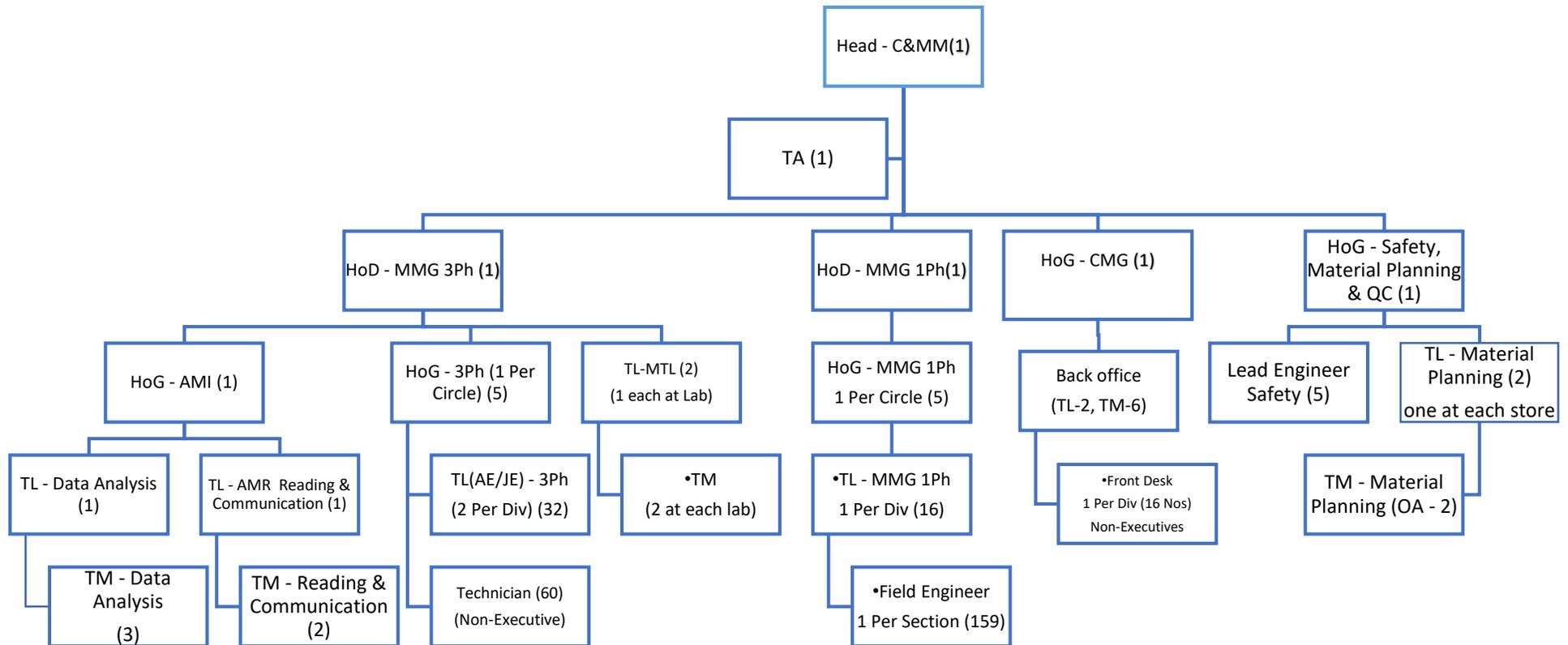
Moreover, the flow of work is less, as consumers are not encouraged to come up for new connections, even for defective meters, company is dependent on consumers to supply new meters for replacement. In lack of dedicated approach, defective meters are not getting replaced. This process is planned to be revised and TPNODL supplied meters will be deployed through Performance Based Contract.

On the other hand, in absence of Training & Development Function, competency enhancement of employees was not done ever. Employees are not capable to work in many new technologies like SAP platform, Smart metering, AMR etc. Knowledge of PPEs and usage of same during work is not there. It is essential to establish a dedicated training and development function to impart both technical and behavioural training to all employees and keep them potentially ready.

Moreover, to establish single phase meter installation wing, manpower needs to be transferred to Metering Group. This manpower has to be imparted training on safety and Standard Operating Practices.

Keeping in mind above mentioned facts and aspiration towards building safe working place, TPNODL propose to restructure its MMG. In MMG structure, separate vertical for single and three phases is proposed as installation of three phase meter is a specialized job for which expertise is required. Further, three phase connection also contributes large part of company's revenue.

Organization Structure- Meter Management Group



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	3	1	2
HOG/Team Lead	MD2/ME1	13	5	8
Team Lead	ME2	36	12	24
Lead Engineer/ Lead Associate	ME3/ ME4	182	0	182
Grand Total		234	18	216

5.0 Proposed Resource Plan for Projects Planning & Execution

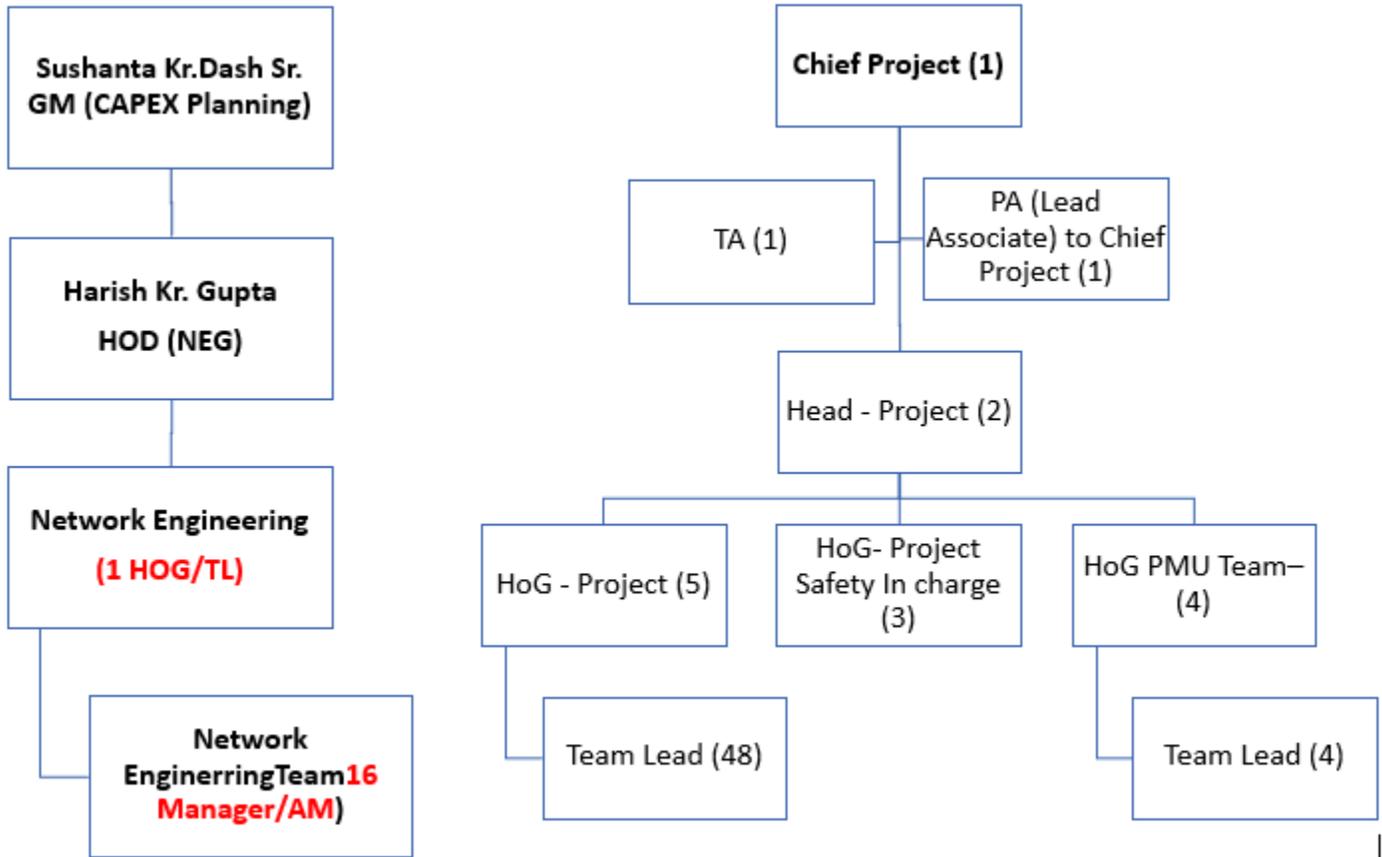
TP Northern Odisha Distribution Limited (TPNODL) has embarked upon the journey of excellence to build a world class organization in Power Distribution Sector, encompassing our commitment towards our consumers to provide reliable power at an affordable price and with quality services. Timely delivery of Projects, with Safety, Quality, and Cost Optimization, have been identified as one of the priorities to meet TPNODL's vision.

