10. ELECTRICAL INSTALLATION

10.1 GENERAL

10.1.1 All Electrical Installations shall follow the Service Authority (Electrical) Standards, in addition to British Standard (BS) and International Electrotechnical Commission (IEC) Codes (latest Editions) where not in contradiction with the local codes of practice and regulations.

10.1.2 All electrical equipment and materials shall be designed, specified and rerated for a continuous and trouble free operation in the ambient conditions where the equipment is located.

10.1.3 The Developer shall provide to the Service Authority (Electrical), the maximum demand load in kVA required for his construction and operation. A copy of the Service Authority (Electrical) N.O.C. shall be forwarded to the Authority for their information.

10.1.4 The Developer shall also provide a detailed list of equipment to be supplied with electric power, indicating type of equipment/load, voltage, No. of phases, capacity in kW or kVA and applicable overall diversity factor, along with power single line diagrams and electrical substations' rooms and equipment layouts.

10.1.5 The Developer shall take the necessary steps to protect and keep safe any service corridor passing nearby the plot. In case of damage, the Developer shall report immediately to the Service Authority in concern.

10.1.6 The project shall be LEED certified, and accordingly the design and construction shall follow and comply with related LEED requirements.

10.2 APPLICATION TO THE SERVICE AUTHORITIES

10.2.1 Upon signing a lease for the allocated plot, the Developer shall apply to the Service Authority (Electrical) for his power connection and for the installation of his own 11 kV meter.

10.2.2 The Consultant must apply, prior to commencing any construction works for the following:

a. No Objection Certificate (N.O.C) from the Service Authorities.

10.2.3 The Contractor shall submit to the Service Authority (Electrical) "Inspection Certificates" in accordance with the Service Authority (Electrical) prescribed forms. All installations and equipment installed therein shall be subject to the Service Authority (Electrical) inspection, testing and final approval before connecting the electric supply. All relevant documents shall be submitted to the Authority after the Service Authority (Electrical) final approval.

10.3 POWER SUPPLY CONNECTION

10.3.1 The point(s) of supply to the allocated plot shall be decided by the Service Authority (Electrical), and shall be made available at defined location(s) within the plot/project, unless otherwise approved by the Service Authority (Electrical).

10.3.2 Power supply from the Service Authority (Electrical) network shall be subject to terms, fees and tariffs issued by the Service Authority (Electrical).

10.3.3 Power supply will be provided to the plot/building at 11 kV, 50Hz, through 3 core Medium Voltage cables. The power shall be stepped down to 400/230 Volts through electrical substations within the plot/building which location and layout shall be approved by the Service Authority (Electrical). The low voltage network within the plot/building shall be distributed at 400/230 Volts, 50 Hz, 3 phases, 4 wires with separate earth continuity conductor.

10.3.4 Electrical substation(s) within the plot/building shall meet the requirements of the Dubai World Central Authority (Electrical) substation based on the Service Authority (Electrical) approved details for the proposed substation(s) and DCA requirements. Provision for connection to the Airport SCADA system shall be provided as per the Service Authority (Electrical) requirements.

10.3.5 Electrical Substation(s) shall be according to the "DEWA - General Conditions for providing 11kV Supply to Consumer's Plot" and the Service Authority (Electrical) requirements and subject to the Service Authority (Electrical) approval.