

Group V Proposals: Non MRL-Related only **NEII® Summary of Key Proposals**

KEY:

- **Description of related requirements in ASME A17.1 (2013)**
- **Current requirements (Group IV) in CA**
- **Description of Group V proposal**

3147.2201(a&b) – Most AJHs allow 4” before beveling. Unclear of safety concern.

- A17.1 §2.1.6.2 specifies beams, slabs or other building construction making an angle less than 75 deg shall not project more than 4” inside hoistway.
- Group IV 3141.7(a)(4) specifies a 2” max. for A17.1-2004 2.1.6.2.
- (a) “flush surfaces” – A17.1-2013 requirement 2.1.6 modified to require clean surface.
- (b) Proposal specifies a flush hoistway surface but permits a 2” projection unless
 - (a)(1) the top surface of the projection shall be beveled at an angle not less than 75 deg with the horizontal or
 - (a)(2) the top and bottom surface of the projection shall be beveled at an angle not less than 75 deg with the horizontal where the horizontal distance between a projection and the standard railing on a car enclosure top is less than 12”.
 - (b) separator beams between adjacent elevators are not required to have bevels
 - (c) where recesses or setbacks exceeding 2” occur in the enclosure wall
 - (c)(1) the top of the recess or setback shall be beveled at an angle of not less than 75 deg with the horizontal or
 - (c)(2) the top and bottom surface of the recess shall be beveled at an angle not less than 75 deg with the horizontal where the horizontal distance between the hoistway wall and the standard railing on a car enclosure top is less than 12”.

3147.2205 – Previously allowed. Unclear of safety issue supporting change at this time.

- A17.1 § 2.5.1.5.3 specifies that the clearance between the loading side of the car platform and the hoistway enclosure is not limited provided:
 - Car door interlock is provided to prevent a door from being opened unless the car is within the unlocking zone; and,
 - Strength of the door complies with 2.11.11.2, 2.11.11.4, 2.11.11.6, 2.11.11.7 and 2.11.11.8.
- Group IV did not delete provision from A17.1-2004
- Proposal does not adopt 2.5.1.5.3.

3147.2212(a) – Design limitations.

- A17.1 §2.12.6 requires hoistway door unlocking devices.
- Group IV did not adopt A17.1 §2.12.6.
- Proposal same as Group IV.

3147.2212(b) – This is a destructive test and verification of compliance unclear. Unclear of safety issue supporting change at this time.

- A17.1 §2.12.2.4.2 requires for passenger elevator the locking member of an interlock to hold the door in the locked position by means of gravity, or by a restrained compression spring, or by both, or by means of a positive linkage.
- Group IV adopted A17.1 without modifications.
- Proposal adds the requirement that the locking member shall not disengage when the door is subjected to a repetitive force of 450 N (100 lbf) in the direction of opening and at a right angle.

3147.2212(c) – This is a destructive test and verification of compliance unclear. Unclear of safety issue supporting change at this time.

- A17.1 §2.12.3.4.3 requires the mechanical lock for vertically sliding doors (freight) to hold the door in the locked position by means of gravity or by a restrained compression spring, or by both.
- Group IV adopted A17.1 without modifications.
- Proposal adds the requirement that the locking member shall not disengage when the door is subjected to a repetitive force of 450 N (100 lbf) in the direction of opening and at a right angle.

3147.2212(d) – Unclear of the safety issue to be mitigated.

- A17.1 §2.12.7 requires hoistway access switches where rated speed is greater than 150 ft/min at:
 - the lowest landing when a separate pit access door is not provided; and,
 - the top landing.
- Group IV 3141.7(a)(18) is similar to the proposal.
- Proposal requires hoistway access switches regardless of rated speed and located within 12” of door frame at height 36”-78”.

3147.2214(b), (a to e) – Combined with other requirements, emergency exit may not fit between rail and crosshead on standard-sized cars requiring larger car than needed.

- A17.1 §2.14.1.5.1 requires car top emergency exits to meet numerous location requirements.
- Group IV adopted A17.1 without modifications.
- Proposal adds an additional requirement 3147.2214(b)(b) that the emergency exit shall reside within the car top railings, if railings are provided. 3247.2214(b)(a,c,d,e) are identical to A17.1-2013 2.14.1.5.1.