As per the Organisational structure of erstwhile NESCO the Existence and Importance of Project Team is highly neglected and doesn't have any dedicated Project execution and Monitoring unit due to which almost all Gol and GoO funded Projects, such as IPDS, RGGVY, ODSSP, DDUGJY, Saubhagya, and many more Projects' execution and Monitoring had been outsourced over the last many years to OPTCL/REC/PGCIL/NTPC which is due to inadequate Manpower available in the Organization and paying very high Consultancy Charges to the Execution Agency/Consultant where Project Management Consultancy is costing @ rate of 0.5% to 7 % of the total Project cost The present NESCO's Project Monitoring Unit in the Head Office and Divisional O & M Team are simply facilitating the Executing Agency for charging and Taking Over the System after commissioning without getting involved day to day execution activities of the Project, due to which the much essential aspects of Project such as Quality, Cost, Timeline, Safety, customer satisfaction etc. are getting negatively impacted and badly affecting customer satisfaction, reliability, AT & C etc. performance parameters of the Organisation.

TPNODL is planning to invest Rs 1300 crores in the next 5 years and also it will carry out the balance work of Fani, Amphan, School/Anganwadi, Elephant corridor, other Government funded Projects worth more than Rs 500 crores and also customer funded projects worth more than Rs 200 crores in the next 2 years.

In view of the above, a dedicated Decentralised Project Department is being formed to oversee planning, monitoring, timely execution, and capitalization of Projects work. This Team's area of responsibility includes improving efficiency and effectiveness in Project Management and execution, ensuring delivery of Projects on time with Safety, Quality, Cost optimization and Customer satisfaction. The Team also be responsible to inculcate and imbibe the culture of safe working, adoption of technology in execution and bring in Quality and Innovation for excellence in Project Management. The Proposed Project Team strength is about 70 Members stretching from Corporate to Subdivision Level as per the Organogram attached.

Organization Structure- Project (Circle to Division)



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	1	1	0
HOG/Team Lead	MD2/ME1	7	5	2
Team Lead	ME2	22	1	21
Lead Engr./Associate	ME3/ ME4	114	4	110
Grand Total		144	11	133

5.1 Network Engineering Group (Network Planning)

At present, there is no network planning group, so the network is being laid on the requirement basis without any proper planning and study. As a result, some portion of the network is overloaded, and some is not being utilised fully. Due to no planning the tripping on the network and no. of failure of transformers are very high. In FY 20-21, 2312 nos. distribution transformers and 19 nos power transformers have been failed. The unbalance loading further contributes to high technical loss in the network. To increase the reliability of network, reduce the losses and enhance the safety of the public and animals, TPNODL is planning to form a centralize Network Planning Group (NPG). This group will be responsible for the below mentioned activities

- Proactive Annual Network Analysis, Planning, estimation, and scheme framing of Sub-transmission network.
- Proactive Annual Network Analysis, Planning & scheme framing of 11 KV & LT networks.
- Analysis of loading on the transformers and framing the schemes for mitigation.
- Planning for Electrification of un-electrified / Greenfield areas.
- Study of the technical losses in the network and preparation of the schemes for loss reduction.
- Preparation of the schemes to enhance the safety of public and animals
- Feasibility for new connections and perpetration scheme in case new/augmentation of network required.

Benefit of having this department:

- Reliability improvement of the power supply.
- Reduction of the technical losses in the network.
- Proper utilization of the assets hence cost saving.
- Reduction in the failure of the equipment
- Planned electrification of the un-electrified area
- Enchantment of the safety of public and animals

Skill set required for working in this department:

- High analytical ability and technically sound.
- Deep Understanding of Sub-transmission and distribution system equipment.
- Knowledge of planning software

- Good knowledge of relevant, Indian Electricity Rules, Supply Codes and Performance Regulations, CEA regulations.
- Knowledge of constructional details, technical parameters, applications, and operation of Equipment.
- Eager to learn new things and keep him/herself updated with latest in distribution sector

5.2 Civil

Civil engineers often balance multiple and frequently conflicting objectives, such as determining the feasibility of plans with regard to financial costs, specific requirements and safety concerns. Balance has to strike between cost incurred to design and getting the return to make it a financially viable proposition for both utility as well as the end consumers. This department shall be responsible for planning, construction, and operation of multifaceted projects and prepare a mitigation plan to address the deficiencies. This department will ensure the optimum utilization of existing and proposed buildings to make it cost effective. This group will have three wings i.e. Civil Maintenance team, which will look after the maintenance and renovation of existing buildings, projects team will look after upcoming projects and work with coordination of electrical team and Estate team shall handle all land related technical works viz. demarcation and protection of boundaries, construction of Fence / Boundary wall etc.

Apart from this, the team shall provide technical feasibility, as-built drawings of various buildings across circles, estimate preparation and coordination with contracts and finance team for placement of Orders and payments to business associates.

Benefit of having this department-

- Improves monitoring of Quality and Schedule of projects.
- Improves Asset utilization.
- Avoiding rework and Procurement of quality material with detailed technical specifications and deliverables.
- Clarity among Business associates about the requirement & specification.
- Less Operational expenditure during the improvement in life cycle of asset thus lower cost to own.
- Compliance to Statutory & Regulatory guidelines.

Kind of skill set required for working in this department:

- Excellent analytical skills and strong at devising ways to make particular aspects of a project work better.

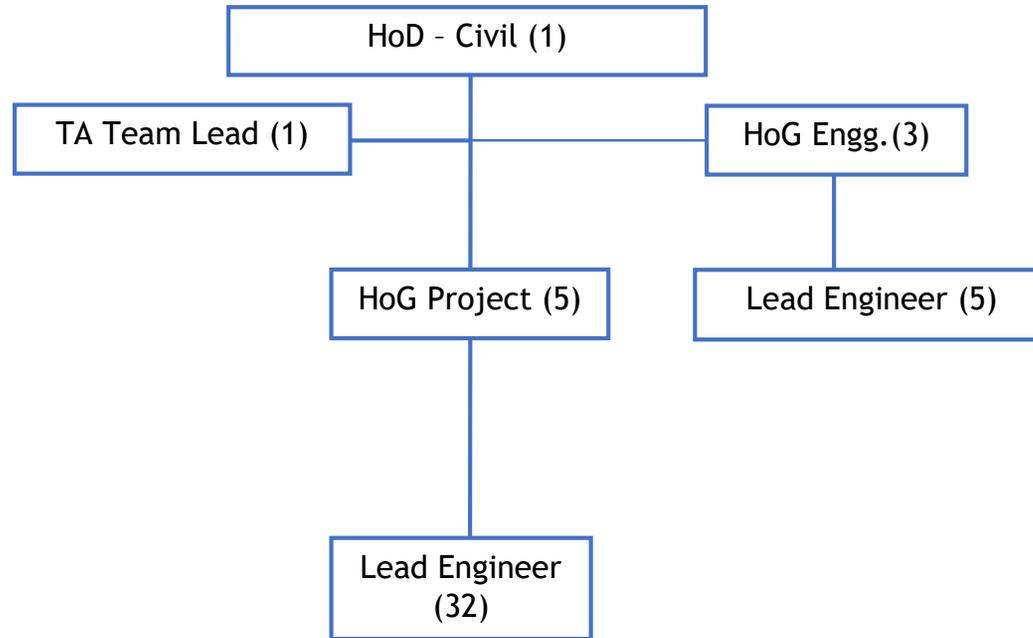
- Skilled in various design techniques, as well as working with maps, drawings, models, blueprints, and CAD software.
- Excellent understanding of applicable act, Supply Code and regulations.
- Good knowledge of various software like Auto-cad, MS Excel and MS projects
- Eager to learn new things and keep him/herself updated with latest in Civil engineering Practices.

