

Occupational Safety and Health Standards Board

Public Meeting and
Business Meeting

August 17, 2023

County Administration Center
Room 310
1600 Pacific Highway
San Diego, California

AND

Via teleconference / videoconference

Occupational Safety and Health Standards Board

Meeting Agenda

DEPARTMENT OF INDUSTRIAL RELATIONS
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
Tel: (916) 274-5721
www.dir.ca.gov/oshsb



MISSION STATEMENT

The mission of the Occupational Safety and Health Standards Board is to promote, adopt, and maintain reasonable and enforceable standards that will ensure a safe and healthful workplace for California workers.

AGENDA

PUBLIC MEETING AND BUSINESS MEETING
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

August 17, 2023 at 10:00 a.m.

Attend the meeting in person:

County Administration Center
Room 310
1600 Pacific Highway
San Diego, CA 92101

Attend the meeting via Video-conference:

1. Go to www.webex.com
2. Select "Join"
3. Enter the meeting information: **268 984 996**
4. Enter your name and email address then click "Join Meeting"
5. Video-conference will be opened to the public at 9:50 a.m.

Attend the meeting via Teleconference:

1. Dial (844) 992-4726
2. When prompted, enter **268-984-996**
3. When prompted for an Attendee ID, press #
4. Teleconference will be opened to the public at 9:50 a.m.

Live video stream and audio stream (English and Spanish):

1. Go to <https://videobookcase.com/california/oshsb/>
2. Video stream and audio stream will launch as the meeting starts at 10:00 a.m.

Public Comment Queue:

Those attending the meeting in person will be added to the public comment queue on the day of the meeting.

Those attending the meeting remotely who wish to comment on agenda items may submit a request to be added to the public comment queue either in advance of or during the meeting through one of the following methods:

ONLINE: Provide your information through the online comment queue portal at <https://videobookcase.org/oshsb/public-comment-queue-form/>

PHONE: Call **510-868-2730** to access the automated comment queue voicemail and provide*: 1) your name as you would like it listed; 2) your affiliation or organization; and 3) the topic you would like to comment on.

**Information requested is voluntary and not required to address the Board.*

I. **CALL TO ORDER AND INTRODUCTIONS**

II. **PUBLIC MEETING (Open for Public Comment)**

This portion of the Public Meeting is open to any interested person to propose new or revised standards to the Board or to make any comment concerning occupational safety and health (Labor Code section 142.2). *The Board is not permitted to take action on items that are not on the noticed agenda, but may refer items to staff for future consideration.*

This portion of the meeting is also open to any person who wishes to address the Board on any item on today's Business Meeting Agenda (Government Code (GC) section 11125.7).

Any individual or group wishing to make a presentation during the Public Meeting is requested to contact Sarah Money, Executive Assistant, at (916) 274-5721 in advance of the meeting so that any logistical concerns can be addressed.

A. PUBLIC COMMENT

B. ADJOURNMENT OF THE PUBLIC MEETING

III. **BUSINESS MEETING – All matters on this Business Meeting agenda are subject to such discussion and action as the Board determines to be appropriate.**

The purpose of the Business Meeting is for the Board to conduct its monthly business.

A. PROPOSED VARIANCE DECISIONS FOR ADOPTION

1. **Consent Calendar**

B. REPORTS

1. Division Update

2. Legislative Update
3. Executive Officer's Report

C. NEW BUSINESS

1. Future Agenda Items

Although any Board Member may identify a topic of interest, the Board may not substantially discuss or take action on any matter raised during the meeting that is not included on this agenda, except to decide to place the matter on the agenda of a future meeting. (GC sections 11125 & 11125.7(a).).

D. CLOSED SESSION

Matters Pending Litigation

1. Western States Petroleum Association (WSPA) v. California Occupational Safety and Health Standards Board (OSHSB), et al. United States District Court (Eastern District of California) Case No. 2:19-CV-01270
2. WSPA v. OSHSB, et al., County of Sacramento, CA Superior Court Case No. 34-2019-00260210

Personnel

E. RETURN TO OPEN SESSION

1. Report from Closed Session

F. ADJOURNMENT OF THE BUSINESS MEETING

Next Meeting: September 21, 2023
Monterey One Water Building
RTP Conference Room A/B
14811 Del Monte Blvd.
Marina, CA 93933
10:00 a.m.

CLOSED SESSION

1. If necessary, consideration of personnel matters. (GC section 11126(a)(1)).
2. If necessary, consideration of pending litigation pursuant to GC section 11126(e)(1).

PUBLIC COMMENT

Efforts will be made to accommodate each individual who has signed up to speak. However, given time constraints, there is no guarantee that all who have signed up will be able to address the State body.

Each speaker is invited to speak for up to two minutes. The Board Chair may extend the speaking time allotted where practicable.

The total time for public comment is 120 minutes, unless extended by the Board Chair.

The public can speak/participate at the meetings before items that involve decisions.

In addition to public comment during Public Hearings, the Occupational Safety and Health Standards Board (Board) affords an opportunity to members of the public to address the Board on items of interest that are either on the Business Meeting agenda, or within the Board's jurisdiction but are not on the noticed agenda, during the Public Meeting. The Board is not permitted to take action on items that are not on the noticed agenda, but may refer items to staff for future consideration. The Board reserves the right to limit the time for speakers.

DISABILITY ACCOMMODATION NOTICE

Disability accommodation is available upon request. Any person with a disability requiring an accommodation, auxiliary aid or service, or a modification of policies or procedures to ensure effective communication and access to the public hearings/meetings of the Occupational Safety and Health Standards Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1-866-326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1-800-735-2929 (TTY) or 1-800-855-3000 (TTY-Spanish).

Accommodations can include modifications of policies or procedures or provision of auxiliary aids or services. Accommodations include, but are not limited to, an Assistive Listening System (ALS), a Computer-Aided Transcription System or Communication Access Realtime Translation (CART), a sign-language interpreter, documents in Braille, large print or on computer disk, and audio cassette recording. Accommodation requests should be made as soon as possible. Requests for an ALS or CART should be made no later than five (5) days before the meeting.

TRANSLATION

Requests for translation services should be made no later than five (5) days before the meeting.

NOTE: Written comments may be emailed directly to oshsb@dir.ca.gov no later than 5:00 p.m. on the Tuesday prior to a scheduled Board Meeting.

Under GC section 11123, subdivision (a), all meetings of a state body are open and public, and all persons are permitted to attend any meeting of a state body, except as otherwise provided in that article. The Board Chair may adopt reasonable time limits for public comments in order to ensure that the purpose of public discussion is carried out. (GC section 11125.7, subd. (b).)

Members of the public who wish to participate in the meeting may do so via livestream on our website at <https://videobookcase.com/california/oshsb/>. The video recording and transcript of this meeting will be posted on our website as soon as practicable.

For questions regarding this meeting, please call (916) 274-5721.

Occupational Safety and Health Standards Board

Meeting Notice

DEPARTMENT OF INDUSTRIAL RELATIONS
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
Tel: (916) 274-5721
www.dir.ca.gov/oshsb



NOTICE OF PUBLIC MEETING AND BUSINESS MEETING
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Pursuant to Government Code Section 11346.4 and the provisions of Labor Code Sections 142.1, 142.2, 142.3, 142.4, and 144.6, the Occupational Safety and Health Standards Board of the State of California has set the time and place for a Public Meeting and Business Meeting:

PUBLIC MEETING: On **August 17, 2023**, at 10:00 a.m.
in Room 310 of the County Administration Center
1600 Pacific Highway, San Diego, California

as well as via the following:

- Video-conference at www.webex.com (meeting ID 268 984 996)
- Teleconference at (844) 992-4726 (Access code 268 984 996)
- Live video stream and audio stream (English and Spanish) at <https://videobookcase.com/california/oshsb/>

At the Public Meeting, the Board will make time available to receive comments or proposals from interested persons on any item concerning occupational safety and health.

BUSINESS MEETING: On **August 17, 2023**, at 10:00 a.m.
in Room 310 of the County Administration Center
1600 Pacific Highway, San Diego, California

as well as via the following:

- Video-conference at www.webex.com (meeting ID 268 984 996)
- Teleconference at (844) 992-4726 (Access code 268 984 996)
- Live video stream and audio stream (English and Spanish) at <https://videobookcase.com/california/oshsb/>

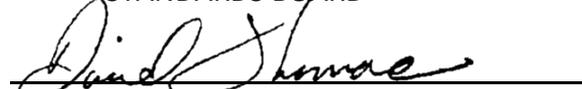
At the Business Meeting, the Board will conduct its monthly business.

DISABILITY ACCOMMODATION NOTICE: Disability accommodation is available upon request. Any person with a disability requiring an accommodation, auxiliary aid or service, or a modification of policies or procedures to ensure effective communication and access to the public hearings/meetings of the Occupational Safety and Health Standards Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1-866-326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1-800-735-2929 (TTY) or 1-800-855-3000 (TTY-Spanish).