3147.2218(b) - Unclear of safety issue supporting change at this time. Makes all currently approved governor marking plates obsolete, requiring new designs.

- A17.1 §2.18.9 requires a speed-governor marking plate on each speed governor indicating
 - Speed at which the governor is set
 - Size, material and construction of the governor rope
 - Governor pull-through tension
 - Manufacturer’s name or trademark
 - A “DO NOT LUBRICATE” statement.
- Group IV adopted A17.1 without modifications.
- Proposal adds the additional marking of manufacturer’s model number .

3147.2220(a) - Unclear the safety issue to be mitigated by this proposal as aramid suspension means was codified in A17.6 and A17.1-2010

- A17.1 §2.20.4.2 permits aramid fiber ropes as a suspension means.
- Group IV did not include alternate suspension means.
- The proposal deletes the allowance for aramid fiber ropes.

3147.2220(b) - Unclear the safety issue to be mitigated by this proposal as aramid suspension means was codified in A17.6 and A17.1-2010

- A17.1 § 2.20.1 references all of ASME A17.6 for its suspension means requirements.
- Group IV did not include alternate suspension means.
- Proposal excepts Part 2 (aramid fiber rope) in its reference to ASME A17.6.

3147.2220(c) – “Means” acceptable and utilized in all other AHJs. Too prescriptive. Unclear of safety issue supporting change at this time.

- A17.1 §2.20.8.3 requires all electric traction elevators, excluding steel wire ropes, to be provided with a residual strength detection means.
- Alternate suspension means not addressed in Group IV.
- Proposal requires a residual strength detection device.
 - The proposal also requires “proven technology” that “effectively monitors” the physical properties and the “actual residual strength” of the suspension members.

3147.2222(a) - Technical change to be consistent with other requirements in proposal.

- A17.1 §2.22.4.8 states that when a car is level with terminal landings, car and counterweight oil buffers of the mechanical spring-return type shall be permitted to be compressed not to exceed 25% of their stroke when the car is level with the terminal landings (see 2.4.2.1).
- Group IV is similar to proposal.
- Proposal does not adopt 2.22.4.8.

3147.2222(b) - Unclear of safety issue supporting change at this time.

- A17.1 §2.22.1.1 states buffers of the spring, oil, or equivalent type shall be installed under the cars and counterweights of passenger and freight elevators subject to the requirements of 2.22.1.1.1 through 2.22.1.1.3.
- Group IV 3141.7 (a)(5) is same as proposal.
- The proposal states that all oil and equivalent type buffers as referenced by 2.22.1.1 shall be subject to approval by the Division.

3147.2222(c) - Unclear of safety issue supporting change at this time. Acceptance and periodic testing determines a buffer’s function and acceptability.

- A17.1 §2.22.2 states solid bumpers, where permitted, shall be made of wood or other suitably resilient material of sufficient strength to withstand without failure the impact of the car with rated load, or the counterweight, descending at governor tripping speed. The material used shall be of a type that will resist deterioration or be so treated as to resist deterioration.
- Group IV adopted A17.1 without modifications.
- Proposal adds that all elastomeric bumpers be marked with manufacturer’s replacement criteria.

3147.2222(d) – Unclear of safety issue supporting change at this time.

- A17.1 §2.22.4.5 states that gas spring-return oil buffers shall be provided with a switch conforming to 2.26.2.22 that shall be actuated if the plunger is not within 13 mm (0.5 in.) of the fully extended position.
- Group IV adopted A17.1 without modifications.
- Proposal would add spring-return-type buffers to this requirement.

3147.2223 - Unclear of safety issue supporting change at this time. Too prescriptive.

- A17.1 §2.23.9.3 requires that slotted guide-rail brackets having single bolt fastenings be provided with an additional means to prevent lateral movement of the rail bracket. Such means shall have a factor of safety of not less than 5.
- Group IV adopted A17.1 without modifications.
- Proposal would state slotted guide-rail brackets shall be secured in their final position by a bolt not less than 3/8 inch diameter or by welding in accordance with section 8.8. Such means shall have a factor of safety of not less than 5.

