

COMMUNICATION PUBLIC UTILITY SYSTEMS

I. PURPOSE

This information bulletin clarifies Department of Building and Safety's (LADBS) authority relating to the installation of Communication Public Utility systems equipment and wiring as delineated in Section 93.0108(c) of the 2020 edition of the City of Los Angeles Electrical Code (LAEC).

II. DEFINITIONS

For the purpose of this information bulletin the following definitions apply:

Central Office - *“CENTRAL OFFICE” is a building owned and occupied by communication public utilities intended to house and operate communication equipment under their exclusive control. This building may be shared with the communication public utility affiliates or other communication public utilities.*

Hazardous (Classified) Location - *“HAZARDOUS (CLASSIFIED) LOCATION” is an area where electrical and electronic equipment and wiring for all voltages may cause a fire or explosion due to the presence of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings.*

III. BACKGROUND

Section 93.0108(c)1 of the 2020 edition of the LAEC states that the provisions of the electrical code shall not apply to installation of communication equipment that are located outdoors or located indoors in spaces that are under the exclusive control of communication public utilities, provided that the installation is not in a Hazardous (Classified) Location or in a plenum or access floor nor any of the equipment associated wiring system shall penetrate fire resistive wall or floor system of a plenum or access floor area.

Section 93.0108(c)2 of the 2020 edition of the LAEC states that the electrical wiring system of the building spaces are not exempted from the Los Angeles Electrical Code except for communication public utility equipment that are rated less than 500 VA. However, section 93.0108(c)2 exempts communication public utility equipment used for transmission of audio, data, video, or other services when such equipment is located within a Central Office building that is not within a Hazardous (Classified) Location.

Typically, Central Office buildings housing communication public utilities equipment are of Type I construction, of concrete or masonry walls and noncombustible roofs and floors, and designed to be operational in the event of natural disaster.

IV. METHODS

A. CENTRAL OFFICE

Communication Public Utility equipment and associated wiring located in a Central Office is considered to be under the exclusive control and operation of a public utility communication company under the following conditions: (See Matrix 1 and Exhibit A for details)

1. Communication public utility equipment shall not be located in a Hazardous (Classified) Location.
2. The wiring system to the Communication Public Utility equipment in a central office building shall be totally independent from the premises wiring system of the building, except that it may receive its power from the building service point.
3. Communication Public Utility electrical system (i.e., raceways and equipment) except for the service equipment shall be installed in separate raceways, cables or cable trays than the building premises wiring system.
4. Grounding of the Communication Public Utility electrical system shall not cause a flow of objectionable current over the building grounding conductors or grounding paths.
5. The neutral conductor of any 4-wire, 3-phase wye circuit supplying any Communication Public Utility panel where major portion of its load is non-linear shall be considered as a current-carrying conductor and the branch circuits, feeders and equipment shall be sized accordingly.

B. ALL OTHER LOCATIONS

Communication Public Utility equipment shall be considered to be under the jurisdiction of the Los Angeles Electrical Code when the installation is outdoors or in any building space in any building other than a Central Office building. (Refer to Matrix 1 and Exhibit A for details).

Matrix 1

Type of Building	Exempt Work	Non-exempt Work
<p>Communication Public Utility Central Office Building</p>	<p>All public utility communication equipment including the following that are not installed in a Hazardous (Classified) Location:</p> <ul style="list-style-type: none"> ! The Alternating Current (AC) Communication Public Utility power panel(s) and wiring systems supplying the communication equipment, power conversion or rectification equipment, lighting and receptacles that are associated as part of the communication equipment. ! Direct current power distribution system(s) and associated equipment. 	<p>All AC premises wiring system other than the exempt work as follows:</p> <ul style="list-style-type: none"> ! Service drops or laterals. ! Service(s). ! Distribution Boards. ! Feeders.
<p>All building spaces within other buildings or outdoor installations (such as in a high rise, multi family, office, multi-tenant, place of assembly, residential and, etc, buildings.)</p>	<p>All public utility communication equipment rated less than 500 VA that are not installed in Hazardous (Classified) Locations or its wiring system does not penetrate a plenum or an access floor fire-resistive wall or floor systems.</p>	<p>All premises wiring systems and communication equipment installed in Hazardous (Classified) Locations or its wiring system penetrating plenum or an access floor fire-resistive wall or floor systems or an equipment rated 500 VA or more.</p>