Accommodations can include modifications of policies or procedures or provision of auxiliary aids or services. Accommodations include, but are not limited to, an Assistive Listening System (ALS), a Computer-Aided Transcription System or Communication Access Realtime Translation (CART), a

sign-language interpreter, documents in Braille, large print or on computer disk, and audio cassette recording. Accommodation requests should be made as soon as possible. Requests for an ALS or CART should be made no later than five (5) days before the hearing.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD



DAVE THOMAS, Chairman

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting

Proposed Variance Decisions

**CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS
AUGUST 17, 2023, MONTHLY BUSINESS MEETING
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON July 26, 2023

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 23-V-154	Santa Fe Senior Village, L.P.	Elevator	GRANT
2. 23-V-183	SCP 130 Alvarado, LLC	Elevator	GRANT
3. 23-V-185	NCCD - Napa Valley Properties LLC	Elevator	GRANT
4. 23-V-190	738 Normandie, L.P.	Elevator	GRANT
5. 23-V-191	Alloy Santa Fe, LLC	Elevator	GRANT
6. 23-V-192	Alloy Santa Fe, LLC	Elevator	GRANT
7. 23-V-193	CP VII Adrian, LLC	Elevator	GRANT
8. 23-V-194	Jamison 3875 Wilshire, LLC	Elevator	GRANT
9. 23-V-195	Santa Monica Office Partners LLC	Elevator	GRANT
10. 23-V-196	SIOF 4252 Whittier Blvd, LP	Elevator	GRANT
11. 23-V-198	The Salvation Army Pasadena Hope Center Apartments L.P.	Elevator	GRANT
12. 23-V-199	San Diego Symphony Orchestra	Elevator	GRANT
13. 23-V-200	Nash - Holland 18750 Delaware Investors, LLC a Delaware Limited Liability Company	Elevator	GRANT
14. 23-V-201	RMG HTC Duarte, LP	Elevator	GRANT
15. 23-V-202	Anaheim Midway, LP	Elevator	GRANT
16. 23-V-203	Sola Impact	Elevator	GRANT
17. 23-V-204	BIF OZ 2551 Commercial St., LP	Elevator	GRANT
18. 23-V-205	La Bahia Propco, LLC	Elevator	GRANT
19. 23-V-206	Elim Associates Inc.	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
20. 23-V-207	Grantville Trolley Family Housing LP	Elevator	GRANT
21. 23-V-208	AG-5R 6610 Nancy Ridge Owner, L.L.C.	Elevator	GRANT
22. 23-V-209	LN Forbes Road Development JV LLC	Elevator	GRANT
23. 23-V-210	LN Forbes Road Development JV LLC	Elevator	GRANT
24. 23-V-211	856 Gramercy Drive, LLC	Elevator	GRANT
25. 23-V-212	4132 Beyer, L.P.	Elevator	GRANT
26. 23-V-213	KT8 LLC, KT9 LLC & Sepco LLC	Elevator	GRANT
27. 23-V-214	LA County Department of Health Services	Elevator	GRANT
28. 23-V-215	LA County Department of Health Services	Elevator	GRANT
29. 23-V-216	LA County Department of Health Services	Elevator	GRANT
30. 23-V-217	RALA (Barrington Ave) LLC	Elevator	GRANT
31. 23-V-218	Venice Adventures LLC	Elevator	GRANT
32. 23-V-219	AS LSTE East Owner LLC	Elevator	GRANT
33. 23-V-220	AS LLL Owner, LLC	Elevator	GRANT
34. 23-V-221	Asian Americans Advancing Justice Southern California	Elevator	GRANT
35. 23-V-222	BIF OZ 5300 Crenshaw, LLC	Elevator	GRANT
36. 23-V-223	Uplift Ventures LLC	Elevator	GRANT
37. 23-V-224	Murrieta Family Housing Partners, L.P.	Elevator	GRANT
38. 23-V-225	8333 Airport, L.P.	Elevator	GRANT
39. 23-V-226	1820 Broadway, LLC	Elevator	GRANT
40. 23-V-227	2400 Adeline Development LLC	Elevator	GRANT
41. 23-V-228	South Coast Plaza	Elevator	GRANT
42. 23-V-229	Post 310 Housing San Diego LP	Elevator	GRANT
43. 23-V-230	Post 310 Housing San Diego LP	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
44. 23-V-231	Standard Aspen Wood Venture LP	Elevator	GRANT
45. 23-V-232	The Lair QOZB LLC	Elevator	GRANT
46. 23-V-233	Gemdale Aperture Phase I, LLC	Elevator	GRANT
47. 23-V-280	Stanford University	Elevator	GRANT

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Schindler 3300 with SIL-Rated Drive to
De-energize Drive Motor (Group IV)

OSHSB File No.: Per table, in Jurisdictional
and Procedural Matters below

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)</p>	<p>OSHSB File Nos.: Per table, in Jurisdictional and Procedural Matters below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

Jurisdictional and Procedural Matters

1. Each below listed applicant (“Applicant”) has applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-154	Santa Fe Senior Village, L.P.	414 North Santa Fe Ave. Vista, CA	1
23-V-222	BIF OZ 5300 Crenshaw, LLC	5300 Crenshaw Blvd. Los Angeles, CA	1
23-V-223	Uplift Ventures LLC	3359 26th St. San Francisco, CA	1
23-V-224	Murrieta Family Housing Partners, L.P.	24960 Adams Ave. Murrieta, CA	3
23-V-225	8333 Airport, L.P.	8333 S Airport Boulevard Los Angeles, CA	2
23-V-227	2400 Adeline Development LLC	1820 Broadway Santa Monica, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
3. This hearing was held on July 26, 2023, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
4. At the hearing, Jennifer Linares, with the Schindler Elevator Corporation, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Reviews of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(B), 2.14.1.7.1, and 2.26.9.6.1]. The relevant language of those sections are below.

1. Suspension Means

Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low-carbon steel) or steel wire ropes, having the commercial classification “Elevator Wire Rope,” or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process, or their equivalent.

Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(b) the diameter in millimeters (mm) or inches (in.)

Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

A metal data tag shall be securely attached-to-one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were non preformed or preformed

Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where:

N= number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S= manufacturer's rated breaking strength of one rope

W= maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30

for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).

Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Inspection Transfer Switch

Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:

When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be

(a) located in the machine room[.]

3. Seismic Reset Switch

Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:

(a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:

(1) seismic zone 3 or greater: a minimum of one seismic switch per building

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

(b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

4. Car-top Railings

Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

5. SIL-Rated System to Inhibit Current Flow to AC Drive Motor

Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:

Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Findings of Fact

Based on the record of this proceeding, the Board finds the following:

1. Applicant intends to utilize Schindler model 3300 MRL elevator cars at the locations listed in Jurisdictional and Procedural Matters, section 1.
2. The installation contract for these elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders (ESO). They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.
5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
6. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
7. Applicant proposes to insert the car-top railings at the perimeter of the car top.
8. Applicant intends to use an elevator control system, model CO NX100NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

Conclusive Findings:

The above-stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail

upon full compliance with the requirements of California Code of Regulation, title 8, Elevator Safety Orders from which variance is being sought.

Decision and Order:

Each Application being the subject of this proceeding, per the table in Jurisdictional and Procedural Matters, section 1 above, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from California Code of Regulations, title 8, section 3141 shall be GRANTED subject to the following conditions and limitations:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric-coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);
- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 – Minimum Number of Suspension Members
 - 2.20.3 – Factor of Safety
 - 2.20.9 – Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Division upon request.

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
 - ii. Any wire, strand or cord breaks through the elastomeric coating;
 - iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
 - iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
- h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Division Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.
- i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.

- k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
 - l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.
 - m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.
- 2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
 - 3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
 - 4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

**CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING**

- f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required level).
5. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
- a. The SIL-rated devices and circuits shall consist of a Variodyn SIL-3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013 or VAF023, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
 - b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
 - c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

**Assembly contains SIL-rated devices.
Refer to Maintenance Control Program and
wiring diagrams prior to performing work.**

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.
- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions

- for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.
 - k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
6. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
 7. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per California Code of Regulations, title 8, sections 411.2 and 411.3.
 8. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed per title 8, Chapter 3.5, Subchapter 1.

Pursuant to California Code of Regulations, title 8, section 426(b), the above, duly completed Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 31, 2023



Autumn Gonzalez, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.
3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance Regarding:

Otis Gen2S/Gen3Edge Elevator & Medical
Emergency Elevator Car Dimensions
(Group IV)

OSHSB File No.: See section A table below

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Otis Gen2S/Gen3Edge Elevator & Medical Emergency Elevator Car Dimensions (Group IV)</p>	<p>OSHSB File Nos.: See section A table below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

A. Subject Matter

1. Each below listed applicant (“Applicant”) has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-183	SCP 130 Alvarado, LLC	130 S. Alvarado St. Los Angeles, CA	1
23-V-185	NCCD - Napa Valley Properties LLC	100 Magnolia Dr. Bldg. 1, Bldg. 2, & Bldg. 3 Napa, CA	2 Elevators each Bldg.
23-V-190	738 Normandie, L.P.	738 S. Normandie Ave. Los Angeles, CA	1
23-V-193	CP VII Adrian, LLC	1 Adrian Court Burlingame, CA	4
23-V-194	Jamison 3875 Wilshire, LLC	640 S. St. Andrews Pl. Los Angeles, CA	3
23-V-198	The Salvation Army Pasadena Hope Center Apartments L.P.	1000 E. Walnut St. Pasadena, CA	1
23-V-201	RMG HTC Duarte, LP	1734 E. 55th St. Los Angeles, CA	1
23-V-202	Anaheim Midway, LP	1445 South Anaheim Blvd. Anaheim, CA	1

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

23-V-203	Sola Impact	4238 S. Western Ave. Los Angeles, CA	1
23-V-204	BIF OZ 2551 Commercial St., LP	2551 Commercial St. San Diego, CA	1
23-V-205	La Bahia Propco, LLC	215 Beach St. Santa Cruz, CA	5
23-V-206	Elim Associates Inc.	983 S. Dewey Ave. Los Angeles, CA	1
23-V-211	856 Gramercy Drive, LLC	856 S. Gramercy Dr. Los Angeles, CA	2
23-V-212	4132 Beyer, L.P.	411 North Lane San Ysidro, CA	2
23-V-217	RALA (Barrington Ave) LLC	1503 S. Barrington Ave. Los Angeles, CA	1
23-V-218	Venice Adventures LLC	3773 S. Glendon Ave. Los Angeles, CA	2
23-V-221	Asian Americans Advancing Justice Southern California	1145 Wilshire Blvd. Los Angeles, CA	1
23-V-229	Post 310 Housing San Diego LP	465 47th St. San Diego, CA	1
23-V-230	Post 310 Housing San Diego LP	500 47th Street San Diego, CA	1
23-V-232	The Lair QOZB LLC	2440 Shattuck Ave. Berkeley, CA	1

2. The safety orders from which variance may issue, are enumerated in the portion of the below Decision and Order preceding the variance conditions.