Organization Structure - Civil (Corporate)

Corporate

Circle Level

Division Level



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	3	3	0
HOG/Team Lead	MD2/ME1	4	2	2
Team Lead	ME2	0	0	0
Lead Engr./ Associate	ME3/ ME4	16	0	16
Grand Total		23	5	18

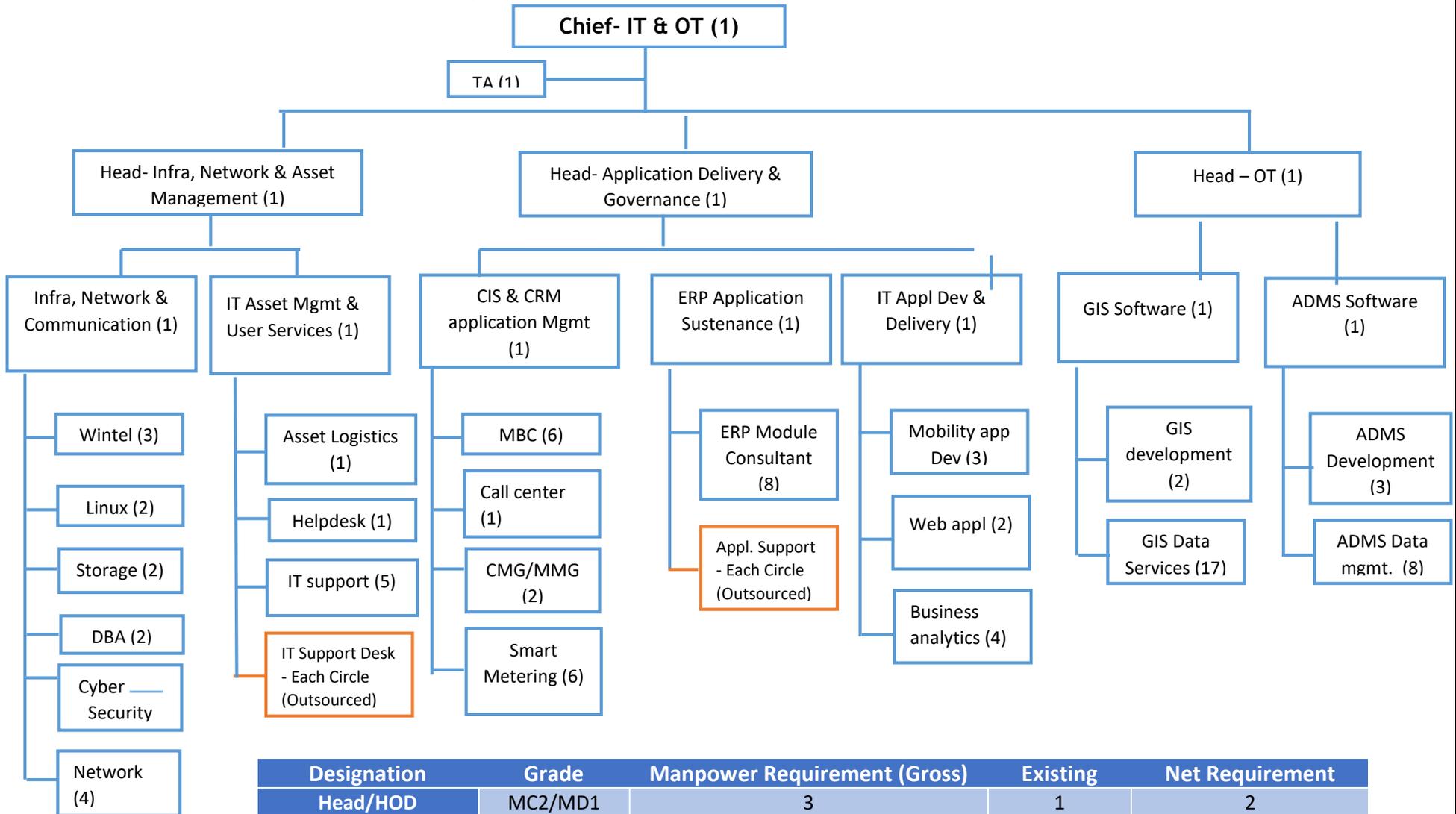
6.0 Proposed Resource Plan for Information Technology

In any business, a highly capable IT team is the lifeline of company. In all businesses, big or small, across all industries, having an IT team that is well-trained is crucial to keeping business afloat. TPNODL's strategy is to improve its operation effectiveness using updated IT & OT technologies. Various TPNODL's function such as Operations, Sub-transmission Maintenance, Construction, Connection Management, Meter Management, etc. are currently challenged with meeting various business and operational performance goals. To enable these groups to achieve required business goals, IT team will play key role to make process more productive, increase performance, save money, improve the customer experience, streamline communications, and enhance managerial decision-making.

Currently IT landscape is using very old and outdated billing system and all other work is carried out through manual paper processing which is time consuming. There is process started for implement new billing system along with other essential system like small number of call center, limited email system, limited AMR but it has not been rolled out so far. Similarly, there is nonexistence of any operational technologies which can help to manage the outage effectively and serve electricity to the consumer. Also, all offices are not connected for any IT related enablement. To eliminate above challenges, we are proposing attached IT & OT new Organization structure which shall bring digital platform for faster decision making, integrated and real time information gathering and faster restoration through up to date information from the equipment itself.

- **SAP ERP & FG's MBC:** Functional and Technical team to manage entire MBC, CAPEX, OPEX process and People Management though a tightly integrated environment. They will be also responsible for Integration and developments of various OT system Interfaces with GIS, SCADA, OMS, MADAS, etc.
- **IT-Mobile App Team** – For Development and maintenance of various Mobile Apps (Reading, Collection, Safety, Tripping, Fuse Calls, etc.)
- **IT- Infra team:** To manage Data Centres, Business Continuity, WAN Communication across various offices and IT users service team to provide last mile support and training to all IT users for their day to day issues in PC/Laptop, Local Routers and switches.
- **In-House Application Development** team to develop and manage various bespoke applications like Web Site, Payment Gateway with an overall cost saving strategy
- **Business Analytics** team to enable generation of various automated regulatory reports and Management MIS for operational efficiency.
- **IT Security:** Largely responsible for different measures to be taken to avert an attack on their information technology and Operational technology systems and checking, monitoring and controlling of rising hacking incidents of power networks across TPNODL's operational area.

Organization Structure - IT & OT



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	3	1	2
HOG/Team Lead	MD2/ME1	7	1	6
Team Lead	ME2	46	0	46
Lead Engr./ Associate	ME3/ ME4	71	0	71
Grand Total		127	2	125

7.0 Proposed Resource Plan for Contracts

Procurement plan and policies shall be the backbone of TPNODL towards ensuring procurement of high-quality products with transparent tendering process which will allow fair competition among the bidders. This will help in getting the best products / services at most competitive price. TPNODL will explore and adopt best practices, policies, software from market as well as from their own benchmarking parent group from Mumbai and other group companies. TPNODL will plan for Centralised procurement of all products and services from best Manufacturers and service providers. TPNODL will also plan to issue the annual rate contracts for supply items and services with the provision to continue the rate contracts for 2nd and 3rd Year depending upon the performance of the vendors. This will have long term benefits in terms of costing and better services to the customers. The qualified Vendors will also be developed from all segments including the Affirmative Segment which will help to grow the stakeholders and society.