Single Line Diagram for a Central Office Building

Dashed marks identifies the equipment and wiring under the exclusive control of Communication Public Utility (CPU)

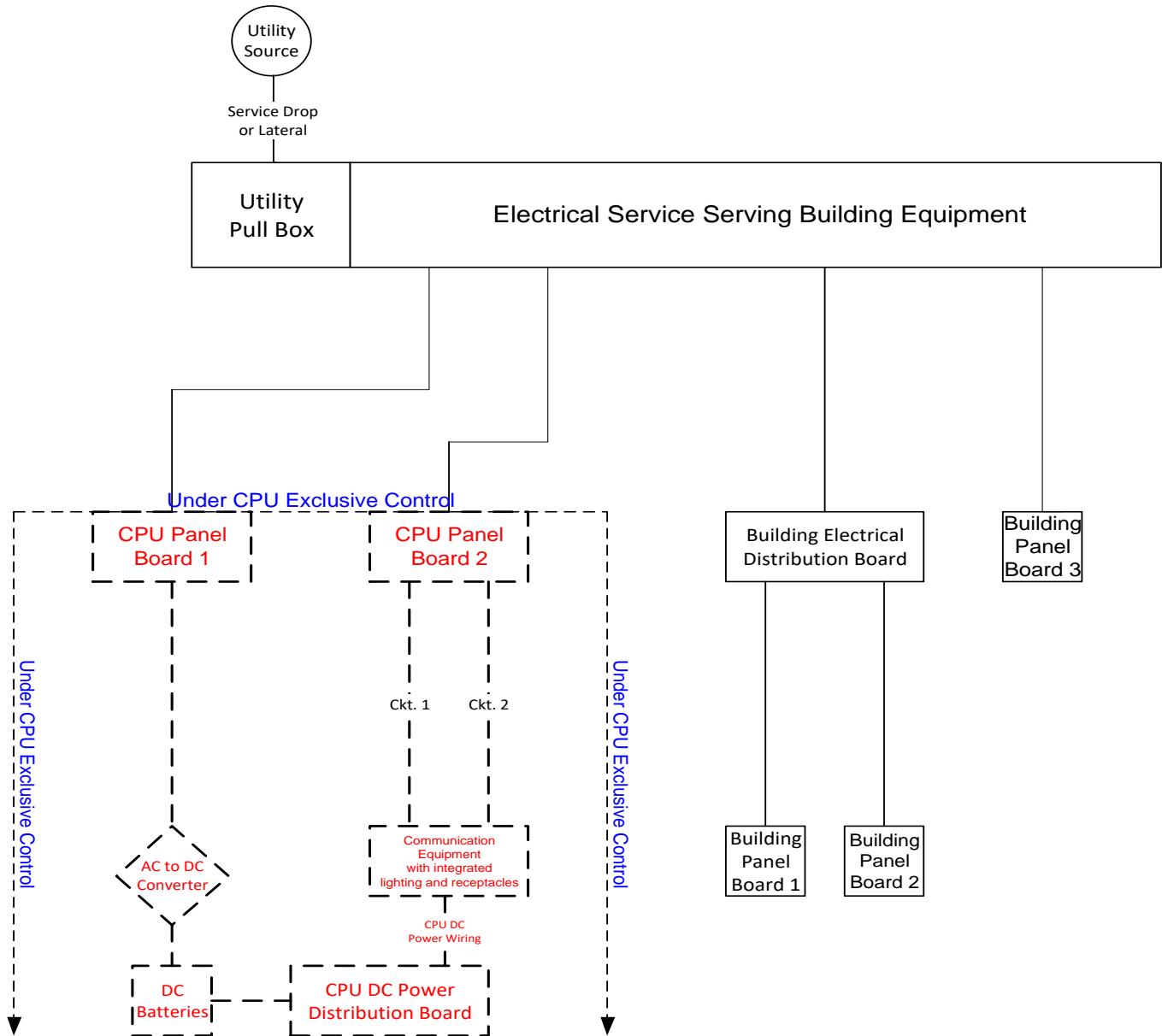


Exhibit A