5. Administrative Policies

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5. ADMINISTRATIVE POLICIES

5.1 DUTIES & RESPONSIBILITIES OF FUNCTIONAL DIRECTORS

A. Director (Personnel)

Director (Personnel) will be the nexus between the Chairman and Managing Director and Personnel & Administration Divisions in the Corporate Office and the Projects/units in the field. As a Functional Director, he will have a dual role viz. helping in shaping the policy of the corporate body and in reviewing the overall performance in the area of Personnel & Administration. As Director In charge of Personnel & Administration functions, he will be responsible for formulation and execution of the entire gamut of P&A functions, which, inter alia comprise the following:

- Personnel policies
- Manpower planning
- Career planning including succession planning
- Recruitment, Selection and Placement
- Wage and Salary Administration
- Performance Appraisal
- Human Resource Development and Planning for Organizational Change
- Organizational Developments
- Industrial Relations and Trade Union Negotiations
- Collective Bargaining/ Productivity Bargaining
- Participative Management
- Vigilance & Security
- Legal aspects and
- Public Relations
- Authority

Besides formulation and implementation of personnel policies, Director (Personnel) will be expected to maintain effective links with different Government agencies as also other sister Undertakings like NJPC, NHPC, BHEL, etc. in addition to Govt. of Himachal Pradesh.

Director (Personnel) will in full functional control and authority on the Head of the Project (s) and functional heads of the departments in their respective areas.

B. Director (Finance)

Director (Finance) will advise the Chairman and Managing Director and the Board of Directors on all important matters having financial bearing or implications on the affairs of the Corporation. He will be required to advise the Chairman and Managing Director and the Board of Directors in the formulation of sound policies relating to the finance and accounts affairs and to direct, coordinate and control financial policies and financial accounts management so as to achieve effective and optimum deployment and utilization of financial resources towards the fulfillment of the goals and objectives of the Corporation.

Director (Finance) will exercise functional control and authority including financial powers and accounting functions in respect of Project construction proposed to be decentralized to the Project Managers and Officers down the line. The Finance and Accounts Organization for various project(s) and works will be under the administrative control of the Project Managers of the Project Head through their Finance Manger or other Accounts Officer so designated but their technical/ functional control, coordination and monitoring will vest with the Director (Finance). Director (Finance) is expected t coordinate effectively the finance and accounts functions with other activities and functions of the Corporation so as to achieve optimum results.

C. Director (Electrical)

Director (Electrical) will be responsible for the design and construction of electrical works of the projects in his area. He would assist the Chairman and Managing Director in these matters in the Corporation.

As a functional Director, he will have a dual role viz. helping in shaping the policies of the Corporate Office and in reviewing and monitoring the overall performance in his area. As Director In charge of the Construction and Design Wing of electrical works, he would be responsible for the execution of his functional responsibilities which comprise of:

- a) Execution of electrical portion of the project(s) including detailed design and planning for the procurement and plant and machinery and all other inputs required and management of execution of electrical works through the respective head of the project.
- b) To monitor the progress of the works and provide information to the top management with recommendations for remedial action, whenever necessary.
- c) Control and coordinate and interact with outside agencies such as the concerned ministries, State Governments, Consultants like CWC, CEA

- and specialized agencies like CWPRS and private retainer/foreign consultants, wherever appointed.
- d) Planning processing of fresh projects in respect of electrical works.
- e) To organize effective management information system at all levels in the organization on the technical activities under the control.

D. Director (Civil)

Director (Civil) will be responsible for the design and construction works of the Projects in his area. He would assist the Chairman and Managing Director in these matters. As a functional Director, he will have a dual role viz. helping in shaping the policies of the Corporate Office and in reviewing and monitoring the overall performance in his area. As Director In charge of the Construction and Civil Design Wing, he would be responsible for the execution of his functional responsibilities, which comprise of:

- a) Execution of project(s) including detailed design and planning for the procurement of plant and machinery in his functional area and all other inputs required for the project(s) and management of execution of works through the Head of the Project.
- b) To monitor the progress of the project(s) and provide information to the top management with recommendation for remedial action, wherever necessary.
- c) Control and coordinate and interact with outside agencies such as the concerned ministries, State Governments, Consultants like CWC, CEA and specialized agencies like GSI, Survey of India and CWPRS and private retainer/foreign consultants, wherever appointed.
- d) Planning and processing of fresh projects likely to be entrusted to the Corporation including organization of pre-investment investigations, feasibility studies and DPRs.
- e) To organize effectively management information system at all levels in the organization on the technical activities under his control.

5.2 DUTIES & RESPONSIBILITIES OF P&A WING

The Human Resource Division is responsible for the human resource management of the entire staff members (regular and temporary) **including outsourced employees**. The division's responsibilities include division restructuring, performance management, development and training (in areas such as management development and interpersonal skills), workforce planning, recruitment and selection, career management (including internal career mobility), management of staff benefits and entitlements, and staff counseling. The central aim of the division is to respond to the evolving needs of the HPPCL, aligning the workforce with the needs of the organization. The Division will be headed by the Director (Personnel).

RESPONSIBILITIES

- 1. Formulation of Corporate Personnel Policies.
- Manpower Planning, Recruitment, Training and Development, Career development and re-deployment.
- 3. Industrial Relations.
- 4. Implementation of Official Language.
- Estate and Administration Activities.
- 6. Establishment Works.

(A) Personnel

- 1. Formulation of Corporate Personnel Policies & Awards/Rewards.
- 2. Maintenance of harmonious Industrial Relations.
- 3. Formulation, negotiations and implementation of wage structure, Wage & Salary Administration.
- 4. Compliance of Labour laws.
- 5. Co-ordination with labour department, PF Commissioner, PF Trust and Gratuity Trust etc.
- 6. Recruitment, placement and establishment matters.
- 7. Manpower planning, career development & redeployment, Performance Appraisal, ACR's.
- 8. SC/ST matters & liaison thereof. OBC/Physical Handicapped/other reservation and follow up thereof.
- 9. Co-ordination cell for project cadre employees.
- 10. Management Information System relating to Personnel.
- 11. Submission of various returns.
- 12. Court cases arising out of Corporation Personnel Policies.
- 13. Preparation and up-dation of Personnel Manuals.

(B) HRD

- Identification and analysis of training needs in different functional areas of the Organization in consultation with other Divisions and Projects.
- 2. Planning and organizing in-house and external training programmes.
- 3. Foreign training programmes.
- 4. Induction and orientation programmes for Probationary Executives.
- 5. Re-training in various skills to facilitate re-deployment of personnel.

(C) Estate, Administration & Hospitality

- 1. Distribution of liveries, lease cases, property returns etc.
- 2. Management of Vehicles & Estates.
- 3. Arrangement of Meetings & Protocol duties.
- 4. Store & Stock articles.
- Handling of lease & Rental cases.
- 6. Security & House Keeping & Hospitality.

Executives (P&A) (E4 to E7)

- 1. To supervise all the work relating to P&A section of the Department.
- 2. To go through the dak received and mark the papers to the concerned section and also to give directions for its disposal.
- 3. To ensure punctuality in attendance in the section and to advise the staff on matters of conduct and discipline. The staff under him/her is fully employed throughout the day and none of them leaves seat frequently or is absent from his seat for a long time or purposelessly roams about in the office or gossips away his/her time.
- Deputing all class –IV and Class-III officials on duties and checking up their day-to-day functioning.
- 5. To ensure that all dealing hands and the diarist maintain all required registers and keep the same updated. Also check these registers at regular intervals.
- 6. To keep a careful watch on any hold up in the movement of dak and files between the section and higher officers.
- 7. To ensure timely submission of fixed date cases, other important cases and papers required by the officers and keep a watch on progress of action.
- 8. To make arrangements for disposal of work of officials of the section on leave.
- 9. To ensure that all Manuals, Rules, Instructions, Guard files and Precedent Registers of the Sections are kept up to date by inserting correction slips.
- 10. To train and guide the staff posted in the section and to point out their shortcomings and deficiencies.

- 11. To allocate evenly, work of the section to the staff posted in the section with the approval of the Superior Officer and maintain an updated distribution list of work amongst the dealing hands in the section.
- 12. All the files are routed through him and his expert opinion on the files are given importance in solving various matters.
- 13. Any other work entrusted by the superiors from time to time.

Executives (P&A) E0 to E3

- 1. To assist the authorities in the performance of his duties and responsibilities.
- 2. To present all the cases and matters to higher authorities in a precise manner with all possible solutions and suggestions.
- 3. To act as supervisor of the concerned branch and keep check on all the officials of the Branch and office to ensure punctuality in attendance in the section and to advise the staff on matters of conduct and discipline. For ensuring availability of staff posted under her/him on holidays or early or late hours, he should maintain local addresses with phone numbers, if any, of the entire staff with him.
- 4. To go through the dak and mark the Dak to various Assistants of the Branch with dated initials indicating the urgency and also to give directions, if any, for its disposal whenever possible at the dak stage to enable speedy processing.
- 5. To allocate/distribute the work amongst all dealing assistants of the branch so that the work of the branch runs smoothly.
- 6. To check that section is kept neat and tidy and that the files, papers are arranged in an orderly manner and the recorded files are sent to the record room and that the ephemeral record is periodically destroyed.
- 7. Any other work entrusted by the superiors from time to time.

Supervisory Staff (S0 to S3/S4)

- 1. To deal with the assignment given by the Superior officer of the concerned branch.
- 2. To ensure that PUCs if urgent nature are put up well within the time prescribed for disposal.
- 3. To maintain proper record of the PUCs being dealt by him/her.
- 4. To compile the data or information and deal matter as to present complete cases with all relevant data and information with past precedents and viable/feasible solutions to facilitate to authorities to arrive at a definite decision.
- 5. Any other job assigned by the Superior Officers of the branch concerned.

Senior Assistant/Junior Assistant/Clerk

We have no sanction post of Senior Assistant/ Jr. Assistant/ Clerk. However, for the purpose of utilization of services of these existing categories; the following duties and responsibilities are assigned to them:-

- 1. To deal with the assignment given by the Superior officers.
- 2. To ensure that PUCs if urgent nature are put up well within the time prescribed for disposal.
- 3. To maintain proper record of the PUCs being dealt by him/her.
- 4. To compile the data or information and deal matter as to present complete cases with all relevant data and information with past precedents and viable/feasible solutions to facilitate to authorities to arrive at a definite decision.
- 5. To handle the work relating to opening and maintenance of files, referencing, dealing cases including noting and drafting, recording of files, maintenance and updating of various types of data and maintenance of various registers, personnel/service/establishment matters including recruitment and promotion rules, conditions of service, posting, transfers, maintenance of service books, service records, preparation of leave account, pension papers, disciplinary matters, personal files etc., budget preparation including appropriation, reappropriation, supplementary demands for grants, additional grants, contingency fund, audit paras, estimates committee etc. etc.
- 6. Any other job assigned by the Superior Officers of the branch concerned.

Ministerial Staff

(a) Private Secretary/Additional Private Secretary

- 1. To assist the Chairman/ Managing Director/ Directors in his day to day working.
- 2. To handle files/records of confidential or secret nature.
- 3. To take dictation in stenography to transcribe the same on Computer and to present the same for approval and signatures.
- 4. To type demi-official, secret, confidential and important letters and to compare the same before submitting for the signatures of the Chairman/Managing Director/ Directors.
- 5. To attend the office telephones courteously and politely and connect the outside calls with the Chairman/ Managing Director/ Directors keeping in view the engagements and his directions.
- 6. To frame tour programme as per directions of the Chairman/ Managing Director/ Directors and send the proposed tour programme for approval of the appropriate competent authority.
- 7. To arrange the accommodation in the Circuit House/Rest House etc. for the stay of the Chairman/ Managing Director/ Directors during tour.

8. Any other job assigned by the Chairman/ Managing Director/ Directors

(b) Personal Assistant

- To assist the HOD and Private Secretary to the HOD in the performance of his duties and responsibilities.
- 2. To take dictation in stenography to transcribe the same on Computer and to present the same to the Officer for approval and signatures.
- To attend the office telephones courteously and politely and connect the outside calls with the Officer in view of the engagements of the Officer and his directions.
- 4. To frame tour programme as per direction of the officer and send the proposed tour programme for approval of the appropriate competent authority.
- 5. To assist the officer in all types of Departmental Enquiries.
- 6. Any other job assigned by the HOD and Private Secretary to the HOD.

(C) Sr. Scale Stenographer/Jr. Scale Stenographer/Steno-Typist

- 1. This category is attached with the senior officers of the Department and they are to assist in day to day official working.
- 2. To take dictation in stenography to transcribe the same on Computer and to present the same to the Officer for approval and signatures.
- 3. To attend the official telephone/fax/official mail etc.
- 4. To assist the officer in all types of Departmental Enquiries.
- 5. Any other job assigned by the HOD and Private Secretary to the HOD.

Peon-cum-Attendant

- 1. To mend, trim, stitch, bind etc. old records, files etc. in Record Room.
- 2. To paste correction slips in the official reference books of various officers and those of the branches/sections.
- 3. To affix service postage stamps or envelops, maintain their accounts, prepare envelops/packets and parcels, dispatch dak and telegrams and helps the dispatcher in the circulation of all printed matters etc.
- 4. To sort out and properly keep the record in the record section.
- 5. To carry and deliver dak within and outside the office.
- 6. To ensure the cleanliness and general up-keep of the section/office wherein posted.
- 7. To perform miscellaneous and odd jobs for officers/officials.
- 8. To attend to officers at headquarters and while on tour.
- 9. Any other duty assigned by the Superiors.

Establishment-I

- 1. Maintenance of service records including Service Books, Personal Files, Deputation /Secondment, ACR's, Inquiry and Vigilance cases, transfer & postings of entire Executives at H.Q as well as at fields and maintaining their incumbency registers.
- 2. All Service Matters relating to Executives i.e. Leave, TA/DA, Pay fixation & verification thereof, GPF, DPC, maintenance of leave account of Executives etc.
- 3. Telephone sanctions of Executives & Supervisors.
- 4. I. Cards/Casual Leave Cards/E. Code etc of entire staff.
- 5. Custodian of Personal Files/ Service Books/ ACR's of entire Executive staff in HPPCL.
 - Any subject pertaining to Establishment-I not mentioned above.

Establishment-II

- Maintenance of service records including Service Books, Personal Files, Deputation /Secondment, ACR's, Inquiry and Vigilance cases, maintenance of leave account, transfer & postings of entire Supervisors at H.Q as well as at fields and maintaining their incumbency registers.
- 2. All Service Matters relating to Supervisors i.e. Leave, TA/DA, Pay fixation & verification thereof, GPF, DPC etc.
- 3. PMIS and ERP.
- 4. Any subject pertaining to Establishment-II not mentioned above.
- 5. Any other work entrusted from time to time.
- Custodian of Personal files/ Service Books/ACR's of entire Supervisory staff in HPPCL

Establishment-III

- Maintenance of service records including Service Books, Personal Files, Deputation /Secondment, ACR's, Inquiry and Vigilance cases, transfer & postings, maintenance of leave account etc. of entire Workmen at H.Q as well as at fields and maintaining their incumbency registers.
- 2. All Service Matters relating to Workmen i.e. Leave, TA/DA, Pay fixation & verification thereof, GPF etc.
- 3. All correspondence relating to outsourced employees including DOEACC employees.
- 4. Any subject pertaining to Establishment-III not mentioned above.
- 5. Any other work entrusted from time to time.

Recruitment-I

- 1. Recruitment of **Executives**.
- 2. Recruitment of Apprentices (Personnel/ Finance/ Civil/ Electrical/ Mechanical) etc.
- 3. Framing of Recruitment & Promotional rules for all the categories.
- 4. All correspondence relating to recruitment of Executives.
- 5. Any subject pertaining to recruitment of Executives not mentioned above.
- 6. Any other works entrusted from time to time.

Recruitment-II

- 1. Recruitment of **Supervisors & Workmen**.
- 2. Recruitment of Apprentice (R&R, Geology, App. JE (Civil/Elect.) etc.
- 3. Manpower Planning.
- 4. Any subject pertaining to recruitment of Supervisors and Workmen not mentioned above.
- 5. Any other works entrusted from time to time.

Training, Industrial Relations & RTI Act, 2005

- 1. Training.
- 2. Industrial Relations & Grievance Redressal.
- 3. Parliamentary and Assembly business.
- 4. Correspondence under Right to Information Act, 2005.
- 5. Any other works entrusted from time to time.

Policy Section

- 1. General Policy Matters pertaining to Personnel and Administration.
- 2. Co-ordination with HOP's in the corporate office as well as Projects.
- 3. Preparation of memorandums for Service Committee as well as BOD meetings pertaining to policy decisions and coordination with HPSEB, State Government, CPSU's etc. in the Power Sector.
- 4. Policy Circulars.
- 5. Any other works entrusted from time to time.
- 6. Any subject pertaining to Policy not mentioned above.

Estate, Hospitality & Administration

- 1. Procurement of store & stock articles, furniture and fixtures.
- 2. Purchase of stationary and stationary articles.
- 3. Purchase and installation of Photostat and Fax machines.
- 4. Maintenance of all Civil / Electrical works of Office building of HPPCL at Shimla & correspondence thereof.
- 5. Arrangement of meetings, Farewell Parties and gifts to retiring employees.
- 6. Correspondence regarding Transit Camp at Delhi.

- 7. Any other works entrusted from time to time.
- 8. Hiring/ taking on lease residential accommodation.
- 9. Checking of Rent assessment cases, Rent bills of Hired Building and Execution of agreement for hiring of building and all correspondence related to this.
- 10. All correspondence regarding vehicles.
- 11. Look After the general works of Transit Camp & correspondence thereof.
- 12. Creation of different offices pertaining to revenue and security in project areas.
- 13. Look after the office canteen & correspondence thereof.
- 14. Look after the security arrangement of HPPCL offices.
- 15. Looking after canteen arrangements and all correspondence thereof.
- 16. Checking of bill of security guards and preparation of duty roster/absentee statement, maintenance of leave record of security guards and all correspondence thereof.
- 17. Any other works entrusted by the Management from time to time.
- 18. Any subject pertaining to administration and hospitality not mentioned above.

Public Relations

- 1. Planning, developing and implementing PR strategies;
- 2. Liaiosoning with colleagues and key spokespeople;
- 3. Researching, writing and distributing press releases to targeted media with prior approval.
- Writing and editing in-house magazines, case studies, speeches, articles and annual reports; preparing and supervising the production of publicity brochures, handouts, direct mail leaflets, promotional videos, photographs, films and multimedia programmes;
- 5. Organizing events including press conferences, exhibitions, open days and press tours; maintaining and updating information on the organization's website.
- 6. To organize Sports and Culture activities
- 7. Subscription of News papers, Magazines, other periodicals and maintaining of records thereof.
- 8. All duties regarding Public Relations as mentioned in earlier letter No. HPPCL/P&A/PF/09-26559-64 Dt. 19/03/09.

Legal Cell

- 1. To defend various court cases instituted against HPPCL.
- 2. To defend various arbitration cases.
- 3. Appointment of Standing Counsel, Retainer Counsel and Legal Advisor for HPPCL.
- 4. To render legal advice on various miscellaneous issues pertaining to works.
- 5. Vetting of contract agreements, various other agreements concerning HPPCL.
- 6. Any subject pertaining to Legal Cell not mentioned above.

Note: In addition to above, the Management can by order assign any other duties which it deems fit in the interest of the organization.

5.3 DUTIES & RESPONSIBILITIES OF FINANCE & ACCOUNTS WING

The organization structure of HPPCL provides for the Finance & Accounts wing of HPPCL to be headed by a Director (Finance), who is a whole time member of the Board of Directors. Director (Finance) functions as the Chief Finance Officer (CFO) of HPPCL and advises HPPCL on all important matters having financial bearing or implications on the affairs of HPPCL. He advises in the formulation of sound policies relating to the finance and accounts affairs and in directing, coordinating and controlling financial policies and financial accounts management so as to achieve effective and optimum deployment and utilization of financial resources towards the fulfillment of the goals and objectives of HPPCL. Director (Finance) exercises functional control over the Finance and Accounts Divisions of various project(s).

Work of Finance & Accounts Wing is divided into three principal departments as under:

Department 1: Funds Management (Treasury) Department

The Funds Management (Treasury) Department is headed by an officer in the rank of Deputy General Manager who functions as the Chief Treasury Officer (CTO) of HPPCL. He is responsible for, *interalia*, the following:

(1) Estimating the funds requirements of HPPCL for the ensuing year, preparing the annual budget for HPPCL, its corporate office and each of its field offices

- (2) Raising funds at optimum cost taking care to see that the funds raised are not in excess of immediate requirement so as to minimize the financing costs.
- (3) Exploring cheaper sources of funds including funds from external sources / multilateral agencies
- (4) Formulating the investment policy of HPPCL & periodically updating it, prompt investment of unutilized funds in accordance with the investment policy of HPPCL and taking care to see that idle funds do not remain in current accounts while ensuring availability of funds when required
- (5) Exercising control over HPPCL's expenditure through the tools of budget & financial concurrence
- (6) Supervising banking arrangements

While the Deputy General Manager (Funds Management) facilitates investments decision, the Deputy General Manager (Accounts) will arrange for issuance of cheques in respect of these investments, maintenance of investment accounts & records, reconciliation of bank accounts etc so as to ensure proper checks and balances over handling of HPPCL's cash.

The Funds Management Department is divided into two divisions (1) Banking & External Funding, and (2) Financial Concurrence & Budgetary Controls. The Banking & External Funding Division is headed by an officer in the rank of Senior Manager and the Financial Concurrence & Budgetary Controls Division is headed by an officer in the rank of Deputy Manager.

The Head of Banking & External Funding Division is assisted by four Dealing Assistants. The Head of Financial Concurrence & Budgetary Controls is assisted by two Dealing Assistants. The number of Dealing Assistants may change from time to time depending upon the workload. The Dealing Assistants are responsible for initial processing & for maintaining the files & records under their custody.

Department 2: Accounts

The Accounts Department is headed by an officer in the rank of Deputy General Manager who functions as the Chief Accounts Officer (CAO) of HPPCL. He is responsible for, *interalia*, the following:

- (1) Consolidation of the accounts of HPPCL
- (2) Maintenance of accounts of the Corporate Office as an Accounting Unit
- (3) Supervision over maintenance of accounts by the field offices
- (4) Functional control over finance & accounts staff of field offices
- (5) Staff salaries & reimbursements and establishment expenses relating to the Corporate Office

(6) Providing assistance in statutory audit, RAO audit & CAG Audit. Ensuring compliance with observations of these auditors

The Accounts Department is divided into two divisions (1) Accounts Division (2) Establishment Division. Currently, all officials in the Accounts Division report to the Deputy General Manager directly. The Establishment Division, currently headed by a Deputy Manager holding additional charge, will in due course be headed by a Senior Finance Officer.

Accounts Division is staffed by five dealing assistants and Establishment Division is also staffed by five dealing assistants. The number of Dealing Assistants may change from time to time depending upon the workload. The Dealing Assistants are responsible for initial processing & for maintaining the files & records under their custody.

Department 3: Internal Audit

The Internal Audit Division is headed by an officer in the rank of Senior Manager who functions as the Chief Internal Auditor (CIA) of HPPCL. Senior Manager (Internal Audit), currently reporting to the Director (Finance) through the Deputy General Manager (Accounts), will in due course be reporting to the Director (Finance) directly. Senior Manager (Internal Audit) is responsible for, *interalia*, the following:

- (1) Facilitating identifying firms of chartered accountants for carrying out internal audit of various offices of HPPCL in accordance with the policy laid down by the Board of Directors, fixing their remuneration and fixing periodicity of internal audit
- (2) Scrutiny of internal audit reports, putting up salient observations to the higher ups and ensuring compliance with audit observations
- (3) Maintaining rapport with senior firms of chartered accountants practicing in the state.

General

Corporate Finance & Accounts Department practices the flat, officer – oriented system being followed by CPSUs. All employees up to and including officers of E3 rank do original work and are not provided with any assistants. Officers in all other ranks do both original work and also supervise the work of employees reporting to them.

Note: In addition to above, the Management can by order assign any other duties which it deems fit in the interest of the organization.

5.4 ROLE & RESPONSIBILITIES OF CIVIL ENGINEERS AT PROJECT SITES

Duties and Responsibilities of Executives and Non-Executives

HPPCL is committed to continuously strive for quality and fully satisfying customer's need by means of State of the Art Technology, Excellence in Engineering and continual improvement in Quality Management for generating reliable and eco-friendly power.

Basic Principles

The power and duties of the officers and employees of the Corporation stems mainly from the provisions of the Companies Act, 1956 and Memorandum and Articles of Association of the Corporation. The officers and workmen of the Corporation carry out the business operations of the Corporation in line with the objectives specified in the Memorandum of the Association of the Companies.

The head of the project will assign duties to the staff posted with him as per work requirement and availability of Engineering Staff.

The general pattern to be followed is:

- (a) HOP will be of the rank of GM. For smaller projects or at initial stage, he can be of the rank of AGM/DGM also. The HOP will be overall in-charge and so responsible for all functions.
- (b) DGM/AGM will be EIC for major packages, may also hold other responsibilities.
- (c) Senior Manager will be in-charge of one or more components of a major package.
- (d) Manager/Dy. Manager will assist Senior Manager.
- (e) E1 to E3 will be the basic level for major packages. They may or may not be assisted by JEs or supervisory staff. All the basic record and documentation on "as actual built basis" and site supervision will be their responsibility i/c co-ordination & interface management.

The responsibilities and the duties of Executives and Non-Executives deployed at site (Projects under execution and investigation) are broadly but not the least are described as under, however any of the executive/non-executive can also be assigned duties other than those specified as per work requirement.

Need for Guidelines

It is important that the available Engineers do only useful work and do not waste time in useless jobs. Supervision of work is sometimes taken to mean just observing what the contractor is doing which may not be required if the contractor is competent to do his work. It is however important to mark correct alignments, take quality checks, measure the work components and maintain proper record. The engineering staff working at site must know what is expected of them and there should be no duplication so that the required results in terms of quality of work & speed are achieved and proper records maintained.

Roles and Responsibilities of GM (HOP)

- (i) He is the overall in-charge of the Project responsible for Personnel Administration, Monitoring, Cost Control, Contract & Procurement, Finance & Accounts (Salary & Main Contractor Package Bill), R&R, Environment and timely execution of the Project.
- (ii) Compile composite reports from individual reports of subordinates required by Management or Government agencies.
- (iii) Determine work procedures, prepares work schedules, and expedites workflow.
- (iv) Consult legal counsel to ensure policies, procedures, and practices comply with State, and local laws.
- (v) Assign duties; examine work for exactness, neatness, and conformance to policies and procedures.
- (vi) Study, develop and standardize procedures and policies to improve efficiency and ensure continuous and safe operations.
- (vii) Address errors and complaints.
- (viii) Develop and implement Capital improvement program (CIP) for HEP.
- (ix) Communicate with managers, supervisors, co-workers, media, and others, maintains confidentially; and represents as head of the Project.

Roles and Responsibilities of DGM

- (i) Will be overall in-charge of the work.
- (ii) Responsible for Administration of contract packages and Engineer-In-Charge of the main contract packages.
- (iii) Responsible for scheduled execution of work as per specification drawings etc in true spirit of contract agreement.
- (iv) Responsible for making communication with the contractor/Firm in respect of contract agreement implementation, monitoring progress of work/achievement of milestone release of work payment/mobilization and various other advances to the contractor as per contract document.
- (v) Exercise Administration and Establishment control over the staff.
- (vi) Pre-checking and verification of main contractor package bills and submission to Finance & Accounts cell of GM/HOP office.
- (vii) Accounts including maintenance of accounting records of the department.
- (viii) Perform supervisory responsibility in accordance with the contract agreement and will ensure that the proper safety procedures and quality control is being observed during execution of the work.

(ix) Will assist GM in implementation of construction programmes for efficient execution of HEPs.

Roles and Responsibilities of Sr. Manager

- (i) Assist DGM in respect of implementation works related to contract package.
- (ii) Interact with site in-charge/responsible officer nominated by the contractor for proper supervision, quality assurance, and safety procedures for scheduled execution of works as per contract agreement.
- (iii) Submission of contractor's work bill to DGM for early payment after affecting the recoveries.
- (iv) Exercise Administration and Establishment control over the staff.
- (v) Preparation of cost estimates for infrastructure works and tender/awards of work to the contractors.
- (vi) Developing quality assurance plans responsible for all inspections witness of test and issue of clearances and approvals.

Roles and Responsibilities of Manager to Dy. Manager

- (i) Assist Sr. Manager in implementation of construction schedules/works as per the contract agreement.
- (ii) Act as a catalyst in helping the contractor in planning, execution and efficient site management for achieving the scheduled progress as per fixed milestone.
- (iii) Supervise the work as per specification and construction drawings to ensure quality assurance and exactness of the work, observance of safety procedures during construction etc.
- (iv) If required, record the entries of the work done by the contractor.
- (v) Submit the contractor's work bill after affecting the recoveries for timely payment to the contractor.
- (vi) Survey, planning, designing, preparation of cost estimate and execution of infrastructure works including services.
- (vii) To prepare and timely submission of deviations, extra items, rate analysis etc. to Sr. Manager for approval from the competent authority.

Roles and Responsibilities of E1, E2 & E3 (Engineers) For HRT Package

a) During Excavation Stage (Excavation of Adits and HRT)

- (i) To mark/check the alignment and elevation of Adits in consultation with contractor and verifying the same through control survey department as per the Construction drawings issued by the competent authority for the execution of work.
- (ii) To get established the portal in the sound rock, as per the Construction drawings issued by the competent authority & assessing the rock mass

- value in consultation with Geologist/Engineering In charge for face treatment.
- (iii) To carry out open excavation of hill for creating a face for Adits and allied drainage works.
- (iv) To get marked/check the profile, drilling pattern, quantity of explosives loaded and blasting operation along with safety measures for achieving effective pull with minimum over break during blasting/tunneling operation.
- (v) To direct/alter the drilling pattern and explosive quantity to obtain minimum over break as per site rock mass quality of rock encountered in consultation with Geologist/E-in-C.
- (vi) To provide and check the drainage holes, side drains, ventilation system and drainage system etc. for proper tunneling operation.
- (vi) To check the alignment and grade as per specification/construction drawings issued by the competent authority after every 5 blasts/10 m of excavated length.
- (vii) To verify/review periodically the correctness of the alignment and grade as per specification/construction drawings in consultation with control survey department as and when necessary or after every month.
- (viii) To get drilled the probe holes for assessing the geological surprises ahead of blasting as and when required.
- (ix) To apprise the Engineering in Charge/Geologist about the rock mass encountered and occurrence of cavity and to seek advice their treatment etc.
- (x) To control the cycle time, get mucking be carried out immediately after blast and defuming with appropriate equipments like dozers and dumpers etc of adequate capacity and in good condition.
- (xi) To check that the excavated muck is dumped and dully protected in specified dumping yards as per contract agreement complying with norms of Pollution Control Board.

Supporting System

- (i) To assess the rock mass value and classify the rock as very good, good, fair, poor and very poor accordingly in consultation with Geologist/E-in-C.
- (ii) For very good, good and fair rock get the drill holes drilled, and installation of rock bolts as per specification/construction drawing issued by the competent authority.
- (iii) To check the installed rock bolts with tension meters etc. for appropriate strength/other parameters as per specification drawings.
- (iv) To get casted shotcrete panels of appropriate size with alternate admixtures in advance to achieve appropriate mix design in consultation with quality control department.
- (v) To get applied finalized mix design for application on shotcrete work.

- (vi) For poor and very poor rock immediately after excavation, provide shotcrete in single or double layer with or without wire mesh as per finalized approved mix design, in accordance with specification/ construction drawings.
- (vii) To get installed the steel supports ISHB of appropriate size with concrete sleepers as per specification/construction drawings.
- (viii) To check the mix design of M10 along with aggregates and sand for back filling and ensure that backfilling is made properly with no voids to establish that the rock mass contact is maintained with the ribs.

c) Concrete Lining

- (i) To check the tunnel for cleanliness, maintenance of invert as per required grade, preparation of sub-surface for placement of rail on the sleeper for proper installation/movement of gentry.
- (ii) To check the profile of the gentry to ensure the proper required section of the tunnel.
- (iii) To check the steel shuttering plates, its oiling etc. and undulations if any for proper placing of concrete.
- (iv) To check the alignment, grade of the gentry and rock undercut if any to ensure the proper thickness of concreting layer.
- (v) To check that the reinforcement has been provided and placed as per specification/construction drawings.
- (vi) To send the constituents of concrete i.e. cement, send and aggregate to quality control department for determining the suitability and their volumetric/weighted proportions i/c water cement ratio for achieving the approved design mix for concrete work.
- (vii) To get check the mix design of concrete and its contents, segregation if any before concreting and ensure that pours are placed in place before initial setting time.
- (viii) To ensure proper compaction of concrete during placement through needle and shutter vibrators.
- (ix) To ensure proper curing of concrete lining during execution of work.
- (x) To check the damages in respect of buldging, cracking undulations and other deformities and get them rectified suitably in consultation with E-in-C.

d) General

- (i) To take the measurement of open excavation for establishing the portal.
- (ii) To take and record measurements of underground excavation with appropriate methods (Geometrically similar D or profiler) bimonthly in presence of the contractor /authorized representative and E-in-C and calculate the excavated quantity and over break.
- (iii) To take and record measurement of reinforcement steel, various types of rock bolts along-with its accessories, shotcrete work and steel ribs along

- with base plates, connecting rods etc. quantity of back fill M10 and concrete lining M20 etc. in presence of the contractor/ authorized representative and E-in-C.
- (iv) To record the entries of work done as per instructions of measurement book which is an important document and submit the same to the billing section before 3rd of every month.
- (v) To bring any wrongful delay by the contractor, in the notice of the reporting officer.
- (vi) To bring any deviation with respect to approved construction drawing and additional item required to be executed in the notice of reporting officer for its approval from the competent authority before its execution.
- (vii) To monitor the progress on the assigned work in respect of mile stone as per contract agreement and any laxity should be reported to quarter concern for appropriate action and asking the contractor for remedial measures immediately.
- (viii) To ensure implementation of mitigated measures of EIA and EMP, being properly executed/ undertaken by the contractor as per contract agreement.
- (ix) To supervise the work and ensure that the quality work executed as per approved specification and construction drawings.
- (x) To ensure that proper safety measures are being observed during execution of the work by the contractor.

Records to be maintained by E1, E2 & E3 (Engineer)

- (a) All relevant general arrangement drawings & constructions drawings for portal development of Adits, excavation and supporting detail drawings for HRT/Adits, general specification drawings for installation of rock bolts, shotcrete, drainage holes, probe holes, ventilation system and drainage system etc. issued by the competent authority for the execution of work.
- (b) All relevant drawings pertaining to permanent support system i.e. concrete lining etc.
- (c) To keep the record of rock mass value cavity/shear zone and other geological surprises encountered during tunneling and treatment done.
- (d) To keep the record of drilling pattern quantity of explosive and detail of blasting operations adopted in various reaches during tunneling operation.
- (e) To maintain the site order book, hindrance register properly recording the stoppage of works duly mentioning the reasons i.e. breakdown of power supply machinery, shortage of material, labour strikes etc. etc. along with period of occurrence.
- (f) To keep the records pertaining to samples of constituents of concrete, other construction materials and concrete samples casted during

concreting work supplied to quality control department and reports received thereof.

- (g) To keep the records of dewatering.
- (h) Records supplied by quality control in respect of clearance of concrete work (O.K. report) and relevant test reports regarding quality assurance received from the quality control department.
- (i) Copy of relevant IS codes literature, estimates for work record of measurement book, MAS, T&P work progress register etc.
- (j) To keep the records of permanent benchmarks and periodical survey conducted in consultation with control survey department.

For Barrage Package

This includes the construction of river diversion works i.e. Coffer Dam of appropriate length for diversion of water, Barrage, Intake Structure, Desilting Tank and Tunnel conveying the water to HRT. The works are of open/on ground works.

Roles and Responsibilities of E1, E2 & E3 (Engineers)

a) Open Work

- (i) To inspect the diversion works of the river by C/o Coffer Dam of appropriate design, approved by competent authority for excavation of foundation in half the width of the structure.
- (ii) To supervise the open excavation work for foundation of Coffer Dam, Piano Key Weir, Intake Structure/ Desanding Chamber as per approved Specification/ Construction Drawings and prevalent construction methodology confirming to relevant IS codes.
- (iii) To give/ check the layout of the component as per specification/ construction drawings in consultation with E-in-C & control survey department.
- (iv) To send the constituents of concrete i.e. cement, send and aggregate to quality control department for determining the suitability and their volumetric/weighted proportions i/c water cement ratio for achieving the approved design mix for concrete work.
- (v) To monitor and record the dewatering during excavation and concrete work.
- (vi) To check/ prepare the sub surface of foundation pit by consolidation ramming free from loose soil, removing of undulations if any and making it fit for RCC work.
- (vii) To check that the reinforcement steel provided is of approved dia specification free from rust with proper lap etc. confirming to relevant IS codes and in accordance with the approved specification/ construction drawings.
- (viii) To check the steel shuttering plates, its oiling etc. free from undulations if any with proper propping and centering etc. for ensuring suitable side and

- bottom covers and placing of concrete as per approved construction/specification drawings.
- (ix) To intimate the quality control department for issuing O.K. certificate before starting of concreting work.
- (x) To get check the mix design of concrete water cement ratio and its contents, segregation if any before concreting and ensure that pours are placed in place before initial setting time.
- (xi) To start the concreting work after obtaining the O.K. certificate in conformity of relevant IS codes duly checking the slump segregation construction and contraction/expansion joints etc. as per approved specification/construction drawings.
- (xii) To ensure proper compaction of concrete during placement through needle vibrators.
- (xiii) To maintain proper construction joints in concrete work after the finish of day's work
- (xiv) To check the alignment, Levels, Dimensions (L, B, and H) of embedded parts for installation of Gates and hoisting arrangements.
- (xv) To check that the materiel used for Fabrication of Gates is as per relevant IS codes and Fabrication has been done as per approved specification/construction drawings.
- (xvi) To get casted sample concrete cubes with proper marking of date of cast etc. in consultation with quality control department and send them to the laboratory for checking the desired strength of concrete mix.
- (xvii) To ensure proper curing of concrete lining during execution of work.
- (xviii) To check the damages in respect of buldging, cracking undulations and other deformities and get them rectified suitably in consultation with E-in-C.
- (xix) Regarding underground works i.e. for silt flushing tunnel etc. the responsibility in respect of underground works may be referred.

b) General

- (i) To take and record the measurement of open excavation for preparation of surface foundation work etc.
- (ii) To take and record measurements of underground excavation with appropriate methods (Geometrically similar D or profiler) bimonthly in presence of the contractor/ authorized representative and E-in-C and calculate the excavated quantity and over break.
- (iii) To take and record measurement of reinforcement steel, shuttering, concreting etc. in presence of the contractor/ authorized representative and E-in-C.
- (iv) To record the entries of work done as per instructions of measurement book which is an important document and submit the same to the billing section before 3rd of every month.
- (v) To bring any wrongful delay by the contractor, in the notice of the reporting officer.

- (vi) To bring any deviation with respect to approved construction drawing and additional item required to be executed in the notice of reporting officer for its approval from the competent authority before its execution.
- (vii) To monitor the progress on the assigned work in respect of mile stone as per contract agreement and any laxity should be reported to quarter concern for appropriate action and asking the contractor for remedial measures immediately.
- (viii) To ensure implementation of mitigated measures of EIA and EMP, being properly executed /undertaken by the contractor as per contract agreement.
- (ix) To supervise the work and ensure that the quality work executed as per approved specification and construction drawings.
- (x) To ensure that proper safety measures are being observed during execution of the work by the contractor.

Records to be maintained by Engineers E1, E2 & E3

To keep all relevant general arrangement drawings, Excavation, Foundation, Reinforcement, construction and specification drawings for river diversion works i.e. construction of coffer dams and river diversion channels and protection etc. issued by the competent authority for the execution of work.

- (a) To keep all relevant general arrangement drawings, Excavation, Foundation (sub structure) and super structure, Reinforcement, construction and specification drawings for piano key weir, intake and desanding chamber, gates etc. issued by the competent authority for the execution of work.
- (b) To keep the records of dewatering executed during the execution of substructure.
- (c) To keep the records of control survey, bench marks etc. vide which the layout of the components marked at site.
- (d) To keep the records pertaining to samples of constituents of concrete, other construction materials and mixed design for concrete work supplied to quality control department and reports received thereof.
- (e) To keep records supplied by quality control in respect of clearance of concrete work (O.K. report) and concrete sample casted during concrete work relevant test reports regarding quality assurance received from the quality control department.
- (f) Copy of relevant IS codes literature, estimates for work record of measurement book, MAS, T&P work progress register etc.
- (g) To maintain the site order book, hindrance register properly recording the stoppage of works duly mentioning the reasons i.e. breakdown of power supply machinery, shortage of material, labour strikes etc. etc. along with period of occurrence.

- (h) To keep the records of measurement books in which the entries for the work done.
- To keep records of the safety measures adopted during execution of work.

Power House Complex

(a) U/G Works

(i) For underground works please refer to responsibilities as per HRT works.

(b) Building Works

- (i) To give/check the layout of the Power House Complex component as per specification/construction drawings in consultation with E-in-C & control survey department.
- (ii) To supervise the open excavation work for foundation as per approved Specification/ Construction Drawings and prevalent construction methodology confirming to relevant IS codes.
- (iii) To check/prepare the sub surface of foundation pit by consolidation ramming free from loose soil, removing of undulations if any and making it fit for RCC work.
- (iv) To check that the reinforcement steel provided is of approved dia specification free from rust with proper lap etc. confirming to relevant IS codes and in accordance with the approved specification/ construction drawings.
- (v) To check the steel shuttering plates, its oiling etc. free from undulations if any with properpropping and centering etc. for ensuring suitable side and bottom covers and placing of concrete as per approved construction/ specification drawings.
- (vi) To send the constituents of concrete i.e. cement, send and aggregate to quality control department for determining the suitability and their volumetric/weighted proportions i/c water cement ratio for achieving the approved design mix for concrete work.
- (vii) To monitor and record the dewatering during excavation and concrete work.
- (viii) To intimate the quality control department for issuing O.K. certificate before starting of concreting work.
- (ix) To get check the mix design of concrete water cement ratio and its contents, segregation if any before concreting and ensure that pours are placed in place before initial setting time.
- (x) To start the concreting work after obtaining the O.K. certificate in conformity of relevant IS codes duly checking the slump segregation construction and contraction/expansion joints etc. as per approved specification/construction drawings.
- (xi) To ensure proper compaction of concrete during placement through needle vibrators.

- (xii) To maintain proper construction joints in concrete work after the finish of day's work
- (xiii) To check the alignment, Levels, Dimensions (L, B, H) of embedded underwater parts and for installation of Gates and hoisting arrangements etc.
- (xiv) To check that the materiel used for Fabrication of underwater parts and Gates is as per relevant IS codes and Fabrication has been done as per approved specification/construction drawings.
- (xv) To supervise and inspect that the various building items like wooden/aluminum fittings finishing, flooring, sanitary and water fittings including drainage etc. is executed as per specified/approved construction drawings and in confirmation of relevant IS codes.
- (xvi) To get casted sample concrete cubes with proper marking of date of cast etc. in consultation with quality control department and send them to the laboratory for checking the desired strength of concrete mix.
- (xvii) To ensure proper curing of concrete lining during execution of work.
- (xviii) To check the damages in respect of buldging, cracking undulations and other deformities and get them rectified suitably in consultation with E-in-C.
- (xix) Regarding underground works i.e. for silt flushing tunnel etc. the responsibility in respect of underground works may be referred.

C) General

- (i) To take and record the measurement of open excavation for preparation of surface foundation work etc.
- (ii) To take and record measurements of underground excavation with appropriate methods (Geometrically similar D or profiler) bimonthly in presence of the contractor/authorized representative and E-in-C and calculate the excavated quantity and over break.
- (iii) To take and record measurement of reinforcement steel, shuttering, concreting etc. in presence of the contractor/ authorized representative and E-in-C.
- (iv) To record the entries of work done as per instructions of measurement book which is an important document and submit the same to the billing section before 3rd of every month.
- (v) To bring any wrongful delay by the contractor, in the notice of the reporting officer.
- (vi) To bring any deviation with respect to approved construction drawing and additional item required to be executed in the notice of reporting officer for its approval from the competent authority before its execution.
- (vii) To monitor the progress on the assigned work in respect of mile stone as per contract agreement and any laxity should be reported to quarter concern for appropriate action and asking the contractor for remedial measures immediately.

- (viii) To ensure implementation of mitigated measures of EIA and EMP, being properly executed/ undertaken by the contractor as per contract agreement.
- (ix) To supervise the work and ensure that the quality work executed as per approved specification and construction drawings.
- (x) To ensure that proper safety measures are being observed during execution of the work by the contractor.

Records to be maintained by Engineers E1, E2 & E3

- (A) For underground cavity excavation and support system.
- (a) All relevant general arrangement drawings, cavity excavation drawings, support detail drawings, in respect of Power House Cavern, Transformer Hall, Cable Tunnel, TRT and for under water parts etc. and general specification drawings for installation of rock bolts, shotcrete, drainage holes, probe holes, ventilation system and drainage system etc. issued by the competent authority for the execution of work.
- (b) All relevant drawings pertaining to permanent support system i.e. concrete lining etc.
- (c) Copy of relevant IS codes literature, estimates & record of measurement book, MAS, T&P work progress register etc.
- (d) To keep the record of rock mass value cavity/shear zone and other geological surprises encountered during tunneling and treatment done.
- (e) To keep the record of drilling pattern quantity of explosive and detail of blasting operations adopted in various reaches during tunneling operation.
- (f) To keep the records pertaining to samples of constituents of concrete, other construction materials, mix design and concrete samples casted during concreting work supplied to quality control department and reports received thereof.
- (g) To maintain the site order book, hindrance register properly recording the stoppage of works duly mentioning the reasons i.e. breakdown of power supply machinery, shortage of material, labour strikes etc. etc. along with period of occurrence.
- (h) To keep the records of dewatering.
- (i) Records supplied by quality control in respect of clearance of concrete work (O.K. report) and relevant test reports regarding quality assurance received from the quality control department.
- (j) To keep the records of permanent benchmarks and periodical survey conducted in consultation with control survey department.

(B) For Building Portion for Power House Complex

- (a) To keep all relevant general arrangement drawings, Foundation Excavation, Super Structure, Reinforcement, Construction, Gentry Crane etc. and Specification Drawings for Building portion for power house complex issued by the competent authority for the execution of work.
- (b) Copy of relevant IS codes literature, estimates for work record of measurement book, MAS, T&P work progress register etc.
- (c) To keep the records of dewatering executed during the execution of substructure.
- (d) To keep the records of control survey, bench marks etc. vide which the layout of the Power House complex marked at site.
- (e) To keep the records pertaining to samples of constituents of concrete, other construction materials and mix design for concrete work supplied to quality control department and reports received thereof.
- (f) To keep records supplied by quality control in respect of clearance of concrete work (O.K. Report) and concrete sample casted during concrete work relevant test reports regarding quality assurance received from the quality control department.
- (g) To maintain the site order book, hindrance register properly recording the stoppage of works duly mentioning the reasons i.e. breakdown of power supply machinery, shortage of material, labour strikes etc. etc. along with period of occurrence.
- (h) To keep the records of measurement books in which the entries for the work done.
- (i) To keep records of the safety measures adopted during execution of work.

Billing Section for Project Component Roles and Responsibilities of E1, E2 & E3 (Engineer)

- (i) To study the contract agreement in respect of various advances and recoveries to be made/recover from the contractor.
- (ii) To prepare the abstract of cost from the measurement books submitted by the concerned departments duly incorporating the advances/ recoveries affected from the contractor as per clauses of contract agreement for timely release of payments for work done to the contractor.
- (iii) To maintain the proper records in respect of the payment made, recoveries affected as per the contract agreement.

Records to be maintained by E1, E2 & E3 (Engineer)

- (a) Copy of contract agreements, specifications and all other necessary records to make functional the contract agreement.
- (b) Records of measurement books, abstract of quantities.

Quality Control Department (for whole Project)

• Quality Control Department is responsible for quality execution of the Project.

Roles and Responsibilities of E1, E2 & E3 (Engineer) for Project Components

- (i) To procure the construction materials i.e. cement, sand, aggregate steel etc. from site of work and get it tested to ensure that it is as per specification and relevant IS codes.
- (ii) For quality execution of concrete work the important test to be conducted by the quality control department, are: -
 - (a) To determine physical properties of cement as per BIS codes.
 - (b) To determine flakiness elongation index of course aggregates.
 - (c) To determine silt, mica alkali and other detereous contents in fine aggregate.
 - (d) To determine specific gravity and water absorption of aggregates.
 - (e) To determine bulk density and voids of aggregates.
 - (f) To determine particle size distribution of fine, coarse all in aggregates by sieve analysis (grading of aggregates).
 - (g) To determine necessary adjustments for bulking of fine aggregates.
 - (h) To determine workability by slum test.
 - (i) To determine the effect of water fine aggregate/coarse aggregate ratio and aggregate/cement ration on slump of concrete.
 - (j) To test compressive strength of concrete cubes with varying water cement ratio.
 - (k) To determine the usefulness/suitability and its ratio to cement for cement concrete work and shotcrete etc.
 - (I) Non destructive test on concrete by rebound hammer test.
 - (m) Ultra sonic pulse velocity test.
 - (n) Profo meter/covesometer test.
- (iii) To determine the suitability of constituents of concrete i.e. cement, sand and aggregate etc. collected/ received from field and their volumetric/weighted proportions i/c water cement ratio for achieving the approved design mix for concrete work and conveying the same to the concerned departments.
- (iv) To issue the O.K. certificate to the concerned executing department/ contractor before start of concreting work after observing all the codal formalities.
- (v) To cast the concrete cube samples during the concreting work, with affixing date of concreting/ sampling randomly, and send the same to the laboratory for conducting appropriate necessary tests to ascertain the quality of mix design, compressive strengths etc.

- (vi) To convey the cube test results of casted cubes and construction materials to the concerned departments for appropriate remedial actions.
- (vii) To ensure that the work executed by the contracting firm is in accordance with the approved specified specifications/construction drawings and in conformity with the relevant IS codes.
- (viii) Will ensure that the concrete mix design for concrete work is as per specification.
- (ix) Will assist the concerned executive department in execution of the quality work.

Records to be maintained by E1, E2 & E3 (Engineer)

- (a) Keep the records of specification drawings and construction drawings issued by the competent authorities for the execution of work.
- (b) Relevant IS codes/literatures.
- (c) Records relating to O.K. certificates, sample cubes collected from sites and test reports for concreting work.
- (d) Records for samples of construction materials collected from site and its test reports.
- (e) Any other record in the preview of Engineer-in-charge.

Control Survey Department (for whole Project)

It will conduct the topographical surveys to check the correctness of benchmarks and location alignment and grades of various components of the project, to ascertain that the Project components are executed as per surveys of SOI.

Roles and Responsibilities of E1, E2 & E3 (Engineer)

- (i) Will assist the executing agencies for giving additional benchmarks/reference points for layout of various components of the Project and checking its correctness as per surveys of SOI.
- (ii) Carry out hydrological and metrological data, sediment loads and various other investigation works for preparation of DPR etc.

Records to be maintained by E1, E2 & E3 (Engineer)

- (a) Keep the records of all the topographical surveys including that of SOI.
- (b) Keep the records of benchmarks including additional one, required for fixing the location of Project components.
- (c) Keep the records of alignment and grades on which the Project components executed.
- (d) Keep the record of all the control surveys made time to time for checking the correctness of execution of various components of the Project.
- (e) Any other record in the preview of Engineer-in-charge.

Infrastructure Works

Roles and Responsibilities of Junior Engineer

a) Open Work

- (i) To give/check the layout of the buildings and other infrastructure works as per specification/construction drawings in consultation with E-in-C & control survey department.
- (ii) To supervise the open excavation work for foundation as per approved Specification/ Construction Drawings and prevalent construction methodology confirming to relevant IS codes.
- (iii) To check/prepare the sub surface of foundation pit by consolidation ramming free from loose soil, removing of undulations if any and making it fit for RCC work.
- (iv) To check that the reinforcement steel provided is of approved dia specification free from rust with proper lap etc. confirming to relevant IS codes and in accordance with the approved specification/ construction drawings.
- (v) To get check the mix design of concrete water cement ratio and its contents, segregation if any before concreting and ensure that pours are placed in place before initial setting time.
- (vi) To check the steel shuttering plates, its oiling etc. free from undulations if any with proper propping and centering etc. for ensuring suitable side and bottom covers and placing of concrete as per approved construction/specification drawings.
- (vii) To monitor and record the dewatering during excavation and concrete work.
- (viii) To get the concreting work done in conformity of relevant IS codes duly checking the slump segregation construction and contraction/ expansion joints etc. as per approved specification/construction drawings.
- (ix) To ensure proper compaction of concrete during placement through needle vibrators.
- (x) To maintain proper construction joints in concrete work after the finish of day's work
- (xi) To supervise and inspect that the various building items like wooden/aluminum fittings finishing, flooring, sanitary and water fittings including drainage etc. is executed as per specified/ approved construction drawings and in confirmation of relevant IS codes.
- (xii) To ensure proper curing of concrete lining during execution of work.
- (xiii) To check the damages in respect of bulging, cracking undulations and other deformities and get them rectified suitably in consultation with E-in-C.
- (iv) To carry out necessary surveys, preparation of contour maps and preparation of estimates for timely submission to the quarter concerned.
- (xv) Carry out investigation works like surveys (topographical surveys), preparation of contour maps, control survey fixing of bench marks,

alignment of various components and execution of various exploratory drift and drill holes.

b) General

- (i) To take and record the measurement of open excavation for preparation of surface foundation work etc.
- (ii) To take and record measurements of underground excavation with appropriate methods (Geometrically similar D or profiler) bimonthly in presence of the contractor/authorized representative and E-in-C and calculate the excavated quantity and over break.
- (iii) To take and record measurement of reinforcement steel, shuttering, concreting etc. in presence of the contractor/ authorized representative and E-in-C.
- (iv) To take and record the entries of work done i.e. open excavation, reinforcement steel, shuttering, concreting and other building items etc. as per instructions of measurement book which is an important document and prepare the contractor's bill for timely payment.
- (v) To bring any wrongful delay by the contractor, in the notice of the reporting officer.
- (vi) To bring any deviation with respect to approved construction drawing and additional item required to be executed in the notice of reporting officer for its approval from the competent authority before its execution.
- (vii) To monitor the progress on the assigned work in respect of mile stone as per contract agreement and any laxity should be reported to quarter concern for appropriate action and asking the contractor for remedial measures immediately.
- (viii) To ensure implementation of mitigated measures of EIA and EMP, being properly executed/ undertaken by the contractor as per contract agreement.
- (ix) To supervise the work and ensure that the quality work executed as per approved specification and construction drawings.
- (x) To ensure that proper safety measures are being observed during execution of the work by the contractor.

Records to be maintained by Junior Engineer

- (a) To keep all relevant general arrangement drawings, Foundation Excavation, Super Structure, Reinforcement, Construction etc. and Specification Drawings for residential and non-residential buildings issued by the competent authority for the execution of work.
- (b) Copy of relevant IS codes literature, estimates for work record of measurement book, MAS, T&P work progress register etc.
- (c) To keep the records of dewatering executed during the execution of sub-structure.

- (d) To keep records supplied by quality control in respect of clearance of concrete work (O.K. Report) and concrete sample casted during concrete work relevant test reports regarding quality assurance received from the quality control department.
- (e) To maintain the site order book, hindrance register properly recording the stoppage of works duly mentioning the reasons i.e. breakdown of power supply machinery, shortage of material, labour strikes etc. etc. along with period of occurrence.
- (f) To keep the records of measurement books in which the entries for the work done.
- (g) To keep records of the safety measures adopted during execution of work.

Note: In addition to above, the Management can by order assign any other duties which it deems fit in the interest of the organization

5.5 PROCEDURE REGARDING MAINTENANCE & MOVEMENT OF FILES IN HPPCL

With a view to streamline the movement of files to various authorities and to ensure their proper maintenance, the following procedure is laid down: -

- All files to the Managing Director and functional Directors will be moved through respective Heads of the Departments. The concerned HOD will examine the proposal and then forward the cases with their recommendations to the respective Directors for decision.
- 2. The files will have two portions: -

a. Noting Portion:

The noting will be done on the noting portion and be numbered properly.

b. Correspondence Portion:

The letters received which are under consideration will be filed in the correspondence portion.

- Any level personnel including officer category can be dealing person for a file depending upon the nature of the file and availability of personnel.
- The Dealing person (Executives/Supervisors/Workers) while forwarding the proposals to their immediate higher officer for consideration must ensure proper flag and paging indicating all

- references of the relevant documents to facilitate quick decisions. The file should be put-up with the previous supporting papers/ decisions.
- 5. If some decision is taken on the PUC or on loose paper it should be placed in the appropriate file at the earliest. If some correspondence is exchanged on e-mail then print outs of important correspondence should be placed in the relevant file.
- 6. While signing note sheets or letters, all the officers/ officials must indicate, under their signature, clearly their name and designation.
- 7. Department, File No. and Subject of the file must be clearly indicated on the cover.
- 8. The files should be opened subject-wise by each Department/ Wing and the matter should be put-up on the respective file.
- 9. The files which become very bulky should be firmly stitched so that no pages are removed and new file may be opened in its continuation. The stitched files should be kept in safe custody to be attached with the running file whenever any previous references are required to be seen/gone through.
- 10. The noting should be initiated by the Dealing Assistant/ Officer.
- 11. Files must be diarized before sending it to the concerned HOD. It will be the responsibility of the Dealing Assistant or Officer of the file to see that the proposal comes back to him after it is seen by the competent authority. He should, therefore, keep track of the files.
- 12. If the main file is under submission and a matter of urgent nature is to be dealt with in loose sheet, it will be the duty of the Dealing Assistant or Officer to place it in the respective file, as soon as the main file comes back and the numbering of noting as well as papers/ letters should be done in continuation with the main file.
- 13. Overwriting, cuttings and use of white fluid must be avoided in the noting sheets.
- 14. All files are the property of the Corporation. These should be kept properly. No unauthorized reproduction of the documents should be allowed. The custodian of the file must ensure this.

- 15. The custodian of the file is the person who deals with the subject matter of that particular file. In case, he/ she get transferred, leaves the organization or proceeds on a long leave (More than 1 month) then he/she will hand-over the files properly to the next custodian.
- 16. The letters and other correspondence received should be placed in the file neatly and tagged firmly. These papers should also be numbered separately and shall be placed at the right hand side of the file.
- 17. The Officers In-Charge of the Section/ Branches must check the files in their section at least once in a month in order to ensure that no file is missing or damaged.
- 18. Important circulars and instructions should be kept separately in a guard file so that these circulars can be referred to whenever required. In case, such circulars are filed in the main file, then a photo copy of the same must be kept in the guard file.
- 19. Periodic inspection will be conducted to check whether record is being maintained properly or not.