

PARTICULARS OF ORGANIZATION, FUNCTIONS AND DUTIES

PARTICULARS OF ORGANIZATION

On 09-11-2000, the State of Uttaranchal came into being as the 27th State of India as per the Uttar Pradesh State Re-organization Act, 2000. The State of Uttaranchal in exercise of the power granted to it under Section 63(4) of the State Re-organization Act, 2000, formed Uttaranchal Jal Vidyut Nigam Ltd. and Uttaranchal Power Corporation Ltd.

As per the provisions of Electricity Act, 2003, UPCL was bifurcated into two entities and Power Transmission Corporation of Uttaranchal Ltd. was created and registered as a Government Company under Section 617 of Companies Act, 1956 on 27th May, 2004 and started functioning w.e.f. 1st June, 2004.

100% shares of the Company is held by the Government of Uttarakhand either directly or through its nominees. Authorized capital of the Company at the time of incorporation was Rs. 10 crores divided into one lacs equity shares of Rs. 1000 each.

The Corporate and Registered Office is at Vidyut Bhawan, Near ISBT Crossing, Saharanpur Road, Majra, Dehradun. The Company is managed by the Board of Directors who meet frequently atleast once in every quarter. The day to day management of the Company is looked after by the Managing Director and other officers of the Company.

MAIN OBJECTS OF THE COMPANY

The main objects to be pursued by the Company for which it has been incorporated are as follows:-

1. To acquire, establish, construct, take over, erect, lay, operate, run, manage, hire, lease, buy, sell, maintain, enlarge, alter, renovate, modernize, work and use electrical transmission lines and/or network through extra high voltage, medium voltage and low voltage lines and associated sub-stations, including cables, wire,

accumulators, plants, motors meters, apparatus, computers and material connected with transmission and wheeling of electrical energy along with ancillary services, telecommunication and telemetering equipment in the State of Uttaranchal and elsewhere. To undertake, for and on behalf of other erection, operation, maintenance, management of extra-high voltage, high voltage, medium voltage and low voltage, lines and associated sub-stations, equipment, apparatus, cable and wires.

2. To co-ordinate the facilities for the inter State, regional and inter regional generation and efficient, economical and integrated transmission and supply of electricity. To levy and charge such fees and Wheeling charges from the generating, distribution Companies, licensees, bulk consumers as may be specified by appropriate Regulatory Commission.
3. To facilitate and promote transmission, wheeling and inter connection arrangements within the State of Uttaranchal for the transmission and supply of electricity by economical and efficient utilization of the electricity.
4. Till a separate SLDC is established as per law, for the time being, to establish, acquire, construct, take over the State Load Despatch Centre and run, manage supervise, operate the State Load Despatch Centre as the apex body to ensure integrated operation of the Power System in the State of Uttaranchal and optimum scheduling and dispatch of electricity within the State of Uttaranchal, monitor grid operation and levy and collect such fees and charges from the generating companies and licensees engaged in Intra-State Transmission of electricity as may be specified by appropriate Regulatory Commission. To schedule and dispatch generation of all units connected to the State power system including the centrally owned generating stations, in respect of the share assigned to the State and electricity purchased from other State undertakings.
5. To study, investigate, collect information and data, review operations, plan research, design, prepare project reports, diagnose operational difficulties and weakness, and advise on the remedial measures to improve and modernize. To tender and/or finalize contract for transmission and wheeling of power from generating stations and other sources.

CORPORATE VISION

PTCUL endeavors to be among the best Power Transmission utilities in India in operating efficiency, system reliability standards and commercially viable operations.