B. Procedural

1. This proceeding is conducted in accordance with Labor Code section 143.
 - A. This hearing was held on July 26, 2023, in Sacramento, California, and videoconference, by the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit in accordance with section 426.
2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per Section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis

Based on the record of this hearing, the Board makes the following findings of fact:

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A table.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
 - a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance File No. 12-V-093;
 - b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent File No. 14-V-206; and
 - c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent File No. 22-V-302 regarding medical emergency car dimensions.
4. Division, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the regulation requirements from which variance has been requested.

D. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that:

1. Each Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and
2. A preponderance of the evidence establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of regulations from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Car top railing: sections 2.14.1.7.1 (only to the extent necessary to permit an inset car top railing, if, in fact, the car top railing is inset);
- Speed governor over-speed switch: 2.18.4.2.5(a) (only insofar as is necessary to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- Governor rope diameter: 2.18.5.1 (only to the extent necessary to allow the use of reduced diameter governor rope);
- Pitch diameter: 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No. 13.c);
- Suspension means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these “suspension means” provisions are only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- Inspection transfer switch: 2.26.1.4.4(a) (only to the extent necessary to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and

- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (only to the extent necessary to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code Section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the “Gen2 Master File”) maintained by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device’s functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
2. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to the Division upon request.
4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts; and
 - g. Lubrication information.
5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
7. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

- c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
- e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
 11. The governor speed-reducing switch function shall comply with the following:
 - a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
 - b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
 - c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
 - d. It shall be used in conjunction with approved car-mounted speed governors only.

- e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
- f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
- g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
- h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to the Division upon request.

12. The speed governor rope and sheaves shall comply with the following:

- a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
- b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
- c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

- a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position."

- b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to the Division, at the time of inspection, for all medical emergency service elevator(s).
14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
 15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
 16. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
 17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
 18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
 19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with the Board’s procedural rules.

Pursuant to section 426(b), the above, Proposed Decision, is submitted to the Board for consideration of adoption.

Dated: July 31, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.
3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Otis Gen20 and/or Gen3Peak (Group IV)

OSHSB File No.: Per Section A.1 Table

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Otis Gen20 and/or Gen3Peak (Group IV)</p>	<p>OSHSB File No: Per Section A.1 Table</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

A. Procedural And Jurisdictional Matters

- Each applicant (“Applicant”) listed in the table below has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-191	Alloy Santa Fe, LLC	530 S. Mateo St. Los Angeles, CA	4

- The subject safety order requirements are specified in B. Applicable Regulations below.
- These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Board’s procedural regulations.
- This hearing was held on July 26, 2023, in Sacramento, California via videoconference by the Occupational Safety and Health Standards Board (“Board”) with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
- Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

7. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 26, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Applicable Regulations

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - b. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
 - c. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

C. Findings of Fact

1. The Board incorporates by reference the findings stated in:
 - a. Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in OSHSB File No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in OSHSB File No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in OSHSB File No. 10 V 029;
 - d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in OSHSB File No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in OSHSB File No. 14-V-170.
2. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").

3. The Division safety engineers, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that:

1. Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and
2. a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:

- a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.
3. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
 4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to the Division upon request.
 5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person who, or organization that, installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;

- g. Lubrication information.
6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
 7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
 10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
 11. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.
 - c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.

- e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

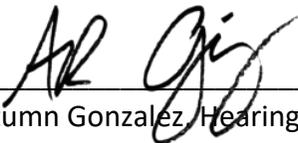
CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
14. The Division shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by the Division, and a Permit to Operate shall be issued before each elevator is placed in service.
15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
16. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per California Code of Regulations, title 8, sections 411.2 and 411.3.
17. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per title 8, division 1, chapter 3.5.

Pursuant to Section 426(b), the above Proposed Decision is submitted to the Board for consideration of adoption.

DATED: July 31, 2023


Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code Section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and

(2) any conditions that existed to cause damage or distress to the suspension components being replaced.

g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

h. All information provided on the crosshead data plate per ASME A17.1-2004, Section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Alloy Santa Fe, LLC

OSHSB File No.: 23-V-192

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: Alloy Santa Fe, LLC	OSHSB File No.: 23-V-192 <u>PROPOSED DECISION</u> Hearing Date: July 26, 2023
---	---

A. Subject Matter

1. Alloy Santa Fe, LLC (“Applicant”) has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations, for 4 elevators, located at 525 S. Santa Fe Avenue, Los Angeles.
2. Applicant requests permanent variance from section 3141 [ASME A17.1-2004, Sections 2.26.9.4, 2.14.1.7.1] of the Elevator Safety Orders, with respect to the means of removing power from driving machine motor and brake, car top railings, respectively.

B. Procedural

1. This proceeding is conducted in accordance with Labor Code section 143.
2. This hearing was held on July 26, 2023, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration.
3. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
4. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance application per Section A
PD-2	OSHSB Notice of Hearing
PD-4	Division Review of Variance Application
PD-5	Review Draft-1 Proposed Decision

5. Official notice is taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis:

Based on the record of this hearing, the Board makes the following findings of fact:

1. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
2. The Applicant proposes the use of a SIL rated software system and circuits consisting of three computer control boards that communicate on a Control Area Network (CAN) to monitor elevator safety devices and perform certain safety functions. The design of this SIL-rated software system and its related circuits includes a required redundant means to remove the power from the driving machine motor and brake under certain conditions. The safety orders do not allow this redundancy to be solely dependent on a software controlled means as proposed by the Applicant.

3. Section 3141[ASME A17.1-2004, Section 2.26.9.4] states:

Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the driving-machine motor and brake shall not be solely dependent on software-controlled means.

4. The intent of this code requirement is to limit hazards that would be created by the failure of critical elevator safety circuits. The use of software as the sole method of controlling certain critical elevator safety circuits is also prohibited.
5. The Applicant contends that the proposed SIL rated software system and its circuits are in compliance with a more recent ASME A17.1 edition, and provide equivalent safety to the existing regulation.
6. ASME A17.1-2013, section 2.26.9.3.2 states:

Methods used to satisfy 2.26.9.3.1 using software systems are permitted, provided that

(a) a non-software-controlled means is also used to remove power from the driving- machine motor and brake, or

(b) the software system and related circuits are listed/certified to a SIL rating that is in accordance with the applicable requirements of IEC 61508-2 and IEC 61508-3. This software system and its related circuits shall have a SIL of not less than the highest SIL value of the safety function(s) in Table 2.26.4.3.2 used in the circuit. The software system and related circuits shall be identifiable on wiring diagrams (see 8.6.1.6.3) with part identification, SIL, and certification identification information that shall be in accordance with the certifying organization's requirements.

7. The Applicant proposes to inset car top railings in a manner consistent with previous permanent variances granted to Otis Gen2S products. (See, OSHSB File No. 14-V-375.)

8. Section 3141[ASME A17.1-2004, Section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

9. The intent of this code requirement is to provide fall protection to a potentially hazardous condition. The code requires the handrails to be installed at the perimeter of the car to prevent persons or objects from occupying the area beyond the handrail.

10. Cal/OSHA, by way of written submission to the record and testimony at hearing, concludes that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis for the conclusion that Applicant has complied with the statutory and regulatory requirements

that must be met before an application for permanent variance may be conditionally granted. A preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of Elevator Safety Orders from which variance is being sought.

E. Decision and Order:

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Car top railing: sections 2.14.1.7.1 (only to the extent necessary to permit an inset car top railing, if, in fact, the car top railing is inset);
- Means of Removing Power: 2.26.9.4 (Only to the extent necessary to permit the redundant monitoring of electrical protective devices and the removal of power from the machine motor and brake to be solely dependent on software-controlled means.).

These variances apply to the location and numbers of elevators stated in section A, and are subject to the following conditions:

1. If there is an inset car top railing:

- a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
- b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
- c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
- e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

**CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING**

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

2. The SIL rated software system and its related circuits shall comply with the following:

- a. The SIL rated software system and related circuits shall consist of three circuit board components (SSIB, KSIB, and HSIB), each labeled or marked with the SIL rating (not less than SIL 3) the name or mark of the certifying organization, and the SIL certification number (AEB 012, EU-ESD 012 or both) followed by the applicable revision number (as in AEB 012/2, EU-ESD 012/1).
- b. The software system and related circuits shall be certified for compliance with the applicable requirements of ASME A.17.1-2013 Section 2.26.4.3.2.
- c. The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL rated devices.

Refer to Maintenance Control Program and wiring diagrams prior to performing work.