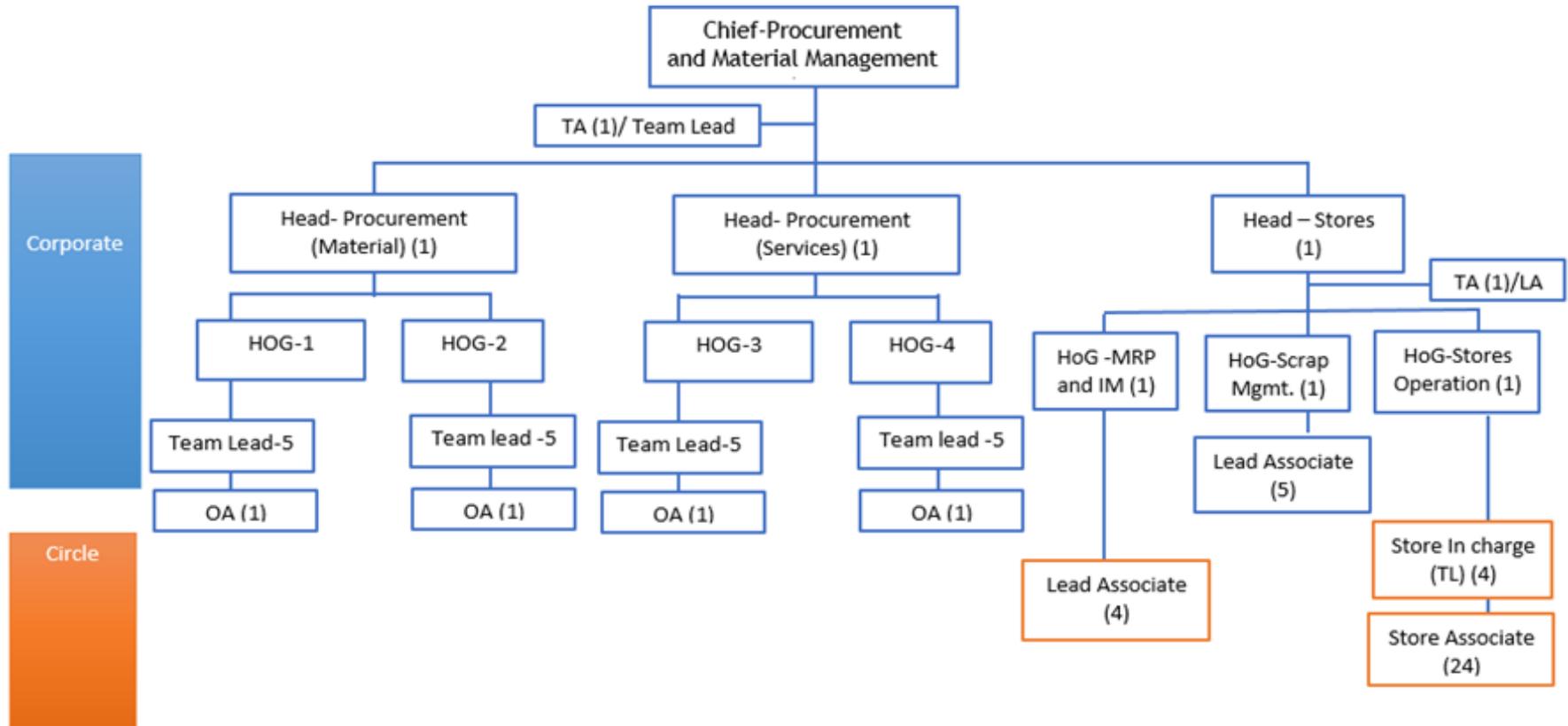
TPNODL shall focus more on optimizing costs, building strong suppliers performance management framework, digitisation of vendor life cycle management, bringing better safety culture and enhancing capability and competency of the vendors.

The processes for selection of the vendors will include methodology to select Business Associates / Vendors based on credentials of the past service and quality of material. All services and materials will be evaluated for quality and performance by users. Incentive and penalty clauses in the contracts will support better quality and timely delivery. Certain Business Associates are identified based on areas of their core-competency such as call-centre, CRC manning and skills to improve upon the distribution business of electricity. The SLAs with these Business Associates are made with an emphasis on higher performance than standards and to enhance the customer satisfaction. The Business Associates who do not perform up to the expectation will be identified and shall be categorised in 4 rankings and suitable action shall be taken so that their performance can be improved and in case of no improvement the Business associates will be sent on Holiday and will also be blacklisted in case of gross negligence / poor performance. Feedback is also sought from Business Associates through a satisfaction survey, BA meets and actions are taken based on the findings. Ethics / Ethical conduct of the BAs will be an integral part of the TPNODL procurement policies.

Challenges on Procurement / Contracting after lockdown period.

- 1) The Demand and supply gap is increased due to lockdowns, less production, dependency on international market and there will be supply- demand gap.
- 2) There will be challenge to retain the existing Supplier and Contractor due to demand in market other than regulated business, where higher price can be accepted without tendering procurement process.
- 3) Manufacturing capacity can be changed / reduced, as such higher profit margin will be expected by supplier and Manufacturer or service provider will also have the choice to select the high paying buyer.
- 4) The market will be towards supplier / Manufacturer - Buyer may have limited choice.
- 5) There is a cash crunch in the market, as such Supplier / Service providers may request for waiver of certain deposits like EMD, Tender fees, PBG etc against the tenders.
- 6) Conditions and impact of above point on the business of TPNODL / Stake holders may require suitable critical decisions on EMD/Tender fee/ PBG/ Penalty clause/ Delivery Conditions etc.
- 7) As labours have already moved to their native places, contractor will have problems to arrange the required number of labours with skill sets.
- 8) There might be chances when vendors may demand for advance payment.
- 9) The services may also impact due to pandemic / lockdowns / Corona impact / Forced Majeure conditions beyond the control of anyone.

Organization Structure - Procurement & Stores (Corporate)



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	4	4	0
HOG/Team Lead	MD2/ME1	3	4	-1
Team Lead	ME2	7	1	6
Lead Engr./Associate	ME3/ ME4	14	4	10
Grand Total		28	13	15

8.0 Resource Plan for Human Resources & Administration

TPNODL has inherited all existing manpower of erstwhile NESCO in line with license agreement. Presently, there are 406 executives and 1744 non-executives as on 1st May 2021 who were on regular rolls of erstwhile NESCO and now part of TPNODL. Average age of this group of employees is around 41 years. There is no induction of Manpower since 2012. Representations of women employees are very less at about 4%. In executive cadre, more than 8.1 % employees are in age range of 54-60 yrs while for non-executives it is about 16.2 %. These employees are working in areas of O&M, Commercial, Finance, Legal, IT and HR & Administration etc.