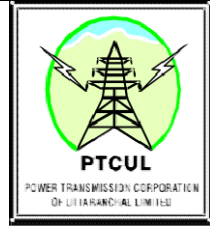
CORPORATE AIMS

- Adopt best practices of Project and Operations & Maintenance Management leading to system efficiency, reliability and commercial viability.
- Create a work environment which motivates & enhances employee performance, value systems and reward contribution.
- Develop and train employees towards upgrading their skills at work, enrich work content to make it more substantive and responsive to Company Goals.
- Imbibe transparency and accountability in all operational areas, be it procurement, construction, operations and maintenance.
- Expand horizons of activities in to contracting and others by leveraging the Company's available technical and project expertise.
- Build, in essence PTCUL to be a Company geared to high standards of Management capabilities and professional performance.

Organizational Values

1. PTCUL shall promote transparency, openness and fairness in all its dealings.
2. PTCUL shall ensure safety, security and dignity of all female employees.
3. PTCUL shall promote work culture of excellence and quality with efficiency and cost consciousness.
4. PTCUL shall promote spirit of co-operation and team work among its employees at all levels.
5. PTCUL shall always strive to protect and balance the interests of all stakeholders in its decision making process.
6. PTCUL shall ensure compliance of all applicable laws and rules in its working.
7. PTCUL shall strive to protect and preserve the natural habitat and try to minimize the damage to environment while carrying out operations/projects.
8. PTCUL shall strive to contribute its best towards the development of the State/Nation and welfare of the public at large.

The Functions and Duties of Officers and Employees



Power Transmission Corporation of Uttarakhand Ltd.

Tel: 0135-2762473, 2762472
Fax : 0135-2762460
Email : md.ptcul@rediffmail.com

No.: /MD/PTCUL/MD(OM)

Dated: /07/2007

OFFICE CIRCULAR

Consequent to organization Structure approved by the Board of Directors of PTCUL, Major Activity Streams and Group wise Activities and Functions of various Operational Groups derived as per the Structure are hereby informed as per enclosure to all the Group Heads and Officers for guidance and implementation. The activities and functions detailed herein have to be understood in the context of the approved Organization Structure as well as the Manuals/Rules & Regulations/Procedures now in force.

Any clarification/interaction in this regard may be done with General Manager (HR) and Dy. General Manager (Corporate Planning).

S. Mohan Ram
Managing Director

No.: /MD/PTCUL/ of dated

Copy to the following:-

1. Executive Director (O&M), PTCUL.
2. General Manager (Projects/C&P/O&M/HR).
3. Dy. General Manager (Finance/SLDC/Regulatory).

S. Mohan Ram
Managing Director

Encls: As above

7-B, Lane No. 1, Vasant Vihar Enclave, Dehradun.

POWER TRANSMISSION CORPORATION OF UTTARAKHAND LTD.

MAJOR ACTIVITY STREAMS

Following major activity streams are derived from the approved Organizational Structure for PTCUL:

1) PROJECTS

All the activity streams comprising of planning, execution and control of engineering, design, procurement and construction of EHV Transmission lines (TL), Sub-stations (S/s), and other utilities (upto and including 132 KV Systems) which form the Transmission network of the Utility.

2) OPERATION & MAINTENANCE (O&M)

All the activity streams comprising of planning, implementation & control of –

- (i) Operational activities of EHV TLs and S/s and other utilities as per Grid standards.
- (ii) Maintenance activities to ensure their efficient and reliable working and
- (iii) Asset management activities of the transmission network to ensure commercial viability as well as life assurance of such assets.

3) STATE LOAD DESPATCH CENTRE (SLDC)

All the activity streams comprising of -

- (i) Scheduling and despatch of electricity within the State.
- (ii) Monitoring grid operations
- (iii) Accounting for the quantity of electricity transmitted through the State Grid.
- (iv) Supervising and controlling intra-state transmission system and
- (v) Carrying out real time operations for grid control and despatch of electricity within the State.

