

**1. GENERAL**

**1.1 References - General**

- .1 Refer To Section 17010.

**2. PRODUCTS**

**2.1 Power Supply and Conditioning Equipment**

.1 General

- .1 Provide all DC power supplies as required for all instrument circuits. All circuits to be powered from the marshalling panels. Power supplies to be equal to Hammond or G.F.C., complete with an overvoltage protection module.
- .2 Provide redundant configurations for power supply equipment serving more than one instrument loop, so that failure of a single unit will not disable all or any shared part of the instrumentation and communication system. Provide diode isolation for redundant direct current supply units, and ground the negative terminal of the power supply.
- .3 Power supplies and transmitters feeding circuits that run in non-armoured cable in cable tray shall meet the requirements for Class 2 circuits as defined under Section 16 of the CEC Part I.
- .4 Unless otherwise required, all DC power supplies to be rated 28VDC, adjustable plus or minus 5 percent, and set to provide 26.4 volts on the panel direct current bus. Size the power supply for two times the connected load, minimum size is 2 amps.

**2.2 Noise Suppression**

- .1 Provide power conditioners in each panel to power AC instrumentation and control loads. Power conditioners are Oneac Series CX.

**2.3 UPS Power Supply**

- .1 Provide a uninterruptible power supply (UPS) in each panel to power the control system equipment.
- .2 Provide a UPS for each computer workstation. Connect the workstation and its associated peripherals such as network concentrators, printers, etc. to the UPS.
- .3 Size UPS standby capacity for 30 minutes at full load rating.
- .4 Provide on-line units from Exide, Oneac, Toshiba or Best.

**3. EXECUTION**

**3.1 References - General**

- .1 Refer To Section 17010, Part 3.

**END OF SECTION**