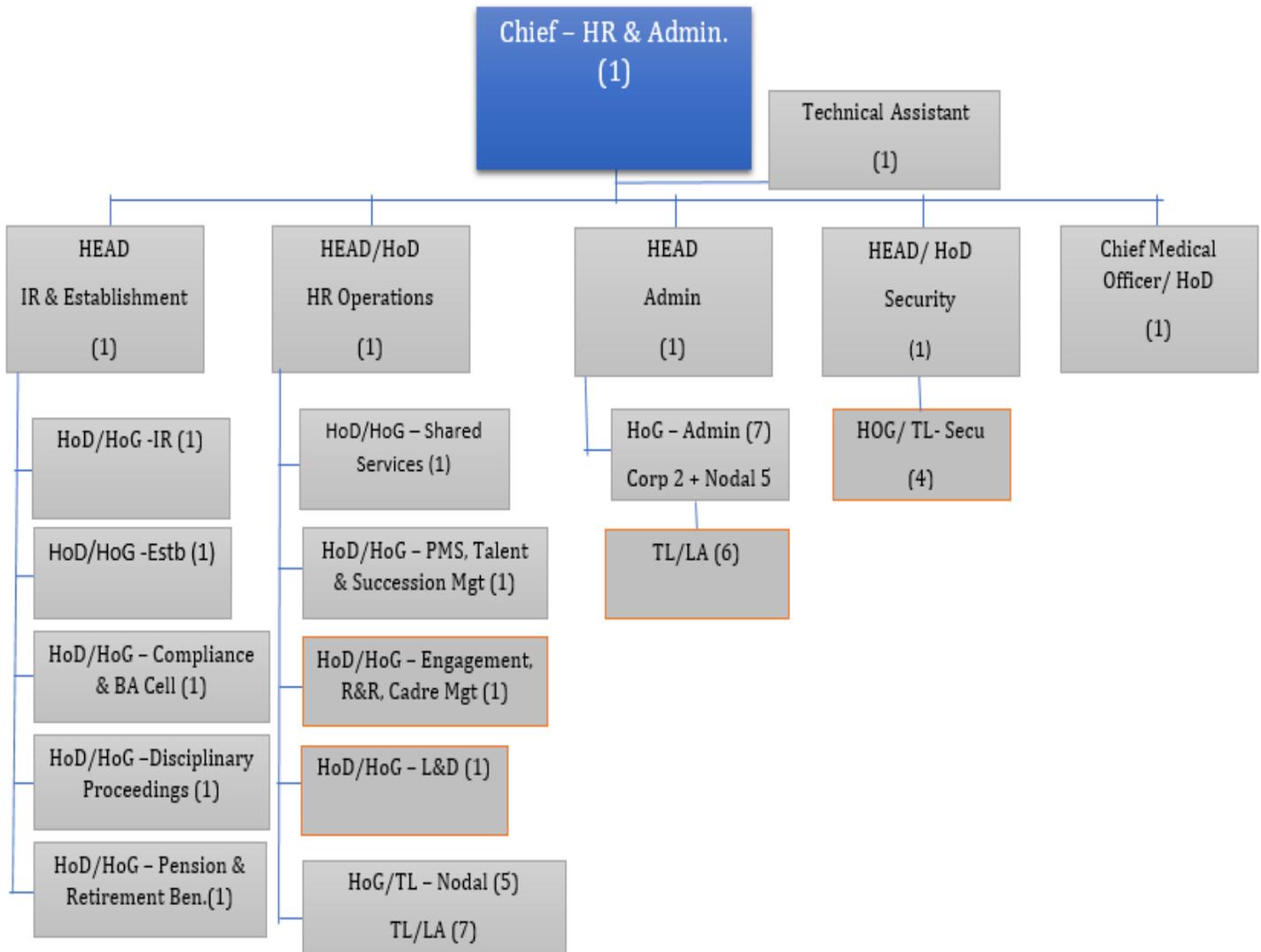
Presently, HR function at TPNODL is operational at Head office level looks after primarily employee service rules, industrial relation, establishment management and legal issues. All employees in HR function are posted at Head office and presently nobody available at Circle, Division or subdivision level. Payroll also being managed in a decentralized manner. Such centralized lean structure has created dissatisfaction and grievances among employees which goes against conducive industrial relation scenario.

On the other hand, absence of Training & Development Function, competency enhancement of employees was not done. Employees are not capable to work in many new technologies like SAP platform, GIS, Smart metering etc. It is essential to establish a dedicated training and development function to impart both technical and behavioural training to all employees and keep them potentially ready.

Employee services and payroll are being managed de-centrally leading localized practise and rise of non-uniform employee practices. This has created need to centralized employees' services, benefits at Head Office level through implementing SAP HR module. Employee engagement activities and basic hygiene facilities like quality office environment across location are almost absent. It is essential to ensure basic facilities to all employees through administrative services and start employee engagement related activities.

Keeping in mind above mentioned facts and aspiration towards building a high performing and highly engaged workplace, TPNODL propose to restructure its HR function as shown here.

Organization Structure- Human Resources & Administration (Corporate)



Designation	Grade	Manpower Requirement	Existing	Net Requirement
Head/HOD	MC2/MD1	6	3	3
HOG/Team Lead	MD2/ME1	25	9	16
Team Lead	ME2	1	1	0
Lead Associate	ME3/ ME4	13	2	11
Grand Total		45	15	30

9.0 Resource Plan for Finance, legal & Secretarial

The objective of any robust and efficient Finance & Accounts (including Regulatory) structure is to ensure uniformity and consistency, transparency, effective control, and agility in operations.

Based on this objective, the Organisation Structure is being re-engineered through introduction of a State of Art ERP System for Finance & Accounts (FI (Finance) & CO (Control) and Material Management (MM) Modules. We shall also be introducing the Treasury module for efficient Banking & Fund management Operations as well as Vendor Invoice Management (VIM) modules to eliminate malpractices in vendor payments, etc.

With the above objective, Procurements & Contracts along with Vendor Payments are being centralised including finance concurrence which shall be involved in the entire process from floating of tenders, evaluation, placement of Order including ensuring checks and Balances for Payments with separate persons being entrusted for processing and payments of bill.

Currently, most contracts are tendered out and placed from the Divisions / Circles their by making it practically impossible to ensure consistency in approach, evaluation / negotiation/ audit with various malpractices with regard to both placing of Orders as well as making Payments. With no Vendor Masters and concept of making Purchase Orders in the System, there is always a possibility of malpractices by BAs / vendors as well.

Centralization of Finance is the need of the hour in the current scenario here in TPNODL. The Centralization of finance refers to consolidation and co-location of various multiple location into a single location. This further helps to provide efficient, streamlined, and well-coordinated services across multiple locations from a single site. Especially the centralization of procure to pay process (P2P), Order to cash, Treasury Management and accounts finalization has delivered better efficiencies in the working. The Automation of processes is an essential benefit of this process. It is proven to improve cost savings, save time, increase transparency, and improve the productivity of the employees.

Currently there is the use of Tally in various divisions/Circles/Head Offices across various locations. They have been maintaining the accounts in a delocalized manner where each division have separate accounts which are being run by themselves. As stated above, TPNODL is planning to implementation of SAP module i.e FI, MM, SD, Treasury, Vendor Invoice Management. Now the accounts finalization, payment processes, receipts, Treasury managements, payroll etc., will be processed and maintained from the corporate office. It is noteworthy to see the benefits of Centralization of Finance: -