GROUPWISE ACTIVITIES & FUNCTIONS

I. PROJECTS

1. DESIGN, ENGINEERING & TECHNICAL GROUP

A. Engineering – System/Network planning

Responsible for

- i) Overall short term & long term planning and development of the Transmission System and Network.
- ii) Identifying requirements of network expansion and upgradation to cater to (a) normal year by year trend growth in load demand (b) corrections in system inadequacies and sub-optimal utilisation (c) requirements of power carriage & evacuation network by power producers/traders/licensees etc. due to general high capacity additions and also requirements of open access regime (d) interstate/interregional power transfers as formulated by CEA, REBs etc.,
- iii) System studies for optimality and efficient usage of the existing system & networks.
- iv) Conducting load flow and energy flow analysis.
- v) Devising action plans for System/Network development on a perspective time basis.

B. Projects – Planning & Monitoring

Responsible for

- i) Developing projectwise planning & Contract networks at L-1 (Corporate), L-2 (Zone Operations) and L-3 (Project Areas)
- ii) Projectwise monitoring of Progress of Design. Procurement and Construction (all activities Pre - tender and Post – tender) w.r.t. time and physical progress.
- iii) Management Information Systems (MIS) on exceptiona reporting basis to Managing Director & other functional Directors.
- iv) Devising remedial/control procedures for bridging, revising, crashing project activities w.r.t. plans and implementing them.
- v) Plan and coordinate Project Area reporting systems.

C. Engineering – Technical & Design

- i) Devising project concepts from the Network plans prepared by Engineering – System/Network Planning as above.
- ii) Preparing Report of project technical feasibility (while on financial feasibility, Engg. – Costing and Finance will contribute) and submission to the

- Board/Funding agencies as per Company's/Funding agencies' norms respectively.
- iii) All Design and engineering aspects of Transmission lines and Substations including but not limited to TL foundations, towers, conductor sizing/configurations and S/s SLD Layouts, and related issues including preliminary surveys.
 - iv) Preparation of BOQs and Contract packages.
 - v) Finalisation of Pre & Post Qualification criterion for Contractors & Suppliers in consultation with Finance and QA for various projects and materials.
 - vi) Preparation of Technical specifications for Supply and Construction packages eventually forming part of contract documents.
 - vii) Approval of detailed engineering drawings by Contractors and Suppliers.
 - viii) Devising technical capability norms for sub vendors and subcontractors.
 - ix) Testing and Commissioning by Company.
 - x) Overall engineering coordination of contracts and purchases including post-bid discussions, technical approvals for quantity change & others etc. in coordination with Contract services, Engineering – Costing & Finance.

D. Engineering – Costing

Responsible for

- i) Compiling cost database for equipments and construction works (including manhours data for various stages of works such as excavation, tower erection etc.) to facilitate real time estimation for works and projects, (civil and other non-electrical works included).
- ii) Preparing packagewise cost estimates based on recent project Cost data, Market data & other reliable data base.
- iii) Providing cost inputs to Performance Budgeting group.
- iv) Revising cost estimates and cost database on a quarterly basis.
- v) Facilitating Project Monitoring groups with individual projectwise planned cost estimates to enable effective cost monitoring.

E. Construction Management and Implementation (TL & SS)

Responsible for

- i) Coordination of all Post-tender activities pertaining to Construction including design & Engg. Coordination, Materials coordination, Project Sitework and commissioning, coordination issues between H.O. Operations – Contractors – Project Site concerned.
- ii) Provisions of site facilities to be provided by the Company as per Contract.
- iii) Activities of land acquisition, right-of-way, environmental issues and similar other preliminary activities
- iv) Coordination of Final Testing & Commissioning including Inspectorate approval etc.

2. CORPORATE CONTRACT & PROCUREMENT GROUP

A) Contracts and Procurement (C&P)

Responsible for

- i) Packagewise finalization of Tender documents with a) Instructions to Tenderers b) General and Special Conditions of Contract (including all commercial and legal provisions)
- ii) Coordinating with Engineering-Technical & Design for Technical specifications, drawings and Data sheets portion of Tender document.
- iii) Calling for Tenders, Tender document selling, coordinating for Tender opening and Tender evaluation Committees (separate), Bid receipt & opening, Bid evaluation reporting.
- iv) Post – bid discussions (in coordination with Engineering – Technical & Design, Costing & Finance).
- v) LOA issue and Contract signing, Performance Guarantees and Initial advances.
- vi) Forwarding complete packagewise contract documents to Operations/ QA&I/Finance/Project Implementation Units.
- vii) Administrative approval for change orders, quantity variations, time extension & LD issues.
- viii) Coordination for Project and Contract closures.

