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Operations
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26 13 00_ MEDIUM VOLTAGE SWITCHGEAR

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Indoor Switchgear
- B. Exterior Switchgear

1.2 SUMMARY

- A. This standard includes Medium Voltage Switchgear used for electrical distribution.
- B. The intent of these standards is to provide input to the design team on the University's preference of manufacturers, design, equipment options and quality assurance to maintain the longevity of its assets.

1.3 REFERENCE STANDARDS

- A. NFPA – National Electrical Code; National Fire Protection Agency; Most Recent Edition Adopted by the Authority having Jurisdiction.

1.4 DESIGN REQUIREMENTS INDOOR

- A. Basis of Design: Square D circuit breaker or HVL switch.
- B. All switchgear rooms shall be provided with emergency lighting originating with the building emergency lighting system.
 - 1. The emergency lights shall be un-switched and not on a timer.
- C. All switchgear requiring metering shall be equipped with Meters. See Section 25 05 00. Contact U of D SEE prior to specifying, and prior to installing meters as needed.
- D. All medium voltage switchgear requiring meters shall be supplied from the switchgear manufacturer with instrument class Current Transformers (CT's) installed and wired to a CT shorting block. All medium voltage switchgear shall be supplied from the switchgear manufacturer with instrument class Potential Transformers (PT's) installed.
- E. Provide fusing for all switches.

1.5 OUTDOOR

- A. Basis of Design for Fusible switch: S and C, Type PME for low profile, Square D Type HVL for vertical sections. Switch type selection to be verified with the University.
- B. All switchgear requiring metering shall be equipped with Meters. See Section 25 05 00. Contact U of D SEE prior to specifying, and prior to installing meters as needed.
- C. All medium voltage switchgear requiring meters shall be supplied from the switchgear manufacturer with instrument class Current Transformers (CT's) installed and wired to a CT shorting block. All medium voltage switchgear shall be supplied from the switchgear manufacturer with instrument class Potential Transformers (PT's) installed.
- D. Provide fusing for all switches.
- E. All outdoor switchgear installations shall have internally powered strip heaters with thermostat.
- F. Provide concrete pad with turn down frost legs for mounting switchgear.
- G. Prior to selecting a site for pad mounted switchgear, research shall be conducted to determine if the site is in the Flood Plain or in a location of high-water table. If the conditions exist, the switchgear site shall be relocated, or the switchgear raised to three feet above the water table or above the flood plain with wave action height (if applicable). Raising the elevation of the switchgear shall require University approval.

1.6 SUBMITTALS

- A. Product Data: Provide electrical characteristics and connection requirements, standard model tests and options.
- B. Manufacturer's Installation instructions.
- C. Maintenance Data: Include maintenance instructions for cleaning methods; cleaning materials recommendation; instructions for circuit breaker/fuse removal, and replacement. Include testing, adjustment, and lubrication instructions.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: Square D, S and C.
 - 1. Schneider Electric: www.schneider-electric.us
 - 2. ABB: www.abb.com
 - 3. S&C Electric Company: www.sandc.com

PART 3 END OF SECTION