- d. Unique maintenance procedures or methods required for the inspection, tests and replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine room. The procedures or methods shall include clear color photographs of each SIL rated component, with notations indicating part identification and location installed.
- e. Wiring diagrams that include part identification, SIL, and certification information, shall be maintained in the elevator machine room.
- f. A successful test of the SIL rated software system and its related circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.
- g. Alterations to the SIL rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices the alterations shall be made in conformance with ASME A17.1-2013, Section 8.7. 1.9.
- h. Replacement of the SIL rated software system or its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain

specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17-1-2013, section 8.6.3.14.

- i. Repairs to the SIL rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
 - j. Any space containing SIL rated software or circuits shall be maintained within the temperature and humidity range specified by Otis Elevator Company. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.
 - k. Field software changes are not permitted. Any changes to the TUV certified SIL rated software will require updated documentation and recertification.
3. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the elevator system (including SIL 3-rated devices) in accordance with the written procedures and criteria required by Condition No. 2.d and in accordance with the terms of this permanent variance.
 4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
 5. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
 6. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
 7. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b) of the Board's procedural regulations, the above Proposed Decision is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

Dated: July 31, 2023



Autumn Gonzalez, Hearing Officer

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Otis Medical Emergency Elevator Car
Dimensions (Group IV)

OSHSB File No.: see grid below

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Otis Medical Emergency Elevator Car Dimensions (Group IV)</p>	<p>OSHSB File No.: see grid below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

A. Jurisdictional and Procedural Matters

- Each below listed applicant (“Applicant”) has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, with respect to the listed conveyance or conveyances, at the specified location:

Variance No.	Applicant Name	Variance Location Address
23-V-195	Santa Monica Office Partners LLC	2101 Wilshire Blvd. Santa Monica, CA
23-V-207	Grantville Trolley Family Housing LP	4470 Alvarado Canyon San Diego, CA
23-V-208	AG-5R 6610 Nancy Ridge Owner, L.L.C.	6610 Nancy Ridge Drive San Diego, CA

- This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Board’s rules of practice and procedure.
- This hearing was held on July 26, 2023, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- At the hearing, Dan Lecox of Lecox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).

¹ Unless otherwise noted, all references are to the California Code of Regulations, title 8.

5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per Section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Reviews of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

B. Findings of Fact and Applicable Regulations

Based upon the record of this proceeding, the Board finds the following:

1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

(1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:

...

(C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, “Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e).”

2. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

C. Conclusive Findings

The above-stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.

3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to the Division, at the time of inspection, for all medical emergency service elevator(s).
4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
5. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), the Division, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

Pursuant to section 426, subdivision (b) of the Board's procedural regulations, the above, Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 31, 2023



Autumn Gonzalez, Hearing Officer

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Otis Gen2S/Gen3Edge Elevator (Group IV)

OSHSB File No.: See section A table below

First Amended Proposed Decision Dated:
July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION.

DAVID THOMAS, Chairman

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

KATHLEEN CRAWFORD, Member

Date of Adoption: August 17, 2023

DAVID HARRISON, Member

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Otis Gen2S/Gen3Edge Elevator (Group IV)</p>	<p>OSHSB File Nos.: See section A table below</p> <p><u>FIRST AMENDED PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

A. Subject Matter

- Each below listed applicant (“Applicant”) has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-196	SIOF 4252 Whittier Blvd, LP	4252 Whittier Blvd. Los Angeles, CA	1
23-V-209	LN Forbes Road Development JV LLC	Apartment 27942 Forbes Rd. Laguna Niguel, CA	1
23-V-210	LN Forbes Road Development JV LLC	Garage 27942 Forbes Road Laguna Niguel, CA	2
23-V-213	KT8 LLC, KT9 LLC & Sepco LLC	2600 S. Sepulveda Blvd. Los Angeles, CA	1
23-V-231	Standard Aspen Wood Venture LP	9000 Alcosta Boulevard San Ramon, CA	2

- The safety orders from which variance may issue, are enumerated in the portion of the below Decision and Order preceding the variance conditions.

B. Procedural

- This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Board’s procedural regulations.

¹ Unless otherwise stated, all other references are to the California Code of Regulations, title 8.

2. This hearing was held on July 26, 2023, in Sacramento, California, and via videoconference, by the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit in accordance with section 426.
3. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
4. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per Section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis

Based on the record of this hearing, the Board makes the following findings of fact:

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A table.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference Items (i.e. sections) D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 regarding Permanent Variance File No. 12-V-093 and Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 in Permanent Variance File No. 14-V-206.
4. The Division, by way of written submission to the record (Exhibit PD-3) and position stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of regulations from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Car top railing: sections 2.14.1.7.1 (only to the extent necessary to permit an inset car top railing, if, in fact, the car top railing is inset);
- Speed governor over-speed switch: 2.18.4.2.5(a) (only insofar as is necessary to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- Governor rope diameter: 2.18.5.1 (only to the extent necessary to allow the use of reduced diameter governor rope);
- Pitch diameter: 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No. 13.c);
- Suspension means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these “suspension means” provisions are only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- Inspection transfer switch: 2.26.1.4.4(a) (only to the extent necessary to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and

- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (only to the extent necessary to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the “Gen2 Master File”) maintained by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device’s functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
2. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.
3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to the Division upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts; and
 - g. Lubrication information.
5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
7. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
 - c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

- e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
 10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
 11. The governor speed-reducing switch function shall comply with the following:
 - a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
 - b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
 - c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
 - d. It shall be used in conjunction with approved car-mounted speed governors only.
 - e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
 - f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

- g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to the Division upon request.
12. The speed governor rope and sheaves shall comply with the following:
- a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).
13. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
15. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
16. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
18. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per title 8, Division 1, Chapter 3.5.

Pursuant to section 426(b), the above Proposed Decision, is submitted to the Board for consideration of adoption.

Dated: July 31, 2023


Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.
3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

TK Elevator Evolution (Group IV)

OSHSB File No.: Per Section A.1 table

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: TK Elevator Evolution (Group IV)	OSHSB File Nos.: Per Section A.1 table <u>PROPOSED DECISION</u> Hearing Date: July 26, 2023
--	---

A. Procedural Matters

1. The below listed Applicants (“Applicant”) have applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-199	San Diego Symphony Orchestra	1245 7th Avenue San Diego, CA	1

2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Board’s procedural standards.
3. This hearing was held on July 26, 2023, in Sacramento, California via videoconference by the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit.
4. At the hearing, James Day with TK Elevator appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
5. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

6. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 26, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Relevant Safety Orders

Variance Request No. 1 (ASME A17.1-2004, section 2.14.1.7.1)

2.14.1.7.1 A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

Variance Request No. 2A (ASME A17.1-2004, section 2.20.1)

2.20.1 Suspension Means

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused.

Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process or their equivalent.

Variance Request No. 2B (ASME A17.1-2004, section 2.20.2[.1])

2.20.2.1 On Crosshead Data Plate.

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(a) the number of ropes

(b) the diameter in millimeters (mm) or inches (in.)

(c) the manufacturer's rated breaking strength per rope in kilo Newton (kN) or

pounds (lb)

Variance Request No. 2C (ASME A17.1-2004, section 2.20.2.2)

2.20.2.2 On Rope Data Tag.

A metal data tag shall be securely attached to one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were nonpreformed or preformed

[...]

Variance Request No. 2D. (ASME A17.1-2004, section 2.20.3)

2.20.3 Factor of Safety

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where

N = number of runs of rope under load. For 2:1 roping, *N* shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Variance Request No. 2E (ASME A17.1-2004, section 2.20.4)

2.20.4 Minimum Number and Diameter of Suspension Ropes

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Variance Request No. 2F (ASME A17.1-2004, section 2.20.9[.1])

2.20.9 Suspension-Rope Fastening

2.20.9.1 Type of Rope Fastenings. The car and counterweight ends of suspension wire ropes, or the stationary hitch-ends where multiple roping is used, shall be fastened in such a manner that all portions of the rope, except the portion inside the rope sockets, shall be readily visible.

Fastening shall be

(a) by individual tapered rope sockets (see 2.20.9.4) or other types of rope fastenings that have undergone adequate tensile engineering tests, provided that

(1) such fastenings conform to 2.20.9.2 and 2.20.9.3;

(2) the rope socketing is such as to develop at least 80% of the ultimate breaking strength of the strongest rope to be used in such fastenings; or

(b) by individual wedge rope sockets (see 2.20.9.5); and

(c) U-bolt-type rope clamps or similar devices shall not be used for suspension rope fastenings.

Variance Request No. 3 (ASME A17.1-2004, section 2.26.9.4)

2.26.9.4 Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the driving-machine motor and brake shall not be solely dependent on software-controlled means.

Variance Request No. 4 (ASME A17.1-2004, section 2.26.9.6.1)

2.26.9.6.1 Two separate means shall be provided to independently inhibit the flow of alternating-current through the solid state devices that connect the

direct-current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Variance Request No. 5 (ASME A17.1-2004, section 2.26.1.4[.1](a))

2.26.1.4.1 General Requirements

(a) Operating devices for inspection operation shall be provided on the top of the car and shall also be permitted in the car and in the machine room.

