Table 20.3.: Operation and Management of Marinas

ITEMS	REQUIREMENTS
1. MARINA MANAGEMENT AND OPERATOR'S RESPONSIBILITY	**7. ELECTRICAL HAZARDS AND SAFETY** i. Electrical systems and electrical equipment in the marina and boatyard require special consideration from marina management because of the existence of wet locations, dampness, rain, atmospheric moisture and severe corrosive conditions. ii. All electrical materials, devices, appliances, fittings, and other equipment shall be listed or labeled by a qualified testing agency, approved by local power distribution authority and shall be installed and connected in accordance with listing requirements and/or manufacturer's instructions. iii. A bench mark indicating the electrical datum plane of the land area shall be permanently located on shore in the marina or boatyard. iv. Electrical services shall be disconnected from the power source when the water level reaches the bench mark for the electrical datum plane. v. All electrical connections shall be located at least 305 mm above the deck of a floating pier. vi. All electrical connections shall be located at least 305 mm above the deck of a fixed pier but not below the electrical datum plane. vii. Poles or structures used to support electrical service, feeder, or branch circuit shall be used only for that purpose. viii. All cable connections shall be in accordance with **NFPA 70, National Electrical Code**. ix. Primary power, when introduced in excess of 230 V phase to phase, shall be transformed to reduce the marina or boatyard electrical system to be not in excess of 230 V phase to phase unless engineered and the system has been approved by the local power distribution authority. x. The bottom of enclosures for transformers shall not be located below the electrical datum plane. xi. Service equipment, including service disconnecting equipment, meters, and associated equipment, and the main switchboard or panel, shall not be installed in wet locations unless listed for wet locations. xii. Where auxiliary emergency or optional standby power supply equipment is provided, the standby electrical system shall be designed, installed, and maintained as required by the local power distribution authority. xiii. The engine and generator shall be housed in a well-ventilated, fire-resistive enclosure that shall contain only the auxiliary power unit and the necessary controls xiv. The means and methods of grounding the non-current-carrying metal parts of the electrical system and for equipment and portable appliances connected thereto, metal poles, metal supports that carry electrical cables etc. shall comply with the requirements of **Articles 250 and 555 of NFPA 70, National Electrical Code.** xv. Wiring electrical equipment and materials installed on piers, wharves, docks, or similar locations, and wiring methods shall specifically conform to the requirements of Article 555 and any other applicable requirements of NFPA 70, *National Electrical Code* xvi. Electrical wiring shall be installed in such a way as to avoid possible contact with masts and other parts of boats being moved in the yard. xvii. All the electrical designs, installations, material specifications, approvals, inspections and operations shall be in accordance with local power distribution authority.