B) C & P- Materials Management

Responsible for

- i) All non-project procurements including purchase of sundry items, emergency spares for projects & maintenance and capital items such as furniture, fixtures, office equipments for offices, Tools & Tackles for Testing and Commissioning etc.
- ii) Stores and inventory management for in-house procurements and usage.

3. QUALITY CONTROL/ASSURANCE & INSPECTION (QC/A&I) & T&C

(A) Quality Assurance & Inspection

Responsible for

- i) Evolving Quality standards, plans, specifications and norms for various equipments, materials and field works.
- ii) Setting Quality implementation methodologies to cover equipment/material/work specifications in tender documents, factory and field inspection, at manufacturer's/supplier's works and locations respectively
- iii) Implementing the Factory/Field Quality plans

- iv) Reporting on an exceptional basis to MD and Directors Company only.
- v) Assisting and Coordinating with Engineering Design & Technical in finalizing Pre and Post Qualification criteria (Technical portion) for various categories of manufacturers/suppliers, sub suppliers and contractors/subcontractors.

B) Testing & Commissioning

Responsible for

- i) Pre-commissioning Tests on all new project equipments related to sub-stations, Transmission lines and other utilities.
- ii) Testing and commissioning after preventive maintenance/breakdowns.
- iii) Disturbance analysis and test result analysis.
- iv) Up keep and sealing of all measuring/recording instruments & energy meters as per regulations of the Act and directives by the Authority.
- v) Consolidation of Energy Accounts, Analysis and Calculation of energy losses till this activity is transferred to SLDC.

4. REGULATORY, ENERGY & COMMERCIAL MANAGEMENT

Responsible for

- i) Energy Metering interface at grid points.
- ii) Energy Scheduling in coordination with SLDC.
- iii) Energy Accounting – Generators & Distribution Utilitywise.
- iv) Input for submissions to UERC etc. for Transmission tariff fixation etc. (in coordination with Finance).
- v) Resolution of intrastate ABT, Open access and other issues.
- vi) Interfacing with SLDC and ALDS for Energy Management – Interstate and Intrastate.
- vii) Commercial Agreements with Transmission System Users such as Generators, Distribution Co(s), Open access applicants, Licensees and Traders.
- viii) Transmission charges billing and accounting.
- ix) Submission of Annual Transmission Tariff or ARR Application to UERC and pursue fixation of best tariff rates for Transmission.
- x) Attending to and replies to all queries on Regulatory and Commercial issues with UERC and others including attendance/submissions in Commission's hearings as and when required.

5. OPERATION & MAINTENANCE - TL & SS – (O&M)

(A) MAINTENANCE GROUP

Responsible for

- i) Condition monitoring of equipments, utilities, accessories, buildings and other installations.
- ii) Defects analysis including A-B-C analysis w.r.t. condition of equipments, structures etc.
- iii) Predictive Preventive and Breakdown maintenance scheduling (in that order of importance), their execution and coordination
- iv) Management of spares inventory adopting contemporary inventory models
- v) Live line maintenance.
- vi) Breakdown and outage reporting, analysis and corrective action.
- vii) MIS reporting on System Performance parameters such as Network Availability, Losses and others.
- viii) Computation of substationwise and linewise losses etc.
- ix) Energy Metering and Accounting including Auxiliary and other supplies like residential colony etc.

