DIVISION 16 - ELECTRICAL

Section 16310 - Primary Switching Station

Introduction

The goal of the electrical department is to provide a looped power distribution system at 13.8 KV Each basic loop is a 400 A loop with available capacity to be able to handle all of the load on the loop from either of two main disconnects at the main distribution system. At present the Primary Pad Mounted (PME) or Vista switch is the point where each building is to be disconnected from the loop.

Where located as part of a new construction system the S&C Vista switch is to be located at a point that is accessible as far as future connections and for future replacement if necessary. Where for redistribution to an existing system the switch is to be located at a point that is limited in access to the general public, and accessible for future connections.

The designer shall coordinate the medium voltage design with the UA Electrical Engineer.

S&C Vista switch should be mounted on a concrete pad with a minimum of 6' clearance in front of all doors, an accessible exit (when the doors are open), and minimum 3' of clearance on both sides for easy access to control switches. The concrete pad shall extend to a minimum of 3' in front of all doors. The concrete pad should contain a grounding ring composed of a 3/4" x 10' copperweld or copperclad ground rod on each corner, connected by minimum of 3/0 ground wire. This ground shall be connected to the ground pad of the PME switch exothermically.
Note: Growth at the University has resulted in fault current availability to exceed the 14 KA value considered maximum for PME style gear. Specify the next higher size rated gear. Check fault values where new switches are to be installed. Use of S and C Vista gear. Coordinate with UA Electrical Engineer and FM Medium Voltage shop. 25KA rated switches are required in UA Distribution System.

Specify stub-outs for all unused compartments.

Specify 24" bases under all switches.

Specify fuse sizes.

Part 1 - General

- Refer to Appendix Section 16310 and incorporate into project.

Part 2 - Products

- Refer to Appendix Section 16310 and incorporate into project.

Part 3 - Execution

- Refer to Appendix Section 16310 and incorporate into project.
- All installations shall be inspected by UFS Engineer, UFS Inspectors, and FM Medium Voltage shop prior to energization.

End of Section 16310