The Department of Community Affairs has been asked to provide guidance to code officials involved in the plan review of elevators and their associated equipment including machine rooms, shafts, and pit areas. Both the Uniform Construction Code and the Uniform Fire Code, through references to National Fire Protection Association standard 13, “Standards for the Installation of Sprinkler Systems,” require sprinkler protection in elevator machine rooms, machinery spaces, shafts, and pits. The Elevator Safety Subcode -- through its reference to Building Subcode Section 3005.5 and ASME A17.1, Section 2.8 -- mandates that, whenever sprinklers are provided in these areas, there be a mechanism to disconnect power prior to the application of water.

It has been widely held that this requirement precludes the use of control equipment to return an elevator in motion to a floor level and open the door prior to disconnection of power. As a result, a situation is created whereby firefighters in Phase II Service, or even building occupants in Phase I Service, could be trapped in an elevator when power is disconnected.

After review of the applicable codes and standards, we have determined that ASME A17.1 does not preclude the use of a system which allows for shut-off of electrical power after an elevator has returned to a floor and opened its door, as long as power is disconnected prior to the application of water and is disconnected independent of the elevator controls.

Depending on the situation, the elevator controls become unreliable the longer the delay; thus, there is no system that can preclude the possible entrapment of individuals in the elevator during a fire emergency. The objective of this bulletin is to allow for a system to minimize the danger of entrapment by shutting off the elevator equipment at a time when, for overall safety, it is appropriate to stop the movement of the car.