DISASTER MANAGEMENT PLAN

DEPARTMENT OF POWER CORPORATION LIMITED

GOVERNMENT OF HIMACHAL PRADESH

Contents

Chapter-1: Introduction

1.1 Overview of the Department

The State of Himachal Pradesh has an enormous hydro-potential. The major river systems of the region are the Chandrabhaga or the Chenab, the Ravi, the Beas, the Satluj and the Yamuna. Through preliminary hydrological, topographical and geological investigations, it has been estimated that about 27436 MW of hydel power can be generated in the State by constructing various major, medium, small and mini/micro hydel projects on the five river basins. Out of the total hydel potential, only 9202.89 MW has been harnessed so far, out of which majority potential has been exploited by the Central Public Sector Agencies, BBMB, IPPs, HPSEB and other agencies.

Himachal Pradesh Power Corporation Limited (HPPCL) is a fast upcoming power generating utility with all the Technical and Organizational capabilities at par with other generating companies like NTPC/SJVNL/NHPC. Efforts are afoot to further strengthen the respective departments with professionals of proven credentials and qualified technical manpower.

Himachal Pradesh Power Corporation Limited (HPPCL), was incorporated in December 2006 under the Companies Act 1956, with the objective to plan, promote and organize the development of all aspects of hydroelectric power on behalf of Himachal Pradesh State Government (GoHP) and Himachal Pradesh State Electricity Board (HPSEB) in Himachal Pradesh. The GoHP has a 60%, and HPSEB, a 40% shareholding in HPPCL.

Hydro Potential in Different Basins

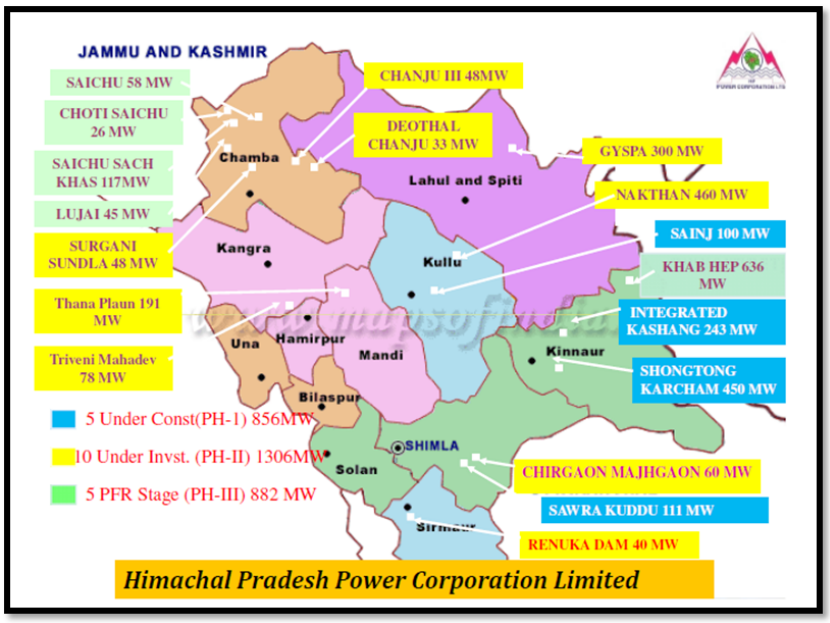
S.No.	Basin	Potential
1	Beas	5995 MW
2	Satluj	13332 MW
3	Ravi	3237 MW
4	Yamuna	840 MW
5	Chenab	4032 MW
	Total	27436 MW

Plate 1 - Basin Plan of Himachal Pradeh

At present, 20 nos. Hydroelectric Projects have been allotted to Himachal Pradesh Power Corporation Ltd. (HPPCL) for development by the Govt. of Himachal Pradesh, out of which 4nos. HEPs viz. Kashang Stage-I, II & III (195MW), Sawra Kuddu (111MW), Sainj (100MW) and Shongtong- Karcham (450MW) are under construction, whereas other projects are under survey and investigation, DPR preparation and pre feasibility stages.

The Basin Plan of Himachal Pradesh and Plan showing the location of Hydroelectric Projects allotted to Himachal Pradesh Power Corporation Ltd. are given as Plate-1 and Plate-2 respectively.

Plate 2 - Hydroelectric Projects alloted to HPPCL



1.2 Purpose of the Plan

A disaster is the result of an immediate situation on the result of a long set process which disrupts normal human life in its established social, traditional and economic system. This is due to the destruction of environment which is caused by extra ordinary natural phenomenon or human induced hazards resulting inhuman hardship and suffering beyond recovery unless an external aid is brought in. A hazard is a perceived event which threatens both life and property – a disaster is the realization of this hazard. Breaching of Dam/Dam failure is also one of the examples of a hazard, which has a potential of becoming a disaster, if proper disaster management and mitigation measures are not ensured.

An emergency Action and Preparedness Plan is a document that identifies potential emergency conditions at a Dam and specifies preplanned actions to be followed to minimize property damage and loss of life. The Emergency Acton and Preparedness Plan specify actions and the Project Authority should take to moderate or alleviate the problems at the dam. It contains procedures and information to assist the authorities in issuing early earning and notification messages to responsible downstream emergency management authorities. It also contains inundation maps to show the emergency management authorities of the critical areas for action in case of an emergency.

As far as HPPCL is concerned, the Emergency Preparedness Plan and Emergency Action Plan of all the ongoing four Hydroelectric Projects have been prepared which are readily available with the respective Project Authorities.

Main objective of the Disaster Management Plan (DMP) is to reduce the risk level through preparedness at various levels.

1. DMP helps to bring together the information related to equipment, skilled manpower and critical supplies.
2. It helps to know the standard operating procedures of the department at the time of disaster.
3. To fix the role and responsibility of each and every officer for disaster preparedness.
4. It helps the Department to assess its own capacity in terms of available resources and get ready to mitigate any unexpected disaster effectively and to prevent the loss of human lives and property through preparedness, prevention & mitigation of disasters.
5. To assist the line departments, block administration, communities in developing compatible skills for disaster preparedness and management.
6. To disseminate factual information in a timely, accurate and tactful manner while maintaining necessary confidentiality.

7. To develop immediate and long-term support plans.
8. To have response system in place to face any eventuality.

1.3 Scope of the Plan

In accordance with the Disaster Management Act 2005 and Himachal Pradesh State Disaster Management Plan 2012, the plan must include the following:

- Identify the vulnerability of different parts of the State to different forms of disasters in context of the department;
- The measures to be adopted for prevention and mitigation of disasters;
- The manner in which the mitigation measures shall be integrated with the development plan and projects;
- The capacity-building and preparedness measures to be taken;
- The roles and responsibilities of different departments of the Government of the State in responding to any threatening disaster situation or disaster;

1.4 Authorities, Codes, Policies:

Section 40 of the Disaster Management Act 2005 provides that there shall be a Disaster Management Plan for every Department of the State. The departmental DM Plan shall be prepared by each department and shall be approved by the State Executive Committee. This plan is prepared under the provisions outlined in the Disaster Management Act 2005.

1.5 Institutional arrangements for Disaster Management:

The State Government has adopted the Disaster Management Act 2005 as enacted by the Govt. of India for providing effective mechanism for Disaster Management in the State of Himachal Pradesh. In line with the Policy of Government of HP, the HPPCL has also framed its Disaster Management Plans for the Hydroelectric Projects which are under construction.
Also so as to coordinate the Disaster management Plan at the Corporate level, HPPCL has constituted Disaster Management Committee which comprises of the following members:

S.No.	Official	Official Designation	Contact Numbers
1	Sh. Parthasarthi Mitra, Chairman, HPPCL	Chairman	0177-2880730,(O) 0177-2621022 (O) 0177-2621658 (R) 98054-02323 (M)
2	Sh. Tarun Shridhar, Addl. Chief Secretary (MPP & Power)	Member	0177-2622382,2880721 (O) 0177-2808444 (R) 94180-18444 (M)
3	Sh. Devendra K. Sharma, Managing Director, HPPCL	Member	0177-2633816 (O) 0177-2670079 (R) 94180-26779 (M)
4	Sh. M.S. Rana, Director (Electrical), HPPCL	Nodal Officer	0177-2633818 (O) 0177-2673554 (R) 94180-49554 (M)
5	Sh. A.K. Gupta, Director (Civil), HPPCL	Member	0177-2633812(O) 0177-2655495 (R) 94180-84970 (M)
6	Sh. Neeraj Kumar, HAS Director (Personnel & Finance), HPPCL	Member	0177-2633815 (O) 0177-2620800 (R) 94180-40609 (M)
7	Er. K.K. Goel, General Manager (Designs)	Member	01907-262298 (O) 94184-50307 (M)
8	Er. A.C. Sandal, GM (Electrical)	Member	0177-2633760 (O) 94180-68280 (M)
9	Sh. B.B.Khullar, General Manager, (CP), HPPCL	Member	0177-2633920 (O) 94180-67890(M)
10	Sh. B.S. Negi, AGM (Finance), HPPCL	Member	0177-2633826(O) 94184-92255 (M)
11	Sh. S.K. Thakur, Dy. General Manager (CM),HPPCL	Member	0177-2832633 (O) 94598-49789 (M)
12	Sh. Nitin Garg, Sr. Manager (Tech/CM), HPPCL	Member	0177-2633822 (O) 94180-47951 (M)
13	Sh. Ved Prakash, Sr. Manager (IT)	Member	0177-2804739 (O) 94180-01446 (M)
14	Sh. Rahul Lotheta, Public Relations Officer, HPPCL	Member	0177-2633811 (O) 94184-33083 (M)

Names of members of the District Level Committee and the HPPCL Committee, in case of changes would be updated and circulated by the General Manager (Corporate Planning), HPPCL, Shimla from time to time.

The responsibilities of the above Committee at Corporate Level are listed here under:

- To coordinate and monitor the HPPCL Disaster Management Plan.
- To co-ordinate with the Plant Level Emergency Management Group (EMG).
- To coordinate information with the State Executive Committee (SEC).
- To mobilize resources for restoration.
- To ensure that disaster management plans are in place.
- To mobilize financial resources.
- To facilitate inter-agency support.
- To facilitate damage assessment.

1.6 Plan Management: (Implementation, Monitoring and Revision)

DM Plan is a "Living document" and would require regular improvement and updating. The plan must be updated at least once a year. The Disaster Management plan prepared by HPPCL shall be circulated to all its district offices. The Plan shall be shared on the department website. The plan will be updated as and when required and modified plan shall be communicated to the key stake holders.

HPPCL will have to ensure the planning, coordination, monitoring and implementation of the Disaster Management Plan. The nodal officer will have the overall responsibility for implementation of all the activities related to disaster management.

Implementation

For the process of implementation, the most important component of testing the Safety Plan is to conduct quarterly mock drill or simulation exercise in order to identify the positive elements as well as gaps. Mock drill exercise is required in order to verify the level of preparedness and improve the coordination during emergencies. This has to be based on past experiences and lessons learnt. Mock-drills help in evaluating response and improving coordination within the administration, with various departments, non-government agencies, other stakeholders and communities. They help in identifying the extent to which the plans are effective and also aid in revising them.

Monitoring

The Nodal officer of the department will be responsible for the proper monitoring and evaluation of the Safety Plan. These drills enhance the ability to respond faster, better and in an organized manner during the response and recovery phase. The Department must ensure the following:-

- Implementation of Plan within the department, its updation and quarterly mock drill
- Implementation of all policies and plans of state govt.
- Implementation of all NDMA guidelines
- Implementation of all instructions of Revenue & Disaster Management department
- Department should ensure that all schemes based on the parameters of mitigation, relief and rehabilitation to be identified and implemented
- Implementation of all guidelines/instructions related to disasters from GoI and state govt.
- All officers to be trained in Disaster Management

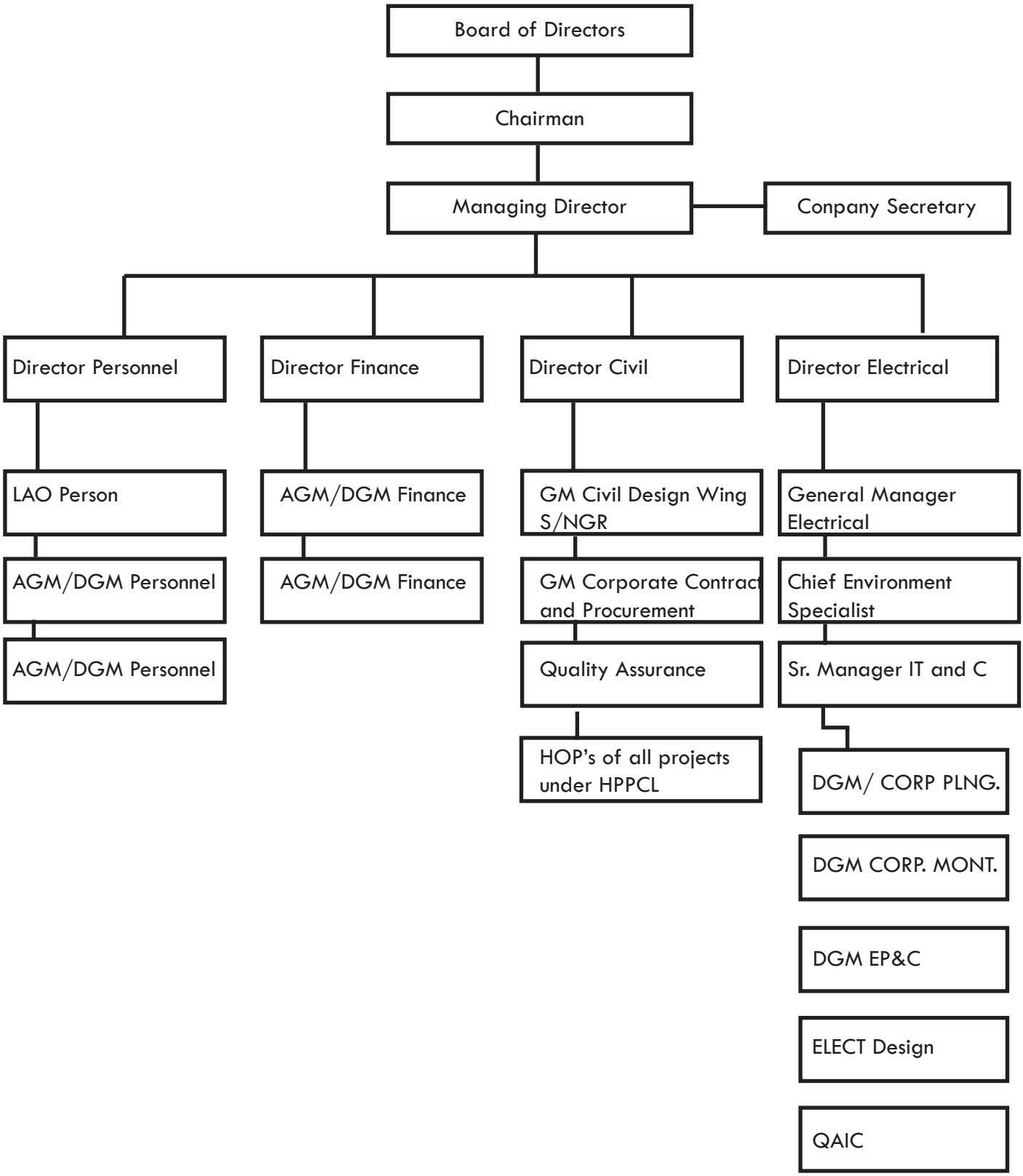
Review and Revision

For the annual review of the disaster management plan participation of different stakeholders will be ensured by inviting them to meetings/workshops. Based on their feedback, necessary changes will be incorporated in the plan.

Dissemination of Plan

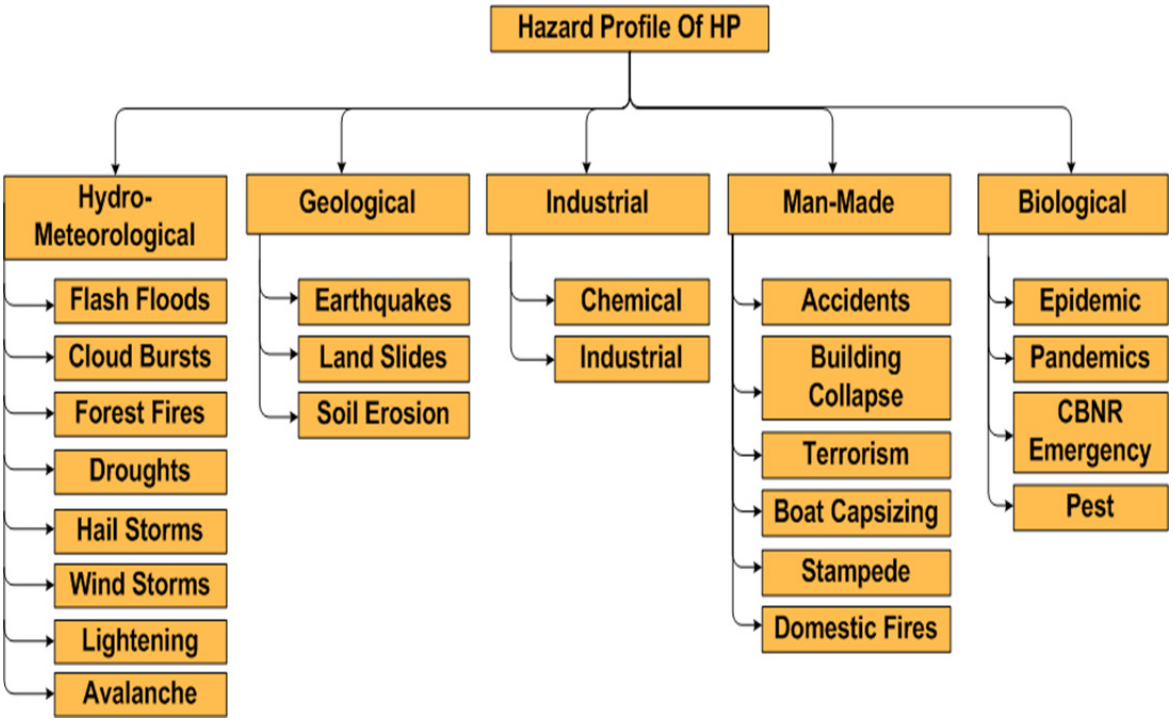
The primary responsibility for dissemination of the plan will be with the HPPCL. They would involve HPSDMA for capacity building at different levels for training and dissemination. The Disaster Management Plan will be disseminated at three levels: District authorities, government departments, NGOs and other agencies and institutions within the State. The content of the plan would be explained through well designed and focussed awareness programmes.

Organisational Chart



Chapter 2: Hazards, Vulnerability, Capacity and Risk Profile

State of Himachal is prone to various hazards both natural and manmade. Main hazards consist of earthquakes, landslides, flash floods, snow storms and avalanches, draughts, dam failures, fires – domestic and wild, accidents – road, rail, air, stampedes, boat capsizing, biological, industrial and hazardous chemicals etc. The hazard which however, poses biggest threat to the State is the earthquake hazard. The State has been shaken by more than 80 times by earthquakes having a magnitude of 4 and above on the Richter scale as per the recorded history of earthquakes.



Disaster occur with unfailing regulatory in Himachal Pradesh causing loss of life, assets and livelihood. The increasingly shifting paradigm from a reactive response orientation to a proactive prevention mechanism has put up the pressure to built a fool- proof system, including within its ambit, the components of prevention, mitigation, rescue, relief and rehabilitation.

Departmental Risk
Nature of Disasters in Hydro Electric Projects and the need to mitigate them:

Hydro Power Sectors deal with underground/surface Power Houses and other surface structures like Dams, Weirs, Barrages and underground structures like Head Race Tunnels & Tail Race Tunnels having large diameters and length up to several kilometers in addition to electrical/mechanical equipments as in all other power stations.

The possibility of disasters due to natural calamities in hydro sectors is much more than that in thermal power stations. Some of reasons of disaster are as under:

- Earthquake may affect any part of hydro power station, which needs to be taken care by proper seismic & geological studies during designing.
- Landslides is other major source, wherein, main areas affected are water conductor systems, surface power house and diversion structures etc.
- Possible failure of a dam and the sudden release of artificially stored water becomes a potential menace to downstream inhabitants.
- Possible disasters like failure of any underground structure due to geological reasons, fire in cable galleries, switchyard & switchgear rooms, over speeding of turbines etc.

Thus, hydro power stations need special consideration to avoid disasters. The necessity of this becomes even more relevant from the fact that hydro projects are generally located in remote or hilly areas having poor logistics. The problem is more serious in case of underground hydro electric installations getting fire, flooding etc.

Appointment of Nodal Officers to perform Emergency Support Functions (ESFs)/ roles in emergency in the format already circulated by the State Government.

Assistant Research Officer HPPCL is appointed as Nodal Officer to perform Emergency Support Functions (ESFs)/ Roles in emergency to Head Office Shimla as well as field offices.

In field District level, concerned Sr. Project Officers/Project Officer-in-charge are responsible for the rescue operation of disaster coordinating the official of Medical Officer PHC/ Police personnel like IIC.

In the State level, Assistant Research officer is the Nodal Officer to coordinate during disaster with the -District Level Nodal Officers.

Chapter-3: Risk Prevention and Mitigation

3.1 Risk Prevention

Most of the fatalities and economic losses occur due to the poor construction practices, lack of earthquake resistant features of the buildings and low awareness about disasters among people. In order to estimate and quantify risk, it is necessary to carry out the vulnerability assessment of the existing building stocks and other infrastructure.

Building Vulnerability assessment is carried out in three stages i.e. Rapid Visual Screening (RVS), Preliminary Vulnerability assessment (PVA) and Detailed Vulnerability Assessment (DVA). As detailed vulnerability assessment of each single building is a very expensive and time consuming process hence department can initially select the building for PVA especially from the seven highly vulnerable districts of the state subsequently from the other districts. This PVA scoring will be supportive in making a decision that whether further stage of vulnerability assessment and retrofitting is required or not in the particular.

3.2 Prevention and Mitigation Measures

Projects for Prevention

Identifying and securing all the sites that might cause disaster-level loss of life and property. This may include measures like electric fences, security guards, biometrics etc. Vulnerabilities can be assessed based on the probability of attack and the extent of damage caused at a particular location.

Basic Mitigation Measures

The impact of certain natural disasters and man-made disasters can be reduced by a series of mitigation measures. The following are some structural and non-structural activities that may be considered for mitigation.

Mitigation measures for Natural as well as Man-made Disasters

Routine maintenance and security activities go a long way in mitigating the effects of incidents that lead to a disaster. The effect of natural disasters such as floods can be mitigated by ensuring that critical facilities are located away from flood prone regions as well as at higher elevations. Situations arising from Chemical, Biological, Radiological and Nuclear (CBRN) incidents require separate and special measures. CBRN hardening of vital equipment is an option that may be considered to mitigate the effects of CBRN incidents.

Measures necessary for prevention of Disaster:-

I. Periodically checking, testing, maintenance etc. of all equipments and regular checking of Protection & Control Instruments as per the Manufacturer's specification as preventive maintenance.

II. Regular checking of fire extinguishing system fitted in Transformer / Generator / Cable Gallery / Switch Yard etc.

III. Action is taken to improve the disaster management activities such as Fire Fighting System/ Flood Management / Terrorist Attack with the following provisions / with modern equipments.

1. Installation of adequate number of Fire Extinguishers in fire prone location.
2. Installation of additional hose pipes and nozzles in different locations.
3. Installation of Emulsifier system in Switchyard.
4. Installation of advanced Fire Fighting System to improve the preparedness for fire fighting.
5. Installation of CCTV Camera and HIGH TECH Security System for prevention of Terrorist attack.
6. Provision of DG set of required capacity at each power station.
7. Provision of required no of De-watering pumps at each power station.
8. Adequate quantity of POL in stock for DG Sets.
9. Arrangement for adequate number of vehicles to ensure movement of personnel and material to safe place(s).

Chapter-4: Disaster Preparedness

4.1 Strategies for Disaster Preparedness

For better supervision, monitoring and preventive measures capacity building programme will be launched for officials working at various levels as per their requirements. Capacity building programmes are categorized into two types. One will be for the Senior Officials of the department and the other for Project Officers and Staff. For Senior Officers of the HPPCL one day advocacy programme will be organised at State level and for others two/three day sensitization programme will be conducted. The team members of HPPCL will be trained to make their offices safe by preparing safety plans and practicing mock drills. Managers of HPPCL will facilitate the efforts of risk reduction. Trainings for Capacity building will be conducted at two levels:

State Level Advocacy Programme: This programme will be for senior functionaries of the department. It will be of one day duration. Director/Joint Director/Assistant Director and Executive Engineers of HPPCL will participate in it from all the offices. State Nodal Officer will organize one day advocacy programme. Director/Joint Director will Chair the advocacy programme. This programme can be conducted in coordination with the HPSDMA and other line stakeholders of the department.

Regional level Capacity Building Programme: A similar capacity building programme will be organized at the regional level to sensitize the field/project staff working at the cutting edge. In this programme, personnel who have attended the State level programme will facilitate at regional level. Depending upon the numbers of the participants, the training batches will be decided. A batch size should not exceed 50 participants. This training will include basic Search & Rescue, fire safety and evacuation drills.

4.2 Measures for Disaster Preparedness

In case of any disaster, logistics play a vital role in delivery of services. The provision of following items is prerequisite for safety measures in institutions.

1. Necessary Items: Items in this head include power backups, Stretcher, ropes, torch, alternative communication system, Siren, Public addressable system and tents etc.
2. Fixing Non-Structural Elements: It includes fixing of Almirah and other falling hazards that can harm during earthquake.
3. IEC material: Pamphlet, brochures or booklets that can be developed to distribute in the Catchment area of the institutions.

4. Repair of computer, printer, phone, fax etc: Most of laboratories have phones, computers, printers etc. These accessories may be used for warning and information during the period of emergencies. Such equipments need to remain functional.

5. Contingency: It will be used to establish warning and information cell in each building. This cell should be able to communicate with District Emergency Operation Centre. The contingency fund can also be utilised for the requirements of various teams constituted.

Some of the key Pre Disaster Activities to be carried out by Department:

- Formation of Disaster Management Cell and manning the same by senior personnel drawn from key Directorates.
- Incorporating costs for preventive and mitigation measures for earthquake, flood, fire and storm prone areas to construct disaster resistant buildings.
- In association with Fire Dept. getting fire extinguishers installed in laboratories identified and trained in operating them.
- Awareness Generation Programmes about Hazard, the kind of preparedness required and how to act at the time of disaster shall be organized in laboratory on monthly basis.

Establishment Procedures for Checking and Certification of Assets

- To ensure that the assets acquired for disaster management are maintained in an acceptable state, the following procedures should be established:
- Procedures for checking and certification of logistics, equipment and stores necessary for disaster management should be established.
- Procedures for operational check-up of Warning Systems and the inspection of facilities and critical infrastructure should be established.

Establishment of Coordination and Communication Protocols

During a disaster, HPPCL as a support function will receive requests from many stakeholders as well as avail the services of other agencies. The protocols for communication and coordination for the following should be established and documented:

- Between District Authorities and civil security agencies such as Police Dept., Fire Dept. and HPPCL.
- Between other civil agencies, such as Municipal bodies, Hospitals etc. and HPPCL
- Between HPPCL and other agencies such as State Government, Public Sector Undertaking (PSUs) and State Disaster Response Force (SDRF).
- Between HPPCL personnel and the Disaster Emergency Operations Centres (DEOCs)
- Protocols should also be established for communication with customers regarding early warning, potential and actual outages, schedule for restoration of services, warning notices and instructions etc.

Capacity Building and Training Measures

Preparedness Measures, capacity building and training is essential for effective Disaster Management and Response.

Approach

The approach for capacity building and training is based on analysis of existing disaster management institutional arrangements, assets, protocols and procedures. The goal of the analysis is to identify appropriate capacity building and training exercises to ensure adequate preparedness for smooth and effective operations during a disaster.

Capacity Building Plan

1) Institutional Capacity Building

- HPPCL should ensure that it has sufficient manpower/resources at different skill levels and thereby reducing the dependency on third parties during disasters
- HPPCL should have (software) systems that aid in providing situational awareness – e.g. visualization of the entire grid network, location of faults, inventory of equipment and resources, and contact information of officers at every level of operation. Training on these systems should be provided at various levels, and they must be accessible to certain personnel at the time of a disaster
- All HPPCL personnel should be trained on at least one essential function apart from their core responsibility and a list of the same should be maintained
- Every Project officer should have list of resources under his division and also corresponding competency/skill list
- Skill and inventory up gradation activities should be carried out on regular basis

2) Community Capacity Building: HPPCL should conduct exercises with civic authorities such as the Police, Fire, Municipalities and Hospitals to establish coordination and communication protocols to be used during a disaster.

Disaster Management Education and Training Activities

Disaster management education and training helps each individual in the organization know his/her duties during a disaster. This kind of education helps an individual to understand the exact hierarchy structure and duties one needs to perform during a disaster situation. This reduces the amount of confusion

that usually exists at the time of disaster. Training activities play a vital role in reducing the response and recovery time and thereby increasing the customer satisfaction. Hence, HPPCL should design appropriate training exercises in coordination with SDMA/DDMAs. Training exercises could consist of mock scenarios that include all parts of the disaster response apparatus. Training exercises conducted with equipment in place will also familiarize personnel with the use of the equipment. These exercises must be held at least once in a year (and/or before every monsoon). Details of training exercises should be maintained by Director.

Preparedness Plan for Disaster Management.

(a) The following Fire Fighting equipments are available at different Power Stations to protect man & material from fire hazard

- Emulsifier system in Transformer Deck for Generator Transformer, Unit Auxiliary Transformer and Cable Room.
- Centralized CO2 system (O2 Banks) for generator barrel.
- Fire hydrants with hose pipes at different locations of Power House.
- Smoke detectors & Heat Sensors available in Generators/ Cable Gallery.
- Portable CO2 fire extinguishers /ABC powder type fire extinguishers provided at Control Room, Turbine Floor and DC Room of Power House, Switch Yard, Different Stores & Offices, Garage, Workshop, Equipment stores etc.
- Automatically sprinkler systems are available throughout the Cable Galleries to extinguish the fires.
- Fire Resistance Barriers are available at the cable entries / Intersection, intermittent places on cable trays.
- Fire buckets provided in Switch Yard premises and Store.
- Fire triangles shown at different locations
- Water hydrant systems provided both inside the power house and near the Generating Transformer.
- Hydraulic Hoses fitted with required sizes of valves available for spraying of water for extinguishing fire.
- Fire Brigades are called from nearest fire stations as and when required.

(b) Flood Control: -

- Dewatering pump motor sets of different capacities are installed for dewatering inside power house.
- Dewatering pumps at Turbine Top Cover for generating Units, Sump Pits, and Foundation gallery for dewatering of leakage water are run automatically. Spare pumps are also available for emergencies.

(c) Black Out:-

• One DG set each has been installed at each power station to facilitate the 'Black Start' facility as well as emergency power supply. Further trial run is being held in every six month to authenticate our preparedness to face black outs.
• D.C. illumination System is available in case of power failure.

(d) Fire Accident, Electrocution etc.

• Emergency Treatment Facility is available in each power station in case of injury arising out of Fire/Accident/Electrocution etc.
• First Aid boxes are provided in each shop floor Areas such as:-
    a. Control Room
    b. Near Turbine Floor Operator Table
    c. Switch Yard Workshop
    d. Utility Division Electrical Maintenance Section.
• Emergency Medicine provision in the Dispensary / Hospital.

(e) Transport Facility:

An emergency vehicle remains in the Power House round the clock to meet any emergency to shift the injured person to nearby Hospital.

(f) Land Slide:

Stone Packing has been made in both sides of penstock pipe lines of high head Power Station to avoid damage to the penstock Pipelines in case of Land Sliding.

(g) Emergency Communication System

Three Tier Communication Systems which are available in the Main Control Centre are given below:-

• Intercom Telephone facilities provided to all essential / important points of different Power Houses.
• Land Line Telephones facility to some Key Executives such as Unit Head, Technical Wing Head,
• Finance Wing Head, HR Wing Head, Field Managers (Divisional Heads).
• Video Conferencing Communication System available at different Power Stations (Including Inter Units & Corporate Office).
• Power Line Carrier Communication System (PLCC) managed by HPPCL (which is an independent communication system) available to all concerned outside the Power Station for communication in case of other system of communication failed.

