Date: July 18, 2014

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety & Health ELEVATOR UNIT - HEADQUARTERS 6980 Santa Teresa Boulevard, Suite 130 San Jose, CA 95119 Tel: (408) 362-2120 Fax: (408) 362-2131



MEMORANDUM

TO:

Conveyance Installers, Manufacturers, and other Interested Parties

SUBJECT: Listed/Certified Conveyance Controllers

The Elevator Safety Orders (ESO) require that conveyance controllers utilized on Group III and Group IV conveyances be listed/certified to the requirements of CSA B44.1/ASME A17.5.

CCR, Title 8, ESO, <u>Group III</u>, section 3121.10 - **ASME A17.1-1996**, section 210.4(b), Electrical equipment shall be certified to the requirements of CSA B44.1/ASME A17.5.

CCR, Title 8, ESO, <u>Group IV</u>, section 3141 – **ASME A17.1-2004**, section 2.26.4.2, Drive-machine controllers, logic controllers, and operating devices accessory thereto for starting, stopping, regulating, controlling, or protecting electric motors, generators, or other equipment shall be listed/certified and labeled/marked to the requirements of CAN/CSA-B44.1/ASME A17.5.

The CSA B44.1/ASME A17.5 is a safety standard for the design and construction of equipment to be used in conformity with the rules of the applicable elevator and electrical codes. The objective of certification is to reduce the risk of injury and property damage from fire and electric shock. The certification process involves comprehensive inspection and testing of the assembled controller's, components, wiring, and enclosure by a Nationally Recognized Testing Laboratory (NRTL).

Alteration to a listed/certified controller's markings, construction, configuration, arrangement, or components, after the certification has been issued, may invalidate its certification.

Actions that may invalidate a listed/certified controller's certification are, but are not limited to:

- 1. Alteration or removal of model identification, manufacturer identification, markings or electrical rating.
- 2. Use of an enclosure not described by the certifying documents.
- 3. Non-identical component replacement or component substitution due to obsolescence not described by the certifying documents.
- 4. Alteration or addition of components, wiring or circuitry to the controller or its enclosure not described by the certifying documents.
- 5. Change in the position, proximity, arrangement, or mounting of controller components not described by the certifying documents.

Any alteration to the marking, construction, configuration, arrangement, or components of a listed/certified controller that is not described by the certifying documents shall be evaluated by an NRTL, and the appropriate certification process completed in accordance with the requirements of CSA B44.1/ASME A17.5. All certificates and test reports shall be submitted to the Division for review and an inspection by the Division shall be completed prior to the conveyance being returned to normal service.

The replacement of a listed/certified controller's components shall be accomplished using only components included in the NRTL's certifying documents, per CCR, Title 8, 3141 - ASME A17.1-2004, section 8.6.3.7.2.

ASME A17.1-2004, section 8.6.3.7.2 Where a component in a listed/certified device is replaced, the replacement component shall be subject to the requirements of the applicable edition of CAN/CSA B44.1/ASME A17.5 and/or the engineering or type test in 8.3. Hoistway door interlocks, hoistway door combination mechanical lock and electric contact, and door or gate electric contact, shall conform to the type tests specified in 2.12.4.1. The component shall be included in the original manufacturer's listed/certified device documentation or as a listed/certified replacement component (see 8.6.1.1). Each replacement component shall be plainly marked for identification. In jurisdictions not enforcing NBCC, door panels, frames, and entrances hardware shall be provided with the instructions required by 2.11.18.

NOTE (8.6.3.7): Devices that may fall under this requirement are included but not limited to: hoistway door locking devices and electric contacts, car door contacts and interlocks, hydraulic control valves, escalator steps, fire doors, and electrical equipment.

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