# SECTION 260500 GENERAL ELECTRICAL REQUIREMENTS

## PART 1 - GENERAL

A. Description

This section includes materials, installation, and testing of the electrical system.

B. Related Work Specified Elsewhere

1. One-Year Guarantee: General Conditions.
2. Permits and Licenses: General Conditions.
3. Submittals: 013300.
4. Construction Facilities and Temporary Controls: 015100.
5. Operation and Maintenance Manuals: 019310.

C. Submittals

1. Submit shop drawings in accordance with the General Conditions.
2. In submitted catalog cuts, cross out items shown that are not pertinent to this project. Where catalog cuts list manufacturer's standard options, cross out those options not intended to be provided and clearly highlight those options that are to be provided.

D. Regulatory Agencies and Standards

1. See General Conditions.
2. Electrical work shall comply with the NEC.

E. Quality Control

Materials, appliances, equipment, and devices shall conform to the applicable UL standards. The label of, or listing by, UL is required for all electrical equipment.

F. Utility Company Requirements and Fees

1. The Contractor shall make application for electric service in the name of the Owner. The Contractor shall pay and the Owner will reimburse Contractor for utility company fees, cable charges, and added facilities charges.

2. The Contractor shall make any service and installation agreements that the utility companies may require.

3. Install electric service entrance equipment in accordance with the serving utility's requirements. Coordinate with the serving utility to ensure timely connection by the utility. Obtain utility company approval of service entrance and metering equipment shop drawings prior to starting fabrication.

G. Power for Construction

Provide for or purchase power for construction in accordance with Section 015100.

H. Operation and Maintenance Manuals

Submit operation and maintenance manuals in accordance with Section 019310.

I. Locations

1. General: Use equipment, materials, and wiring methods suitable for the types of locations in which they are located as defined below.

2. Definitions of Types of Locations:

a. Dry Locations: Indoor areas which do not fall within the definitions below for wet, damp, or corrosive locations and which are not otherwise designated in the drawings.

b. Wet Locations: Locations exposed to the weather, whether under a roof or not, unless otherwise designated in the drawings.

c. Damp Locations: Spaces wholly or partially underground or having a wall or ceiling forming part of a channel or tank, unless otherwise designated in the drawings.

PART 2 - MATERIALS

A. General

1. Similar materials and equipment shall be the product of a single manufacturer.

2. Provide only products which are new, undamaged, and in the original cartons or containers.

3. Materials and equipment shall be the standard products of manufacturers regularly engaged in the production of such material and shall be the manufacturer's current design.

4. Materials and equipment shall be suitable for storage, installation, and operation at an ambient temperature of 0°C to 40°C except where more stringent conditions are stated in individual equipment specifications.

5. Electrical equipment and panels shall be factory finished with manufacturer's standard primer and enamel topcoats, unless stated otherwise in the individual equipment specifications. Provide 1 pint of the equipment manufacturer's touchup paint per 500 square feet of painted surface for repair of damaged enamel topcoats.

## PART 3 - EXECUTION

### A. Installation

1. The drawings indicate connections for typical equipment only. If the equipment furnished is different from what is shown, provide the modifications necessary for a safe and properly operating installation in accordance with the equipment manufacturer's recommendations.

2. The drawings diagrammatically indicate the desired location and arrangement of outlets, conduit runs, equipment, and other items. Field determine exact location based on physical size and arrangement of equipment, finished elevations, and obstructions.

3. Work or equipment not indicated or specified which is necessary for the complete and proper operation of the electrical systems shall be accomplished without additional cost to the Owner.

4. Accomplish work required to pierce any waterproofing after the part piercing the waterproofing has been set in place. Seal and make watertight the openings made for this purpose.

5. Seal weathertight equipment or components exposed to the weather.

6. Protect equipment outlets and conduit openings with factory-made plugs or caps whenever work is not in progress at that point.

### B. Nameplates

1. Mark each individual panelboard, motor controller, disconnect switch, timer, relay, and contactor to identify each item with its respective service or function.

2. Provide a nameplate on each transformer listing its designation, voltage, feeder number, and load served.

3. Provide nameplates with engraved lettering not less than 1/4 inch high. Use black-on-white laminated plastic, attached with rivets or sheet metal screws. Do not use embossed plastic adhesive tape.

END OF SECTION