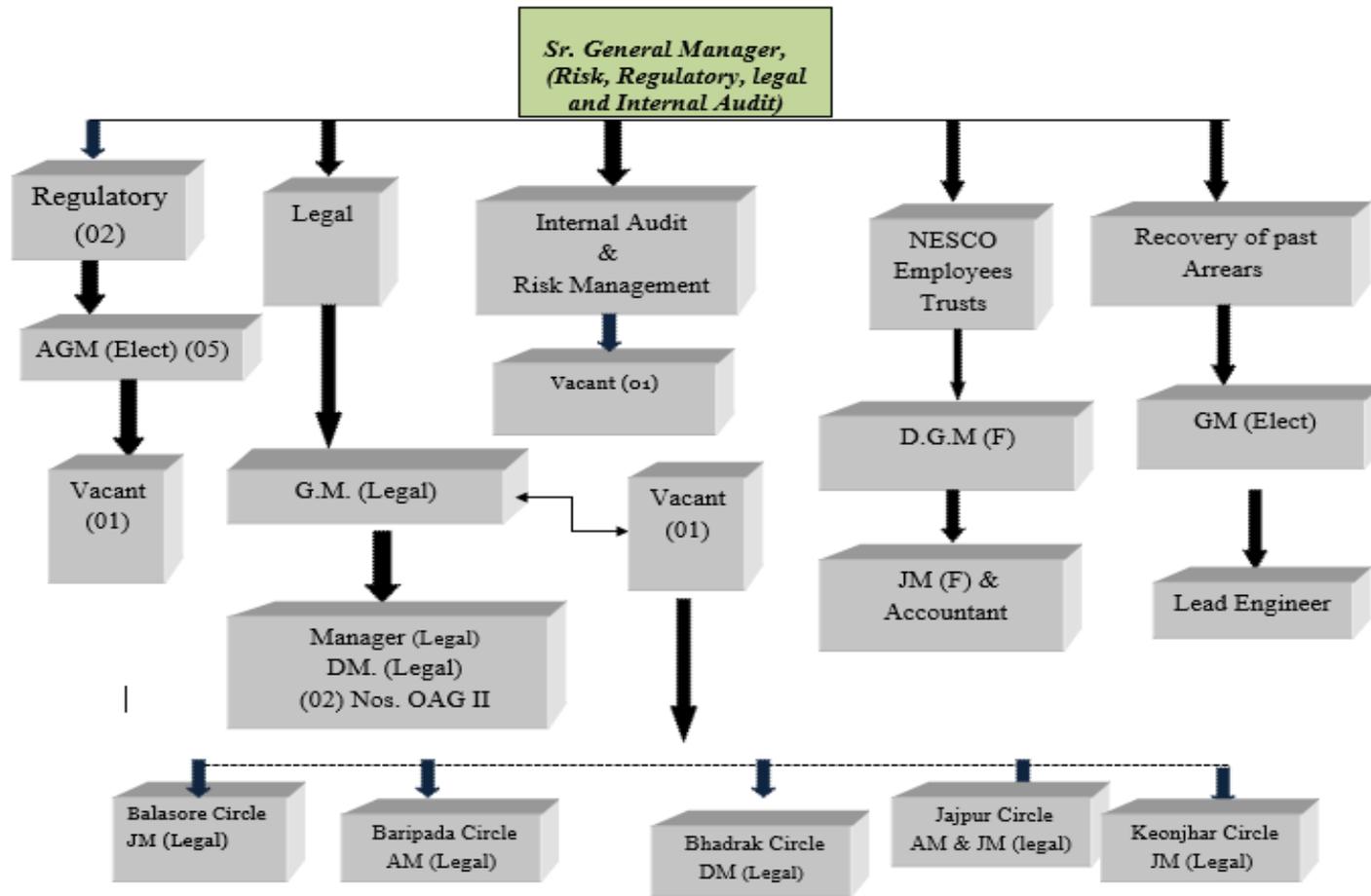
- The single point of control enables decisions to be made more quickly and easily, as managers will have a clearer view of the whole organization.
- It makes the organization easier to co-ordinate and control from a single location.
- All the information is stored in one place, allowing for accurate reporting.
- It avoids the duplication of roles across the organization, thereby saving costs.
- A centralized finance function provides a single view of the organization, allowing for complete visibility over processes and better, more informed reporting.
- The standardization of processes allows for higher levels of efficiency, productivity, and reduced costs.

By stating the above- mentioned facts and benefits about centralization we are aiming for a better and transparent working structure and better working environment at TPNODL. Thereby we propose to implement the centralizing processing systems.

In addition to above, various areas need to be strengthened / established such as MIS and Budgeting, Regulatory Accounting, Internal Audit, Risk Assurance & Compliance, Expenditure Control & Accounts Payable & Finance Concurrence

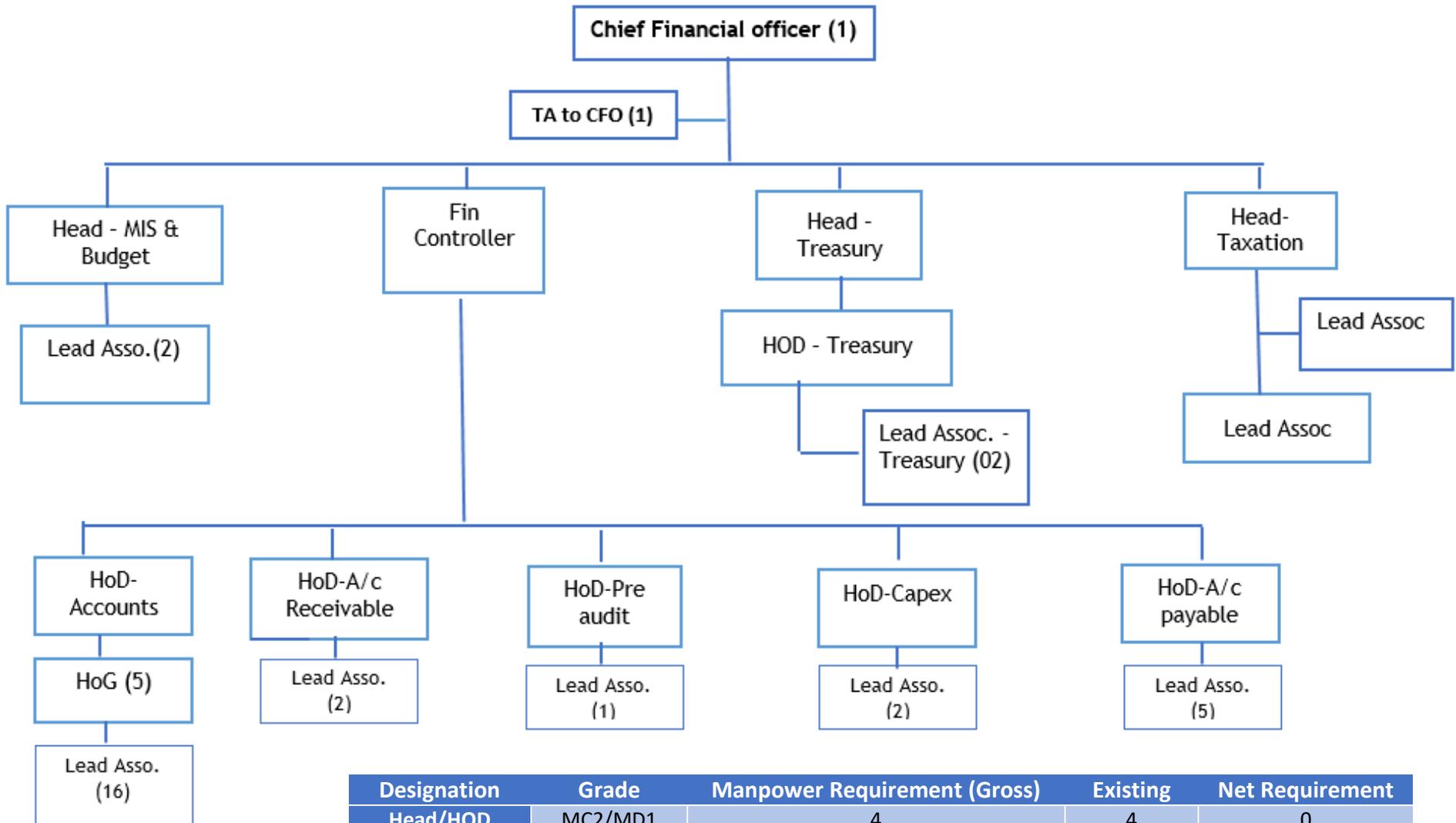
Based on the above, the revised Org Chart along with Manning requirement is provided below:

Organization Structure- Risk, Regulatory, Legal & IA



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	4	4	0
HOG/Team Lead	MD2/ME1	6	4	2
Team Lead	ME2	10	3	7
Lead Associate	ME3/ ME4	5	4	1
Grand Total		25	15	10