Variance Request No. 6 (ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b))

8.4.10.1.1 Earthquake Equipment (See Also Fig. 8.4.10.1.1)

(a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:

(1) seismic zone 3 or greater: a minimum of one seismic switch per building

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

(b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room [see 8.4.10.1.3(i)]

C. Findings

1. Applicant proposes to utilize inset car top railings and guards in compliance with ASME 17.1-2013, section 2.14.1.7.1 and the *Vivante Westside, LLC* File No. 18-V-364 (Nov. 20, 2020) decision (*Vivante*). Applicant further claims that the request is consistent with the *Vivante*, the *Mack Urban, LLC*, File No. 15-V-349 (Nov. 17, 2016), and the *Patton Equities, LLC* File No. 20-V-128 (Nov. 12, 2020) decisions (*Patton Equities*).
2. Applicant proposes to utilize noncircular elastomeric-coated steel belts (“ECSBs”) rather than steel ropes in a machine room-less (“MRL”) elevator installation, with updated data plates, data tags, and wedge sockets designed for use with ECSBs, as well as the appropriate factor of safety criteria conforming to ASME 17.1-2013, with a continuous residual strength detection device (“RSDD”) compliant with the *San Francisco Public Works (File No. 21-V-061, et al.)* decisions.
3. The installation shall utilize the TK Elevator Model 104DP001 RSDD, accepted by the Division on May 4, 2021.
4. Applicant proposes to comply with ASME A17.1-2013 sections 2.26.9.3, “Protection Against Failures”, rather than the requirements of 2.26.9.3 and

2.26.9.4 in the ASME 2004 code.

5. Applicant proposes to use TKE's control systems, using the TKE TAC32T Controller with SIL3 rated elements, to provide equivalent safety to ASME A17.1-2004, section 2.26.9.4 as a means to inhibit flow of Alternating Current to the Driving Motor in compliance with ASME A17.1-2013, section 2.26.9.6.
6. Applicant proposes to locate the Inspection Transfer Switch within the machinery/control room/space in the MRL installation, in compliance with ASME 17.1-2013, section 2.26.1.4.
7. Applicant proposes to locate the Seismic-Operation Reset Switch in the machinery/control room/space in the MRL installation.

D. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, with respect to the section A specified number of TKE EVO 200 elevator(s), at the specified location, each shall conditionally hold permanent variance from the following subparts of ASME A17.1-2004, currently incorporated by reference into section 3141:

- Car-Top Railing: 2.14.1.7.1 (Limited to the extent necessary to permit the use of an inset car-top railing)
- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1 (Limited to the extent necessary to permit the use of the elastomeric-coated steel belts in lieu of circular steel suspension ropes)
- Inspection transfer switch: 2.26.1.4.4(a) (Limited to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room)
- Software Reliant Means to Remove Power: 2.26.9.4 (Limited to the extent necessary to permit the exclusive use of SIL-rated software systems as a means to remove power from the driving machine motor and brake)
- SIL-Rated Circuitry to Inhibit Current Flow: 2.26.9.6.1 (Limited to the extent necessary to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive motor)
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Limited to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room)

Inset Car Top Railing (Variance Request No. 1):

- 1.0 Any and all inset car top railings shall comply with the following:

- 1.1 Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit trained elevator mechanics or elevator service personnel to stand or climb over the car top railing.
- 1.2 The distance that the railing can be inset shall be limited to not more than six inches (6").
- 1.3 All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds two inches (2"), shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
- 1.4 The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4" diagonal red and white stripes.
- 1.5 The Applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

**CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING**

- 1.6 The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

Suspension Means (Variance Request No. 2):

- 2.0 The elevator suspension system shall comply with the following:
 - 2.1 The elastomeric coated steel belts (ECSBs) and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 – Minimum Number of Suspension Members
 - 2.20.3 – Factor of Safety
 - 2.20.9 – Suspension Member Fastening
 - 2.2 Additionally, ECSBs shall meet or exceed all requirements of ASME A17.6 2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.
 - 2.3 The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the ECSBs and fastenings and related monitoring and detection systems and criteria for ECSB

- replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Division of Occupational Safety and Health (Division) upon request.
- 2.4 ECSB mandatory replacement criteria shall include:
- 2.4.1. Any exposed wire, strand or cord;
 - 2.4.2. Any wire, strand or cord breaks through the elastomeric coating;
 - 2.4.3. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
 - 2.4.4. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.
- 2.5 Traction drive sheaves must have a minimum diameter of 112 mm. The maximum speed of ECSBs running on 112 mm drive sheaves shall be no greater than 6.1 m/s.
- 2.6 If any one (1) ECSB needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed ECSB having been placed into service, it is permissible to replace the individual damaged suspension member. ECSBs that have been installed on another installation shall not be re used.
- 2.7 A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- 2.8 A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- 2.9 An elevator controller integrated bend cycle monitoring system shall monitor actual ECSB bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the ECSB makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single ECSB member drops below (60%) sixty percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 2 (Division Circular Letter), the bend cycle monitoring system shall be tested semiannually in accordance with the procedures required per above Conditions 2.3 and 2.4.
- 2.10 The elevator crosshead data plate shall comply with the requirements of

ASME A17.1-2013, section 2.20.2.1.

- 2.11 A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- 2.12 Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 2.3 and 2.4 specified criteria, shall be conducted and documented every six (6) months by a CCCM.
- 2.13 The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 1, "Suspension Means Replacement Reporting Condition."
- 2.14 Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2, and 8.6.1.4, respectively.
- 2.15 The subject elevators(s) shall be equipped with a TK Elevator Model 104DP001 Residual Strength Detection Device accepted by the Division on May 4, 2021 or Division accepted equivalent device.

Control and Operating Circuits

Combined Software Redundant Devices with Software Removal of Power from Driving Motor and Brake (Variance Request No. 3)

Removal of Power from Driving Motor Without Electro-mechanical Switches (Variance Request No. 4)

- 3.0 The SIL rated circuitry used to provide device/circuit redundancy and to inhibit electrical current flow in accordance with ASME A17.1-2004, sections 2.26.9.4 and 2.26.9.6.1 shall comply with the following:
 - 3.1 The SIL rated systems and related circuits shall consist of:
 - 3.1.1. ELGO LIMAX33 RED, (aka LIMAX3R-03-050-0500-CNXTG-RJU), Safe Magnetic Absolute Shaft Information System, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/A 163), followed by the applicable revision number (as in 968/A 163.07/19).
 - 3.1.2 Printed circuit board assembly SSOA (6300 AHE001), labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1347), followed by the applicable revision number (as in 968/FSP 1347.00/16).
 - 3.1.3 Two circuit board components (Serializer S3I and S3O), each labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization and the SIL certification number (968/A 162), followed by the applicable revision number (as in 968/A 162.04/18)
 - 3.2 The software system and related circuits shall be certified for compliance with the

applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.

- 3.3 The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

**Assembly contains SIL rated devices.
Refer to maintenance Control Program and wiring diagrams
prior to performing work.**

- 3.4 Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL rated component, with notations identifying parts and locations.
- 3.5 Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- 3.6 A successful test of the SIL rated circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.
- 3.7 Any alterations to the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- 3.8 Any replacement of the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- 3.9 Any repairs to the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- 3.10 Any space containing SIL rated circuits shall be maintained within the temperature and humidity range specified by TKE. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.
- 3.11 Field software changes to the SIL rated system are not permitted. Any changes to the SIL rated system's circuitry will require recertification and all necessary updates to the documentation and diagrams required by Conditions 3.4 and 3.5 above.

Inspection Transfer Switch and Seismic Reset Switch (Variance Request Nos. 5 and 6):

- 4.0 Inspection Transfer switch and Seismic Reset switch placement and enclosure shall

comply with the following:

- 4.1 If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4, does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 4.2 If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 5.0 The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the TKE EVO 200 elevator system in accordance with written procedures and criteria, including as required per above Conditions 2.3, and 2.4.
- 6.0 The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in full service prior to the Permit to Operate being issued by Division.
- 7.0 The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, Title 8, sections 411.2, and 411.3.
- 8.0 This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division, or by the Board on its own motion, in the manner prescribed for its issuance.

Pursuant to section 426(b), the above Proposed Decision is submitted to the Board for consideration of adoption.

DATED: July 31, 2023


Michelle Iorio, Hearing Officer

ADDENDUM 1

SUSPENSION MEANS REPLACEMENT REPORTING REQUIREMENTS

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- (1) A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, Attn: Engineering Section, 2 MacArthur Place Suite 700, Santa Ana, CA 92707.
- (2) Each such report shall contain, but not necessarily be limited to, the following information:
 - (a) The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - (b) The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - (c) The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - (d) The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, and certification expiration date of each CCCM performing the replacement work.
 - (e) The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - (f) A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - (g) A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - (h) All information provided on the crosshead data plate per ASME A17.1-2004, section

2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

- (i) For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- (j) For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- (k) Any other information requested by the Division regarding the replacement of the suspension means or fastenings.

In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2(a) above.

ADDENDUM 2

CIRCULAR LETTER E-10-04, October 6, 2010

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQ

ADDENDUM 3

- (A) A Residual Strength Detection Device (RSDD) shall continuously monitor all Elastomeric Coated Steel Belt suspension members (ECSB), automatically stopping the car if the residual strength of any belt drops below 60%. The RSDD shall prevent the elevator from restarting after a normal stop at a landing. The RSDD shall device shall apply a form of electrical current and/or signal through the entire length of the steel tension elements of the ECSB and measure the current and/or signal on its return. The values measured shall be continuously compared to values that have been correlated to the remaining residual strength of the ECSB through testing. The required RSDD shall not rely upon giant magnetoresistance technology, or other magnetic measurement means, for residual strength detection or monitoring.

The RSDD must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room or controller location. The removed RSDD must be replaced or returned to proper service within 30 days. If upon routine inspection, the RSDD device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room or controller location.

If upon inspection by the Division, the RSDD is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service. If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

- (B) On or before November 21 2021, and thereafter, the above specified and documented RSDD shall be installed and operational on the subject elevator.
- (C) A successful functionality test of each RSDD shall be conducted once a year, and a copy of completed testing documentation conspicuously located in the machine room or within proximity of the controller.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

KONE Monospace 500 Elevators (Group IV)

OSHSB File No.: See Section A.1 Table Below

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
FIRST AMENDED PROPOSED DECISION.