(B) OPERATIONS GROUP (SHIFT OPERATIONS)

Responsible for

- i) Effective Load and operation management in the network of Sub-Station.
- ii) Operation protocols and procedures to ensure minimum outage and disruption of service as well as safety of equipments and personnel.
- iii) Energy & other System parameter reading and measurement.
- iv) System monitoring, recording disturbances and specific occurrences.
- v) Maintenance of Logbooks, Spreadsheets, Registers and Records in Substation.

(C) ASSETS & UTILITIES MANAGEMENT SUBGROUP

Responsible for

- i) Gathering data of assets, categorization, labeling and codification.
- ii) Valuation of assets and estimation of useful life and future revenue earnings.
- iii) Condition monitoring statement and reports
- iv) Documentation as database for purposes of asset depiction in Company Balance sheets, Financial statements and tariff submissions etc.

6. STATE LOAD DESPATCH CENTRE (SLDC)

Manual No.	Activity	Action to be taken by State Load Despatch Centre
	The Particulars of its organization, Functions and duties	<ul style="list-style-type: none"> • As per section 32 of the Act, State Load Despatch Centre (SLDC) shall have following functions:- <ol style="list-style-type: none"> 1. The State Load Despatch Centre (SLDC) shall be the apex body to ensure integrated operation of the power system in the State. 2. The State Load Despatch Centre shall: <ol style="list-style-type: none"> (a) be responsible for optimum scheduling and dispatch of electricity within a state, in accordance with the contracts entered into with the licensees or generating companies operating in the state. (b) monitor grid operations. (c) keep accounts of the quantity of electricity transmitted through the state grid. (d) exercise supervision and control over the intra-state transmission system and (e) be responsible for carrying out real time operations for grid control and dispatch of electricity within the State through secure and economic operations of the state grid in accordance with the Grid Standards and the State Grid Code. 3. The State Load Despatch Centre may levy and collect such fee and charges from the generating companies and licensees engaged intra-State transmission of electricity as may be specified by the State Commission. • Besides above, following shall be the exclusive functions of SLDC:- <p>System operation and control of the State Grid covering contingency analysis and operation planning on real time basis.</p> <ol style="list-style-type: none"> (a) Scheduling/re-scheduling of generation. (b) System restoration following grid disturbances. (c) Meter data collection. (d) Compiling and furnishing data pertaining to system operation. (e) Operation of State Energy Account, State Pool Accounts and any other functions as directed by the Commission. (f) Keep account of the quantity of electricity generated in the State. <p>In accordance with Section 33 of the Act the State Load Despatch Centre in a state may give such directions and exercises such supervision and control as may be required for ensuring the integrated grid operations and for achieving the maximum economy and efficiency in the operation of power system in that State. Every licensee, generating company, generating station, substation and any other person connected with the operation of the power system shall comply with the directions issued by the SLDC shall comply with the directions of the RLDC.</p>

7. Supervisory Control and Data Acquisition (SCADA)

- i) SCADA stands for Supervisory Control and Data Acquisition.
- ii) SCADA system is used for real time data acquisition of various Parameters from various Substations of PTCUL and Generating Stations of Uttarakhand.
- iii) The real-time data of various inter-state transmission lines, intra-state transmission lines and generations is telemetered and reported to SLDC Dehradun where Grid Operation decisions are made for proper and efficient grid control and electricity dispatch.
- iv) This data is further reported to NRLDC New Delhi.
- v) SCADA PTCUL has established 01 no SLDC at Dehradun and 01 no. Sub-LDC each at Kashipur and Rishikesh.
- vi) Kumaon region data reports to Sub-LDC Kashipur and further to SLDC Dehradun. Similarly, Garhwal region data reports Sub-LDC Rishikesh and further to SLDC Dehradun.
- vii) RTUs/SAS(Remote Terminal Unit/Substation Automation System) are used for data acquisition from respective substations/generating stations. RTU/SAS data is communicated via PLCC/OPGW link to respective Sub-LDC i.e Kumaon Region data reports to Sub-LDC Kashipur and Garhwal region data to Rishikesh and further from Sub-LDCs data reports to SLDC Dehradun via OPGW link.

