



# Municipality of Anchorage



## Policy E.04

### Electrical Disconnects

The intent of this policy is to assist emergency responders with locating, securing, and disconnecting power to **commercial structures** during emergency responses and operations. The purpose is to provide rapid identification and location of service disconnect switches for the electrical power to **commercial structures** within the Municipality of Anchorage and to provide for the disconnection of power sources supplying electrical wiring and equipment inside structures from the exterior of the structure. This policy meets the requirement of Anchorage Fire Department Bulletin #05-0003.

#### New Commercial Structures

All service disconnecting means shall be identified as described in the signage section. Means to disconnect all electrical power sources from structure wiring shall be provided at an exterior location. An exception for an external disconnect is allowed in two instances: for a service supplying only a fire pump controller and for an uninterruptible power supplying power only to a specific room. Enclosures containing multiple service disconnects for utility power must provide for each service disconnect to be individually lockable in the off position. The door enclosing multiple service disconnecting means may be provided with a hasp but is not a substitute for the required individual switch lock off mechanism. The intent is to allow power to unaffected portions of a structure.

**Service disconnection by use of shunt trip device** is acceptable. The shunt trip switch may be either the safety switch type or a switch inside an enclosure.

**Safety switch:** must be suitable for the environment and be lockable in either the "on" or "off" position. Interlock contacts may be used to provide correct handle location. The "off" position must disconnect the power.

**Inside an enclosure:** the shunt switch must be placed within an enclosure suitable for the environment and with a hinged cover. The enclosure shall be large enough for the required sign to be mounted on it.

The enclosure must have a padlock hasp with the padlock accessible for removal with bolt cutters by emergency responders. No hardened steel shackles are permitted. Shackle diameter should not exceed 5/16". The shunt trip switch shall be a maintained contact with "off" and "on" clearly identified. The "off" position must disconnect the power.

**Alternate power sources** supplying emergency, legally required, or optional systems may disconnect power by controlling the operation of the transfer switches or shunt trip circuit breakers. Each switch controlling the operation of a transfer switch or breaker shall be labeled with the system supplied. The shunt trip switch for utility power shall not be in the same enclosure for a generator or other alternate power sources.

#### Existing Commercial Structures

Existing buildings must comply with requirements for signage as described in the signage section. Exception: signage may be located above, below, or adjacent to, but must be within 2" of the existing switching devices.

When electrical service is upgraded or replaced, switch requirements for new construction will apply.

Existing buildings must comply with new disconnect requirements when:

Access to existing shutoff devices is extremely or unduly difficult and/or emergency responders are unable to rapidly access the shutoff devices. These facilities will be reviewed on a case by case basis.

#### Signage

"Service Shunt Trip Utility" or "Service Switch Generator" is verbiage required on exterior or service disconnect enclosures.

All signs identifying or describing the location of electrical power disconnecting switches must have white lettering on red background with minimum one (1) inch letters. Sign must be permanently affixed to enclosure or safety switch. The sign must be a minimum 8" x 8" in size.

Enclosures containing multiple service disconnects for utility power must clearly identify each switch as a service disconnect along with the load served.

Where buildings have multiple electrical services at different locations, additional signage is required. Additional signage must indicate total number and location of all switches that control the electrical service to the building.

Examples:

All signage to have 1" or larger letters.

STANDARD SIGNAGE

SERVICE  
SHUNT TRIP  
UTILITY

MULTIPLE DISCONNECTS

SERVICE SHUNT  
TRIP UTILITY #1 OF 2  
SEE NW CORNER FOR #2

SERVICE SHUNT  
TRIP UTILITY #2 OF 2  
SEE SE CORNER FOR  
#1

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Ron Thompson, Building Official

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