Organization Structure- Finance & Accounts



Designation	Grade	Manpower Requirement (Gross)	Existing	Net Requirement
Head/HOD	MC2/MD1	4	4	0
HOG/Team Lead	MD2/ME1	21	21	0
Team Lead	ME2	17	15	2
Lead Associate	ME3/ ME4	6	6	0
Grand Total		48	46	2

10.0 Consolidated Resource Plan

Sr. No.	Department	Group	Manpower Requirement (Gross)					Existing Numbers					Net Total Requirement				
			Head/HO D	HOG/Team Lead	Team Lead	Lead Engineer/Lead Associate		SGM/GM & DGM/AGM (Head/HoD)	MGR/DM (HoG/TL)	Asst Mgr (TL)	Jr Mgr (LE/LA)		Head/HO D	HOG/Team Lead	Team Lead	Lead Engineer/Lead Associate	
			MC2/MD 1	MD2/ME 1	ME2	ME3	ME4	E9/E8 & E7/E6 (MC2/ME1)	E5/E4 (MD2/ME1)	E3 (ME2)	E2 (ME3)	E2 (ME4)	MC2/MD 1	MD2/ME 1	ME2	ME3	ME4
1	CEO Office	CEO Office	1	1		1		1	1			0	0	0	1	0	
		Company Secretary		1								0	1	0	0	0	
		Corp Affair & Govt Reln.	1									1	0	0	0	0	
Total CEO Office			2	2	0	1	0	1	1	0	0	1	1	0	1	0	
2	Safety	SHE & Disaster Management	1	1	0	5	5	1	1	0	0	0	0	0	5	5	
3	O&M Team	11KV Section Team	11	52	57	2	428	11	52	47	113	0	0	10	2	315	
		33KV STS Team		2	16	32				2	10		0	0	6	32	0
4	Protection & Testing	PSS Protection (Grid)	1	1	5	10	5	1	0		5	0	1	5	10	0	
		Distribution Protection		1	5	5	5		0	0	0	0	1	5	5	5	
5	Operation Services	DT Workshop		2	2	5	5		1	1	0		1	1	0	5	
		Switchgear Workshop			0	5	5			0	0			0	0	5	
		Fault Location Cell (FLC)		1	0	3	3		0	0	0		1	0	3	3	
		Corporate Operation Services	3		11	17	0	3		11	3	0	0	0	14	0	
		Maintenance Planning (MPG)		1	0	2	3		0	0	0		1	0	2	3	
		Plant Engineering		1	5	2	3		0	0	0		1	5	2	3	
6	PSC	Quality Assurance (QA)		1	8	16	0		0	0	0		1	8	16	0	
		PSC	1	1	6	19	0	0	1	1		1	1	5	18	0	
7	Automation	Substation Automation		1	5	5		0	0	0	0	1	1	5	5	0	
8	Energy Audit	Energy Audit Group (EAG)	1	1	0	0	16	0	0	0	0	1	1	0	0	16	
		Corporate Enforcement Group		5	16	16	32	0	0	0	3	1	5	16	16	29	
9	Enforcement	Enforcement Assessment Cell	1	3	5	5	0	1	2	0		1	2	3	5	0	
		Total Operation services	19	74	141	139	510	16	57	72	4	121	3	17	69	135	389
10	RCM	Reading & Billing / Collection /Recovery	3	5	32	5	45	3	21	13	5	0	-16	19	0	45	
11	CS	CCS/ CRE/ Customer Experience	1	5	16	0	16	1	0	1		0	5	15	0	16	
12	KCG	KCG	1	2	5	9	0	1	0	0		0	2	5	9	0	
13	CSR & SHG	CSR & SHG		1									1				
14	C&MM	CMG & MMG	3	13	36	32	150	1	5	12		2	8	24	32	150	
Total Commercial Services			8	26	89	46	211	6	26	26	5	0	2	0	63	41	211
15	Project Team(Govt. + Capex project) execution and monitoring	Head office		5	1				4	1		1	0	1	0	-1	
		Circle Offices for overall monitoring of electrical & civil projects			5		0						0	0	5	0	0
		Division Offices					98						0	0	0	0	98
16	Network(capex) Planning	Network Engineering Group	1	2	16		16	1	1	0		3	0	1	16	0	13
17	Civil Projects	Head office	3	4			0	3	1			0	3	0	0	0	
		Division Offices					16		1				-1	0	0	16	
Total Projects			4	11	22	0	130	4	7	1	0	4	0	4	21	0	126
18	IT - Infra, Network & asset Management	Infra, Network & Communication	1	1	8	14	0					1	1	8	14	0	
		IT Asset Management & User services		1	1	0	5		1				0	1	0	5	
19	Application Delivery & Sustenance	CIS & CRM application Management	1	1	10	2	4					0	1	10	2	4	
		ERP (SAP) Application Sustenance		1	10	0	0	1					1	10	0	0	
		IT Application development & Delivery		1	12	8	9						1	12	8	9	
20	Operational Technologies	GIS Software & Development	1	1	2	10	9					1	1	2	10	9	
		OT - SCADA/ADMS Development		1	3	5	5						1	3	5	5	
Total IT&OT			3	7	46	39	32	1	1	0	0	2	6	46	39	32	
21	Contracts and MM	Contracts	3	2	7	6	4	3	2	1	1	0	0	0	6	5	4
		MM	1	1			4	1	2	0	3	0	-1	0	0	1	
Total C&MM			4	3	7	6	8	4	4	1	1	3	0	-1	6	5	5
22	HR	HR	3	14	1	7	7	2	8	1	2	1	1	6	0	5	0
		Admin	1	7		6		1	1				0	6	0	6	0
		Security	1	4									1	4	0	0	0
		Medical	1										1	0	0	0	0
Total HR & Admin.			6	25	1	13	0	3	9	1	2	0	3	16	0	11	0
24	Int. Audit, Regulatory & Legal	Legal	2	4	3	4		2	4	2	4		0	0	1	0	0
		IA&R			2					1			0	0	1	0	0
		Regulatory	1	2	5		1	1	0	0		0	2	5	0	1	
		Past recovery	1					1					0	0	0	0	0
Total IA, R & Legal			4	6	10	4	1	4	3	4	0	0	2	7	0	1	
23	Fin & Accounts	Fin & Accounts	4	21	17	6	6	4	21	15	6	0	0	0	2	0	0
		Total Fin & Acts	4	21	17	6	0	4	21	15	6	0	0	0	2	0	0
Grand total			54	175	333	254	892	43	130	119	22	128	11	45	214	232	764
Total			1708					442					1266				