8 COMMON GROUPS

A. FINANCE /ACCOUNTS /BUDGETING/COMMERCE

1. FINANCE

Responsible for

- i) Application of Companywide Finance policies & procedures for accruals and disbursements.
- ii) Cash & Funds Flow Management.
- iii) Debt/Equity management.
- iv) Capital – Fixed & Working Capital Management.
- v) Cash and Expenses Management.
- vi) Project Pre-tender evaluation and post tender discussions (as part of Tender

Evaluation Committee).

- vii) Contract and Contract agreement signing (along with Contract services).
- viii) Securing Bid bonds, Performance Guarantees for Projects.
- ix) Funds release for Project payments.
- x) Contract closures.
- xi) Tariff formulations, submissions and application of granted tariffs to energy conveyed/ transmitted through PTCUL's Transmission network including collection of tariff revenues.
- xii) Projectwise funds and payment scheduling.
- xiii) Contract payments as per T.O.P. after processing of bills.
- xiv) Processing of EMD's and CPG's to be forwarded to Corporate Finance.

2. ACCOUNTS & AUDIT

Responsible for

- i) Application of Companywide Accounting policies & procedures conforming to the requirements of The Companies Act 1956.
- ii) Accounting for working funds, Contracts, Advances, Suspense W.I.P., Imprest, Revenue & Expenditure, Stores, Disbursals and other.
- iii) Compilation of Daybooks-Cashbooks, Journals, Cash abstracts and other.
- iv) Financial reconciliation and Bank reconciliation.
- v) Final Company P & L A/cs and Balance Sheets and Facilitate Auditing.
- vi) Internal audit of all in-Company transactions and accounts.
- vii) Project and Contract Accounts – accumulation & posting.
- viii) Journals, Cashbooks, Stock registers etc.
- ix) Cost accounting for various stages of Project work based on budgets and actuals reported.

3. BUDGETING

Responsible for

- i) Companywide Performance Budgeting as well as Functional Budgeting for Projects and Operational groups respectively
- ii) Devise budgets as instruments of planning as well as control.
- iii) Preparation and implementation of Functional Cost Budgets such as Revenue Budgets, Expenses (Direct and Fixed) Budget, Capital Budget etc.
- iv) Reconciliation of budgets with actual cost and review/ analyse variances for cost and performance control.

4. COMMERCIAL (incl. Regulatory)

Responsible for

- i) Application of Tariff to energy 'wired' through Transmission Network
- ii) Transmission billing based on (i) as above to Generators or Discoms or Licensees or Traders as the case may be
- iii) Submissions to ERC for tariff approval through Fixed – Variable UI cost computations and pursue fixation of best tariff rates for Transmission.

5. LEGAL AND ARBITRATION

Responsible for

- i) Companywide policies on legal and paralegal issues and their resolution
- ii) Represent Company cases (through Company empanelled Advocates) in appropriate judicial forums and legal issues.
- iii) Facilitate arbitration issues with Transmission network users, project contractors & employees & litigating public

6. COMPANY SECRETARIAL

All companywide Company Secretarial functions

7. HRD & ADMINISTRATION (including Training)

I PERSONNEL & ADMINISTRATION

Responsible for

- i) Devising Companywide Personnel & Administration Policies and Procedures

- ii) Facilitating recruitment of personnel and inducting them to the Company
- iii) Devising Standing orders, norms for working conditions, terms of employment, salary and perquisites, administrative etc.
- iv) Assessing employee training needs & facilitate design and administration of Training Programmes in coordination with Operations Groups and Company /External Training Institutes
- v) Administering employee benefits and incentives as per Company Rules /Statutory regulations
- vi) Ensuring good work environs, safety and environmental harmony
- vii) Provision of modern office facilities, communication and IT –enabled information-retrieval systems to enhance employee comfort and performance.
- viii)Resolving IR issues and problems
- ix) Salary Administration
- x) Routine Personnel functions including IR issues etc.