

		<p>14. All the cables and bus ducts feeding switchboards from transformers shall be sized based on transformer ratings. All the cables and bus ducts feeding transformers shall be sized based on current ratings of transformer at the minimum voltage tap of the transformer. All other cables/bus-ducts shall be sized based on the load demand under most onerous conditions.</p> <p>15. The electrical distribution system shall be designed considering all possible factors affecting the choice of the system to be adopted such as required continuity of supply, flexibility of operation, reliability of supply from available power source, total load, and concentration of individual loads.</p> <p>16. There shall be classified for the degree extend of hazard from flammable materials.</p> <p>17. Classification of hazardous areas for all area shall be done as per guideline indicated in latest IS 5572 and equipment selection for hazardous area shall be as per IS 16724/IEC 60079-14. All electrical equipment in hazardous area shall be minimum suitable for ZONE-2, Gas group IIA/IIB/IIC, Temperature class T1....T6.</p> <p>18. Interlocks & protection as per IS/IEC & CEA guidelines shall be provided.</p> <p>19. Lock out Tag out (LOTO) provision for all HT & LT feeders.</p> <p>20. Firefighting system shall be provided for all the transformers as per CEA latest regulations & amendment.</p> <p>21. Maximum interchangeability of equipment's.</p> <p>22. HT/LT Switchgear shall be supplied by HT/LT breaker manufacturer only.</p>
2	Electrical Standards	<p>1. Indian Electricity Act, IS, IEC & CEA guidelines & rules there under.</p> <p>2. The Fire insurance Regulations.</p> <p>3. The regulations laid down by Electrical Inspectorate (CEA).</p> <p>4. The regulations laid down by the Factory Inspectorate.</p> <p>5. The regulations laid down by the Chief Controller of Explosives.</p> <p>Any other regulations laid down by the Central, State or Local Authorities from time to time during the execution of this contract.</p>
3	Electrical Load List (Indicative): CO2 Capture, Compression and Storage Block	<p>1. Total Electrical Load – 500 kW (indicative for tender purpose only, to be finalized alongside ‘Technology Provider’ with approval of NTPC).</p> <p>2. Fuel Gas Fan – A/B</p> <p>3. CO2 Compressor – A/B</p> <p>4. DCC Circulation Pump – A/B</p> <p>5. Scrubbing Solution Circulation Pump – A/B</p> <p>6. Rich Solvent Pump – A/B</p> <p>7. Lean Solvent Pump – A/B</p>