DAVID THOMAS, Chairman

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

KATHLEEN CRAWFORD, Member

Date of Adoption: August 17, 2023

DAVID HARRISON, Member

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 500 Elevators (Group IV)	OSHSB File Nos.: See Section A.1 Table Below <u>FIRST AMENDED PROPOSED DECISION</u> Hearing Date: July 26, 2023
---	---

A. Subject Matter:

- Each below listed applicant (“Applicant”) applied for a permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-200	Nash - Holland 18750 Delaware Investors, LLC a Delaware Limited Liability Company	18750 Delaware St. Huntington Beach, CA	3
23-V-233	Gemdale Aperture Phase I, LLC	6043 Edgewood Bend Court San Diego, CA	1
23-V-280	Stanford University	253 Bonair Siding Rd. Stanford, CA	1

- The subject title 8, safety order requirements are set out within California Code of Regulations, title 8, section 3141 incorporated ASME A17.1-2004, Sections 2.18.5.1 and 2.20.4.

B. Procedural:

- This hearing was held on July 26, 2023, in Sacramento, California, via videoconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.

2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 26, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact—Based on the record of this proceeding, the Board finds the following:

1. Each respective Applicant intends to utilize the KONE Inc. Monospace 500 type elevator, in the quantity, at the location, specified per the above Section A.1 table.
2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, Section 2.20.4.
4. In relevant part, ASME A17.1-2004, Section 2.20.4 states:

2.20.4 Minimum Number and Diameter of Suspension Ropes

...The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

5. An intent of the afore cited requirement of ASME A17.1-2004, Section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes’ foreseen service life.

6. KONE has represented to Division and Board staff, having established an engineering practice for purposes of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010, Section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.
7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject to Division approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from title 8, section 3141, incorporated ASME A17.1-2004, Section 2.18.5.1.
9. ASME A17.1-2004, Section 2.18.5.1, specifies, in relevant part:

2.18.5.1 Material and Factor of Safety.

... [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5...

10. The Board takes notice of title 8, Elevator Safety Order Section 3141.7, subpart (a)(10):

A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to activate the safety is 5 or greater;

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with Section 3141.7(a)(10), the specific parameters of which, being expressly set out within title 8, Elevator Safety Orders, take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, Section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current title 8, Elevator Safety Orders requirements, and therefore not be subject to issuance of permanent variance.
12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. OSHSB File Nos. 06-V-203, 08-V-245, and 13-V-303).
13. As noted by the Board in OSHSB File Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of

projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, as also noted by Board staff, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Both Board staff and Division safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).
15. The applicant supplies tabulated data regarding the “Maximum Static Load on All Suspension Ropes.” To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, Section 2.20.3:

$$W = (S \times N) / f$$

where

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 Sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by both Board staff and Division as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.
17. Board staff and Division are in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter*

Suspension Ropes for KONE Elevators. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

18. Both Board staff, and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, are of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of California Code of Regulation, title 8, Elevator Safety Orders from which variance is being sought.

E. Decision and Order:

Each Application being the subject of this proceeding, per above Section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from California Code of Regulations, title 8, section 3141 incorporated ASME A17.1-2004, Section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 500 elevators identified in each respective Application, subject to the following conditions:

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter

steel ropes for KONE Elevators” (per Application Exhibit B, or as thereafter amended by KONE subject to Division approval).

5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 Section 2.20.3.
10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division and a “Permit to Operate” issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
14. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per Title 8, Division 1, Chapter 3.5.

Pursuant to California Code of Regulations, title 8, section 426(b), the above, duly completed Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

Dated: July 31, 2023

Michelle Iorio

Michelle Iorio, Hearing Officer

Appendix 1

Monospace 500 Suspension Appendix 1 Table.

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
23-V-200	1	8	200	13207
23-V-200	2	7	200	11556
23-V-200	3	7	200	11556
23-V-233	1	7	150	12247
23-V-280	1	7	150	12247

Appendix 2

Suspension Means Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings. Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

- h. All information provided on the crosshead data plate per ASME A17.1-2004, Section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.
3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in above Appendix 2, Section 2, Subsection (a), above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Otis Gen20, and/or Gen3Peak with Variant
Governor Rope and Sheaves
(Group IV)

OSHSB File No.: Per Section A.1 Table

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Otis Gen20, and/or Gen3Peak with Variant Governor Rope and Sheaves (Group IV)</p>	<p>OSHSB File No: Per Section A.1 Table</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

A. Procedural & Jurisdictional Matters

- Each applicant (“Applicant”) listed in the table below has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
23-V-214	LA County Department of Health Services	HUCLA - IPT Building 1000 W. Carson St. Torrance, CA	4
23-V-215	LA County Department of Health Services	HUCLA - OPT Building 1000 W. Carson St. Torrance, CA	9
23-V-216	LA County Department of Health Services	HUCLA - PS-A 1000 W. Carson St. Torrance, CA	4
23-V-219	AS LSTE East Owner LLC	Life, Science, Technology and Engineering East 200 Aggie Square Way Sacramento, CA	6
23-V-220	AS LLL Owner, LLC	Life Long Learning 300 Aggie Square Way Sacramento, CA	5

- The subject safety order requirements are specified in B. Applicable Regulations below.
- These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Board’s procedural regulations.
- This hearing was held on July 26, 2023, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board (“Board”) with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.

1. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”)
5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

6. Official notice is taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 26, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Applicable Regulation

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - b. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
 - c. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
 - d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
 - e. Governor Rope Diameter: 2.18.5.1 (Only to the extent necessary to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However,

the Board has included a variance from this code requirement in similar previous variances.

- f. Pitch Diameter: 2.18.7.4 (Only to the extent necessary to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

C. Findings of Fact

1. The Board incorporates by reference the findings stated in:
 - a. Items 3 through 5.c, 5.e, and 5.f of the “Findings of Fact” section of the Proposed Decision adopted by the Board on February 19, 2009, in OSHSB File No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in OSHSB File No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in OSHSB File No. 10 V 029;
 - d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in OSHSB File No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in OSHSB File No. 14-V-170.
2. Regarding requested variance in governor sheave diameter, and governor rope diameter, in variance from title 8, section 3141, incorporated ASME A17.1-2004, sections 2.18.7.4 and 2.18.5.1, respectively, the Board incorporates by reference the following previous findings of record: Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, in OSHSB File No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.
3. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders (“ESO”).
4. Both Board staff and Division safety engineers, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that:

1. Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and
2. a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
- Governor Rope Diameter: 2.18.5.1 (Only to the extent necessary to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); *Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.*
- Pitch Diameter: 2.18.7.4 (Only to the extent necessary to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:
 - a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.
3. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to the Division upon request.
5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);

- c. The name of the person who, or organization that, installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;
 - g. Lubrication information.
6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
- a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
11. If there is an inset car top railing:
- a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.

- c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.
- e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
12. The speed governor rope and sheaves shall comply with the following:
- a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
13. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
15. The Division shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by the Division, and a Permit to Operate shall be issued before each elevator is placed in service.
16. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per California Code of Regulations, title 8, sections 411.2 and 411.3.

18. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per title 8, division 1, chapter 3.5.

Pursuant to Section 426, subdivision (b) of the Board's procedural regulations, the above, Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 31, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code Section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and

(2) any conditions that existed to cause damage or distress to the suspension components being replaced.

g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

h. All information provided on the crosshead data plate per ASME A17.1-2004, Section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Schindler 3300 Elevator, Variant
Governor, Rope and Sheaves, VAF Drive &
NX Controller (Group IV)

OSHSB File No.: See table in Jurisdictional
and Procedural Matters

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: August 17, 2023

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Schindler 3300 Elevator, variant governor. rope and sheaves, VAF Drive & NX Controller (Group IV)</p>	<p>OSHSB File No.: See table in Jurisdictional and Procedural Matters</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: July 26, 2023</p>
--	--

Jurisdictional and Procedural Matters

- Each below listed applicant (“Applicant”) has applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-226	1820 Broadway, LLC	1820 Broadway Santa Monica, CA	1

- This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Board’s procedural regulations.
- This hearing was held on July 26, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- At the hearing, Jennifer Linares, with the Schindler Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
- Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

6. Official notice taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on July 26, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(b), 2.14.1.7.1, 2.18.7.4, and 2.26.9.6.1] of the Elevator Safety Orders, with respect to the suspension ropes and connections, inspection transfer switch relocation, seismic reset switch relocation, the location and construction of car-top railings, governor-sheave diameter, and means of removing power from the driving machine motor for one (1) Schindler model 3300 MRL elevator.

The relevant language of those sections are below.

1. Suspension Means

Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low-carbon steel) or steel wire ropes, having the commercial classification “Elevator Wire Rope,” or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process, or their equivalent.

Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(b) the diameter in millimeters (mm) or inches (in.)

Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

A metal data tag shall be securely attached-to-one of the wire-rope fastenings.
This data tag shall bear the following wire-rope data:

- (a) the diameter in millimeters (mm) or inches (in.)
[...]
- (f) whether the ropes were non preformed or preformed

Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where:

N= number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S= manufacturer's rated breaking strength of one rope

W= maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).

Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Requested Transfer Switch Placement Variance

As it pertains to installation of the requisite transfer switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:

Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room

Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:

When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be

(a) located in the machine room[.]