10.1 Year-wise Resource Plan

Sr. No.	Department	Group	FY22 Requirement					FY23 Requirement					FY24 Requirement				
			Head/HO D	HOG/Team Lead	Team Lead	Lead Engineer/Lead Associate		Head/HO D	HOG/Team Lead	Team Lead	Lead Engineer/Lead Associate		Head/HO D	HOG/Team Lead	Team Lead	Lead Engineer/Lead Associate	
			MC2/MD 1	MD2/ME 1	ME2	ME3	ME4	MC2/MD 1	MD2/ME 1	ME2	ME3	ME4	MC2/MD 1	MD2/ME 1	ME2	ME3	ME4
1	CEO Office	CEO Office															
		Company Secretary		0			5	0	0	0	1	0	0	0	0	0	0
		Corp Affair & Govt ReIn.	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Total CEO Office			1	0	0	0	0	0	1	0	1	0	0	0	0	0	0
2	Safety	SHE & Disaster Management	0	0	0	5	0	0	0	0	0	0	0	0	5	0	
3	O&M Team	11KV Section Team	0	0	0	179	0	0	5	1	115	0	0	5	1	21	
		33KV STS Team	0	0	0	32	0	0	3	0	0	0	0	3	0	0	
4	Protection & Testing	PSS Protection (Grid)	0	1	5	5	0	0	0	3	0	0	0	0	2	0	
		Distribution Protection	0	1	5	5	0	0	0	2	0	0	0	0	3	0	
5	Operation Services	DT Workshop		1	1	1		0	0	0	3		0	0	0	1	
		Switchgear Workshop		0	0	1		0	0	0	3		0	0	0	1	
		Fault Location Cell (FLC)		0	0	2		0	0	1	1		0	0	2	0	
		Corporate Operation Services	0	1	0	5	0	0	0	4	0	0	0	0	5	0	
		Maintenance Planning (MPG)		1	0	2	3		0	0	0	0		0	0	0	0
		Plant Engineering		1	5	1	1		0	0	1	1		0	0	1	1
		Quality Assurance (QA)		1	8	0	0		0	0	8	0		0	0	8	0
6	PSC	PSC	1	0	5	18	0	1	0	0	0	0	0	0	0	0	
7	Automation	Substation Automation	1	1	5	5	0	0	0	0	0	0	0	0	0	0	
8	Energy Audit	Energy Audit Group (EAG)	1	1	0	5	0	0	0	7	7	0	0	0	-7	4	
9	Enforcement	Corporate Enforcement Group	1	5	16	16	0	0	0	9	9	0	0	0	7	4	
		Enforcement Assessment Cell	1	2			0	0	2	3	0	0	0	1	2	0	
Total Operation services			3	16	50	67	218	0	1	10	39	139	0	0	9	29	32
10	RCM	Reading & Billing / Collection /Recovery	0	0	16	0	0	-16	2	0	30	0	0	1	0	15	
11	CS	CCS/ CRE/ Customer Experience	0	2	16	10	0	3	-1	0	4	0	0	0	0	2	
12	KCG	KCG	0	2	5	9	0	0	0	0	0	0	0	0	0	0	0
13	CSR & SHG	CSR & SHG	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
14	C&MM	CMG & MMG	3	8	20	50	-1	0	2	20	70	0	0	2	12	30	
Total Commercial Services			3	12	57	9	60	-1	-12	3	20	104	0	0	3	12	47
15	Project Team(Govt. + Capex project) execution and monitoring	Head office		1		0	0	0	0	0	0	0	0	0	0	-1	
		Circle Offices for overall monitoring of electrical & civil projects			5	0	0	0	0	0	0	0	0	0	0	0	
16	Network(capex) Planning	Division Offices				16	0	0	0	-16	70	0	0	0	0	28	
17	Civil Projects	Network Engineering Group	0	1	16	0	0	0	0	0	0	0	0	0	0	13	
		Head office		2		0	0	1	0	0	0	0	0	0	0	0	
Total Projects			0	4	21	16	16	0	0	0	-16	70	0	0	0	0	40
18	IT - Infra, Network & asset Management	Infra, Network & Communication	1	1	4	5	0	0	2	7	0	0	0	2	2	0	
		IT Asset Management & User services		1	0	3		-1	0	0	1		0	1	0	1	
19	Application Delivery & Sustenance	CIS & CRM application Management	0	1	5	1	0	0	2	1	2	-1	0	3	0	2	
		ERP (SAP) Application Sustenance	0	1	5	0	0	0	3	0	0	0	0	2	0	0	
20	Operational Technologies	IT Application development & Delivery	0	1	6	3	3	0	3	3	4	0	0	3	2	2	
		GIS Software & Development	0	1	1	1	0	1	0	1	6	5	0	0	1	3	4
Total IT&OT			1	7	21	10	6	2	-1	12	20	15	-1	0	13	9	11
21	Contracts and MM	Contracts	0	5	5	4	0	0	1	0	0	0	0	0	0	0	0
		MM	0	0	2	2	0	-1	-1	-1	-1	0	0	1	1	0	
Total C&MM			0	0	5	5	6	0	-1	0	-1	-1	0	0	1	1	0
22	HR	HR		3	2	1	3	0	2	0	0	0	0	0	0	1	0
		Admin	0	5	1	0	0	0	1	0	3	0	0	0	0	2	0
		Security	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0
		Medical	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total HR & Admin.			1	10	0	3	0	2	6	0	5	0	0	0	0	3	0
24	Int. Audit, Regulatory & Legal	Legal			1	0	0	0	0	0	0	0	0	0	0	0	0
		IA&R			2	0	0	0	0	-1	0	0	0	0	0	0	0
		Regulatory			2	0	2	0	2	2	0	1	0	0	1	0	0
		Past recovery			1	0	0	0	0	-1	0	0	0	0	0	0	0
Total IA, R & Legal			0	0	6	0	0	0	2	0	0	1	0	0	1	0	0
23		Fin & Accounts	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Fin & Acts			0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Grand total			9	49	162	110	306	3	-4	25	68	328	-1	0	27	54	130
Total					636					420					210		

11.0 Non-Executive Cadre Manpower

All non-executive employees (Technical and non-technical) have been mapped against proposed organization structure as presented earlier. It is being ensured that all non-executives are properly engaged and completely utilized. Details of their deployment plan function wise, department wise are tabled below.

Category of Non-Executives	Technical	Non-Technical
OAG-I		6
OAG-II		27
OAG-III		221
Accountant		15
Jr. Accountant		18
Steno Grade-II/ III		1
Sr. Charge man	3	
L/M-A	90	
L/M-B	402	
L/M-C	635	
JT	168	
Helper	142	
Jr. Storekeeper		13
Driver-A	3	
Driver-B	1	
Daftary		3
Peon		3
Watchman		1
	1444	308
Total count of available Non-Executives		1752

Function	Department	Count
Operation	Sub-Transmission System	
	Sub-Division Office - Technician	50
	Section Office – Maint. Technician	1195
	Section Office - FCC	159
	Protection & Testing	
	Circle/ Division office	142
Commercial	Corporate	4
	Circle/ Division office	110
	MMG	0
	Customer Service	16
	Finance	16
Contracts & Materials	Procurement & Stores	26
HR & Admin.	HR	16
	Admin	18
Total deployment of Non-Executives		1752

12.0 Conclusion & Recommendation

TP Northern Odisha Distribution Limited (TPNODL) is a joint venture of Tata Power and Odisha Govt. TPNODL has distribution license in the area spread across major districts viz. Balasore, Bhadrak, Jajpur, Keonjhar and Mayurbhanj (Baripada). TPNODL has laid out an ambitious plan to improve reliability of power supply, enhance customer services and implement cutting edge technology. To meet the business requirements, TPNODL has reviewed existing organization structure of each function at Corporate Office and at Circle, Division, Sub-Division and Section Offices. Accordingly, each function has revised its structure to exceed all stakeholders' expectations towards its journey of excellence.

NESCO had on its rolls, 2194 number of regular employees (Including Executive & Non-executive Employees) as of 31.03.2021. close of business. The proposed manpower strength by TPNODL is 3460 number of regular employees (that includes 13 of existing contractual employees), wherein **1266 additional employees in executive cadre will be recruited** over a period of 3 years. To meet the void of 881 positions in various departments due to the resource crunch on account of superannuation without recruitment as also to put in place the required focus on Operations, Commercial, IT and other functions, in the first year, 636 employees are proposed to be recruited in FY 2021-22.

PRAYER:

Pursuant to the direction of Hon'ble Commission, OERC at Para 45 of its Order dated 25.03.2021 in Case No.9/2021, TPNODL has prayed that the Hon'ble Commission may kindly pleased to;

1. Admit the detailed management structure and staff deployment plan.
2. Approve the employee expenses as a part of Operation and Maintenance expenses for the period April 21 to March 22 as proposed by the Utility as per Hon'ble Commission's Order dated 25th March 2021 in Case No. 9/2021.

It is submitted that these manpower planning are estimates based on current understanding of the conditions and the petitioner is in the process of hiring manpower where number may turn out to be in variance to the Budgeted estimates. In view of the above, it is prayed, to grant the manpower deployment plan.

Chief Executive Officer