8.1.10 An over current device shall be provided in each circuit for each capacitor bank. A separate over current device shall not be required for a capacitor connected on the load side of a motor overload protective device. The rating or setting of the over current device shall be as low as practicable.

8.1.11 The capacitor banks installed for power factor correction, are major contributors to potential resonance. Such resonance conditions can magnify harmonic levels. Parallel resonance gives rise to a high impedance across the network and can cause voltage and current amplification. Network studies should be carried out to ensure the correct rating of capacitors and their operation without causing resonance. Mitigation measures shall be taken such as installing suitable harmonic filters or reactors. The capacitors shall be suitable for operation under harmonic current conditions. To minimise this risk of harmonic currents, harmonic filter reactors shall be provided in series with capacitors. Tuning of the capacitors, Harmonic filter reactors shall be made below the lowest harmonic order considered in the network.

8.1.12 The contactors used in the capacitor banks shall be able to withstand switching surges.

8.1.13 Suitable means shall be installed to isolate each capacitor, capacitor bank, or capacitor installation from all sources of voltage and to remove from service as unit.

8.1.14 All non-current carrying metal parts of capacitors shall be earthed as specified under Section 5 of this regulation.

8.1.15 Each capacitor shall be provided with a name plate indicating rated voltage, frequency, KVAR, number of phases, discharge device and name of the manufacturer.

8.1.16 The controls and protection device provided in the capacitor bank shall be checked and maintained regularly.

8.1.17 Wherever capacitor bank/panel is installed on the supply side of any DEWA's KWh metering, adequate sealing provision shall be made as specified under Section 3 of this regulation.

8.1.18 In premises, where capacitor banks are not installed and individual equipment are provided with suitable means for power factor correction, a power factor meter is to be provided in the Main Distribution Board (MDB) for displaying the power factor. If power factor deviates from the requirement customers shall arrange a PF correction equipment to maintain the power factor close to 0.95 lagging.

8.1.19 The capacitor bank panel shall be provided with a suitably rated main incomer isolating switch. This shall be a three-pole isolator or MCCB. The handle of the incomer isolator or MCCB shall be interlocked with the door to ensure that the capacitor bank is de-energised when the door is open.