3. Requested Seismic Reset Switch Placement Variance

As it pertains to installation of the requisite seismic reset switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code subsection:

Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room

Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:

(a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:

(1) seismic zone 3 or greater: a minimum of one seismic switch per building

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

(b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

4. Requested Car Top Railing Inset Variance

As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, section:

Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

5. Pitch Diameter of Governor Sheaves

Section 3141 [ASME A17.1-2004, Section 2.18.7.4] states:

“The pitch diameter of governor sheaves and governor tension sheaves shall be not less than the product of the diameter of the rope and the applicable

multiplier listed in Table 2.18.7.4, based on the rated speed and the number of strands in the rope.”

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter
[from ASME A17.1-2004]

Rated Speed m/s (ft./min)	Number of Strands	Multiplier
1.00 or less (200 or less)	6	42
1.00 or less (200 or less)	8	30
Over 1.0 (over 200)	6	46
Over 1.0 (over 200)	8	32

6. SIL-Rated System to Inhibit Current Flow to AC Drive Motor

Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:

Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Findings of Fact

Based on the record of this proceeding, the Board finds the following:

1. Applicant intends to utilize Schindler model 3300 MRL elevator cars at the locations listed in Jurisdictional and Procedural Matters, section 1.
2. The installation contract for these elevators was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders. They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.
5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
6. Due to the use of a 6 mm (0.25 in.) governor rope with 6-strand construction, the provided governor sheave pitch diameter is less than that required by the Elevator Safety Orders.

7. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
8. Applicant proposes to insert the car-top railings at the perimeter of the car top.
9. Applicant intends to use an elevator control system, model CO NX100NA or CO NX300NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

Conclusive Findings:

The above-stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

Decision and Order:

The Application being the subject of this proceeding, per the table in Jurisdictional and Procedural Matters, section 1 above, is conditionally GRANTED, to the extent that the Applicant shall be issued permanent variance from section 3141 subject to the following conditions and limitations:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric-coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);
- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Governor Rope and Sheave: The Applicant shall conditionally hold permanent variance from certain requirements of the following Title 8, Section 3141, incorporated section of

ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: Section 2.18.7.4.

- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:

2.20.4.3 – Minimum Number of Suspension Members

2.20.3 – Factor of Safety

2.20.9 – Suspension Member Fastening

- b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members, fastenings, related monitoring and detection systems, and criteria for STM replacement. The Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Division upon request.

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
 - ii. Any wire, strand or cord breaks through the elastomeric coating;
 - iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
 - iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
 - d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.

- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
 - f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
 - g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
 - h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Division Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.
 - i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
 - j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
 - k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
 - l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.
 - m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.
2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

**CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING**

- f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required bevel).
5. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6 strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).

6. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
- a. The SIL-rated devices and circuits shall consist of a Variodyn SIL3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013, VAF023, or VAF043 labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
 - b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
 - c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

**Assembly contains SIL-rated devices.
Refer to Maintenance Control Program and
wiring diagrams prior to performing work.**

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.
- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific

provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.

- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.
 - k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
7. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per sections 411.2 and 411.3.
 9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed per the Board's procedural regulations.

Pursuant to section 426, subdivision (b), the above, duly completed Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 31, 2023



Autumn Gonzalez, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code Section 7318 allows the Division to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by the Division is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by the Division, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt the Division from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of the Division to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings. Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, Section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that

pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, Section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
 - k. Any other information requested by the Division regarding the replacement of the suspension means or fastenings.
3. In addition to the submission of the report to the Division, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to the Division referencing the information contained in item 2a above.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833
(916) 274-5721

In the Matter of Application for
Permanent Variance regarding:

Mitsubishi Elevators (Group IV)

OSHSB File No.: See section A.1 Table

Proposed Decision Dated: July 31, 2023

DECISION

The Occupational Safety and Health Standards Board hereby adopts the
attached PROPOSED DECISION.

DAVID THOMAS, Chairman

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

KATHLEEN CRAWFORD, Member

Date of Adoption: August 17, 2023

DAVID HARRISON, Member

THE FOREGOING VARIANCE DECISION WAS
ADOPTED ON THE DATE INDICATED ABOVE.
IF YOU ARE DISSATISFIED WITH THE
DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

Note: A copy of this Decision must be
posted for the Applicant's employees to
read, and/or a copy thereof must be
provided to the employees' Authorized
Representatives.

BEFORE THE
 OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
 DEPARTMENT OF INDUSTRIAL RELATIONS
 STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: Mitsubishi Elevators (Group IV)	OSHSB File Nos.: See section A.1 Table <u>PROPOSED DECISION</u> Hearing Date: July 26, 2023
--	---

A. Procedural Matters

- Each below listed applicant (“Applicant”) has applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
23-V-228	South Coast Plaza	3333 Bristol Street, Space 1200 & 2200 Costa Mesa, CA	1

- The safety orders at issue are set forth in the prefatory portion of the Decision and Order. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Board’s procedural standards.
- This hearing was held on July 26, 2023, in Sacramento, California, via videoconference by the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit in accordance with section 426.
- At the hearing, Matt Jaskiewicz, with Mitsubishi Electric, Elevator Division, appeared on behalf of each Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”).
- At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence:

¹ Unless otherwise noted, all references are to the California Code of Regulations, title 8.

6.

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official Notice is taken of the Board’s rulemaking records and variance decisions concerning the safety order requirements from which variance is requested. At the close of hearing on July 26, 2023, the record was closed and the matter taken under submission by the Hearing Officer.

B. Findings of Fact

Based on the record of this proceeding, the Board makes the following findings of fact:

1. Each section A table specified Applicant intends to utilize Mitsubishi elevators at the location and in the number stated in the table in Item A. The installation contracts for these elevators were signed on or after May 1, 2008, thus making the elevators subject to the Group IV Elevator Safety Orders.
2. The Board takes official notice and incorporates herein, Subsections D.3 through D.5 of the February 20, 2014, Decision of the Board in Permanent Variance File No. 13-V-270.
3. As reflected in the record of this matter, including Division evaluation as PD-3, and testimony at hearing, it is the professionally informed opinion of the Division, that grant of requested variance, subject to conditions and limitations in substantial conforming with those set out per below Decision and Order, will provide Occupational Safety and Health equivalent or superior to that provided by the safety order requirements from which variance is sought.

C. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and (2) a preponderance of the evidence establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of regulations from which variance is being sought.

D. Decision and Order

As of such date as the Board adopts this Proposed Decision, each Application for Permanent Variance listed in the above section A.1 table, is conditionally GRANTED to the extent each

Applicant of record shall have permanent variance from section 3141 [ASME A17.1-2004, sections 2.10.2.2 (only to the extent necessary to permit the intermediate rail to be located at a point other than halfway between the top rail and the surface on which the railing is installed), 2.10.2.4 (only to the extent necessary to permit a bevel sloping that conforms with the variance conditions) and 2.14.1.7.1 (only to the extent necessary to permit the car top railing to be inset to clear obstructions when the conveyance is elevated to perform work on the machine and/or governor). The variance applies to the location and number of elevators stated in the section A.1 table, and the variance is subject to the above limitations and following conditions:

1. The car top railing may be inset only to the extent necessary to clear obstructions when the conveyance is located at the top landing to perform work on the machine and/or governor.
2. Serviceable equipment shall be positioned so that mechanics, inspectors, and others working on the car top can remain positioned on the car top within the confines of the railings and do not have to climb on or over railings to perform adjustment, maintenance, minor repairs, inspections, or similar tasks. Persons performing those tasks are not to stand on or climb over railing, and those persons shall not remove handrails unless the equipment has been secured from movement and approved personal fall protection is used.
3. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall, and shall be beveled from an intermediate or bottom rail to the outside of the car top.
4. The top surface of the beveled area shall be clearly marked. The markings shall consist of alternating 4-inch red and white diagonal stripes.
5. The Applicant shall provide a durable sign with lettering not less than ½-inch high on a contrasting background. The sign shall be located on the inset top railing; the sign shall be visible from the access side of the car top, and the sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING.
PERSONNEL ARE PROHIBITED FROM REMOVING HANDRAIL
UNLESS THE EQUIPMENT HAS BEEN SECURED FROM MOVEMENT
AND APPROVED PERSONAL FALL PROTECTION IS USED.

6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).
7. A mechanical means (e.g., locking bar mechanism) that will secure the car to the guide rail to prevent unintended movement shall be provided and used during machine and/or governor car-top work. The mechanical means (e.g., locking bar mechanism) shall have a safety factor of not less than 3.5 for the total unbalanced load.

8. An electrical switch or a lockout/tagout procedure shall be provided that will remove power from the driving machine and brake when the mechanical means (e.g., locking bar mechanism) is engaged.
9. In order to inhibit employees from working outside the car top railing, sections shall not be hinged and they shall be installed by means that will inhibit (but not necessarily completely preclude) removal. The Applicant shall ensure that all persons performing work that requires removal of any part of the car top railing are provided with fall protection that is appropriate and suitable for the assigned work. That fall protection shall consist of a personal fall arrest system or fall restraint system that complies with section 1670.
10. The bevel utilized by the Applicant in accordance with the variance granted from ASME A17.1-2004, section 2.10.2.4 shall slope at not less than 75 degrees from the horizontal to serve as the toe board; however, that slope may be reduced to a minimum of 40 degrees from the horizontal as may be required for sections where machine encroachment occurs.
11. If the Applicant directs or allows its employees to perform tasks on the car top, the Applicant shall develop, implement, and document a safety training program that shall provide training to Applicant employees. Components of the training shall include, but not necessarily be limited to, the following: car blocking procedures; how examination, inspection, adjustment, repair, removal and replacement of elevator components are to be performed safely, consistent with the requirements of the variance conditions; applicable provisions of the law and other sources of safety practices regarding the operation of the elevator. A copy of the training program shall be located in the control room of each elevator that is the subject of this variance, and a copy of the training program shall be attached to a copy of this variance that shall be retained in any building where an elevator subject to this variance is located. The Applicant shall not allow Certified Qualified Conveyance Company (CQCC) or other contractor personnel to work on the top of any elevator subject to this variance unless the Applicant first ascertains from the CQCC or other contractor that the personnel in question have received training equivalent to, or more extensive than, the training components referred to in this condition.
12. Any CQCC performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
13. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.

15. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division, or by the Board on its own motion, in the manner prescribed for its issuance.

Pursuant to section 426(b), the above Proposed Decision, is submitted to the Board for consideration of adoption.

Dated: July 31, 2023



Autumn Gonzalez, Hearing Officer

Occupational Safety and Health Standards Board

Business Meeting
Legislative Update

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-1 Oil refineries: maintenance.(2023-2024) – **NO UPDATE**

AB-1	AB-1 Oil refineries: maintenance.(2023-2024)	
	(Ting)	
	Date	Action
	01/26/23	Referred to Com. on P.E. & R.
	12/06/22	From printer. May be heard in committee January 5.
12/05/22	Read first time. To print.	
<u>Summary:</u>		
AB 1, as introduced, Ting. Oil refineries: maintenance.		
The California Refinery and Chemical Plant Worker Safety Act of 1990 requires, among other things, every petroleum refinery employer to submit to the Division of Occupational Safety and Health a full schedule of planned turnarounds, meaning a planned, periodic shutdown of a refinery process unit or plant to perform maintenance, overhaul, and repair operations and to inspect, test, and replace process materials and equipment, as provided.		
This bill would express the intent of the Legislature to enact subsequent legislation to ensure that only one oil refinery in the state is undergoing scheduled maintenance at a time.		
Board staff is monitoring for potential impacts on Board operations.		

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-521 Occupational safety and health standards: restrooms.(2023-2024) – **UPDATED**

AB-521 Occupational safety and health standards: restrooms.(2023-2024)	
(Bauer-Kahan)	
Date	Action
07/05/23	Read second time. Ordered to third reading.
07/03/23	From committee: Do pass. (Ayes 5. Noes 0.) (July 3).
06/26/23	Read second time and amended. Re-referred to Com. on APPR.
06/22/23	From committee: Amend, and do pass as amended and re-refer to Com. on APPR. (Ayes 5. Noes 0.)
06/14/23	In committee: Set, first hearing. Hearing canceled at the request of author.
05/31/23	Referred to Com. on L., P.E. & R.
05/23/23	In Senate. Read first time. To Com. on RLS. for assignment.
05/22/23	Read third time. Passed. Ordered to the Senate. (Ayes 77. Noes 0.)
05/15/23	Read third time and amended. Ordered to third reading.
05/11/23	Read second time. Ordered to third reading.
05/10/23	From committee: Do pass. (Ayes 15. Noes 0.) (May 10).
04/27/23	From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (April 26). Re-referred to Com. on APPR.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

04/18/23	Re-referred to Com. on L. and E.
04/17/23	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. and E. Read second time and amended
02/17/23	Referred to Com. on L. & E.
02/08/23	From printer. May be heard in committee March 10.
02/07/23	Read first time. To print.

Summary:

AB 521, as amended, Bauer-Kahan. Occupational safety and health standards: construction jobsites: toilet facilities.

Existing law grants the Division of Occupational Safety and Health, which is within the Department of Industrial Relations, jurisdiction over all employment and places of employment, with the power necessary to enforce and administer all occupational health and safety laws and standards. The Occupational Safety and Health Standards Board, an independent entity within the department, has the exclusive authority to adopt occupational safety and health standards within the state. Existing law, the California Occupational Safety and Health Act of 1973 (OSHA), requires employers to comply with certain safety and health standards, as specified, and charges the division with enforcement of the act.

Existing law requires the division, before December 1, 2025, to submit to the standards board a rulemaking proposal to consider revising the heat illness standard and wildfire smoke standard. Existing law also requires the standards board to review the proposed changes and consider adopting revised standards on or before December 31, 2025.

This bill would also require the division, before December 1, 2025, to submit to the standards board a rulemaking proposal to consider revising a regulation on construction jobsite toilet facilities to require at least one designated separate toilet facility for jobsites with 2 or more required separate toilet facilities for employees who self-identify as female or nonbinary. The bill would require the standards board to review the proposed changes and consider adopting revised standards for the standards described above on or before December 31, 2025. The bill would include related legislative findings.

Board staff is monitoring for potential impacts on Board operations.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-1007 Occupational safety and health standards: plume.(2023-2024) - **UPDATED**

AB-1007 Occupational safety and health standards: plume.(2023-2024)	
(Ortega)	
Date	Action
07/10/23	In committee: Referred to APPR. suspense file.
06/29/23	Read second time and amended. Re-referred to Com. on APPR.
06/28/23	From committee: Amend, and do pass as amended and re-refer to Com. on APPR. (Ayes 4. Noes 0.)
AB-1007 06/14/23	Referred to Com. on L., P.E. & R.
06/01/23	In Senate. Read first time. To Com. on RLS. for assignment.
05/31/23	Read third time. Passed. Ordered to the Senate.
05/18/23	Read second time. Ordered to third reading.
05/18/23	From committee: Do pass. (Ayes 11. Noes 4.) (May 18).

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

04/19/23	In committee: Set, first hearing. Referred to suspense file.
03/22/23	From committee: Do pass and re-refer to Com. on APPR. (Ayes 5. Noes 2.) (March 22). Re-referred to Com. on APPR.
02/23/23	Referred to Com. on L. & E.
02/16/23	From printer. May be heard in committee March 18.
02/15/23	Read first time. To print.

Summary:

AB 1007, as amended, Ortega. Occupational safety and health standards: plume.

Under existing law, the Occupational Safety and Health Standards Board within the Department of Industrial Relations promulgates and enforces occupational safety and health standards for the state, including standards dealing with toxic materials and harmful physical agents. Under existing law, the Division of Occupational Safety and Health is required to enforce all occupational safety and health standards, as specified. A violation of these standards and regulations under specific circumstances is a crime.

This bill would, by January 1, 2025, require the division to submit to the board a proposed regulation requiring a health facility to evacuate or remove plume to the extent **technologically feasible** through the use of a plume scavenging system in all settings that employ techniques that involve the creation of plume. The bill would require the division, when developing regulations, to consider, among other things, recommendations on the evacuation of plume from the federal Occupational Safety and Health Administration and National Institute for Occupational Safety and Health. The bill would require the board to consider for adoption a proposed regulation by July 1, 2025.

This bill would provide that compliance with general room ventilation standards or the use of surgical masks does not satisfy the requirements for protection from surgical plumes under these provisions. The bill would provide that the use of respirators does not satisfy the requirements for protection from surgical plumes under these provisions, except as specified. The bill would require the manufacturer of a plume scavenging system to provide evidence that the system meets specified minimum requirements when installed, operated, and maintained in accordance with the manufacturer’s instructions.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

	<p>This bill would specify that these provisions do not limit the authority of the division to develop, or limit the authority of the board to adopt, a regulation with a broader scope or broader application than required by these provisions.</p> <p>By expanding the definition of an existing crime, this bill would impose a state-mandated local program.</p> <p>The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.</p> <p>This bill would provide that no reimbursement is required by this act for a specified reason.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>
--	---

AB-1424 Occupational safety and health: cannabis delivery employee. (2023-2024) - **NO UPDATE**

AB-1424	AB-1424 Occupational safety and health: cannabis delivery employee. (2023-2024)	
	(Jones-Sawyer)	
	Date	Action
	04/05/23	In committee: Set, first hearing. Hearing canceled at the request of author.
	04/04/23	Re-referred to Com. on L. & E.
	04/03/23	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
	03/09/23	Referred to Com. on L. & E.
	02/18/23	From printer. May be heard in committee March 20.
02/17/23	Read first time. To print.	

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

Summary:

AB 1424, as amended, Jones-Sawyer. Occupational safety and health: cannabis delivery employee.

The Control, Regulate and Tax Adult Use of Marijuana Act of 2016 (AUMA), an initiative measure, authorizes a person who obtains a state license under AUMA to engage in commercial adult-use cannabis activity pursuant to that license and applicable local ordinances. The Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), among other things, consolidates the licensure and regulation of commercial medicinal and adult-use cannabis activities. MAUCRSA establishes the Department of Cannabis Control within the Business, Consumer Services, and Housing Agency to administer the act.

This bill would require a cannabis delivery employer, as defined, to develop, implement, and maintain specified driver safety protocols allowing a cannabis delivery employee, as defined, to not complete a delivery if the delivery would create a real and apparent hazard to the employee or fellow employees, providing for notification and documentation procedures relating to incomplete deliveries, and providing information relating to worker retaliation protections. The bill would impose various requirements on a cannabis delivery employer relating to access to the driver safety protocols, including requiring the employer to make the protocols available to the Department of Cannabis Control upon request. The bill would require a cannabis delivery employer to notify the department upon being notified or becoming aware of an attempted robbery, injury, or death in the course of a delivery. The bill would also require a cannabis delivery employer to ensure that containers used in the delivery of cannabis goods do not indicate that the delivery employee is carrying cannabis goods, as specified.

Existing law prohibits an employee from being laid off or discharged for refusing to perform work in violation of prescribed safety standards, where the violation would create a real and apparent hazard to the employee or fellow employees. