

# DISASTER MANAGEMENT PLAN - 2025

ADANI ELECTRICITY MUMBAI LIMITED  
DEVIDAS LANE, OFF SVP ROAD, BORIVALI (W), MUMBAI - 400103.

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# ADANI ELECTRICITY OVERVIEW

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## 1. SUMMARY

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Adani Electricity's Disaster Management Plan (DMP) has been developed to ensure preparedness, effective response, and timely recovery of operations during emergencies, particularly those arising from natural disasters such as floods, cyclones, and monsoon-related incidents.

The DMP serves as a comprehensive framework guiding all internal departments, response teams, and supporting agencies involved in transmission and distribution. It also communicates Adani Electricity's approach to disaster risk mitigation and service continuity to key external stakeholders, including government authorities, emergency services, and regulatory bodies.

This plan is to be activated immediately upon the occurrence of any disaster event that poses a threat to life, infrastructure, or the continuity of electricity supply. Additionally, it is intended for proactive use during pre-monsoon preparations and early warning phases, enabling risk reduction and swift, co-ordinated action.

## 2. INTRODUCTION

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The Adani Group is a globally integrated infrastructure player with businesses spanning across key industry sectors like Energy and Utilities, Transportation and Logistics, Incubation, Airports, Material, and others. The Adani Group's growth and vision has always been in sync with the idea of nation building. 'Thinking Big. Doing Better' is a natural philosophy that is embodied in everyone at Adani Group, and they sincerely believe that they are doing their part in nation building and touching the lives of millions positively.

Adani Electricity Mumbai Limited (AEML) is a 100% subsidiary of Adani Energy Solutions Ltd. (AESL) and is an integrated Transmission and Distribution utility powering the suburbs of Mumbai and the areas around it.

Adani Electricity Mumbai Limited (Adani Electricity) has been in the field of power distribution for over 9 decades, with a network spanning over 400 sq.kms., catering to the electricity needs of over 3.2 million customers in Mumbai City with a maximum demand of 2268 MW.

Adani Electricity's Distribution Network ensures that power reaches end customers with maximum efficiency and reliability. They stand by their core belief of 'Power of Service' to consistently deliver reliable and quality services to all customers at competitive costs, with international standards of customer care, thereby creating superior value for all stakeholders. They strive to set new benchmarks in standards of corporate performance and governance through the pursuit of operational and financial excellence, and responsible citizenship - thus aiding in nation's growth.





## 3. POWER DISTRIBUTION ASPECTS

### 3.1 Transmission & Distribution

Adani Electricity's distribution licence area includes the suburban area of Mumbai (about 75% of Greater Mumbai) and the Mira-Bhayander Municipal Corporation area in Thane District. The entire licensed area is urban with a mix of residential, commercial, and industrial consumers.

Adani Electricity's power transmission system in Mumbai is part of the intra-state transmission system. At present, our transmission system comprises 9 EHV stations and ~593 circuit kms. of 220 kV lines. The power received at various EHV stations is supplied mainly through underground cables to our distribution substations, for onward distribution to around 3.2 million consumers with network length of ~26078 circuit kms. and interconnected via ~7207 substations at 11 kV / 0.4 kV level.

### 3.2 License

Adani Electricity holds Transmission & Distribution license (TL No.1 of 2011 & DL No. 1 of 2011), granted under Section 14 and 15 of the Electricity Act, 2003 for a period of 25 years starting from 16 August, 2011.

## 4. DISASTER MANAGEMENT ASPECTS OF T&D NETWORK

The Disaster Management Act, 2005, in 2(d) defines 'disaster' as a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.

In Section 2 of the Central Electricity Authority (CEA). 'Crisis and Disaster Management Plan for Power Sector', 'crisis' is defined as an event of acute danger, which can cause sudden disruption of power supply. The event is caused either due to human error / equipment failure or sabotage by anti-social elements. It leads to disruption of normal life including that of the power supply. Natural or other disasters can strike suddenly anytime and anywhere. As far as the CEA document is concerned, 'disaster' is synonymous with 'crisis'.

**The main features of a disaster are:**

Unpredictability

Unfamiliarity

Threat

Urgency

Speed

Uncertainty

#### 4.1 Types of Disasters

Sr. No.	Type	Details
1	Water and Climate-Related	<ol style="list-style-type: none"> <li>1. Floods</li> <li>2. Cyclones</li> <li>3. Tornadoes and Hurricanes</li> <li>4. Hailstorm</li> <li>5. Cloud Burst</li> <li>6. Landslides and Snow Avalanches</li> <li>7. Heat and Cold Waves</li> <li>8. Thunder and Lightning</li> <li>9. Tsunami</li> </ol>
2	Geological-Related	<ol style="list-style-type: none"> <li>1. Earthquakes</li> <li>2. Dam Bursts and Dam Failures</li> </ol>
3	Chemical, Industrial and Nuclear-Related	<ol style="list-style-type: none"> <li>1. Chemical and Industrial Disasters</li> <li>2. Nuclear Disasters</li> </ol>
4	Accident-Related	<ol style="list-style-type: none"> <li>1. Major Building Collapse</li> <li>2. Serial Bomb Blasts</li> </ol>
5	Fire	<ol style="list-style-type: none"> <li>1. Urban Fire (less probable)</li> <li>2. Forest Fire (less probable)</li> </ol>
6	Agitation	Local community or local mass movement, road, rail blockades, religious or communal conflict, major law and order situation, long duration strikes
7	Terrorism	Terrorist Attack, Siege, or Hostage Situation
8	Transport Unavailability	Major Traffic Disruption on Roads, Rails, Waterways

(\*Past occurrence history is considered in the same and vicinity areas)

**Details of probable disasters are as follows:**

##### I. Water and Climate-Related

##### Floods / Cloud Bursts / Tsunamis / Urban Floods

Floods refer to a huge amount of water reaching land in a short span of time, causing the land surface to be submerged under water – at places where land surface is usually not covered with water.

Floods could occur due to natural causes, or human activities, or a combination of both. Floods are caused by discharge of a huge volume of water in a short span of time, at such a rate that the water cannot be carried away from the scene of discharge.

Some of the possible reasons for such a huge discharge of water could be:

- Very heavy rainfall in a short span of time. The amount of rainfall itself is not a sufficient cause, the duration within which the rainfall is received is an equally important contributor
- Breach in levees, dams, etc.
- Very high tidal waves (sometimes in the aftermath of a seismic activity, e.g., earthquakes), etc. – also called tsunamis

Among the various kinds of disasters, flooding is unique in the sense that it has a very high degree of predictability, both in the short term, as well as long term. In most situations, flood-prone areas are quite known, in the sense that they have a history of flooding. Only in very rare situations, a place might be flooded without having any history of flooding. Even in such cases, a careful study of the area could give an indication of possible flooding.



## Urban Flood

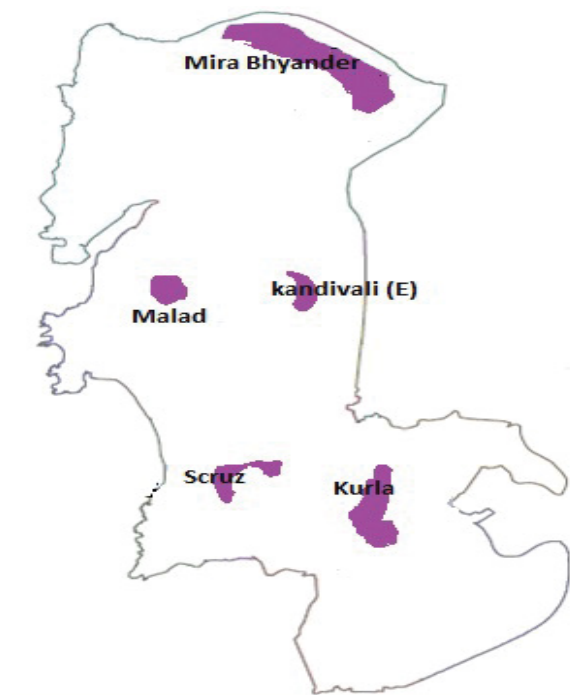
The problem of urban flooding is a result of both, natural factors and land-use changes, brought about by urban development. Urban flooding is significantly different from rural flooding as urbanisation leads to developed catchments which increases the flood peaks from 1.8 to 8 times and flood volumes by up to 6 times. The problems associated with urban floods range from relatively localised incidents to major incidents, resulting in inundation of some or large parts of urban areas for several hours to many days. It may result in damage to property, relocation of people and loss of life. It may also cause disruption in transport and power supply, bringing life to a grinding halt.

## Indicators of Possible Flooding

Usually, any of the following situations should indicate the possibility of flooding:

- Heavy rainfall in / around the vicinity, especially, if the specific location falls in the pathway of the water-discharge system from the area receiving heavy rainfall
- If there is heavy rainfall / flow of water / accumulation of water on the other side of a boundary, e.g., across a dam, across a levee, side of a river-embankment, etc. which might get breached

The above situations can be predicted with reasonable degree of accuracy. Meteorological predictions are accurate enough for up to 4-5 days.



Map showing identified Deluge Zones under Operational Area of Adani Electricity

## Effect of Floods / Cloud Burst / Tsunami on Adani Electricity T&D Network:

i. Due to floods / cloud burst / tsunami / Distribution Substation (DSS) buildings / Transmission Line Towers / Consumer Substations (CSS) / Network Feeder Pillars may get damaged, which can result in disruption of supply. Mumbai has experienced flooding due to cloud burst in 2005.

Also, for safety of human beings and other living animals distribution utility needs to disconnect the power supply to avoid / eliminate any eventuality due to short circuits in low lying areas where the probability of submerging customer installations is high.

Please refer to the map to locate the identified AEML Network Deluge areas.

## II. Cyclones / Hurricanes / Tornadoes

These are winds of high-speed, usually accompanied by heavy rainfall. They cause structural damage, snap overhead wires, and can cause floods. Heavy rainfall could cause flooding too. Usually, these could last for a few days. In such cases, restoration and relief activities can start only after the activities start subsiding.

Thanks to advancements of meteorological sciences these kinds of natural disasters can be predicted to a reasonable degree and it is possible to get a warning of up to several days. It is possible to take at least some preventive measures during these few days of warning. However, despite these warnings, damage to property cannot be mitigated as immovable structures cannot be relocated.

An important thing about these kinds of strong winds and rainfall is that they do not appear totally at will. There are well-defined geographical areas which tend to see incidents of typhoons and cyclones. This means, people inhabiting these areas could take some fundamental care while building homes.

### **Effect of Cyclones / Hurricanes / Tornadoes on Adani Electricity's T&D Network:**

- i. Strong winds can topple transmission towers, bend or break utility poles, and snap conductors.
- ii. Flying debris and falling trees damage overhead lines and substations.
- iii. Coastal and low-lying substations are vulnerable to water-logging and salt-water corrosion, leading to equipment failure.
- iv. Flooded cable trenches and control rooms can cause short circuits and extended downtime.
- v. Cyclones / Hurricanes / Tornadoes, may damage substation buildings / transmission line towers which can result in disruption of supply.
- vi. Also, they may damage equipment such as installed transformers / switchgear / transmission towers / other distribution equipment resulting in disruption of supply.







### III. Geologically-Related

#### Earthquakes

Earthquakes refer to shaking of the Earth. There is continuous activity going on below the surface of the Earth. There are several large plates (continent-sized) below the surface of the earth, which move at a very slow speed. As part of this movement, these plates collide against each other. After the collision, they might continue to push each other, building up pressure across these plates below the surface. At a certain point of time, one of the plates might slide over another causing an earthquake. Some earthquakes might be caused by activity above the surface. For example, in a mountainous region, there might be a heavy landslide. Due to huge masses of rocks falling, at the point of the fall, there could be a minor shaking of the earth, due to the impact of the fall. However, such earthquakes are not that damaging.

Maharashtra and its adjoining regions are prone to earthquakes of moderate magnitude. Mumbai lies in the Zone-III category. Earthquakes of mild capacity have hit Maharashtra at Koyna (1967 - 6.5 Richter) and Latur (1993 - 6.4 Richter) in the recent past. In addition to buildings, transformers, underground cable network and other machines spread across the whole supply area can get impacted during an earthquake. For seismic zone mapping, please refer to the map provided below.

[www.mapsofindia.com](http://www.mapsofindia.com)



Seismic Zone Map of India

#### **Effects of Earthquakes on Adani Electricity's T&D Network:**

- i. Due to earthquake, substation buildings / transmission line towers / underground cables could get damaged, which can result in disruption of supply. Mumbai has experienced several earthquakes of intensities from 3.5 to 4.6 Richter scale in the past. However, there has not been any significant impact on our system.
- ii. Also, earthquakes may cause damage to installed equipment such as transformers / switchgear / transmission towers / equipment, resulting in disruption of supply.

#### **IV. Chemical, Industrial and Nuclear-Related**

##### **Chemical Leaks / Spillovers & Industrial Disasters**

As the world is making rapid advancements in the field of industrialisation, there are huge chemical plants dealing with all kinds of chemicals. Some of these chemical plants deal with seemingly simple (non-hazardous) chemicals, while some other chemicals may contain hazardous materials.

##### **Risks associated with chemicals and chemical industries include:**

- Risks due to blast of certain equipment involved in large chemical plants, e.g., boiler, etc.
- Risks due to leakage of chemicals wherever they are stored / transported / used in small quantities, etc.

#### **Effects of Chemical Leaks / Spillovers & Industrial Disasters on Adani Electricity's T&D Network:**

Chemical vapours or liquid spillovers can corrode transformers, insulators, circuit breakers, and cables. Residues can lead to arcing and short circuits in substations or overhead lines.

#### **V. Accident-Related**

##### **Major Building Collapse**

This can be caused due to:

- Construction on marshy land
- Poor planning of building layout
- Poor construction materials
- Other natural calamities

#### **Effects of Major Building Collapse on Adani Electricity's T&D Network:**

- i. As all the controlling equipment, including relays, breakers, etc. are within the building premises, the collapse of the building will cause damage to property and human life.

#### **VI. Serial Bomb Blasts**

Terrorism / Bomb Blasts are one of the deadliest forms of crisis in terms of loss of life and damage to property. Power generation stations, transmission lines, and Load Dispatch Centres (LDCs) are prime target for such terrorist groups. Terrorist-related aspects could be dealt through advancement in technology, especially in the areas of surveillance and intelligence network.

#### **Effects of Serial Bomb Blasts on our System:**

- i. This can damage the equipment inside the Distribution Substations, disrupting the supply.
- ii. Bomb explosion may cause fire, resulting in damage of equipment and disrupt supply.





## VII. Pandemics / Epidemics

Pandemics / Epidemics may have catastrophic effects as they can cause large-scale mortality and morbidity as seen in the case of COVID-19, recently. Such biological emergencies are caused by infectious agents that may break naturally, accidentally, or through deliberate dispersal of such harmful agents into food, water, air, soil or into plants, crops, or livestock. As many people now travel within and across national boundaries, the likelihood of epidemics spreading globally has increased dramatically, turning local outbreaks into national epidemics and global pandemic / epidemic. Pandemics / epidemics impact the power sector as well, which may make ensuring uninterrupted power supply a very challenging task. Therefore, appropriate strategies should be planned to ensure that operations and infrastructure are properly supported to provide reliable electricity throughout an emergency. In the short-term, the continuity of the operations of the electricity system is based on guaranteeing the availability of key workers, their infrastructure, and technological platforms, as well as having vital supplies such as fuel and spare parts. In the medium and long-term, mechanisms will be required to ensure financial and operational viability of the power utilities.

### Effects of Pandemic / Epidemic on our System:

- i. Employee absenteeism and disruptions in transportation and supply chains (global, national, regional, and local) can make the availability of essential resources—such as fuel, manpower, and materials—highly unpredictable. This calls for integrated response plans involving multiple stakeholders.
- ii. The fluctuation in power demand and changes in the consumer category mix may pose operational challenges to deal with, which need to be addressed in real time.

## VIII. Availability of Power

Power crises may arise due to non-availability of generation / transmission network, increase in demand, depleting coal, oil or gas supplies at thermal power plants, non-availability of solar energy during night or a man-made / natural disaster in the local area of generation.

Availability of power is a major concern during non-availability of important EHV transmission lines or generator outages. The major effect of power crises is total blackouts in industrial / commercial hubs / urban residential areas and in villages.

To overcome this, dedicated control desks monitor the demand and supply positions on a continual basis. AEML / Power Procurement will arrange power as per MOD. In case of technical constraints or emergencies, demand and supply are matched, and load curtailment may be initiated as per directives from SLDC (State Load Dispatch Centre). AEML has plans to restore essential services during such emergencies.

## IX. Landslides

Landslides are a major and widespread natural disaster that affects life and property. Insofar as the impact of landslides on the power sector is concerned, it may damage the foundation of electrical equipment, cause damage to tower foundation that may lead to tower collapse, damage substation equipment and result in power disruption. Landslides in the upstream and downstream reservoirs may cause formation of artificial reservoirs, which result in flash floods, leading to severe impact on the



downstream structures / property, roads, inhabitants, etc.

**Effects of Landslides on our System:**

- i. Landslides may cause damage to installations and stoppage of electricity generation.

**X. Fire / Forest Fire**

Fires / Forest fires can start due to human activities or from natural causes or from a combination of both. The most common fires are usually caused by human errors, faulty designs, or mechanical failures. Fire can also be the secondary effect of a disaster, like an earthquake, that constitutes a substantial and heavy risk. Damages to electrical systems during a disaster can ignite major fires. Fire is a big threat, and causes loss to human life and property. Fire / forest fire can directly damage transmission towers and other electricity infrastructure. In case of forest fire, the greatest risk comes from smoke and particulate matter, which can ionise the air around the transmission line, thereby creating a conducting path for electricity resulting into 'phase to phase' or 'phase to ground' fault, and may lead to shutdown of the lines. When a forest fire occurs, assets like wooden poles and power cables in the vicinity can burn. Steel towers are also vulnerable to heat from forest fires. The conductors of transmission lines are susceptible to physical damage from the heat of a forest fire, and conductor damage may not be repairable, needing replacement. A forest fire can force the outage of a transmission circuit if it raises the ambient temperature of the air around the conductors above the line's operating parameters. Heavy smoke from a nearby forest fire can contaminate a transmission line's insulating medium, which is the air surrounding the conductor.





## 5. VULNERABILITY ANALYSIS

Following is the brief vulnerability analysis of AEML network with respect to various hazards.

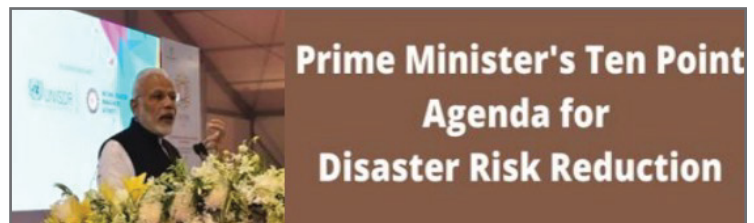
Sr. No.	Hazards (Potential Events)	Threats	Risks (H/M/L)	Probability (H/M/L)
1	Floods / Cloud Bursts / Tsunamis / Landslides	Station Equipment, UG Network & Human Life	High	High
2	Cyclones / Hurricanes / Tornadoes	All Equipment & Human Life	Medium	Low
3	Earthquakes	All Equipment & Human Life	High	Low
4	Fire	All Equipment & Human Life	Medium	High
5	Pandemic	All Equipment & Human Life	High	Low
6	Availability of Power	Blackout	Medium	Low
7	Landslides	All Equipment & Human Life	Medium	Low
8	Chemical Leaks / Spillovers & Industrial Disasters	Human Life	Medium	Low
9	Major Building Collapse	Station Equipment & Human Life	Medium	Low
10	Serial Bomb Blasts	All Equipment & Human Life	High	Low
11	Agitation	All Equipment & Human Life	High	Low
12	Terrorism	All Equipment & Human Life	High	Low
13	Transport Unavailability	All Equipment & Human Life	High	Low

While it will be an ongoing task to identify potential environmental risks and Occupational Health & Safety (OH&S) hazards, the impacts of these on our T&D system and the mitigation processes have been emphasised in this plan.

## 6. DISASTER MANAGEMENT PLAN (DMP)

Natural disasters cannot be prevented, and accidents can occur despite all efforts to prevent them, but effective preparedness and actions taken during the critical timeframe can greatly lessen the impact of such events. Response to disasters, in the absence of a well-defined plan, would be arbitrary leading to overemphasis of some actions and absence of other critical ones. Hence, it is necessary to document a Disaster Management Plan (DMP) so that pre-planned procedures can be followed during disasters.

The DMP is based on three landmark global agreements reached in 2015 – Sendai Framework for Disaster Risk Reduction (Sendai, Japan, March 2015), Sustainable Development Goals (UN General Assembly, New York, September 2015) and Climate Change Agreement (COP21, Paris, December 2015), in addition to the Prime Minister's Agenda for Disaster Risk Reduction.



### Sendai Framework for Disaster Risk Reduction

The emphasis of Sendai Framework is on preventing new disasters and reducing existing risks, and strengthening overall disaster resilience through the implementation of integrated measures.

#### The salient features of Sendai Framework are:

- i. Outcome - To achieve substantial reduction of disaster risk, loss of lives, livelihoods, health, and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries globally over a span of 15 years, i.e. by 2030.
- ii. Goal - Prevent new, and reduce existing, disaster risks through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard-exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.

#### Four priorities for action as per Sendai framework are:

- Understanding disaster risk
- Strengthening disaster risk governance to manage disaster risk
- Investing in disaster risk reduction for resilience
- Enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation, and reconstruction

Seven Targets	
1	Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rates in the decade 2020–2030 compared to the period 2005–2015.
2	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015.
3	Reduce direct disaster economic loss in relation to global Gross Domestic Product (GDP) by 2030.
4	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, including health and educational facilities, by developing resilience by 2030.
5	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
6	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present framework by 2030.
7	Substantially increase the availability of, and access to, multihazard early warning systems and disaster risk information and assessments to people by 2030.



Sendai Framework for Disaster Risk Reduction - 7 Global Targets

### Sustainable Development Goals (SDG)

The Sustainable Development Goals (SDGs), adopted by the UN General Assembly on 25 September, 2015, consisting of 17 Global Goals and 169 Targets, are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. It includes new areas such as climate change, economic inequality, innovation, sustainable consumption, peace, and justice, among other priorities.



Sustainable Development Goals (SDGs) adopted by the UN

#### Prime Minister's Agenda for Disaster Risk Reduction:

1. All development sectors must **imbibe the principles of disaster risk management**.
2. **Risk coverage must include all** - starting from poor households to SMEs to multinational corporations to nation states.
3. **Women's leadership** and greater involvement should be central to disaster risk management.
4. **Invest in risk mapping** globally to improve global understanding of nature and disaster risks.
5. **Leverage technology** to enhance the efficiency of disaster risk management efforts.
6. Develop a **network of universities** to work on disaster-related issues.
7. Utilise opportunities provided by **social media and technologies** for disaster risk reduction.
8. **Build** on local **capacity** and initiative to enhance disaster risk reduction.
9. Make use of every opportunity **to learn from disasters** and, to achieve that, there must be studies on the lessons after every disaster.
10. Bring about greater **cohesion in international response** to disasters.

The primary objective of DMP is to ensure the safety of life and protection of property, and ensure minimum disruption of power. Other major objectives of the DMP can be summarised as follows:

- To identify major resources, manpower, material, and equipment needed to make the plan operational
- To make optimum use of combined resources
- Delegation of power at various levels for disaster conditions
- Medical Support, Additional Crews, Security Guards and Communication Support
- Identification of key personnel with their skills and experience in Disaster Management
- Plan for using outsourced manpower, services, etc.



- To set up effective command and control structure for handling disasters
- To improve the state of preparedness to meet any contingency
- To reduce response time in organising the assistance
- To identify the training needs for personnel engaged in handling disasters
- To promote evacuation, rescue, and relief
- To reduce the frequency of occurrence of such disasters
- To protect environmental damage
- Assessing the severity or magnitude of effects of any disaster
- And, to facilitate quick business recovery

## 6.1 Components of Disaster Management

### a) Risk Management

The Risk Analysis and Vulnerability Assessment aims at identifying the disasters, their probability, their effects and impact on business and people.

### b) Response Plan

The Response Plan lays down preparedness checklists, operating procedure guidelines, list of monitoring facilities, reporting formats and other measures to mitigate the impact of disasters. It identifies functional areas such as relief, communication, transport, health services, etc. and proposes assignments to various departments, identifying lead and supporting departments, and the organisational structure to deal with the disaster in a co-ordinated and smooth manner.

### c) Control of Events

Control is maintained through the following measures:

- i. Anticipation of a disaster and the cause-and-effect relationship generated by each type of event.
- ii. Focusing mitigation strategy on long-term planning for disaster handling, continued commitment to hazard identification, risk assessment and long-term measures to reduce the probability and impact of disasters. The mitigation strategy should plan for better resource management, safety codes, training programs, and innovative leadership.  
  
The document should deal with the various events that may lead to disasters, preventive measures that need to be adopted to avoid and lessen the impact of any disaster, ways and means to respond, and the hierarchical set up at various levels for effective and efficient Disaster Management.
- iii. By viewing the anticipated scope of disaster, managers can plan adequate responses.
- iv. Accurate information collection and assessment after a disaster has occurred helps the manager to base priorities and guide responses.
- v. Each type of disaster will require a different set of responses.

#### **d) Equity of Assistance**

All disaster responses should be provided in an equitable and fair manner.

#### **e) Resource Management**

Few disaster managers have adequate resources to meet all competing needs and demands of a post-disaster environment. Thus, resource management becomes a critical element of disaster response. The disaster manager must be familiar with the resources available.

#### **f) Loss Management**

Losses in a disaster include human, structural and economic losses. Loss management addresses these through pre and post-disaster actions designed to minimise losses. Effective loss management activities occur prior to a disaster and are focused on reducing the society's vulnerability.

### **6.2 Objectives and Scope of Crisis & Disaster Management Plan**

Disaster management encompasses the activities that enable various agencies to plan for, quickly respond to, and recover from unexpected events and situations. It is a tool to provide necessary guidelines for assistance to organisations for ensuring safety of people, protection of environment, protection of installations and restoration. It has the following objectives:

- To improve state of preparedness to meet any contingency
- To reduce response time in organising the assistance
- To identify major resources, manpower, materials and equipment to make the plan operational
- Making optimum use of the combined resources

#### **The activities in response to a crisis on disaster shall mainly include:**

- a. Exchange of information in terms of event description, its severity and action plan.
- b. Identification of resources and deployment viz., technical experts, manpower, equipment, spare parts and other material.
- c. Early restoration and facilitating re-inspection as needed.
- d. Field / site surveys, damage assessment.
- e. Post event investigation & analysis, and strategy for the future.





# ADANI ELECTRICITY MUMBAI TRANSMISSION

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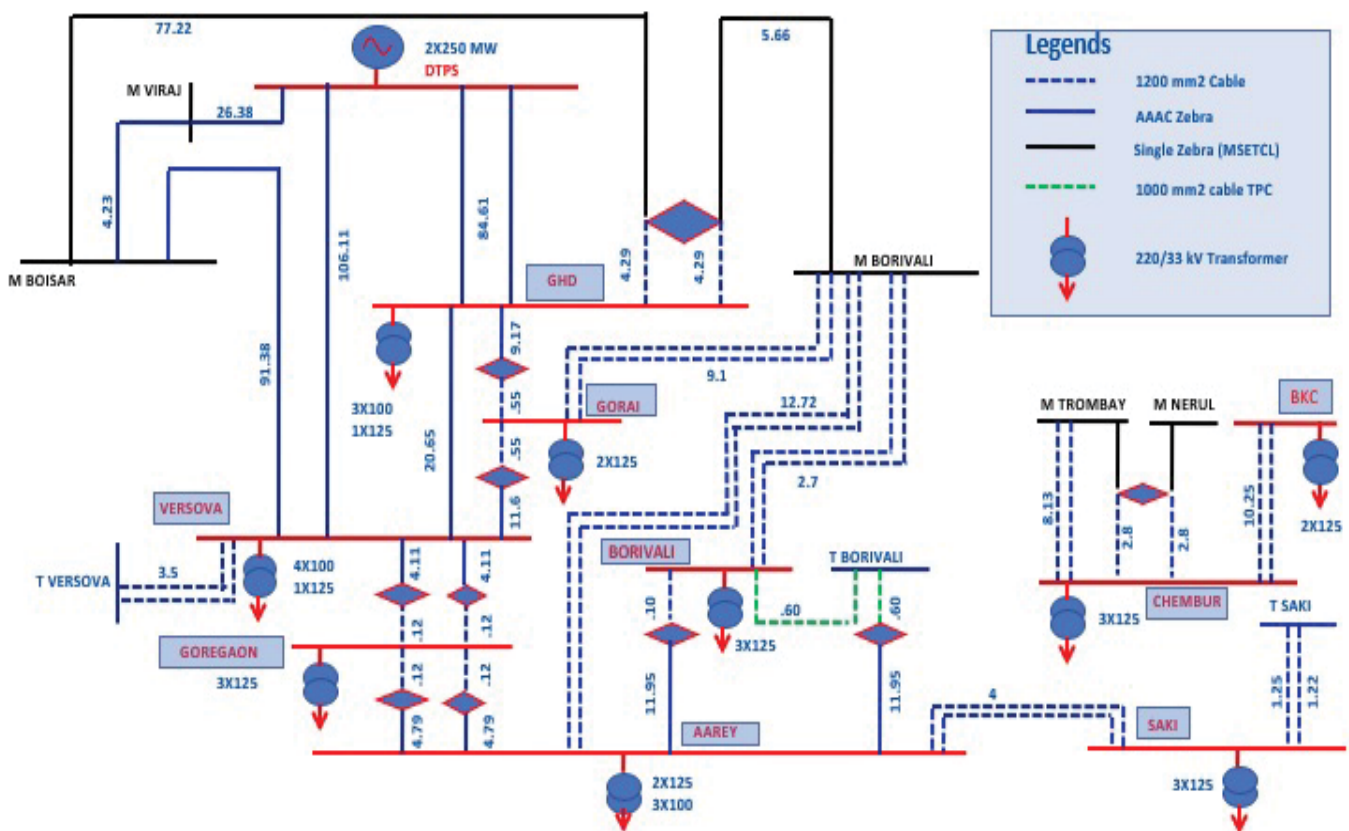
The power of service

## 7. MUMBAI TRANSMISSION BUSINESS

The power generated at ADTPS is brought to Adani Electricity's area of supply through two double circuit 220 kV transmission lines. Grid connection is established through tie lines with TPC's Borivali, Versova and Saki substations, MSETCL's Boisar, Borivali, Trombay, and Nerul EHV substations.

Nine 220 kV EHV substations are set up in Versova, Ghodbunder, Aarey, Goregaon, Gorai, Borivali, Saki, Chembur and BKC. 100 MVA, 125 MVA transformers installed at these substations step down the voltage from 220 kV to 33 kV. The 33 kV feeders emanating from these substations cater to the demand of Adani Electricity's area of supply.

### 7.1 Adani Electricity 220 kV Network







## 7.2 Transmission Lines - Brief Details

Route	Details	Line Length (circuit-km.)
ADTPS to Ghodbunder ADTPS to Versova Ghodbunder to Versova Versova to Aarey Aarey to TPC's Borivali Ghodbunder to Gorai Gorai to Versova Versova to Goregaon Aarey to Goregaon ADTPS to MSETCL Viraj MSETCL Viraj to MSETCL Boisar Versova to MSETCL Boisar	Conductor type AAAC 487.5 sq.mm. ADTPS-Ghodbunder-Versova line with OPGW Aarey to Tata Borivali with OPGW	Total 220 kV OH lines 482.67 circuit km.
AEML Borivali to TPC Borivali	Single Core 1200 sq.mm. cable	Total 220 kV UG cables 110.6 circuit km.
AEML Borivali to MSETCL Borivali Gorai to MSETCL Borivali	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	
Ghodbunder to MSETCL Boisar Ghodbunder to MSETCL Borivali	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit till existing LILO tower of MSETCL	
Aarey to Saki Chembur to MSETCL Trombay AEML Saki to TPC Saki Aarey to MSETCL Borivali	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	
Chembur to MSETCL Nerul Chembur to MSETCL Trombay-3	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit till existing LILO tower of MSETCL	
Chembur to BKC	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	
ADTPS to Ghodbunder ADTPS to Versova Ghodbunder to Versova Versova to Aarey Aarey to TPC's Borivali Ghodbunder to Gorai Gorai to Versova Versova to Goregaon Aarey to Goregaon	Conductor type AAAC 487.5 sq.mm. ADTPS-Ghodbunder-Versova line with OPGW Aarey to Tata Borivali with OPGW	Total 220 kV OH lines 482.67 circuit km.



ADTPS to MSETCL Viraj MSETCL Viraj to MSETCL Boisar Versova to MSETCL Boisar		
AEML Borivali to TPC Borivali	Single Core 1200 sq.mm. cable	Total 220 kV UG cables 110.6 circuit km.
AEML Borivali to MSETCL Borivali Gorai to MSETCL Borivali	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	
Ghodbunder to MSETCL Boisar Ghodbunder to MSETCL Borivali	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit till existing LILO tower of MSETCL	
Aarey to Saki	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	
Chembur to MSETCL Trombay		
AEML Saki to TPC Saki		
Aarey to MSETCL Borivali		
Chembur to MSETCL Nerul Chembur to MSETCL Trombay-3	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit till existing LILO tower of MSETCL	
Chembur to BKC	Single Core 1200 sq.mm. cable along with one OFC and DTS cable per circuit	



### 7.3 List of EHV Substations

Sr. No.	Location	Area	Contact No.
1	Aarey EHV Substation	220 kV Aarey EHV substation, Off Jogeshwari - Vikhroli Link Road, Opp. SEEPZ North Gate No. 3, Unit No. 19, Aarey Colony, Goregaon (E), Mumbai - 400063	022 - 50547271
2	Chembur EHV Substation	220 kV Chembur EHV substation, Behind Borla Receiving Station, S.T. Road, Near Deonar Depot, Mumbai - 400088	022 - 50547285
3	Saki EHV Substation	220 kV Saki EHV substation, Andheri -Kurla Road, Near Indian Oil Petrol Pump, Saki Naka Junction, Andheri (E), Mumbai - 400072	022 - 50547276
4	Versova EHV Substation	220 kV Versova EHV substation, Behind Lokhandwala Complex, Near Joggers Park, Andheri (W), Mumbai - 400053	022 - 50547275
5	Goregaon EHV Substation	220 kV Goregaon EHV substation, Opp. Sahara India, S.V. Road, Adani Electricity Mumbai Ltd, Mumbai - 400062	022 - 50547372
6	Gorai EHV Substation	220 kV Gorai EHV substation, L.T. Road, Near MCGM Dumping Ground, Borivali (W), Mumbai - 400092	022 - 50547269
7	Ghodbunder EHV Substation	220 kV Ghodbunder EHV substation, Ghodbunder Village, Near Raj Bucket Factory, Mira-Bhayander Area, Thane - 401107	022 - 50547273
8	AEML Borivali EHV Substation	220 kV GIS Borivali substation, Near Jn. of Dattapada Road and Western Express Highway, Borivali (E), Mumbai - 400066	022 - 50547283
9	BKC EHV Substation	220 kV BKC substation, Next to Adani Inspire, Next to MGL Petrol Pump, Village - Kolekalyan, Bandra Kurla Complex, Bandra East, Mumbai - 400051	022 - 50549771

### 7.4 Salient Details of 220 kV EHV Substations

Particulars	Versova	Ghodbunder	Aarey	Saki	Chembur	Goregaon	Gorai	Borivali	BKC
Installed No. of Power Transformers	5	4	5	3	3	3	2	3	2
No. of 220 kV AIS Bays	12	9	-	-	-	-	-	2	-
No. of 220 kV GIS	5	10	18	10	10	10	10	10	7
No. of 33 kV Switchgear	66	59	82	42	42	42	26	33	28

Installed No. of 220 kV Variable Reactor	–	–	–	–	–	–	1	–	–
Critical Feeders	Juhu, Ambivali, Saraswati Road	Mira-Bhayander	Airport, SEEPZ, Hirana-dani	Saki, Kurla, BKC	Chembur, Shivaji Nagar	Goregaon	Gorai, KIE	Borivali, Maga-thane	MMRDA, Godrej BKC, Santacruz

### 7.5 Trans-Security Control Room

The security control room with plasma displays is situated at the 220/33 kV Ghodbunder EHV substation, for one-point monitoring of all EHV substations. Modern PTZ cameras at appropriate locations in the substations can be controlled from the control room and security control room for round-the-clock monitoring of unauthorised entry, keeping watch on illegal activities in the switchyard. Access control doors are provided at all 220/33 kV EHV substations to prevent unauthorised entry in the Control Room Building. Porta cabins are provided inside the switchyard for effective patrolling of the area.

## 8. ACTION PLAN - TRANSMISSION SYSTEM

### 8.1 Preparedness to Meet any Contingency

- Creating awareness by training and posters / slogans, etc.
- Collecting updated information / news from relevant agencies and communicating to departmental heads and other respective sections.
- Issuing warning notifications to initiate advance action to minimise the damages and start rescue operations. The warning notification indicating the magnitude of disaster should be communicated to the concerned parties in the region.

### 8.2 Warning Systems

Area Cyclone Warning Centre (ACWC), Colaba, Mumbai, is responsible for issuing cyclone warning bulletins for Arabian sea, north of Latitude 50° N and east of Longitude 600° E, excluding the area north of 200° N and west of 680° E.

Whenever the coastal belt is expected to experience adverse weather (heavy rain / gales / tidal wave) in association with a cyclonic storm, or depression likely to intensify into a cyclonic storm, ACWC - Mumbai issues warnings for coastal districts of Goa and Maharashtra in two stages.

**Cyclone alert (1<sup>st</sup> Stage Warning):** Issued 48 hours in advance

**Cyclone warning (2<sup>nd</sup> Stage Warning):** Issued 24 hours in advance

Main mode of communication of cyclone warnings is by telegram. 000 Weather Immediate Telegram, Telex, W/T, Telephone, Fax, Police Wireless, and satellite communication (disaster warning system), if other channels fail.



Disaster	Agencies
Earthquakes	IMD, MERI, BARC
Floods	Meteorological Department, Irrigation Department
Cyclones	IMD
Epidemics	Public Health Department
Road Accidents	Police
Industrial and Chemical Accidents	Industry, MARG, Police, DISH, BARC, AERB
Fires	Fire Brigade, Police

### 8.3 Advance Preparedness

The following steps are recommended as an organisational practice to avoid last minute panic in the face of a disaster:

- Well-documented emergency plans
- Data on availability of resources and buffer stocks of restoration materials
- Identification of key personnel with skills and experience in Disaster Management
- Allocation of budget for emergencies
- Delegation of power at various levels for disaster conditions
- Transportation of emergency DG Set and other resources
- Medical Support, Additional Crews, Security Guards, and Communication Support
- Fail-safe communication system in the event of communication system failure
- Plan for using outsourced manpower, services, etc.

The on-site in-charge, shall arrange for mock drills on disasters as per schedule in co-ordination with the safety and security departments.

Sr. No.	Mock Drill
1	Floods / Cloud Bursts / Tsunamis / Landslides
2	Cyclones / Hurricanes / Tornadoes
3	Earthquakes / Major Building Collapse
4	Chemical Leaks / Spillovers & Industrial Disasters
5	Serial Bomb Blasts / Bomb Threats / Terrorist Attacks
6	Fire

#### 8.4 Accident / Incident Recovery Plan (Build Back Better)

After the emergency, the team needs to normalise the facility. The Assessment Committee will assess the loss / damage and Redevelopment Committee will be responsible for the restoration of the facility.

**The major concerns which keep people worrying about their facility are:**

- Environmental factors
- Accident-related psychological factors

The debris is cleaned properly to minimise further environmental damages. The management can take help from outside personnel who are experts in this area. The wastewater is in no case allowed to go out of the premises untreated.

The psychological trauma associated with accidents can be minimised through thoughtful investigation of the accident and taking actions to eliminate the cause of the accident.

Emergency management plan is recorded and reviewed for adequacy to reduce future response times.

#### 8.5 Post-Disaster Response and Recovery Stages

- Accurate information collection and assessment** – After a disaster, the manager needs reliable data to base priorities and guide responses.
- Balanced response** – Each type of disaster will require a different set of responses.

**Following features need to be kept in mind for an efficient recovery system:**

- Clear hierarchy of command system.
- Mobilisation of damage assessment teams.
- Mobilisation of teams for establishment of base camps / infrastructure.
- Officer for communication with the outside environment / press, etc.
- Predefined staff for co-ordination with other agencies for restoration.
- Management of funds and resources at the disaster site.



## 9. ROLES AND RESPONSIBILITIES

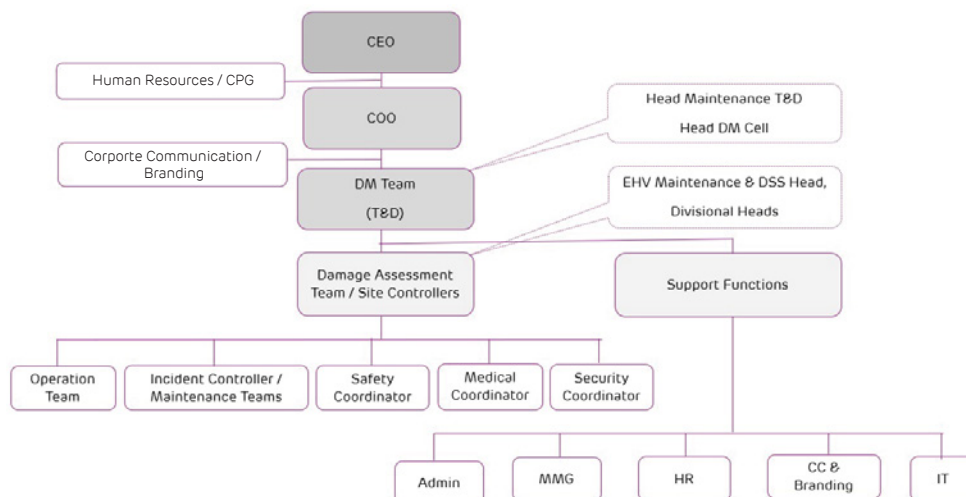
### 9.1 Responsibilities

The Disaster Management (DM) Cell is responsible for implementing the Disaster Management Plan and acts as the co-ordinating, controlling, and monitoring body.

#### The DM Cell shall:

- Examine the vulnerability of different parts within an organisation for different forms of disasters and specify measures to be taken for their prevention or mitigation.
- Lay down, review and update guidelines for preparation of Disaster Management Plans.
- Monitor the implementation of the guidelines laid down for integrating measures for prevention of disasters and mitigation by the departments.
- Evaluate preparedness at all functional levels to respond to any threatening situation or disaster and direct, where necessary, to enhance such preparedness.
- Co-ordinate with Response / Rescue teams in the event of any disaster situation.
- Direct all concerned sections, about actions to be taken at any disaster situation.
- Advise, assist, and co-ordinate the activities of the departments engaged in Disaster Management.
- Inform concerned government authorities about different aspects of Disaster Management.
- Ensure communication systems are in order and Disaster Management drills are carried out periodically.
- Assess the severity or magnitude of effects of any disaster.
- Facilitate quick business recovery.

### 9.2 Organisation Structure of Disaster Management Cell



The Head-T&D will review / revalidate DM Cell in January every year.

#### **a) COO**

COO shall be the Chairperson of the Disaster Management Cell.

#### **b) Human Resources**

They shall ensure availability and distribution of resources prior to disaster, he / she shall support the Incident Controller in implementation of the Disaster Management Plan.

#### **c) Incident Controller**

Head-O&M / Head-Projects will be in-charge of the Disaster Management Cell and the main co-ordinating authority. Responsibilities shall be:

1. Maintain prior agreed inventory of emergency equipment in the Emergency Control Centre.
2. Keep shift schedule for all the areas readily available.
3. Direct all actions taken on the actual on-site condition.
4. Direct Key Personnel at the work spot for carrying out specific tasks.
5. Provide updates and information to the CEO.
6. Assess the impact of disaster.
7. Co-ordinate with the redevelopment committee.
8. Request for help from Government / Private Authorities like MCGM, MBMC Fire brigade, Ambulance, Police, NGO, etc.

Key Personnel have been identified in the table below for handling disasters at each EHV substation. Their contact details are provided subsequently in this plan.

In absence of the Head-O&M / Head-Project, the Zonal in-charge acts as the Incident Controller.

#### **d) Key Personnel (KP)**

A list of Key Personnel and their phone numbers is available at all the times at the concerned places. They decide the actions required to evacuate personnel at the affected area, carry out emergency works, and arrange supplies of equipment, personnel, etc., and liaison with outside authorities. The following authorities shall be KP at the corporate level during the disaster / emergency.

Their roles are:

##### **d1) Admin Co-ordinator**

He / She shall provide all the logistical support required for implementing the Disaster Management Plan to the Incident Controller.

##### **d2) Safety Co-ordinator**

He / She shall:

- Update the on-site Disaster Management Plan regularly
- Provide and keep ready a list of compatibility of chemicals, appropriate fire extinguishing media / safety equipment
- Carry out mock drills
- Arrange for training on a periodic basis
- Monitor fire extinguishers and update their refilling
- Ensure availability of competent first-aiders





### **d3) Security Officer**

He / She shall:

- Maintain the inventory of spill containment equipment
- Periodically check and ensure availability of functioning battery-operated radios and cellular mobile phones at the time of emergency
- Co-ordinate with fire brigade, police officials, ATS, and the bombs disposal squad as and when required

### **d4) On-site In-charge**

He / She shall:

- Be ready with an evacuation plan, and ensure its availability with office personnel
- Ensure all equipment / tools / first-aid kits are available and maintained at assigned locations
- Keep a list of all fire extinguishers and update their refilling
- Ensure availability of local rescue teams

### **d5) Medical Co-ordinator**

He / She shall:

- Co-ordinate for equipped ambulances and other medical facilities
- Assess casualties and co-ordinate with hospitals in nearby areas

## **e) Emergency Response Teams**

Local Emergency Response Teams are available at all locations. In case of a disaster, these teams will act immediately. DCC will co-ordinate with other teams for mobilising them in the affected areas.

Emergency Response Teams shall consist of a Cordon Team, a First-Aid Team, a Firefighting Team, a Restoration Team, and a Spill Clean Team.

### **Responsibilities of Emergency Response Teams:**

- Identify the location of trapped or isolated disaster victims
- Save lives of disaster victims by bringing them to a safe location
- Provide them with medical attention
- Ensure survival of the maximum possible number of victims
- Facilitate search & rescue by experts
- Work out the search & rescue plans with locals
- Involve various teams in appropriate steps
- Involve locals well-versed with the area for searching
- Relocate the victim to safe areas through community mapping
- Provide shelter and other relief material
- Control panic, rumours, confusion
- Provide moral support to the victims
- Provide food, drinking water, first-aid, and psychosocial care to the victims at the affected places and stranded people in life-threatening situations, awaiting rescue



- Provide post evacuation relief through emergency supplies and services
- Approach damaged buildings and facilities, if required, from the least dangerous side or access
- Shut off / switch off all piped service mains (water / gas) and electricity lines in collapsed buildings

#### f) Assessment Committee

The Assessment Committee shall consist of representatives from HR, Admin, Finance, Planning, Engineering, Safety, Security, with representatives from the affected department. It shall be chaired by Head-O&M / Head-Projects.

First Information Report of the committee shall be submitted to the CEO within 48 hours and the Final Analysis Report shall be submitted within 7 days.

#### g) Redevelopment Committee

CEO will appoint the Redevelopment Committee which shall:

- Co-ordinate with the Assessment Committee
- Plan for redevelopment
- Execute redevelopment work

### 9.3 Disaster Control Centre (Emergency Control Room)

Disaster mitigation operations are directed and co-ordinated from the Disaster Control Centre (DCC). This centre is activated as soon as on-site disaster is declared.

The DCC is equipped to allow unhampered communication with the teams involved in bringing the incident under control with the help of external response organisations and personnel from other facilities. The Occupational Health Room provides shelter for persons affected by the emergency.

Access to the DCC is limited and regulated to eliminate unnecessary interference and confusion.

#### Location

In case of emergency at 220 kV EHV substations, Disaster Control Centres (DCC) will be set up at two different locations.

Location	DCC	Backup DCC
	Aarey	Ghodbunder

#### Resources

The Central Control Room shall have the following resources to handle disasters effectively:

1. Contact list and numbers of fire stations, medical centres, security, police, and district administration and authorities.
2. First-aid procedure.
3. Disaster Management Manuals, blown up area maps, district phone directories.
4. Contact list of Key Personnel from AEML.

5. Complete details of the system and guiding document for Bulk Supply Failure.
6. In addition to the above, comprehensive communication facilities are made available at Emergency Control Centres to handle disasters.
7. The DCC is also equipped with site plans, facility descriptions, various drawings and maps describing electrical fittings, availability of fire-fighting equipment, floor-wise plan of evacuation, etc.
8. The DCC will have facilities like telephones, wireless communication handsets, mobiles, back up with emergency lighting, etc.

#### Facilities at Disaster Control Centre

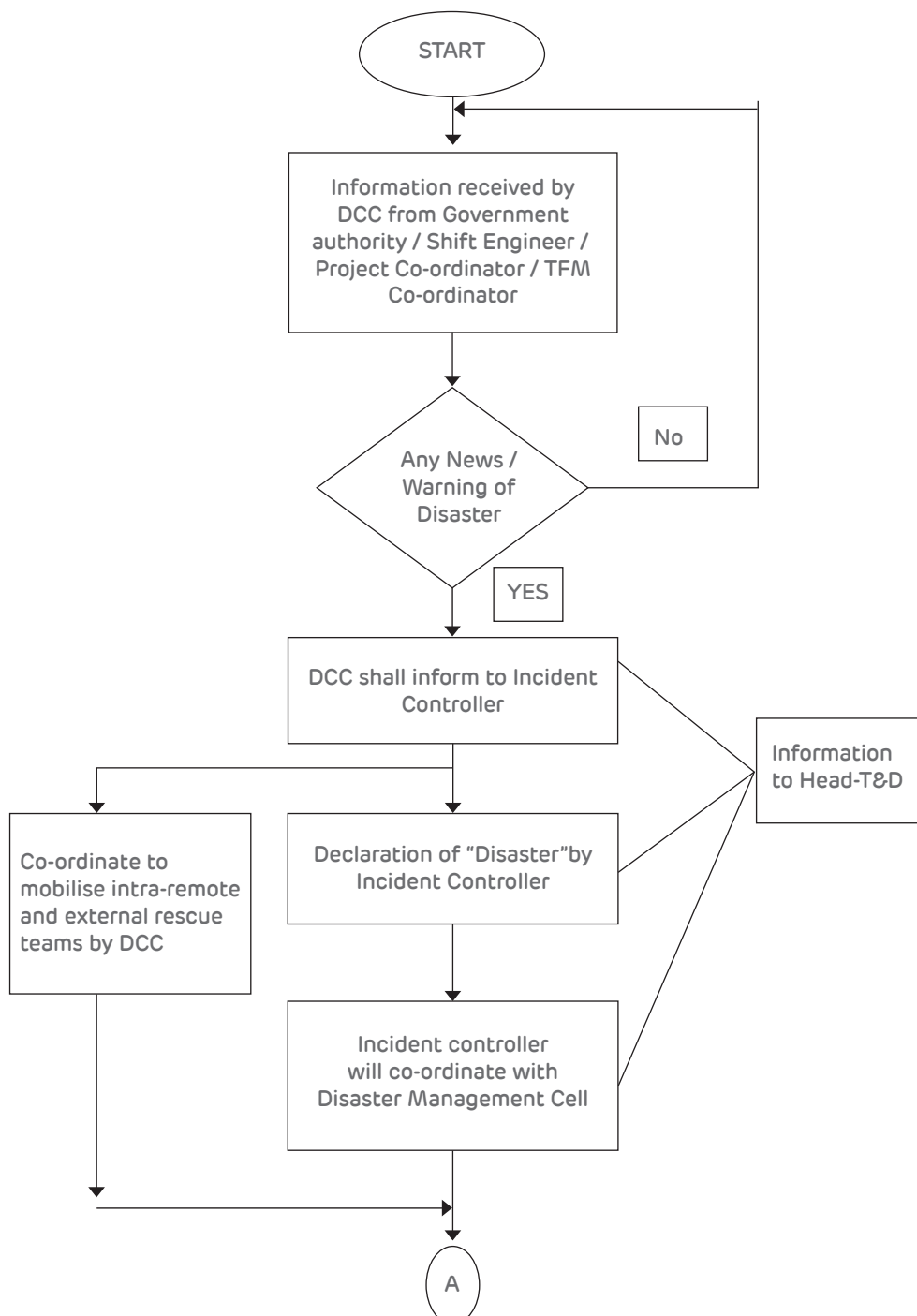
Sr. No.	Description	Quantity (Aarey DCC)	Quantity (Ghodbunder Backup DCC)
1	Hotline Telephone	2	1
2	IP Telephone	1	2
3	Personal Computer	1	1
4	Printer	1	1
5	LAN Connectivity	1	1
6	Outlook (web mail)	1	1
7	Cell Phone Chargers	1	1
8	Cell Phone	1	1

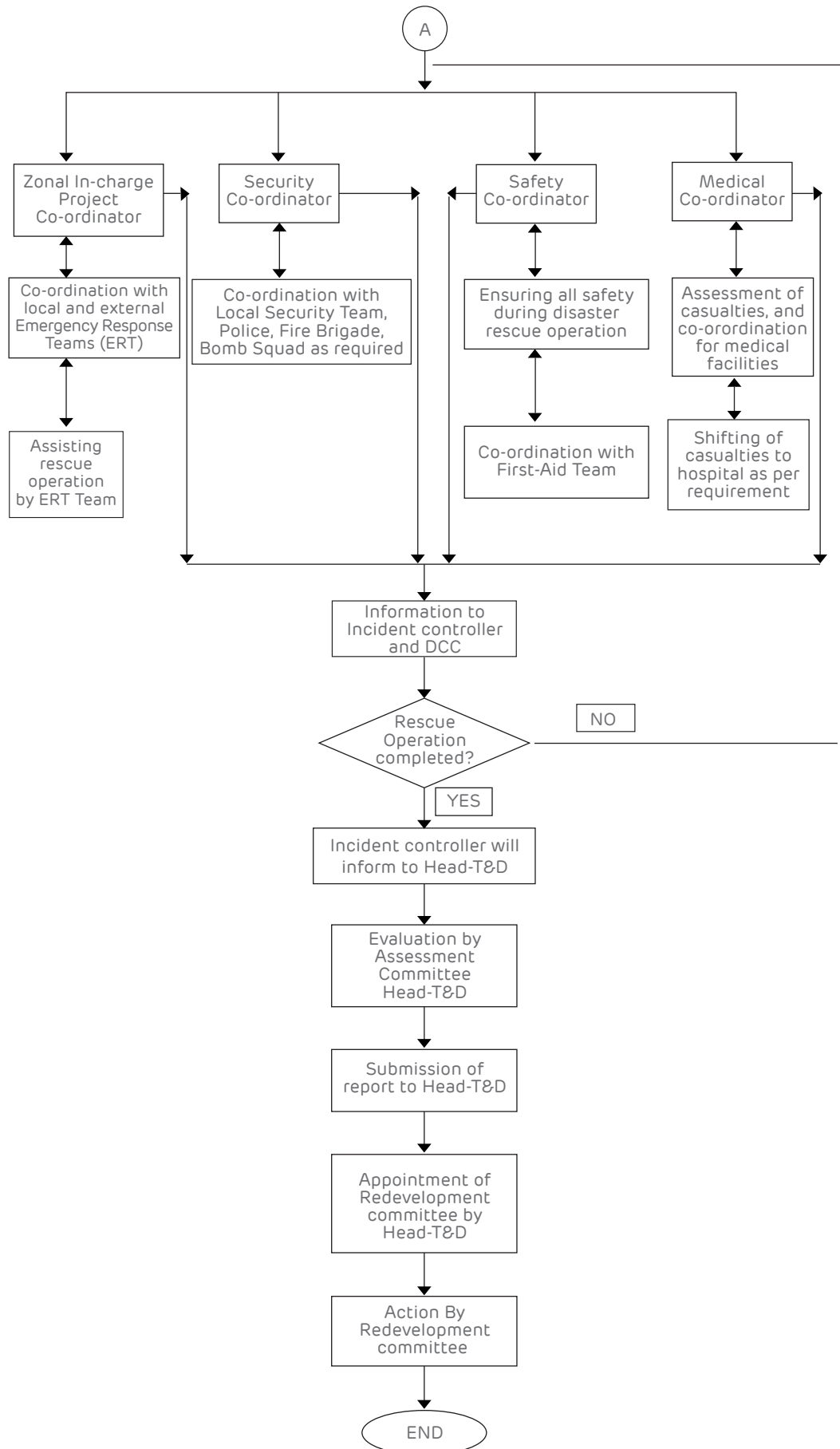
#### 9. List of Additional Equipment at EHV substations

Sr. No.	Resources	ARY Zone	VSV Zone	GBR Zone	TFM
1	De-watering Pumps	8	6	4	–
2	DG Sets	4	3	2	–
3	Fire Extinguishers	405	303	292	–
4	First-Aid Box	4	3	2	3
5	Torches	8	6	4	6
6	Emergency Lights	6	6	4	–
7	Gloves	6	6	4	5
8	Life Jackets	6	6	4	22
9	Fire Suits	10	10	10	–
10	PPEs	As applicable	As applicable	As applicable	As applicable
11	Public Address Systems	4	3	2	–
12	Inflatable Boats	–	–	–	2
13	Lifeboats	1	1	–	–

14	AED Kits	1	1	1	-
15	Wheelchairs	4	3	2	-
16	Stretchers	4	3	2	-
17	Walkie Talkies	1	1	1	1

## 10. FLOWCHART FOR TRANSMISSION DMP







## 11. IMPORTANT CONTACT NUMBERS

### 11.1 The following Key Personnel have been identified for handling disasters at each receiving station

Area / Location	Disaster Control Centre	Backup Disaster Control Centre
Area Covered	All EHV substations in MTB	All EHV substations in MTB
Location	As mentioned in details of EHV substation	As mentioned in details of EHV substation
<b>Person Responsible</b>		
Disaster Control Centre Head	Mr. Sanjay Salunke 9324582596	Mr. Satish Shinde 9322131364
Dy. Disaster Control Centre Head	Mr. Umesh Wagh 9324465425	Mr. Sanjay Satamkar 9321923437
<b>Person Responsible in Absence of the Person Above</b>		
Disaster Control Centre Head	Mr. Sumegh Mangle 9321923482	Mr. Balkrishna Gosavi 9321923438
Dy. Disaster Control Centre Head	Mr. Krishna Shrivastva 7498446859	Mr. Sagar Patil 9372199811

Sr. No.	Department Details	Designation	Name	Contact No.
1	AEML	CEO	Sh. Ramesh Sharma	9099090702
2	Head (T&D)	COO	Sh. Suraj Phalak	9322218741
3	Head (NM)	VP	Sh. Nitin Kate	9323549946
4	Head (Operations)	VP	Sh. Mahesh Andhari	9323549996
5	Head (DSS Maintenance)	Addl. VP	Sh. Vignesh Gawade	9324216596
6	In-Charge (EHV Zone)	GM	Sh. Sanjay Salunke	9324582596
7	In-Charge (T&P)	GM	Sh. Mohan Waingankar	9324216664
8	In-Charge (TFM)	DGM	Sh. Satish Shinde	9322131364
9	Head (Engineering)	Sr. VP	Sh. Mahesh Ambardekar	9323842316
10	Head-Projects (T&D)	Sr. VP	Sh. Unnat Prakash	7705912151
11	In-Charge (Substation projects)	Addl. VP	Sh. Rajesh Vadangekar	9323951396
12	In-Charge (Cable projects)	Astt. VP	Sh. Sandeep Godbole	9323702020
13	Head (ROW & EHV Cable Planning Cable Construction)	GM	Mr. Vikrant Patil	9323802992
14	Head (PMG & FQAP)	Addl. VP	Mr. Susanta Singha	9323549978
15	Head (Planning & Regulatory)	Addl. VP	Sh. Rakesh Raj	9323552940
16	Head-HR (T&D)	VP	Mr. Sanjeev Muramkar	8980802636
17	Head (Security)	VP	Sh. Vinay Khanduri	9099980108

18	In-Charge (Security)	GM	Sh. Saddam Abrar	9321963487
19	Head (Safety)	VP	Sh. Jai Singh	8591315263

### 11.2 For Bomb Threat

Bomb Squad (BDDS)	Mumbai	022 - 22080501 / 22650707
BDDS	Thane	022 - 25392767
Fire	Fire Brigade	101
Police	Police Control	100
Sh. Suraj Phalak	Sr. VP (Head-T&D)	9322218741
Sh. Nitin Kate	VP (Head-NM)	9323549946
Sh. Mahesh Andhari	VP (Head-Operations)	9323549996
Sh. Vignesh Gawade	Addl. VP (Head-Maintenance)	9324216596
Sh. Vinay Khanduri	VP (Security)	9099980108

### 11.3 For Terrorist Attack

Mr. Vinay Khanduri	VP (Security)	9099980108
Fire	Fire Brigade	101
Police	Police Control	100
Mr. Suraj Phalak	Sr. VP (Head-T&D)	9322218741
Mr. Nitin Kate	VP (Head-NM)	9323549946
Mr. Mahesh Andhari	VP (Head-Operations)	9323549996
Mr. Vignesh Gawade	Addl. VP (Head-Maintenance)	9324216596
ATS	Mumbai	022 - 23780944 / 23791619 / 58444697
DCP (Protection)	Mumbai	022 - 22652767 / 22655075



## 11.4 List of Hospitals for Transmission Feeders

### Mumbai Section of Transmission Line

Cluster No.	Location	Area	Hospital Name	Contact No.
1	SS 174 - SS 204 LS 171 - LS 201	Virar	Sanjivani Hospital, Datta Mandir Road, Virar	7378502284 9168505029
2	SS 205 - SS 214 LS 202 - SS 211	Nallasopara	Alliance Hospital Tulinj Rd. Nallasopara (E)	8669611807 8669611811 9011324881
3	SS 215 - SS 228 LS 212 - LS 226	Vasai	Riddhi Hospital Vasant Nagari, Nallasopara Link Rd. Vasai (E)	7666383424
4	SS 229 - SS 264 LS 227 - LS 261	Naigoan	Purushottam Hospital Juchandra, Naigaon (E)	0250 - 6012048
5	SS 265 - SS 297 LS 262 - LS 285	Mira-Bhayander	Bhaktivedanta Shrusti, Mira Road (E)	022 - 29452400 8400146262
6	SS 298 - SS 316			
7	SS 298 - SS 334 LS 313 - LS 332	Malad (W)	Dr. Bet Hospital & Polyclinic, Neptune Building, Mith Chowki, Marve Road, Malad (W)	022 - 28820435 / 28823910
8	SS 335 - SS 338 LS 333 - LS 337 VAB 1 - VAB 11	Versova	Cooper Hospital, Vile Parle (W)	022 - 26207254
9	LS 286 - LS 312 VAB 71 - VAB 77	Borivali (E)	Karuna Hospital, Jeevan Bhima Nagar, Borivali (W)	022 - 28934698 022 - 61594698
10	VAB 54 - VAB 61	Malad (E)	Sanjeevani Hospital, Ishwar Bhavan, Rani Sati Marg, Malad (E)	9892056253 9372641009
11	VAB 62 - VAB 70	Kandivali (E)	Aditi Hospital & Polyclinic, Nirav Building, 90 ft. Road, Kandivali (E)	022 - 28709901
12	VAB 12 - VAB 21	Goregaon (W)	101, ONYX 1 <sup>st</sup> Floor, SV Road, Goregaon (W)	022 - 26794797
13	VAB 22 - VAB 31 VAB 39 - VAB 53	Goregaon (E)	Dr. Kamat's Hospital, B-3/4, Ground Floor, Satellite Classic, Caves Road, Jogeshwari (E)	022 - 28265677
14	VAB 31 - VAB 38	Aarey	Vidya Hospital Kanya Pada, Film City, Shop #21, Goregaon Road, Goregaon (E)	022 - 28492201



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## Dahanu Section of Transmission Line

Cluster No.	Location	Area	Hospital Name	Contact No.
1	LS 2 - LS 51 SS 1 - SS 55	Dahanu	Dr. R. Wadekar Wadekar Hospital, Above Chandrika Hotel, Dahanu Station Road, Dahanu	025 - 28222067 025 - 28222957
2	LS 52 - LS 92 SS 55 - SS 94 BTL 1 - BTL 27	Boisar	Dr. Jaiprakash Tarapur General Hospital, A unit of TIMA Hospital, P-126, Khaira Phatak, Saravali, Boisar, Dist. Thane - 401501	9260709968 025 - 25278444
3	LS 92X - LS 170 SS 94X - SS 173	Palghar	Rural Homoeopathic Hospital, Palghar - Boisar Road, Opp. S.T. Workshop, Palghar - 401404	025 - 25256932 / 33

## 11.5 Police Stations

### Aarey / Versova EHV Zones

Sr. No.	Station	Exchange No.	Exchange No.	Tel. No.	Sr. PI No.	Name of Sr. PI / PI
1	Andheri	26831365	26831447	26831562	28367767	Santaji Ghorpade
2	D.N. Nagar	26304002		26303893	26304001	Milind Kurde
3	Jogeshwari – East	28221672	28210763	28367548	28367767	Balasaheb Tambe
4	Meghwadi	28210860	28221651	28210860	28210837	Sanjiv Pimple
5	MIDC	28368352		28368352	28394205	Satish Gaikwad
6	Oshiwara	26422042	26323862	26323861	26322753	Manohar Dhanwade
7	Sahar	26829784	26817485	26829783	26829783	Sanjay Govilkar
8	Versova	26365420	26304812	26304812	26304812	Siraj Inamdaar
9	Aarey Colony	29272485	29272484	29272484	29272484	Shekhar Dombé
10	Chembur	25232044	25221613	25227563	25221613	Jaykumar Suryawanshi
11	Deonar	25544292	25563381	25568682	25563381	Ravindra Adane
12	Trombay	25563382		25563382		Rehana Sheikh



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**adani**  
Electricity

### Ghodbunder EHV Zone

Sr. No.	Address	Names of Sr. Officers	Contact No. (Police Stn.)
1	<b>Mira Road Police Station</b> Kanakiya (Beverly) Park, Bhayander (E), Dist. Thane		022 - 28126767
2	<b>Kashimira Police Station</b> Jn. Off. Western Exp. Highway & Mira-Bhayander Road, Kashimira, Dist. Thane	Sr. PI - Sanjay Hazare PSI Shaikh	9890597999 022 - 28457301 8657936948
3	<b>Bhayander (W) Police Station</b> Station Road, Bhayander (W), Dist. Thane	Sr. PI - Mukutrao Patil	9767506633 8657936951 022 - 2819257
4	<b>Charkop Police Station</b> Reserve Land (Svy. #152/3/4) Sector 2 Charkop, Kandivali (W), Mumbai - 67, Zone 11	Sr. PI - Manohar Shinde	7710806572 022 - 28676581
5	<b>MHB Police Station</b> Yogi Nagar, Police Officers Quarters, Borivali (W), Mumbai - 92, Zone 12	Sr. PI - Sudhir Kudulkar	9975575986 022 - 28677401 022 - 28677402
6	<b>Kasturba Marg Police Station</b> Jn. Off Main Kasturba Road & Cross Road #1, Borivali (E), Mumbai - 66, Zone 12	Sr. PI - Anil Avhad	9870018699 022 - 28066158
7	<b>Dahisar Police Station</b> Near Rajshri Jn. SV Road, Dahisar (E), Mumbai - 68, Zone 12	Sr. PI - Pravin Patil	9821238656 022 - 28971654

### National Disaster Management

Sr. No.	Address	Contact No.	Fax No.
1	Ministry of Home Affairs National Disaster Management Division, Lok Nayak Bhawan, New Delhi MHA Control Room	011 - 23092923 011 - 23093054 011 - 23092885 011 - 23093897	011 - 23093750 011 - 23092763
2	Meteorological Department Maharashtra Flood, Drought, Tsunami Control Room	18001801717 022 - 22027990	022 - 22026712
3	SLDC (Kalwa)	022 - 27601765 022 - 27601766	022 - 27601769
4	MCC Transmission	9320290123	



## 11.6 EHV Substation-wise Hospitals and Fire Services Contact Numbers

### Aarey EHV Zone

Sr. No.	Hospital Name	Contact No.
1	Sanjivan Hospital, Andheri	022 - 26833939
2	Seven Hills Hospital, Andheri	022 - 67676767 / 67676766
3	Nanavati Hospital	022 - 26267500 / 26267777
4	JJ Hospital	022 - 23735555
5	Sion Hospital	022 - 24076381 / 24063000
6	Day & Night Ambulance Service	102 / 022 - 28732823
7	Fire Brigade, Marol	101 / 022 - 28210940 / 41
8	Holy Spirit Hospital, Mahakali Road, Andheri (E)	022 - 28248500 / 1 / 2 / 3 022 - 42478888 / 28248505
9	Gurunanak Hospital & Research Centre, BKC	022 - 42227777

### Versova EHV Zone

Sr. No.	Hospital Name	Contact No.
1	BBSSES MG Hospitals	022 - 66487500
2	Kokilaben Dhirubhai Ambani Hospital	022 - 30919191
3	Ambulance service	102 / 022 - 26243675
4	Ambulance service	9821531252
5	Fire Brigade, Andheri	101 / 022 - 26205301

### Ghodbunder EHV Zone

Sr. No.	Hospital Name	Contact No.
1	Bagwati Hospital, Borivali (W)	022 - 28932461 / 62
2	BMC Hospital, Kandivali (W)	022 - 28647003
3	Karuna Hospital, Borivali (W)	022 - 61594698 / 28953009
4	BhaktiVedanta Hospital, Mira Road	022 - 29452435 / 61882435
5	St Anns, Mira Road	022 - 28458663 / 8291531912
6	Ambulance service – BhaktiVedanta	8879936253
7	Ambulance, Mira-Bhayander	9870035135 / 9820332108
8	Fire Brigade, Silver Park	022 - 28553661
	Fire Brigade, Dahisar (E)	022 - 28977702
	Fire Brigade, Borivali (W)	022 - 28602847



The power of service

## Other Contact Numbers

Designation	Contact No.
Head, Mumbai Meteorology Department	022 - 22150517
Marine Engineering and Research Institute, Mumbai	022 - 23723577 / 23725987
Bhabha Atomic, Research Centre, Trombay	022 - 25505050 / 25592000

## NGOs at State Level

Designation	Contact No.
Indian Red Cross	022 - 23096979
Divya Joyti Jagrati	011 - 27020666 / 27024555
Ratna Nidhi Charitable Trust	022 - 61506435 / 23898930

Sr. No.	DM Group member		Name	Contact No.
1	Head-T&D		Sh. Suraj Phalak	9322218741
2	Head-NM		Sh. Nitin Kate	9323549946
3	Head-EHV & DSS Maintenance		Sh. Vighnesh Gawade	9324216596
4	Incident Controller	Head (Operations)	Sh. Mahesh Andhari	9323549996
		Head (Project Construction)	Sh. Unnat Prakash	7705912151
5	HR - Head (T&D)		Sh. Sanjeev Muramkar	8980802636
6	Zone In-charge	All EHV Zones	Sh. Sachin Suryawanshi	9323701986
	Project Co-ordinator	All sites	Sh. Rajesh Vadangekar	9323951396
	In-charge (TFM)		Sh. Satish Shinde	9322131364
	In-charge (Cable Project)		Sh. Sandeep Godbole	9323702020
7	Head (Safety)		Sh. Tukaram Rane	9321044290
8	Medical Co-ordinator		Dr. Naresh Jhamnani	9324232140
9	Security Co-ordinator		Mr. Vinay Khanduri	9099980108



# ADANI ELECTRICITY MUMBAI DISTRIBUTION

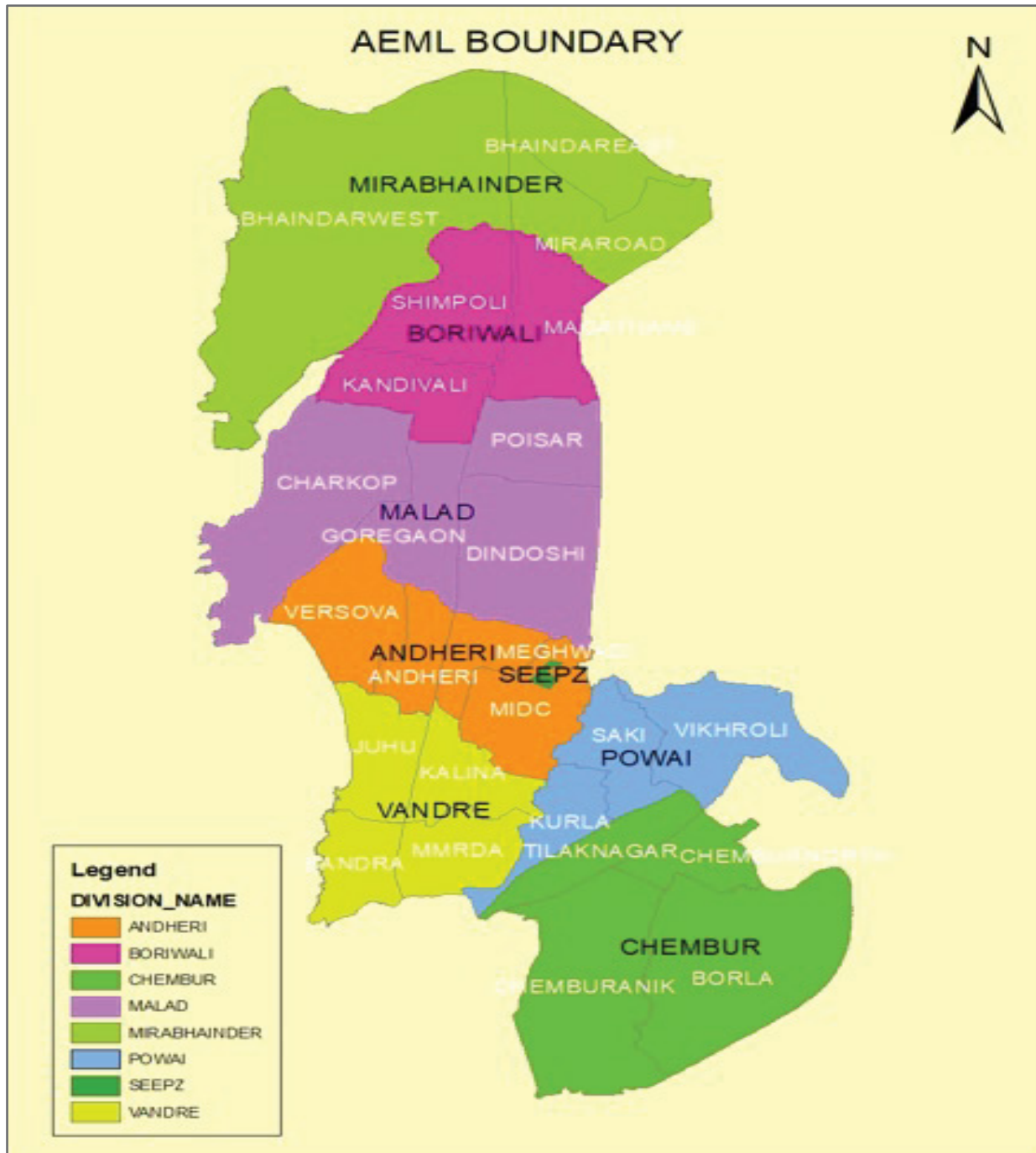
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## 12. ADANI ELECTRICITY MUMBAI DISTRIBUTION AT A GLANCE

Adani Electricity distribution network is spread over 400 sq.kms. of suburban Mumbai. From Bandra to Bhayander on the western side, and Sion to Mankhurd on the eastern side catering to over 3 million customers. The geographical map is given below:



Map Showing Operational Area of Adani Electricity

As an organisation, Adani Electricity believes in 'The Power of Service'. It is born with the will to 'make a difference'. Adani Electricity changes things for the better, and powers the dreams of their consumers.

From an operational point of view, Adani Electricity's supply area is divided into 7 divisions

Division	Area
Vandre	Bandra, Khar, Santacruz, Vile Parle
Andheri	Andheri, MIDC, Marol, SEEPZ and Jogeshwari
Malad	Goregaon, Dindoshi, Poisar and Kandivali
Borivali	Kandivali, Shimpoli and Borivali
Mira-Bhayander	Mira Road, Bhayander East, Bhayander West, Uttan
Powai	Kurla West, Saki and Vikhroli
Chembur	Chunabhatti, Chembur and Tilak Nagar, Govandi, Mankhurd

Adani Electricity strives to provide quality power to its consumers. It has adopted several new technologies like the state-of-the-art SCADA (Supervisory Control and Data Acquisition) system as its backbone. It has adopted high-tech by installing Secondary SCADA, GIS (Geographical Information System), OMS (Outage Management System), WMS (Work Management System), etc. to ensure uninterrupted power supply to its 3.2 million consumers.

At the System Control Centre, Adani Electricity monitors and controls the entire distribution network which operates as an open ring system. The distribution network has NOPs (Normally Open Points) from where the supply to other parts of the network can be restored in case of any abnormality. With the kind of topology of 11 kV network, Adani Electricity successfully maintains the reliability and quality of power supplied to its consumers.

Adani Electricity has state-of-the-art Network Operation Centre (ANOC). ADMS System is implemented here, which not only monitors and controls 33 / 22 / 11 kV Distribution Substations (DSS) and 11 / 0.433 kV Consumer Substations (CSS) but also analyses the data and does complex network calculations to give network status where no remote monitoring is performed. It closely monitors the distribution system and its behaviour. The operation team takes prompt actions to reduce the downtime. It has 100% automation for 33-22 / 11 kV Distribution Substations and 66% automation for 11 / 0.433 kV Consumer Substations aiming for 100% in the future.

## 13. ADANI ELECTRICITY – DISTRIBUTION DISASTER PREPAREDNESS

Adani Electricity management has drawn up an elaborate Disaster Management Plan to minimise the damage and disruption of power supply during any probable natural disasters and establish a well-defined response, recovery, and restoration plan with its associated infrastructure.

The following steps are taken by Adani Electricity Mumbai Ltd. as part of the Disaster Management Plan:

### 13.1 Creation of Dedicated Disaster Management Teams

Disaster Management Teams, of senior and experienced personnel drawn from various functions, have been formed at Central Control Centre levels as well as at 7 Divisional levels. Regular review meetings are held to assess the level of preparedness with respect to material, manpower, and transport.



Apart from the Apex DM Team stationed at Central Disaster Control Centre (CDCC) at Adani Electricity Management Centre, Unit No. 19, Goregaon (E), 7 Divisional DM teams function from Divisional Disaster Control Centres (DDCCs) located at respective Divisional Offices across Mumbai's suburban areas. These Disaster Control Centres are equipped with communication gadgets, including wireless communication equipment like Radio Frequency Walkie-Talkie Sets, Hotlines, etc. Apart from these, mobile phones are provided to each executive, for continuance of communication if normal communication systems fail. Hotline connectivity is available between the System Control Centre's Complaint Management Cell (CMC) and MCGM's Primary Disaster Control Room at their headquarters opposite Mumbai CSMT, and backup Control Room at Parel. A BSNL Satellite Phone has been purchased and installed at the Network Operation Control Centre.

### **13.2 Disaster Management Manual**

A comprehensive Disaster Management Manual specific to the business has been prepared for reference and guidance to all employees connected with the Mumbai business. This updated reference manual covers information of the DM Cell, round-the-clock accountability of available quick response teams, response trigger mechanisms, and resource management at pre-defined locations. The updated manual is available on the company's intranet portal and all employees can access and view the same.

### **13.3 Training of Teams**

The organisation has identified 32 teams for quick response during and effective post-disaster recovery. These teams comprise trained and experienced personnel who understand electrical systems, and are available on-call 24x7.

### **13.4 Pre-disaster Preparedness**

Each team's role has been defined, and necessary briefing / training is conducted as and when needed, including mock drills.

The disaster trigger mechanism is defined, and the methodology of alerting and activating all teams within the shortest possible time has been worked out.

### **Safe Loading of Lines, Equipment, and Network Redundancy**

Installed capacities of Power Transformers (PT) are 1.5 times the Peak Load Demand, and capacities of Distribution Transformers (DT) are 2 times the Peak Load Demand. All DT CSS are provided with energy audit metering, and as a continuous planning process, upgraded as and when new loads are added.

All substations are interconnected by Ring Main Unit (RMU) type switchgear to ensure redundancy of supply in case of any fault in the network with minimal interruptions.

### **13.5 Infrastructure**

#### **a) Additional Spares and CAPEX Materials**

- i. Essential spare parts, tools and other equipment are specifically reserved to tackle problems in the event of a catastrophic disaster and are stocked at 10 locations spread over the area of supply. These materials are at the disposal of the divisional teams. Each of these store locations has 70 different types of identified equipment, including major CAPEX equipment like Distribution Transformers, HT / LT Switchgear, HT / LT Cables, Accessories, etc. and other electrical utility spares.



- ii. Stocking of 9 Distribution Transformers, more than 300 kms. of cables, 12 LT Pillars, 25 Mini Pillars.
- iii. Adequate LT / HT jointing kits and LT / HT HRC fuses are kept as reserve stocks.
- iv. 20 dewatering pumps of 3 HP for pumping out flood water are kept at strategic locations.
- v. One 500 kVA DG set is kept available at Adani Electricity Management, Disaster Control Room, Unit No. 19, Goregaon (E).

#### **b) Transportation Emergency and Other Resources**

- i. Adequate number of trucks, pickups / delivery and testing vans equipped with emergency repair kits, tools and safety gear & PPE are made available during the monsoon period. These have been placed at all Divisional offices and Depots.
- ii. In addition to the above, DG sets of various capacities are hired on 'As and When' basis and kept on 24x7 standby.
- iii. A satellite phone has been installed at the Network Operation Control room for business continuity, should all communication modes fail.

#### **c) Medical Support, Additional Crews, Security Guards, and Communication Support**

- i. Medical teams can provide first-aid training as well as spread awareness about monsoon-related diseases to employees, including contract labour. Necessary medicines are also distributed to all field level employees and contract labour to handover as and when required.
- ii. Identified teams have been given training for administering first-aid.
- iii. Additional skilled employees from other functions are also absorbed in DM, based on their necessity and availability.
- iv. 31 Radio Frequency Walkie-Talkie (Handsets and Base Sets) are made available at all Divisions as well as Control Centres.

### **13.6 Fire Safety Management System at AEML-D**

**Firefighting: The areas covered for firefighting are as below:**

- 33 kV / 11 kV Distribution Substations (DSS)
- 11 kV / 0.440 kV Consumer Substations (CSS)
- AEML-D Office Building

**The following fire protection sub-systems are installed for firefighting:**

- Portable fire extinguishers
- Trolley-type fire extinguishers
- Emulsifier system based on water sprinklers for protection of power transformer
- Nitrogen-based fire extinguishing system for protection of power transformer

Firefighting method is quickly decided by Area in-charge / Distribution Substation in-charge and action to extinguish the fire is initiated. Concerned Area in-charge is responsible for equipment isolation, if any, and to control fire with the help of firefighting equipment and to inform the Fire brigade office.

Inspection, testing, and refilling of fire extinguishers are done in co-ordination with the Safety Department. The health of the firefighting system is checked periodically.

Mock fire drills are conducted regularly for creating awareness among employees of the organisation at all working locations.

Regular awareness sessions are conducted in slums and residential parts to educate and safeguard our consumers.



Safe Raho, Khush Raho - Safety Awareness Program for Consumers!

### 13.7 Cyber Security: Business Continuity / Disaster Recovery Plan for IT

#### a) Server Load Balancing and Redundancy

- i. All servers are configured in load balancing and redundant mode within the Data Centre (DC).
- ii. Hard disks of the main server system are configured in a disk array to ensure there is redundancy built-in for failure of single hard disks.
- iii. The server system stores the data on different server machines i.e., primary and secondary, which caters to in-built redundancy for the data (Fail-over / HA mode).
- iv. The secondary server where data is stored is activated in case the primary server fails.
- v. IT Network devices are configured in HA mode.
- vi. IT Network links are configured in HA mode.
- vii. IT Network links are taken from different service providers.

#### b) Backups and Restoration

- i. Backup of all critical servers is taken in accordance with the backup frequency and type of backups identified by respective stakeholders.
- ii. Backup restoration and testing activity is carried out on periodic basis.
- iii. All administrators will check on the successful completion of a backup that the data can be read properly. This shall be ascertained to the extent possible using the testing features of the backup solution.

### 13.8 Central and Divisional Control Centres

As per the Disaster Management Act, 2005, Central Disaster Control Centres (CDCC) are equipped with necessary communication facilities such as dedicated teams to man these centres on a 24x7 basis, especially during the monsoon months from June 1 to September 30. In addition, 7 Divisional Disaster Control Centres (DDCCs) are set up with similar arrangements. These arrangements will continue to operate if the monsoon period extends beyond September.

The contact details of the control centre are appended vide **Annexure – 1**

### 13.9 Distribution / Consumer Substations in Low-lying Areas

Distribution / Consumer Substations in low-lying areas have been identified and a disaster recovery plan for their speedy restoration is in place. Adequate resources have been reserved to meet any contingencies in case of disruption of supply to these substations in low-lying areas.

### 13.10 Pre-Monsoon Maintenance Checks

All network and equipment are subjected to additional physical verifications. Preventive maintenance audits are carried out prior to monsoons to ensure prevention of moisture ingress in any form. This includes cleaning, drying, and sealing of busbars and switchgear, water seepage checks at substation ceilings, Distribution Substations (DSS), etc. All accessories in outdoor-type HT installations and cable terminations, etc; in pole-mounted type Consumer Substation are cleaned and sealed to prevent moisture ingress.

### 13.11 Identified Essential Consumers

The supply network is an Open Ring System, i.e., every Consumer Substation is fed by a duplicate source of supply, thereby providing enough redundancy in HV / LV network to minimise interruption of supply by providing power through alternate source of supply. Also, our Operation Squad personnel are available round-the-clock at strategic locations for faster restoration of supply in case of emergency. In case of a major failure due to man-made or natural disaster, the priority will be to safeguard the distribution system and prevent shock, fire, and loss of human life.

We have identified essential consumers including:

Airport	Public Transportation Mass Transit
Metro	Public Transportation Mass Transit
MCGM Installations	All Hydraulic and Sewage Pumping Stations
Hospitals	All Government, MCGM and Large Private
Defence Establishments	Military and Civil Establishments
Government Installations	Radio Stations, MTNL Exchanges
Mobile Towers	All Mobiles / Telephone exchanges

### 13.12 Supply-Side Disaster Management Process

#### a) Risk / Threat / Potential Event

- i. Non-availability of generation / transmission network.
- ii. Man-made Disaster or Natural Disaster in the local area of generation.

#### b) Probability: Low

#### c) Action Plan to Match Demand and Supply

- i. Dedicated control desks monitor the demand and supply positions on a continual basis.
- ii. Any tripping or failure of generation / transmission lines will be reported by Generator / MSLDC / through mail / phone.
- iii. Primarily, as per existing Balancing and Settlement Code, AEML / Power Procurement is responsible for AEML network demand and supply matching.
- iv. AEML / Power Procurement will arrange power as per MOD, irrespective of the contract.
- v. In case of technical constraints or emergencies, demand and supply are matched irrespective of contracts, and post-facto settlement between utilities takes place.
- vi. All actions are taken as per 'Scheduling and Dispatch Code / DSM' as approved by the Hon. MERC.

#### d) Risk / Threat / Potential Event

All emergency-related transmission systems have been addressed by the transmission division along with response and recovery plans. All documents pertaining to transmission emergencies and Disaster Management are available on the intranet.

## 14. COMMUNICATION

Communication before, during, and after a disaster dictates the success of prevention and relief efforts. It is one of the most important aspects of any Disaster Management Plan.

### 14.1 External Communication – Media, Public Information

AEML has a corporate communication team for communicating with external stakeholders like the media. Information is passed to customers via 24x7 helpline: 19122 (Toll-Free), SMS, and Social Media.

### 14.2 Internal Communication Plan

Internal communication flow among the organisation's staff plays a key role in mitigating disaster. For effective communication, all employees (including site staff) have been provided with mobile phones. Wireless handsets are given to field crews for faster communication during emergencies. A directory with contact numbers is made available on the intranet which is accessible at the control centre, 24x7. Two satellite phones have been installed for emergency communication.



## 15. POWER HELPLINE FOR CONSUMER CONNECT

### 24x7 Helpline: 19122 (Toll-Free)

This seamless Interactive Voice Response (IVR) service has been established to handle all customer complaints, queries, and other information needs. The Call Centre has been staffed with multilingual, professionally trained agents who offer services in English, Hindi, Marathi, and Gujarati. In the likelihood of a situation leading to a disaster, there is an option for shifting / taking additional provisions at our Call Centres.

Apart from 19122 (Toll-Free) customers can lodge their 'No Supply Complaint' at zonal offices.

During the monsoon period, customers can also call the 24x7 Central Disaster Control Room on 50549111 / 50547225 between June to September, in case of emergencies like fire and shock.

Virtual Contact Centre (VCC) - Consumers can also lodge complaints from Adani Electricity website via their Customer Account number or interact face-to-face with our customer agents.

**Missed Call:** Consumers can give a missed call to 9594519122 from their registered mobile number to register their complaint or know the status of power restoration.

**SMS:** They can send 'Power' <9-digit account no.> to 7065313030, e.g. If your account no. is XXXXXXXXX, then send Power XXXXXXXXX, to 7065313030.

**WhatsApp:** They can also send 'No Supply Complaint' message on Whatsapp Business Account: 9594519122 on 24x7 basis.

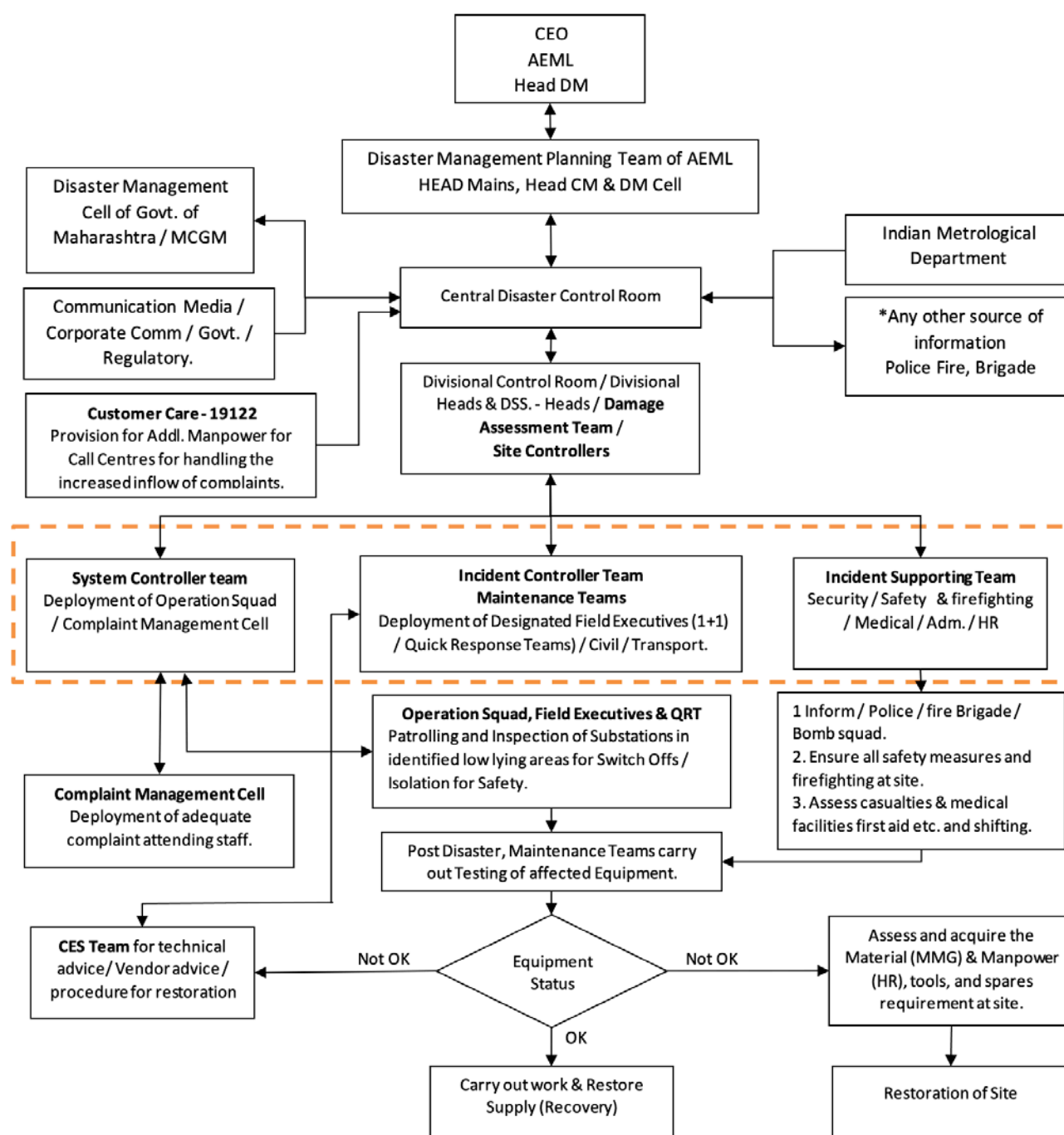
## 16. COMPLAINT HANDLING CENTRES

Apart from 19122 (Toll-Free), customers can lodge their 'No Supply Complaint' at the following Complaint Handling Centre serving their area.

Sr. No.	Control Centre	Location Address	Contact No.	Alternate No.
1	AEML	Adani Electricity Management, Disaster Control Room, Unit No.19, Goregaon (E), Mumbai - 400065	022 - 50547165	9324216667

## 17. DISASTER: RESPONSE, RECOVERY, AND RESTORATION

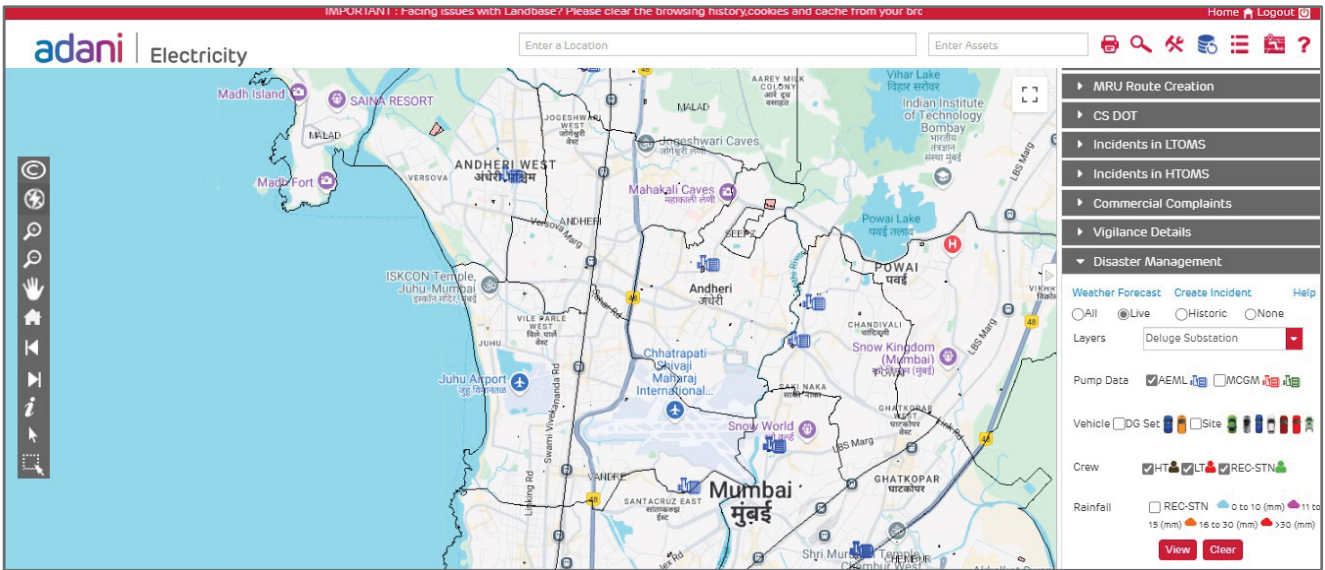
The Disaster Response, Recovery, and Restoration processes ensure Adani Electricity manages power supply efficiently during and after any disaster event. It follows a well-defined procedure that is activated immediately when a disaster occurs, and continues through to the full recovery of services. Refer to the flowchart below for a step-by-step representation of the Disaster Management Process from response to restoration.



1. Accurate information collection and assessment – Once a disaster has occurred, the manager needs reliable data based on which priorities can be decided, and guidance can be provided.
2. Balanced response – Each type of disaster will require a different set of responses.
3. Notification - The first reaction to an interruption on account of disaster would be to inform all the relevant people (alternatively referred as teams) about the interruption.

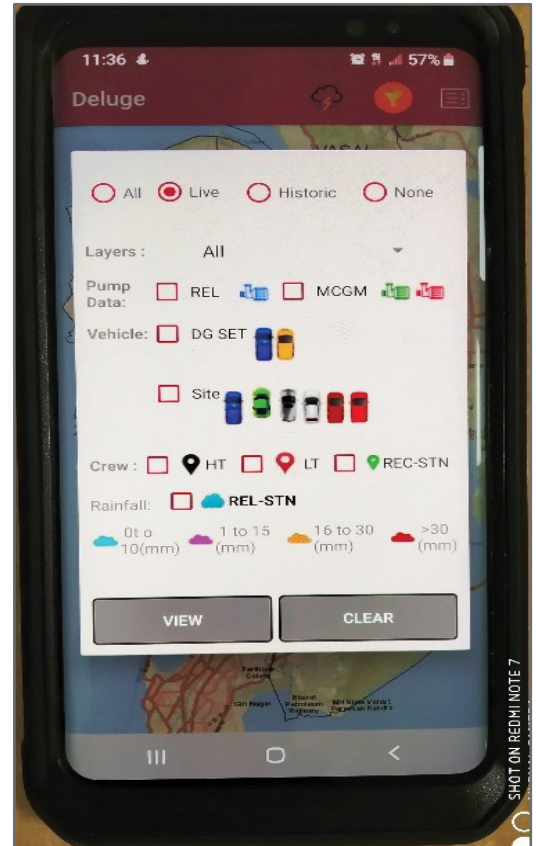
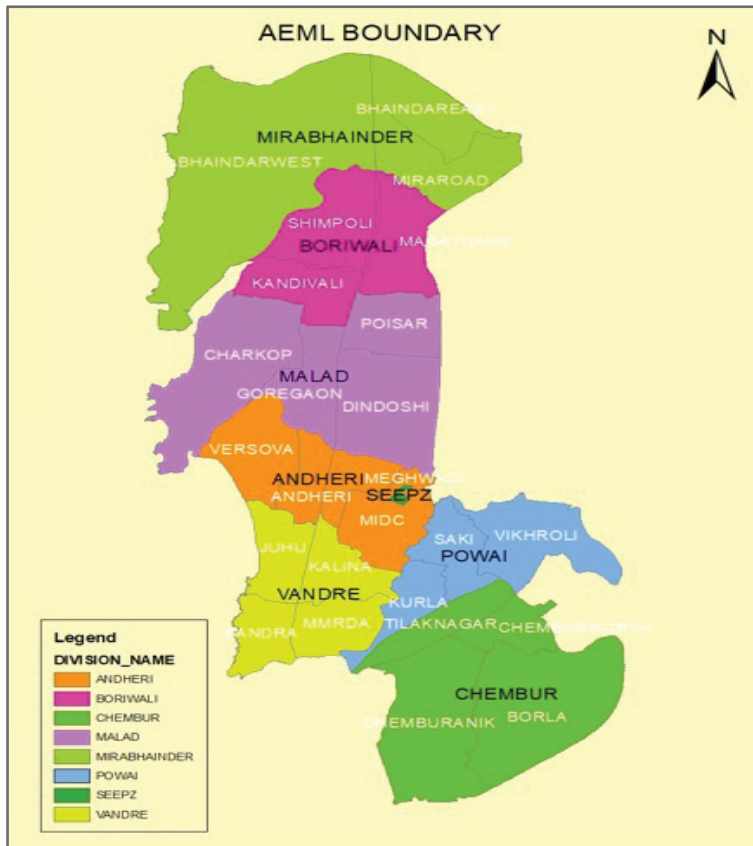
## I. Technology & Tools Used

### Disaster Management Portal



Adani Electricity has a Disaster Management portal on its GIS platform accessible to all employees. This portal aims to minimise, or have zero consumers affected during a deluge situation. Information related to the deluge can be accessed on this single platform. It interlinks and correlates the data captured from other systems and derives actionable points in restoring supply in an optimal way.

## II. Disaster Management Portal Mobile App



A mobile app gives the field staff access to and shares live information from the site. Actions taken on the site during the disaster like Division / Zone-wise assets affected due to water-logging, water level, reason for switching 'OFF', actions taken to recover affected assets, expected restoration time and intimation to 'Pump Operator', can be fed in. This App is also useful for identification and allocation of de-watering pumps, mapping water-logged areas on GIS, allocation and communication of the affected assets to the asset owner.

## 18. ROLES AND RESPONSIBILITIES OF THE DISASTER MANAGEMENT CELL (DMC) AND TEAM

- **Head-T&D** (Mumbai-Distribution) shall be the Chairperson of the Disaster Management Cell.
- **Head-Mains, Head-CM and Head-DM Cell** shall be in-charge of the Disaster Management Cells and will be the main co-ordinating authorities in case of a disaster. They are the Disaster Management Planning Team of AEML. They will co-ordinate with the management to authorise emergency responses and further actions. They will deal with the shareholders, press, public, customers, and other stakeholders.

The DM Cell is responsible for implementing the Disaster Management Plan and acts as the co-ordinating, controlling, and monitoring body.

**The DM Planning Team shall:**

- a. Examine the vulnerability of different parts within the organisation for different forms of disasters (natural / man-made) and specify measures to be taken for their prevention or mitigation.
- b. Lay down, review, and update guidelines for preparation of Divisional / Centralised Department Disaster Management Plans.
- c. Monitor the implementation of the guidelines laid down for integrating measures for prevention of disasters and mitigation by the departments.
- d. Evaluate preparedness at all functional levels to respond to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness.
- e. Co-ordinate Response / Rescue teams in the event of any threatening disaster situation.
- f. Provide information to the concerned Government Authorities relating to different aspects of Disaster Management.

**Central Disaster Control Room**

Apart from our Master Control Centre (MCC) that functions 24x7, 365 days catering to supply-related incidents, a separate 24x7 Central Disaster Control Room (CDCR) is set up and activated during the monsoon months from June to September, as laid down in the Disaster Management Act, 2005.

Office of the Additional Municipal Commissioner, MCGM is the District Disaster Management Authority as stipulated under the Disaster Management Act, 2005, who activates the CDCR from June 1 and deactivates it as per the vagaries of the monsoon.

MCGM co-ordinates with AEML on their two hotlines for all disaster-related matters concerning electric supply.

AEML is one of the emergency support functions to BEST, the lead agency.

CDCR maintains two-way co-ordination with internal stakeholders as Head-Mains, Head-CM and DM Cell, Divisional Control Rooms, System Controller Team, Divisional Maintenance Heads, Incident Controller Team, Maintenance Team, and the Incident Support Teams.

External Stakeholders with whom CDCR maintains two-way co-ordination are Disaster Management Cell of the Government of Maharashtra (GoM), MCGM, Communication Media - GoM, Regulatory, and the Indian Meteorological Department.

**Divisional Heads, Damage Assessment Team, and Site Controller**

They assess the damage caused by the disaster and rate the severity of the interruption. They identify the need of refurbishment or replacement of the equipment.

**In addition, they:**

- Maintain the prior agreed inventory of emergency equipment in the Emergency Control Centre
- Keep shift schedules for all areas readily available
- Direct all actions taken on the actual on-site condition
- Provide update of the on-site Disaster Management Plan to COO
- Direct the Operational and Technical teams at the work spot for execution



- Review the proposals made by the Technical / Maintenance teams
- Help define and prioritise the actions and resources to reduce immediate risks
- Identify the priorities of actions required
- Estimate the additional support required for immediate resumption / recovery
- Request for help from authorities like MCGM, MBMC, Fire brigade, Ambulance, Police, NGOs, etc.  
List of co-ordinating authorities are attached in **Annexure 2 A, B, C.**

### **Incident Controller Team**

This team comprises the functional heads who deploy Quick Response and Maintenance teams for recovery or stopping further damage as the case may be.

They identify and train field executives for deployment in 1+1 formation (for redundancy). They rush to disaster affected substations to switch-off / isolate the electrical circuit.

In addition, Quick Response and Maintenance teams are formed to carry out restoration and normalise the system.

They also co-ordinate with MMG, HR, and CES for the requisite material, man-power, and technical support required to restore supply with minimum downtime.

### **Maintenance Team (DSS, HT&LT)**

The respective teams visit the site, and assess the losses due to the disaster. They make proposals for replacement of equipment, etc; and serve as the key decision-makers for further activities of the recovery of the site.

- Execute preventive maintenance schemes planned by CES and System Controller
- Co-ordinate with CES Team for technical specifications of the equipment and procedures for execution of the schemes
- Budgetary team makes budgetary provisions for necessary MERC approvals for the execution of the schemes in **Annexure B1, B2, B3.**

### **Operations and System Controller Teams**

They act as first responders to a disaster event to recover or to stop further damage with appropriate operations on network components.

- Discuss with the Divisional / HT Heads the loading of the 11 kV feeders. Identify critical feeder for essential consumers
- Approve the outages-plan operations and issue work permits
- Ensure section outage and restore supply for balanced section (**Annexure C**)

CES would serve as the key decision-maker for budgetary provision, planning and execution of schemes to eliminate / minimise the impact of disaster event in future.

### **Quick Response Team**

- Skilled fitters and jointers working under experienced engineers, they are well-equipped with tools and instruments
- Visit the incident site, isolate the faulty section / equipment and arrange for supply restoration in co-ordination with System Controller and LT teams
- Isolate the fault and charge the network after adequate testing of equipment





### Powai Division Quick Response Team

Location	Saki Naka Office	Kurla Bailbazar	Vikhroli	Tagore Nagar
Team Leader	Mr. Nilesh Lohar - 9321340497	Mr. Sanjay Khatal - 9323791967	Mr. Rajesh Bawaskar - 9323470363	Mr. Rajesh Bawaskar - 9323470363
Executive	Mr. Mangesh Shelar - 9322655329	Mr. Sachin Redij - 9323470344	Mr. Bharat Maskar - 9323470363	Mr. Sandip Shinde - 9323470361
JE / Supervisor	Mr. Shivakumar Pandey - 7208084681	Mr. Kishan Namdas - 8169564099 Mr. Rajendra Wagh - 9323702094	Mr. Manish Patel - 7208970630	Mr. Ravindra Raul - 9323701963
Jointer	Krishtya Potugulla - 9323569572	Mr. Suresh Rajbhar - 9082021102	Mr. Naresh Dasri - 9702812069	Mr. Naresh Dasri - 9702812069
Linesmen	Mr. Narsimha Boya - 7498508091	Mr. Girish Patil - 9320137750 Rama Swami Edda - 7498508087	Mr. Ashok Bhalerao - 7498998152	Mr. Ashok Bhalerao - 7498998152
Fitter	Mr. Chandrakant Jadhav - 9833598993	Mr. Chandrakant Jadhav - 9833598993	Mr. Bhagwan Paste - 8691906669	Mr. Bhagwan Paste - 8691906669
Vehicle No.	MH47AS1205 / MH47AS1084	MH47AS1026 / MH47AS0981	MH47AS1195	MH47AS1088
CL	NN-4 Nos.	SBT-4 Nos.	DRR-4 Nos.	KRR-4 Nos.

### Incident Supporting Team

This team comprises all executives from Security, Safety & Firefighting, Medical, HR, Admin, Civil, and Transport teams. Their role is to support the Core Team to bring the system back to normal. They ensure a safe working environment to enable other teams to start their operations at the earliest.

#### Main Roles and Responsibilities:

- Evacuate the affected area and ensure head-count at Safe Assembly Area/s
- Undertake firefighting operations
- Undertake search & rescue operations as per need
- Render first-aid and admit casualties to the hospital as advised by the team's Medical Officer
- Arrange for the welfare of people assembled at the Safe Assembly Area/s and shift them to shelter/s, if necessary

#### Roles and Responsibilities

##### a) Safety and Firefighting Team

- Arrange for extra Personal Protective Equipment (PPE) such as (helmet, mask, safety shoes, gloves, etc.)
- Collect and preserve evidence-related to accidents / disaster
- Guide authorities on all safety-related issues
- Any other responsibilities as decided by Executive Site Controller looking into the circumstances at the time of disaster
- Formulate the procedure and process of fire-management in the AEML Premises (Office Buildings and Distribution Substations Building)
- Prepare matrix and co-ordinate with teams as part of OHSAS
- Conduct and record fire safety mock drills twice a year at AEML-D

- Arrange firefighting training in co-ordination with Security and Administration on a periodic basis
- Monitor list of all fire extinguishers and update their refilling
- Ensure availability of competent first aiders

#### **b) Security Officer**

- Ensure all installations are guarded against trespassing / entry of unauthorised personnel
- Arrange screening of visitors / outsiders
- Ensure restrictions on the involvement of outsiders
- Protect restricted vital premises
- Verify issued gate passes / visible identity badges
- Traffic and crowd control
- Provide additional security and home guards to the staff and executives attending the disaster site
- Co-ordinate with Fire brigade, Police Officials, ATS, Bomb Disposal Squad as and when required

#### **c) Medical Executive Team**

- Direct all medical activities through its team of doctors
- Provide first-aid and other medical facilities at the earliest
- Liaison with nearest hospitals / dispensaries and ask for specific medical assistance from outside
- Maintain casualty cards and medical stockpile
- Maintain blood group, register of the employees
- Organise camps for the hygiene of employees / precaution against epidemic
- Co-ordinate for equipped ambulances and other medical facilities
- Assess the casualties and co-ordinate with hospitals nearby
- Arrange and give training in first-aid and precautionary measures for epidemics
- Assist victims of electrical shocks, snake bite, fracture, and heart attack, etc.

#### **d) Administration / HR Team**

Their overall responsibility is to support DM teams in terms of food, transport and accommodation, and ensure personal attention to external manpower for their comfortable stay in Mumbai. They can help casualties / injured receive adequate medical attention, and arrange additional support, if required.

- Arrange transport casualties to first-aid-post, safe places, or medical centres
- Arrange for relief of personnel, organise refreshments and canteen facilities for prolonged emergencies
- Maintain details of the employees and pass information to kith and kin of fatal and injured persons
- Arrange temporary residential accommodation, reliever, and catering facilities
- Other responsibilities as decided by the Executive Controller looking into the circumstances at the time of disaster



# ANNEXURE A TO D: DAMAGE ASSESSMENT TEAM AND SITE CONTROLLER

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## 19. ANNEXURE A TO D: --- DAMAGE ASSESSMENT TEAM AND SITE CONTROLLER

### a) Annexure A: Division / DSS Head

Sr. No.	Designation	Officer	E-Mail	Contact No.
1	Head-DSS	Mr. Vignesh Gawade	Vighnesh.gawade@adani.com	9324216596
2	Divisional Head - Vandre Division	Mr. Umesh Kamat	Umesh.kamat@adani.com	9321044397
3	Divisional Head - Andheri Division	Mr. Shrikant Yeole	Shrikant.yeole@adani.com	9323552945
4	Divisional Head - Malad Division	Mr. Kiran Shinde	Kiran.shinde@adani.com	9022961249
5	Divisional Head - Borivali Division	Mr. Manoj M. Chouhan	Manoj.m.chouhan@adani.com	9323552830
6	Divisional Head - Mira-Bhayander Division	Mr. Jaypal Vadgave	Jaypal.vadgave@adani.com	9322218682
7	Divisional Head - Powai Division	Mr. Rajesh Nerurkar	Rajesh.nerurkar@adani.com	9322218732
8	Divisional Head - Chembur Division	Mr. Abaji Naralkar	Abaji.naralkar@adani.com	9324817526


**b) Annexure B1: Maintenance Team Distribution Substation (DSS)**

Sr. No.	Executive	Function	Division	Contact No.
1	Mr. Vighnesh Gawade	DSS / RSM Maintenance	All 7 Divisions	9323552858
2	Mr. Mohan Waigankar	Head-T&P	All 7 Divisions	9324216664
3	Mr. Rajesh J. Sawant	Maintenance Planning TSS / DSS	All 7 Divisions	9325119643
4	Mr. Sunil Bhujbal	Maintenance Planning DSS	All 7 Divisions	9321044307
5	Mr. Sanjay Salunkhe	DSS Maintenance	Andheri, Vandre, Chembur, Powai	9324582596
6	Mr. Dinesh P. Kadam	DSS Maintenance	Andheri, Vandre, Chembur, Powai	9321044281
7	Mr. Swanand Sawant	DSS Maintenance	Andheri, Vandre, Chembur, Powai	9323126183
8	Mr. Swapnil Sukalkar	DSS Maintenance	Andheri, Vandre, Chembur, Powai	9320328587
9	Mr. Vaishnavi Bhimrao Patre	DSS Maintenance	Andheri, Vandre, Chembur, Powai	8169445312
10	Mr. Chandrakant Marathe	DSS Maintenance	Malad, Borivali & Mira-Bhayander	9699972194
11	Mr. Mangesh Sardal	DSS Maintenance	Malad, Borivali & Mira-Bhayander	9323951414
12	Mr. Mahamad Noumanabbas Shaikh	DSS Maintenance	Malad, Borivali & Mira-Bhayander	8169445213
13	Mr. Namit Satam	DSS Maintenance	Malad, Borivali & Mira-Bhayander	9321044654
14	Mr. Suresh Patil	TSS / DSS T&P	Andheri, Vandre, Chembur, Powai	9324177944
15	Mr. Hulaji Dorugade	DSS T&P	Andheri, Vandre	9323951431
16	Mr. Sunil Bamne	DSS T&P	Andheri, Vandre	9323951401
17	Mr. Prasad Datar	DSS T&P	Chembur, Powai	9324216639
18	Mr. Ashok Dhale	DSS T&P	Chembur, Powai	9323951404
19	Mr. Vilas Patil	DSS T&P	Chembur, Powai	9323950789
20	Mr. Arjit Gupta	DSS T&P	Chembur, Powai	7507458616
21	Mr. Omkar Patankar	DSS T&P	Chembur, Powai	9323737921
22	Mr. Satish Parab	DSS T&P	Malad, Borivali & Mira-Bhayander	8080009542
23	Mr. Sunil Vikhare	DSS T&P	Malad, Borivali & Mira-Bhayander	9323951412
24	Mr. Santosh Kumbhar	DSS T&P	Malad, Borivali & Mira-Bhayander	9323441449

### c) Annexure B2: Division HT Maintenance Team

#### HT Maintenance Team

Sr. No.	Division	Name	Contact No.
1	Vandre Division	Mr. Kiran Suryawanshi	9322427653
		Mr. Shivashankar Lohare	9320328621
2	Andheri Division	Mr. Mohammed Rafique Shaikh	9324895354
		Mr. Sandeep Machkar	9323820938
3	Malad Division	Mr. Shasikant Misal	9324905358
		Mr. Eknath Jangli	9323179660
4	Borivali Division	Mr. Suresh Dongare	9321044122
		Mr. Subhash Ardalkar	9324904844
5	Mira-Bhayander Division	Mr. Prashant Salian	9321044408
		Mr. Aditya Jain	9699113180
6	Powai Division	Mr. Ashish Gaikwad	9320399849
		Mr. Kiran V. Patil	9320497835
7	Chembur Division	Mr. Sandip Jadhav	7208905236
		Mr. Santosh Kadam	9323126177

#### HT Projects Team - Consumer Substation (CSS)

Sr. No.	Division	Name	Contact No.
1	Vandre Division	Mr. Yogesh Panchal	9324904843
		Mr. Sunil Katkar	9323470346
2	Andheri Division	Mr. Dattatray Nikam	9323806437
		Mr. Yash R. Bichave	8356858853
3	Malad Division	Mr. Rajesh Kandalgaonkar	9323646746
		Mr. Deepak A. Patil	9322803963
4	Borivali Division and Mira-Bhayander Division	Mr. Kalpesh Kamble	8356859830
		Mr. Sujeet Kuwar	9322803961
5	Powai Division and Chembur Division	Mr. Avinash Chaudhari	9323126175
		Mr. Audumber Bobade	9321923461



#### d) Annexure B3: Division LT Maintenance Team

##### Vandre Division

Division	Zone	Name	Contact No.
Vandre	Bandra	Zonal Head - Mr. Vikas Satam	9321044564
Vandre	Bandra	LT NM - Mr. Ramdas Patil	9323702026
Vandre	Bandra	Mr. Ashok Pawar	9324193820
Vandre	Bandra	Mr. Nasir B. Shaikh	9022919166
Vandre	Juhu	Zonal Head - Mr. Vikas Satam	9321044564
Vandre	Juhu	LT NM - Mr. Pandurang Kalekar	9323418939
Vandre	Juhu	Mr. Suresh Pawar	9321044573
Vandre	Juhu	Mr. Sachin Gharat	9322803950
Vandre	Kalina	Zonal Head - Mr. Sandeep Khule	9323647338
Vandre	Kalina	LT NM - Mr. Prasad Kadam	9324193757
Vandre	Kalina	Mr. Laxmikant Ahinave	9320124678
Vandre	MMRDA	Zonal Head - Mr. Sandeep Khule	9323647338
Vandre	MMRDA	LTNM - Mr. Subhash Shigwan	9323702353
Vandre	MMRDA	Mr. Ajay Pardeshi	9323126186
Vandre	MMRDA	Mr. Dattaram Sawant	9323699197

##### Andheri Division

Division	Zone	Name	Contact No.
Andheri	Andheri	Zonal Head - Mr. Sandesh Mane	9324216588
Andheri	Andheri	LT NM - Mr. Arun Sivaram	9699720180
Andheri	Andheri	Mr. Shrikrushna Pawar	7208846728
Andheri	Versova	Zonal Head - Mr. Sandesh Mane	9324216588
Andheri	Versova	LT NM - Mr. Rukmangad Deshpande	9320399848
Andheri	Versova	Gayatri Bhopale	8169445164
Andheri	Meghwadi	Zonal Head - Mr. Anurag Thatte	9320499374
Andheri	Meghwadi	LT NM - Mr. Sunil Chavan	9320328615
Andheri	Meghwadi	Mr. Abhimanyu Patil	8169444864
Andheri	MIDC	LT NM - Mr. Suyog Banubakode	7498288399
Andheri	MIDC	Mr. Chandan Pawar	9323470340
Andheri	MIDC	Mr. Vijaykumar A. Kadam	9321044129



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### Malad Division

Division	Zone	Name	Contact No.
Malad	Goregaon	Zonal Head - Mr. Akram Khan	7208983647
Malad	Goregaon	LT NM - Mr. Swapnil Umale	9323553037
Malad	Goregaon	Mr. Vasant Palkar	9323810619
Malad	Goregaon	Mr. Sadashiv Bhikle	7498508085
Malad	Goregaon	Mr. Rushikesh Patil	7208846727
Malad	Aarey	Zonal Head - Mr. Satyajeet Varadkar	9323629438
Malad	Aarey	LT NM - Mr. Mahesh Rajole	9322343984
Malad	Aarey	Mr. Sagar Sable	9323126196
Malad	Aarey	Mr. Lavu More	9324904850
Malad	Poisar	LT NM - Mr. Sanket Rane	7498288010
Malad	Poisar	Mr. Rajesh Pendse	9322150615
Malad	Poisar	Mr. Sandeep Pudke	9324563778
Malad	Charkop	Zonal Head - Mr. Akram Khan	7208983647
Malad	Charkop	LT NM - Mr. Chetan Mistry	9324056695
Malad	Charkop	Mr. Haresh Rane	9320109565

### Borivali Division

Division	Zone	Name	Contact No.
Borivali	Shimpoli	Zonal Head - Mr. Pushpraj Jaint	9322218672
Borivali	Shimpoli	LT NM - Mr. Subhash Desai	9322424592
Borivali	Shimpoli	Mr. Naresh Boya	7498411292
Borivali	Shimpoli	Mr. Sanjeev Permalla	9324749113
Borivali	Magathane	Zonal Head - Mr. Abhijit Patil	9322603919
Borivali	Magathane	LT NM - Mr. Netravati Kamble	7498601787
Borivali	Magathane	Mr. Ramesh Gawade	9323470359
Borivali	Kandivali	Zonal Head - Mr. Pushpraj Jaint	9322218672
Borivali	Kandivali	LT NM - Mr. Prathmesh Ajgaonkar	9324582598
Borivali	Kandivali	Mr. Chandraprakash Koravi	7208846724
Borivali	Kandivali	Mr. Vishal Khot	7208846731





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### Mira-Bhayander Division

Division	Zone	Name	Contact No.
Mira-Bhayander	Mira Road	Zonal Head - Mr. Ganesh Patil	9323552858
Mira-Bhayander	Mira Road	LT NM - Mr. Prashant Shipurkar	9323126181
Mira-Bhayander	Mira Road	Mr. Shailesh Kavathankar	9323621202
Mira-Bhayander	Bhayander East	Zonal Head - Mr. Ashweni Jain	9323629444
Mira-Bhayander	Bhayander East	LT NM - Mr. Rajan Korgaonkar	9323951554
Mira-Bhayander	Bhayander East	Mr. Umesh Tendolkar	9321044486
Mira-Bhayander	Bhayander West	LT NM - Mr. Prashant Gore	9323126180
Mira-Bhayander	Bhayander West	Mr. Prathamesh Burud	8169445369
Mira-Bhayander	Bhayander West	Mr. Shruti Kotwad	8169445519

### Powai Division

Division	Zone	Name	Contact No.
Powai	Kurla	Zonal Head - Mr. Shyam Chaudhary	9322150625
Powai	Kurla	LT NM - Mr. Sanjay Khatal	9323791967
Powai	Kurla	Mr. Aditya Tukaram Raje	8169444918
Powai	Kurla	Mr. Sachin Redij	9323470344
Powai	Saki	Zonal Head - Mr. Shyam Chaudhary	9322150625
Powai	Saki	LT NM - Mr. Nilesh Lohar	9321340497
Powai	Saki	Mr. Sumit Uike	8356857085
Powai	Saki	Mr. Mangesh Shelar	9322655329
Powai	Vikhroli	LT NM - Mr. Rajesh Bawaskar	9323470363
Powai	Vikhroli	Mr. Girish Sulakhe	9324249280
Powai	Vikhroli	Mr. Bharat Maskar	9137851430



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### Chembur Division

Division	Zone	Name	Contact No.
Chembur	Tilak Nagar	Zonal Head - Mr. Jayesh Kulkarni	9322218655
Chembur	Tilak Nagar	LT NM - Mr. Rajendra Jawale	9321044339
Chembur	Tilak Nagar	Mr. Mahendra Nerurkar	9323470345
Chembur	Tilak Nagar	Mr. Santosh Karande	9324861178
Chembur	Chembur Anik	Zonal Head - Mr. Jayesh Kulkarni	9322218655
Chembur	Chembur Anik	LT NM - Mr. Malakari Pujari	9325401272
Chembur	Chembur Anik	Mr. Rohan Mhatre	9320604952
Chembur	Chembur North	Zonal Head - Mr. Prashant Mane	9322956270
Chembur	Chembur North	LT NM - Mr. Balasaheb Dhokate	9320361160
Chembur	Chembur North	Mr. Yogesh Pradhan	9322150601
Chembur	Chembur North	Mr. Vijay Waingawdekar	9322803971
Chembur	Borla	Zonal Head - Mr. Prashant Mane	9322956270
Chembur	Borla	LT NM - Mr. Amit Gudekar	9323803017
Chembur	Borla	Mr. Samar Vaidya	9324581160
Chembur	Borla	Mr. Sushant Rothe	9022966451
Chembur	Borla	Mr. Mahendra Chaudhari	9322150627





### Annexure C: Team Operation

Sr. No.	Zone	Name	Contact No.
1	Head-Operations	Mr. Mahesh Andhari	9323549996
2	Head-SCADA Maintenance	Mr. Ashish Patil	9323951393
3	Head-System Control	Mr. Rahul Hanchate	9321044369
4	In-charge (CMC and OS)	Mr. Tushar Borade	7208857653
5	CMC	CMC - Centre	022 - 50547166
6	CMC	CMC - Centre	9324216667
7	System Control	MCC	022 - 50547346 022 - 50548930
8	System Control	ZCC Vandre Division	022 - 50548928
9	System Control	ZCC Andheri Division	022 - 50548932
10	System Control	ZCC Malad Division	022 - 50547293
11	System Control	ZCC Borivali and Mira-Bhayander Division	022 - 50548931
12	System Control	ZCC Powai and Chembur Division	022 - 50548929
13	System Control	BCC Transmission	022 - 50547295





## Annexure D: Division Incident Management Team

### Annexure D1: Vandre Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Vandre Division	Mr. Umesh Kamat	9321044397
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Vandre Division	Mr. Kiran Suryawanshi	9322427653
		3. Zonal Head	Bandra	Mr. Vikas Satam	9321044564
			Juhu	Mr. Vikas Satam	9321044564
			Kalina	Mr. Sandeep Khule	9323647338
			MMRDA	Mr. Sandeep Khule	9323647338
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Vandre Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Ravindra Jagtap	7498283818
		Safety Co-ordinator - NM		Mr. Amrut Jagtap	7498288406
4	Security In-charge	Security Head	Vandre Division	Mr. Vinay Khanduri	9099980108
		Divisional Head Security		Mrs. Aishwarya Surendra Ugle	8928519064
5	Medical In-charge	Head-Medical	Vandre Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer		Dr. Utpal Chakraborty	9223276270
				Dr. Rakesh Matekar	9324136774
6	HR In-charge	HR Head	Vandre Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head HR		Mr. Amit Gore	7666830673
7	Administration	Head-Administration	Vandre Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Himanshu Awati	9324067395
8	MMG	Head-MMG	Vandre Division	Mr. Bhushan Chaudhari	9323552884
				Mr. Shailraj Uchil	9324049183





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## Annexure D2: Andheri Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Andheri Division	Mr. Shrikant Yeole	9323552945
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Andheri Division	Mr. Mohammed Rafique Shaikh	9324895354
		3. Zonal Head	Andheri	Mr. Sandesh Mane	9324216588
			Versova	Mr. Sandesh Mane	9324216588
			Meghwadi	Mr. Anurag Thatte	9320499374
			MIDC	Mr. Anurag Thatte	9320499374
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Andheri Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Bhalchandra Prabhu	9323950924
		Safety Co-ordinator - NM		Mr. Amit Mandal	9324056706
4	Security In-charge	Security Head	Andheri Division	Mr. Vinay Khanduri	9099980108
		Divisional Head Security		Mr. Saddam Abrar	9321963487
5	Medical In-charge	Head-Medical	Andheri Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer		Dr. Rakesh Matekar	9324136774
6	HR In-charge	HR Head	Andheri Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head HR		Mr. Amit Gore	7666830673
7	Administration	Head-Administration	Andheri Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Roshan Couthino	9320233563
8	MMG	Head-MMG	Andheri Division	Mr. Bhushan Chaudhari	9323552884
				Mr. Shailraj Uchil	9324049183



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### Annexure D3: Malad Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Malad Division	Mr. Kiran Shinde	9022961249
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Malad Division	Mr. Shashikant Misal	9324905358
		3. Zonal Head	Charkop	Mr. Akram Khan	7208983647
			Goregaon	Mr. Akram Khan	7208983647
			Poisar	Mr. Satyjeet Varadkar	7323629438
			Dindoshi	Mr. Satyjeet Varadkar	7323629438
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Malad Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Suraj Singh	9322956268
		Safety Co-ordinator - NM		Mr. Sachin Satose	9323701965
4	Security In-charge	Security Head	Malad Division	Mr. Vinay Khanduri	9099980108
5	Medical In-charge	Head-Medical	Malad Division	Dr. Naresh Jhamnani	9324232140
		Divisional Medical Officer		Dr. Santosh Kate	9320011058
6	HR In-charge	HR Head	Malad Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head HR		Mr. Lloyd Castelino	9320846420
7	Administration	Head-Administration	Malad Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Shrutakriti Bhise	9324681837
8	MMG	Head-MMG	Malad Division	Mr. Bhushan Chaudhary	9323552884
				Mr. Dayanand Rane	7719875400



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#### Annexure D4: Borivali Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Borivali Division	Mr. Manoj M. Chavan	9323552830
2	Incident Controller	1. Head-Distribution Substation	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Head-Divisional HT	Borivali Division	Mr. Suresh Dongre	9321044122
		3. Zonal Head	Shimpoli	Mr. Pushpraj Jaint	9322218672
			Magathane	Mr. Abhijit Patil	9322603919
			Kandivali	Mr. Pushpraj Jaint	9322218672
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Head-Safety	Borivali Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Vishal Kadam	9321923467
		Safety Co-ordinator - NM		Mr. Subhash Desai	9322424592
4	Security In-charge	Head-Security	Borivali Division	Mr. Vinay Khanduri	9099980108
5	Medical In-charge	Head-Medical	Borivali Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer		Dr. Utpal Chakraborty	9223276270
6	HR In-charge	HR Head	Borivali Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head-HR		Mr. Lloyd Castelino	9320846420
7	Administration	Head-Admin	Borivali Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Diana Karkaria	9320710338
8	MMG	Head-MMG	Borivali Division	Mr. Bhushan Chaudhari	9323552884
				Mr. Dayanand Rane	7719875400



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#### Annexure D5: Mira-Bhayander Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Mira-Bhayander Division	Mr. Jaypal Vadgave	9322218682
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Mira-Bhayander Division	Mr. Prashant Salian	9321044408
		3. Zonal Head	Mira Road	Mr. Ganesh Patil	9323552858
			Bhayander East	Mr. Ashweni Jain	9323629444
			Bhayander West	Mr. Ganesh Patil	9323552858
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Mira-Bhayander Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Prafulla Manekar	7498288220
		Safety Co-ordinator-NM		Mr. Ganesh Patil	9323552858
4	Security In-charge	Security Head	Mira-Bhayander Division	Mr. Vinay Khanduri	9099980108
5	Medical In-charge	Head-Medical	Mira-Bhayander Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer		Dr. Utpal Chakraborty	9223276270
6	HR In-charge	HR Head	Mira-Bhayander Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head-HR		Mrs. Smita Shilwant	9322603798
7	Administration	Head-Administration	Mira-Bhayander Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Jeevan Patil	9022599707
8	MMG	Head-MMG	Mira-Bhayander Division	Mr. Bhushan Chaudhari	9323552884
				Mr. Garry Faroz	9320335813



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#### Annexure D6: Powai Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Powai Division	Mr. Rajesh Nerurkar	9322218732
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Powai Division	Mr. Ashish Gaikwad	9320399849
		3. Zonal Head	Kurla	Mr. Shyam Chaudhary	9322150625
			Saki	Mr. Girish Salunkhe	9324249280
			Vikhroli	Mr. Girish Salunkhe	9324249280
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Powai Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Sashikant Patil	9324216615
		Safety Co-ordinator - NM		Mr. Aandhiya Mundle	9022984678
4	Security In-charge	Security Head	Powai Division	Mr. Vinay Khanduri	9099980108
		Divisional Head Security		Mr. Lakshay Choudhary	9321963492
5	Medical In-charge	Head-Medical	Powai Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer			
6	HR In-charge	HR Head	Powai Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Head-HR		Mr. Amit Arolkar	9324567356
7	Administration	Head-Administration	Powai Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Sagar D. Patil	7498256949
8	MMG	Head-MMG	Powai Division	Mr. Bhushan Chaudhari	9323552884
				Mr. Pankaj Buragohain	9324632884





## Annexure D7: Chembur Division Incident Management Team

Sr. No.	Disaster Control Position	Position of Executive	Division / Zone	Name	Contact No.
1	Site Controller	Divisional Head	Chembur Division	Mr. Abaji Naralkar	9324817526
2	Incident Controller	1. Distribution Substation Head	Centralised Department	Mr. Vignesh Gawade	9324216596
		2. Divisional HT Head	Chembur Division	Mr. Sandip Jadhav	7208905236
		3. Zonal Head	Tilak Nagar	Mr. Jayesh Kulkarni	9322218655
			Chembur Anik	Mr. Prashant Mane	9322956270
			Chembur North	Mr. Jayesh Kulkarni	9322218655
			Borla	Mr. Prashant Mane	9322956270
		4. Operations	System Control	Mr. Rahul Hanchate	9321044369
			CMC	Mr. Tushar Borade	7208857653
3	Safety & Fire In-charge	Safety Head	Chembur Division	Mr. Jai Singh	8591315263
		Divisional Safety Officer		Mr. Mahendra Thasale	9321044368
		Safety Co-ordinator - NM		Mr. Amit Gudekar	9323803017
4	Security In-charge	Security Head	Chembur Division	Mr. Vinay Khanduri	9099052702
		Divisional Head Security		Mr. Lakshay Choudhary	9321963492
5	Medical In-charge	Head-Medical	Chembur Division	Sh. Naresh Jhamnani	9324232140
		Divisional Medical Officer			
6	HR In-charge	HR Head	Chembur Division	Mr. Sanjeev Muramkar	8980802636
		Divisional Hea-HR		Mr. Amit Arolkar	9324567356
7	Administration	Head-Administration	Chembur Division	Mr. Satish Ganeshan	9321210023
		Division Admin In-charge		Mr. Mohan Dhotre	7498268499
8	MMG	Head-MMG	Chembur Division	Mr. Bhushan Chaudhari	9323552884
				Ms. Archana Amin	9322347056
				Mr. Kiran Barge	9324890623

## Annexure 1: Key Personnel details

### 1. Central Disaster Control Centre (CDCC)

Sr. No	CDCC	Contact No.	Location
1	CDCC	022 - 50549111	Adani Electricity Management, Disaster Control Room, Unit No.19, Goregaon (E), Mumbai - 400065
2		022 - 50547225	

### Key Personnel

Sr. No.	Name of Executive	Contact No.	Department
1	Mr. Ramesh Sharma	022 - 50555116	CEO-MDB
2	Mr. Nitin Kumar Rohilla	022 - 50555850	Chief Information Officer
3	Mr. Suraj Phalak	022 - 50548420	Head-T&D
4	Mr. Nitin Kate	022 - 50548410	Head-Maintenance T&D
5	Mr. Shanayd Shah	022 - 50666011	Head-Commercial Management
6	Mr. Sanjeev Muramkar	022 - 50548730	Head-HR (Corporate)
7	Mr. Arindam Chakawarty	9909954844	Head-CPG / MMG
8	Mr. Unnat Prakash	7705912151	Head-Project Construction
9	Mr. Vinay Khanduri	022 - 50548140	Head-Security
10	Mr. Kishore R. Patil	022 - 50548780	Head-Regulatory
11	Mr. Mahesh Ambardekar	022 - 50548360	Head-Engineering & Technology
12	Mr. Mahesh Andhari	022 - 50549410	Head-Operations / Disaster Mgmnts. Cell
13	Mr. Vignesh Gawade	022 - 50547872	Head-DSS
14	Mr. Ashish Patil	022 - 50547677	Head-SCADA
15	Mr. Umesh Kamat	022 - 50549618	Head-Vandre Division
16	Mr. Shrikant Yeole	022 - 50547660	Head-Andheri Division
17	Mr. Kiran Shinde	022 - 50549020	Head-Malad Division
18	Mr. Manoj Chouhan	022 - 50549800	Head-Borivali Division
19	Mr. Jaypal Vadgave	022 - 50549700	Head-Mira Bhayander Division
20	Mr. Rajesh Nerurkar	022 - 50549631	Head-Powai Division
21	Mr. Abaji Naralkar	022 - 50548781	Head-Chembur Division
22	Mr. Dinesh Parab	022 - 50549597	Head-Projects
23	Dr. Naresh Jhamnani	022 - 50549448	Head-Medical
24	Mr. Shanayd Shah	022 - 50666011	Corporate Communications (MDB)
25	Mr. Govind Samant	022 - 50548240	Head-IT
26	Mr. Mayaprakash Pandey	022 - 50548210	CISO
27	Mr. Ashish Pande	022 - 50559408	Head-Central Marketing
28	Mr. Bhushan Choudhary	022 - 50548130	Head-MMG



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## 2. Divisional Disaster Control Centres (DDCCs)

### Vandre Divisional Control Centre

City2 Centre office, Kalina, Santacruz (E)

Areas Covered	Name	Contact No.
Divisional Head - Mr. Umesh Kamat		9321044397
Bandra	Zonal Head - Mr. Vikas Satam	9321044564
Juhu	Zonal Head - Mr. Vikas Satam	9321044564
Kalina	Zonal Head - Mr. Sandeep Khule	9323647338
MMRDA	Zonal Head - Mr. Sandeep Khule	9323647338
HT - Mains Head	Mr. Kiran Suryawanshi	9322427653

### Andheri Divisional Control Centre

MIDC Distribution Substation, E-4, MIDC, Andheri (E), Mumbai - 400093

Areas Covered	Name	Contact No.
Divisional Head - Mr. Shrikant Yeole		9323552945
Andheri	Zonal Head - Mr. Sandesh Mane	9324216588
Versova	Zonal Head - Mr. Sandesh Mane	9324216588
Meghwadi	Zonal Head - Mr. Anurag Thatte	9320499374
MIDC	Zonal Head - Mr. Anurag Thatte	9320499374
HT - Mains Head	Mr. Mohammed Rafique Shaikh	9324895354

### Malad Divisional Control Centre

Dindoshi Office, off W.E. Highway, Goregaon (E), Mumbai - 400097

Areas Covered	Name	Contact No.
Divisional Head - Mr. Kiran Shinde		9022961249
Goregaon	Zonal Head - Mr. Akram Khan	7208983647
Aarey	Zonal Head - Mr. Satyjeet Varadkar	9323629438
Poisar	Zonal Head - Mr. Satyjeet Varadkar	9323629438
Charkop	Zonal Head - Mr. Akram Khan	7208983647
HT - Mains Head	Mr. Shashikant Misal	9324905358

### Borivali Divisional Control Centre

S.V. Road and Shankar Lane Junction, Kandivali (W), Mumbai - 400067

Areas Covered	Name	Contact No.
Divisional Head - Mr. Manoj Chouhan		9323552830
Shimpoli	Zonal Head - Mr. Pushpraj Jaint	9322218672
Magathane	Zonal Head - Mr. Abhijit Patil	9322603919
Kandivali	Zonal Head - Mr. Pushpraj Jaint	9322218672
HT - Mains Head	Mr. Suresh Dongre	9321044122

### Mira-Bhayander Divisional Control Centre

Pavan Putra, Near Bhayander Pump

Areas Covered	Name	Contact No.
Divisional Head - Mr. Jaypal Vadgave		9322218682
Mira Road	Zonal Head - Mr. Ganesh Patil	9323552858
Bhayander (E)	Zonal Head - Mr. Ashweni Jain	9323629444
Bhayander (W)	Zonal Head - Mr. Ganesh Patil	9323552858
HT - Mains Head	Mr. Prashant Salian	9321044408

### Powai Divisional Control Centre

A. K. Road, Opp. Kumaria Residency, Saki Naka, Andheri (E)

Areas Covered	Name	Contact No.
Divisional Head - Mr. Rajesh Nerurkar		9322218732
Kurla	Zonal Head - Mr. Shyam Chaudhary	9322150625
Saki	Zonal Head - Mr. Shyam Chaudhary	9324249280
Vikhroli	Zonal Head - Mr. Girish Salunkhe	9324249280
HT - Mains Head	Mr. Ashish Gaikwad	9320399849

### Chembur Divisional Control Centre

Tilak Nagar R/S, Road No.3, Chembur, Mumbai - 400089

Areas Covered	Name	Contact No.
Divisional Head - Mr. Abaji Naralkar		9324817526
Tilak Nagar	Zonal Head - Mr. Jayesh Kulkarni	9322218655
Chembur Anik	Zonal Head - Mr. Jayesh Kulkarni	9322218655
Chembur North	Zonal Head - Mr. Prashant Mane	9322956270
Borla	Zonal Head - Mr. Prashant Mane	9322956270
HT - Mains Head	Mr. Sandeep Jadhav	7208905236

### Master System Control Centre (MSCC) / Complaint Management Cell (CMC)

Network Operation Centre, Hiranandani Receiving, Hiranandani, Near IIT Bombay,

Powai, Mumbai - 400076

Areas Covered	Name	Contact No.
Operation Head - Mr. Mahesh Andhari		9323549996
System Control	Mr. Rahul Hanchate	9321044369
System Control	MCC (HT Abnormalities)	022 - 50548930
CMC	Mr. Tushar Borade	7208857653
CMC	CMC (LT Abnormalities)	022 - 50547645 / 50547644

## Annexure 2: a) List of Contact Nos. of Local Police Stations by Divisions

Police Control Room No. - 100 / 103 / 022 - 22625020

Division	Locations	Contact No.
Vandre Division / Andheri Division	Bandra Police Station, Hill Road	022 - 26423122
	Vile Parle Police Station	022 - 26117317
	Santacruz Police Station	022 - 26493139
	D N Nagar Police Station	022 - 26303893 / 26304002
	Andheri Police Station	022 - 28394205 / 26831562
Borivali Division / Mira-Bhayander Division	Kashimira	8657936948
	Mira Road	8657936947
	Naya Nagar	8657936949
	Navghar	8657936952
	Uttan Sagri	8657936953
	Bhayander	8657936951
	Gorai	022 - 28450763
Powai Division / Chembur Division	Powai Police Station	022 - 25702690

## Annexure 2: b) List of Contact Nos. of Local Fire Brigades by Divisions

General Fire Brigade No. - 101 / 022-23085992 / 91

Division	Location	Contact No.
Vandre Division	Bandra	022 - 26435206
Andheri Division	Irla / Andheri Fire Brigade	022 - 26205301
Malad Division	Goregaon Fire Brigade	022 - 23085992 / 91
Borivali Division / Mira-Bhayander	Bhayander West	022 - 28197637
	Silver Park	022 - 28553661
	Kandivali Fire Brigade	022 - 28602847
Powai Division / Chembur Division	Chembur Fire Station	022 - 25224824
	Vikhroli Fire Station	022 - 25170730
	Marol Fire Station	022 - 29200940





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**Annexure 2: c) List of Hospitals & Ambulances with Contact Nos. in the Area**

**General Ambulance No. - 102 / 108**

Division	Name	Contact No.
Vandre Division	Guru Nanak Hospital	022 - 42227777
	Nanawati Hospital	022 - 61347777
	Kokilaben Hospital	022 - 42696969
	Lonica Ambulance V.P. East	9821182100
	Nulife Cardiac Ambulance	022 - 26040934
	Sanjeevani Ambulance	9892181211
Andheri Division	Holy Spirit Hospital	022 - 42478888 / 28248500 / 2 / 3 / 4
	BSES Mg Hospital	022 - 66487500
	Kokilaben Dhirubhai Ambani Hospital	022 - 42696969
Malad Division	Shatabdi Hospital	022 - 28647003 / 04
	Kokilaben Dhirubhai Ambani Hospital	022 - 42696969
	Oscar Hospital, Ganeshnagar	022 - 29672020
	KDAH Ambulance	022 - 42696969
	Suchak Hospital	022 - 28891484 / 28891744
Borivali Division / Mira-Bhayander Division	Kasturi Memorial, Mira-Bhayander	022 - 28147676
	Shatabdi Hospital	022 - 28647003
	Ambucare Ambulance	9820644421 / 9820648900
	Karuna Hospital	022 - 28934698
Powai Division / Chembur Division	Godrej Hospital	022 - 66417052 / 7100
	Ambucare Ambulance	9820644421 / 9820648900

## 20. ABBREVIATIONS

ACWC	: Area Cyclone Warning Centres	KP	: Key Personnel
AEML	: Adani Electricity Mumbai Limited	LDC	: Load Dispatch Centre
AMCDRR	: Asia Pacific Ministerial Conference on Disaster Risk	LILO	: Loop-In-Loop-Out
ATS	: Anti-Terrorism Squad	LT	: Low Tension
AVP	: Assistant Vice President	LV	: Low Voltage
BCC	: Backup Control Centre	MBMC	: Mira-Bhayander Municipal Corporation
BDDS	: Bomb Detection and Disposal Squad	MCC	: Master Control Centre
BEST	: Bombay Electric Supply & Transport	MCGM	: Municipal Corporation of Greater Mumbai
CAPEX	: Capital Expenditures	MIDC	: Maharashtra Industrial Development Corporation
CDCC	: Central Disaster Control Centres	MOD	: Merit order Dispatch
CDCR	: Central Disaster Control Room	MSEB	: Maharashtra State Electricity Board
CEA	: Central Electricity Authority	MSLDC	: Maharashtra State Load Dispatch Centre
CEO	: Chief Executive Officer	MTNL	: Mahanagar Telephone Nigam Limited
CFO	: Chief Finance Officer	NLDC	: National Load Dispatch Centre
COO	: Chief Operating Officer	NMS	: Network Management System
CSS	: Consumer Substations	NOP	: Normally Open Points
DCC	: Disaster Control Centre	O&M	: Operation & Maintenance
DDCC	: Divisional Disaster Control Centres	OHSAS	: Occupational Health and Safety Assessment Series
DDLO	: Devidas Lane Office	OPGW	: Optical Ground Wire
DG	: Diesel Generator	PT	: Power Transformer
DGM	: Deputy General Manager	PTZ	: Pan Tilt and Zoom
DMP	: Disaster Management plan	RLDC	: Regional Load Dispatch Centre
DSS	: Distribution Substations	RMU	: Ring Main Unit
DT	: Distribution Transformer	SCADA	: Supervisory Control & Data Acquisition
DTS	: Distributed Temperature Sensing	SLDC	: State Load Dispatch Centre
GDP	: Gross Domestic Product	SMS	: Short Message Service
GIS	: Geographic Information System	SOP	: Standard Operating Procedures
GM	: General Manager	T&D	: Transmission & Distribution
GOM	: Government of Maharashtra	UNDRR	: United Nations office for Disaster Risk Reduction
HR	: Human Resource	VP	: Vice president
HRC	: High Rupturing Capacity	ZCC	: Zonal System Control
HT	: High Tension		
HV	: High Voltage		
IVR	: Interactive Voice Response		