

SECTION 26 23 00 - LOW VOLTAGE SWITCHGEAR

PART I - GENERAL

1.1 Manufacturers: Eaton, GE or Square D.

PART 2 - PRODUCTS

2.1 CONSTRUCTION

- A. All phase, Neutral, and ground busses shall be tinned copper.
- B. Switchgear shall be Fully Rated. No series rating allowed.
- C. Switchgear shall have sufficient Short-Circuit Current Rating for the available Fault Current.
- D. Tapping of an existing Switchgear buss to add feeder circuit breaker/ fusible switches is not permitted without a written permission from F & S Engineering department. However, should a written permission be granted, then taps shall comply with the following:
 - 1. Taps will have to be done using U.L. Listed materials.
 - 2. Taps will have to be done per switchgear manufacturer instructions to maintain the U.L. Listing of the electrical equipment.

2.2 FUSIBLE MAIN SECONDARY SWITCH

- A. Over 601 Amps: Switches over 601 amps shall be quick-make, quick-break, bolted pressure switches equal to Barkelew "Bolt-Loc" pressure contact *[Note to PSC: Include 2 additional Owner-approved manufacturers.]* Switch shall be complete with UL Class "L" Time-Delay fuses with 200,000 ampere interrupting capacity.
- B. Under 601 Amps: Switches under 601 amps shall be molded case circuit breakers or fused switches with either UL Class L, RK-1, or J fuses, where the interrupting capacity of the device is greater than that of the transformer feed.
- C. *[Note to PSC: Low Voltage Switchgear preference is to have an all fused overcurrent protection devices instead of circuit breakers].*

2.3 FEEDER CIRCUIT BREAKER DEVICES

- A. Type: Feeder circuit breakers shall be manually or electrically (as required) operated, draw-out type or molded case, in the proper pole arrangement, and possess current ratings and interrupting capacity.
- B. Short Circuit Current: All electrical equipment such as sub-stations, bus-duct, panelboards and motor control centers shall be constructed to withstand the short circuit current, symmetrical and asymmetrical, for the number of cycles as required by the rating of the particular overcurrent protective device.
- C. Auxiliary Loads: Campus lights, steam tunnel lights, pumps, outdoor tennis courts, or an adjacent building may be supplied with power from the secondary switchgear of the building. Branch circuit overcurrent device, especially for these subsidiary loads, shall be a part of the secondary switchgear in the room.

PART 3 - EXECUTION

3.1

END OF SECTION 26 23 00

This section of the *U of I Facilities Standards* establishes minimum requirements only.
It should not be used as a complete specification.