3147.2224 – Technical change to be consistent with other requirements in proposal.

- A17.1 §2.24.2.3.2 addresses traction requirements for aramid fiber ropes.

- Alternate suspension means not addressed in Group IV.
- Proposal does not adopt 2.24.2.3.2.

3147.2227(c) – Unclear of safety issue supporting change at this time. Car could remain in service when there is a fire in the pit.

- 2.27.3.2(c) requires smoke detectors in an elevator hoistway when sprinklers are located in the hoistway.
- Group IV adopted A17.1 without modifications.
- Proposal unclear.

3147.2806(a) - Technical change to be consistent with other requirements in proposal, but conflicts still exist. Unclear why emergency evacuation procedures would be eliminated.

- A17.1 §8.6 applies to maintenance, repairs, replacements, and testing and states that maintenance, repair, and replacement shall be performed to provide compliance with the Code applicable at the time of installation or alteration.
- Group IV adopted A17.1 without modifications.
- Proposal states that sections 8.6.3.2.2, 8.6.4.20.1(b), 8.6.4.20.4(b), 8.6.4.20.10(b), 8.6.7.11, 8.6.11.5.2 through 8.6.11.5.6, 8.6.11.9, and 8.6.11.10 are not adopted.

3147.2806(b) – Eliminates alternative testing, based on physics principles, which are which are defined in an engineering analysis and verified on every elevator. Full load/full speed tests requiring weights decrease worker safety.

- A17.1 §8.6.1.7.2 states that, for periodic testing, if any of the alternative test methods contained in 8.6.4.20 were performed, then the test tag must indicate alternative testing was utilized for the applicable requirement.
- Group IV does not have alternative test methods, which were added in A17.1 – 2013 edition.
- Proposal would delete provision for alternative test methods.

3147.2806(d) – Unclear of safety issue supporting the elimination of slipping the drive train.

- A17.1 §8.6.4.19.12(b) specifies an alternative test provided in the Maintenance Control Program [see 8.6.1.2.1(f)]
- Group IV did not recognize traction loss detection means.
- Proposal would eliminate the reference to MCP and instead states if relative motion between the drive sheave and suspension means will result in material damage, it is permissible to relieve the tension between the two devices prior to demonstrating conformance with 8.6.4.19.12(a).

3147.2806(e) - Eliminates alternative testing, based on physics principles, which are which are defined in an engineering analysis and verified on every elevator. Full load/full speed tests requiring weights decrease worker safety.

- A17.1 §8.6.4.20.3 requires car oil buffers to be tested to determine conformance with the applicable requirements.
- Group IV adopted A17.1 without modifications.
- Proposal retains Group IV requirements and deletes no load car buffer testing.

3147.2806(h) – Unclear of safety issue supporting change at this time.

- A17.1 §8.6.11.1 requires all elevators provided with firefighters' emergency operation shall be subjected monthly to a check by authorized personnel.
- Group IV is similar to the proposal.

- Proposal states the check can be done by authorized personnel except on every third time it shall be performed by a Certified Competent Conveyance Mechanic.

3147.2806(j) - Unclear of safety issue supporting change at this time.

- A17.1§8.6.11.5.1 states that the evacuation of passengers from stalled elevators shall be performed only by authorized, elevator and emergency personnel (see 1.3) in compliance with the procedures specified in 8.6.11.5.2 through 8.6.11.5.6.
- Group IV adopted A17.1 without modifications.
- Proposal states the evacuation of passengers from stalled elevators shall be performed only by elevator and emergency personnel (see 1.3) and references ASME A17.4.

3147.2102(a) – Rationale provided does not support proposed change. Will dramatically increase variances based on proposal.

- A17.1 §1.2 recognizes A17.7 compliance as equivalent to A17.1.
- Group IV does not reference A17.7, which was added in A17.1 – 2007 edition.
- Proposal would delete the reference and exclude ability to utilize A17.7.