Chapter-5: Disaster Response and Relief

5.1 Response Plan

Mechanism for Early Warning and Dissemination

After getting warning from State Disaster Management Authority or District Disaster Management Authority, information shall be disseminated to the field by the State/District Incident Response Team. Mass media like TV, Radio, and Press should also be included for awareness.
The State and District Control room will be activated to function round the clock in the affected district. The State IRT shall furnish the status report about the establishment of control room at district level. Project Officer will be responsible to provide all kinds of support to the control room at district level.

Trigger Mechanism for Response

After issue of early warning, Executive Engineers of the vulnerable districts will explain the detailed response plan at district level meeting of District Disaster Management Authority constituted in every district in conformity with GOI guidelines for planning, coordinating and implementing various activities. At State level HPPCL, State nodal officer will coordinate with the SEOC and SDMA for the response.

Appointment of Nodal Officers

Director/Assistant Director of HPPCL will be the nodal officer at state level and will be supported by Controller (Finance) and an Officer on Special Duty. HPPCL will serve as a support agency for regulating relief operations during the disaster.

Roles and responsibilities of the nodal officers:

Roles and responsibilities of the nodal offices are as under:-

1. Act as the focal point for disaster management activities of the department. The department may ensure that he/she has the mandate to work immediately without waiting for directions from the higher authorities. This will save time.
2. Provide his/ her contact and alternate contact details to SDMA/DDMA and Revenue Department, State and District Emergency Operation Centre, all line departments and agencies.
3. Accountable to any communication/actions related to disaster management of the department.
4. Take lead to prepare the department disaster management plan, Emergency Support

Function (ESF) plan and Standard Operating Procedure (SOP).

5. Constitute the Incident Response Team (IRT) in the department as per the need and organize training for members.

6. Help the department to procure the equipments necessary for search and rescue, first aid kits and disburse the same to IRTs and for the department if required.

7. Provide regular information on disaster or task assigned to him to SEOC/ Revenue Department during and after disasters in consultation with the department head.

8. Attend Disaster management meeting, trainings, workshops or any related programme on behalf of the department.

9. Identify an alternate nodal officer and build his/her capacity.

10. As per the need of the department, set up control room and assign other official (s) for control room duty.

11. Identification and staffs for deployment on site operation centers (on site control room during a disaster)

12. In consultation with the department, make arrangement of alternative communication system for the department.

13. Mobilise resources for disaster response activities as per the resource inventory put in the department DM Plan if it is needed by the department or other line departments.

14. Organise regular awareness programmes in the department.

15. Organise the periodic mock drills at least twice a year as per the suitability of the department and update the plans at all levels and ensure participation of the department in mock drills of other agencies and other departments.

16. To have liaison with other departments and functionaries working in the field of DM

Disaster Management Plan for the respective projects under construction

The status of the HPPCL Projects at construction stage and their Disaster Management Plans is as under:

• Sainj HEP (100MW) – The project is at the advanced stage of construction and shall be commissioned during 2016-17. The Disaster Management Plan of the Project is attached herewith as Document-I

• Sawra Kuddu HEP (111MW) – The project is at the construction stage and shall be commissioned during 2016-17. The Disaster Management Plan of the Project is attached herewith as Document-II

• Integrated Kashang HEP (243 MW) – The first stage of the project is at the advanced stage of construction and shall be commissioned during this year. The Disaster Management Plan of the Project is attached herewith as Document-III

• Shongtong–Karchham HEP (450 MW) – The project is at the construction stage and shall be commissioned during 2017-18. The Disaster Management Plan of the Project is attached herewith as Document-IV

The respective Disaster Management Plans of the above projects is being also supplied to the respective Project Authorities/Head of Projects for implementation in letter and spirit.

Chapter 6: Financial Resources for Implementation of DMP

Section 40(2) of the Disaster Management Act stipulates that every department of the State, while preparing the DM Plan, shall make provisions for financing the activities proposed therein. Normally the funds required for risk assessment and disaster preparedness must be provided in the budgets of every concerned Board. Such funds are not very sizeable and HPPCB will allocate such funds within their normal budgetary allocations from coming budget year for risk assessment and preparedness.

HPPCL should make financial allocations in preparing and executing the disaster management plan. The Director (Finance) should plan for the following:

- Funds for Prevention and Mitigation Activities
- Funds for Preparedness and Training Activities
- Funds for Response Activities (including pre-authorization to draw money from treasury in the event of an immediate emergency)
- Funds for Disaster Risk Insurance

For the purpose of expediting services to its customers, HPPCL will delegate special financial powers during an emergency to its personnel.