

# CENTRAL ELECTRICITY AUTHORITY

## (Safety Requirements for Construction, Operation and Maintenance of Electrical Plants and Electric Lines) Regulations, 2011, Dated: 24.01.2010

Sl. No.	Description	Summary
1.	<b>Control Period</b>	N.A.
2.	<b>Safety provisions relating to Owner</b>	<ol style="list-style-type: none"> <li>1. The Owner shall obtain accreditation of electric plants and electric lines with IS-18001 certification.</li> <li>2. The Owner shall set up a sound and scientific safety management system which shall include: <ul style="list-style-type: none"> <li>• providing adequate human, physical and financial resources to implement the safety management system;</li> <li>• providing adequate training to all employees to keep them aware of safety related issues;</li> <li>• establishing system for periodic monitoring and review of the safety system by the management;</li> <li>• preparing detailed safety manual complying with the statutory requirements and manufacturers' recommendations.</li> </ul> </li> </ol>
3.	<b>Safety officer and safety committee</b>	<ol style="list-style-type: none"> <li>1. The Owner shall appoint one qualified safety officer where the number of employees, including contract workers, exceeds five hundred and where the number of employees is less than five hundred, a suitable officer shall be designated as safety officer.</li> <li>2. The safety officer shall be appointed before start of construction activities and the safety set-up chart shall be prepared and properly displayed at a conspicuous place.</li> <li>3. The safety officer shall be authorised to stop the execution of any work which in his judgment is unsafe and may result in injury to any person and he shall also have the power to remove the employees or contract workers from the site, if they are found not using personal protection equipment or in unsafe practice or procedure.</li> <li>4. where number of employees, including contract workers, is two hundred and fifty or less, the safety committee shall be constituted by the Owner for a group of electrical plants or electric lines, as the case may be.</li> <li>5. The safety committee shall meet at least once in a month during construction stage and once in three months during operation and maintenance of electrical plants and electric lines and the decisions and recommendations of the safety committee shall be complied with by the Owner within the time limit as decided by the safety committee.</li> </ol>
4.	<b>Safety provisions relating to contractor</b>	<ol style="list-style-type: none"> <li>1. The Owner shall incorporate the safety provisions in the contract document which are required to be complied by the contractor's employees during execution of the contract to facilitate safe working during execution of the work.</li> <li>2. The contractor employing two hundred employees or more, including contract workers, shall have a safety coordinator in order to ensure the implementation of safety requirements of the contract and a contractor with lesser number of employees, including contract workers, shall nominate one of his employees to act as safety coordinator who shall liaise with the safety officer on matters relating to safety and his name shall be displayed on the notice board at a</li> </ol>

		<p>prominent place at the work site.</p> <p>3. The contractor shall be responsible for non-compliance of the safety measures, implications, injuries, fatalities and compensation arising out of such situations or incidents.</p>
5.	<b>Reporting of accidents</b>	<p>The cases of outage of an electrical plant or an electric line of following nominal rating due to any accident related to any equipment e.g. fire, explosion of pressure piping or pressure vessel, implosion, emission of hazardous chemicals, collapse of transmission tower, flooding of power house area, shall be reported to the Authority within twenty four hours, whether or not any death or disablement is caused to any person,-</p> <ul style="list-style-type: none"> <li>❖ Thermal generating units                    200 MW and above;</li> <li>❖ Hydro-electric generating units            50 MW and above;</li> <li>❖ Electric lines/ sub-stations                 132kV and above.</li> </ul>
6.	<b>Emergency management plan</b>	<ol style="list-style-type: none"> <li>1. An on-site emergency management plan shall be formulated for thermal generating plant, hydro-electric generating plant, sub-station and group of electric lines for quickly and effectively dealing with probable emergencies like fire, explosion, gas leakages, landslides, floods, earthquakes, storms, cyclones, hurricanes, and crisis situations arising in the event of strikes, terrorist threats, attacks and sabotages, bomb threats and explosions and reducing response time.</li> <li>2. The Owner shall ensure that a mock drill of the on-site emergency management plan is conducted at least once every six months.</li> <li>3. The Owner shall arrange to furnish to the District Collector the information pertaining to industrial activities under his control, including the nature, extent and likely effects of off-site possible major accidents as well as any additional information which the District Collector may require in this regard and the minimum information to be furnished by the Owner s given as under:- <ul style="list-style-type: none"> <li>• details of the key employees of the emergency team and their responsibilities;</li> <li>• information regarding type of hazardous chemicals and fuels at plant site;</li> <li>• internal and external communication plan in case of emergency.</li> </ul> </li> </ol>
7.	<b>Medical facilities</b>	<ol style="list-style-type: none"> <li>1. The Owner shall provide medical facilities: <ul style="list-style-type: none"> <li>• to prevent and control occupational diseases;</li> <li>• to prevent and reduce disability;</li> <li>• to provide immediate relief to accident victims.</li> </ul> </li> <li>2. An occupational health centre with the services and facilities as per scale laid down (where number of employees, including contract workers, working at one premises are fifty or less, where number of employees, including contract workers, working at one premises are between fifty-one and two hundred, where number of employees, including contract workers, working at one premises are more than two hundred.), then the Owner shall be provided for all electrical plants and electric lines and maintained in good order.</li> <li>3. The medical officer of occupational health center shall be involved in planning the emergency handling of large numberof injured employees in the event such as fire, explosion, natural calamities and man-made disasters and all the equipment required for providing immediate relief to the injured during emergencies shall always be kept in readiness in occupational health center.</li> <li>4. The Owner shall ensure that a fully equipped ambulance van is provided at the site for transportation of serious cases of accident or sickness to the hospital promptly and said ambulance van is maintained in good condition and equipped with necessary facilities.</li> </ol>

<b>8.</b>	<b>Safety training and awareness</b>	<ol style="list-style-type: none"><li>1. Regular safety training programmes to be conducted for employees shall include the following:- general safety awareness, first aid, emergency procedures including shock treatment, use of personal protective equipment, use of different types of firefighting equipment, response in the event of emergencies including fire, flood, landslide, earthquake etc, ten hours training per year to each employee etc.</li><li>2. The Owner shall ensure that adequate safety training is provided by the contractor to his employees.</li><li>3. Safety promotional activities shall be organised periodically to create awareness and enthusiasm among the employees which shall include organising safety day, safety week, fire safety day, fire safety week, safety competitions, posters, slogans, safety calendars and displays depicting possible consequences of unsafe acts and conditions in conspicuous locations in the plant.</li></ol>
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