MEMORANDUM

Date: June 17, 2014

TO: Conveyance Installers, Manufacturer’s, and other Interested Parties

SUBJECT: Location of Shunt Trip Equipment

The Elevator Unit’s previous policy of requiring equipment used to remove main line power to conveyances prior to the application of water by fire sprinklers (shunt trip) to be located outside of the elevator machine room has become inconsistent with provisions of the current California Electrical Code, as referenced by the Elevator Safety Orders (ESO’s).

§CCR, Title 8, section 3141.7(a)(3) - C.E.C., 620.51
620.51 Disconnecting Means. A single means for disconnecting all ungrounded main power supply conductors for each unit shall be provided and be designed so that no pole can be operated independently. Where multiple driving machines are connected to a single elevator, escalator, moving walk, or pumping unit, there shall be one disconnecting means to disconnect the motor(s) and control valve operating magnets.

The disconnecting means for the main power supply conductors shall not disconnect the branch circuit required in 620.22, 620.23, and 620.24.

A. Type. The disconnecting means shall be an enclosed externally operable fused motor circuit switch or circuit breaker capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed. Portable means for adding a lock to the switch or circuit breaker shall not be permitted as the means required to be installed at and remain with the equipment.

The disconnecting means shall be a listed device.

B. Operation. No provision shall be made to open or close this disconnecting means from any other part of the premises. If sprinklers are installed in hoistways, machine rooms, control rooms, machinery spaces, or control spaces, the disconnecting means shall be permitted to automatically open the power supply to the affected elevator(s) prior to the application of water. No provision shall be made to automatically close this disconnecting means. Power shall only be restored by manual means.

The Division will permit shunt trip devices that are incorporated into the design and function of listed equipment which is utilized as the single means of disconnecting main line power to the conveyance in conformance with the requirements of C.E.C. 620.51 to reside in machine rooms, control rooms, and control spaces.

Shunt trip equipment not incorporated into the design and function of the single means of disconnecting the main line power to the conveyance shall not be located in machine rooms, control rooms, or control spaces.

Debra Tudor  
Principal Engineer  
DOSH - Elevator Unit HQS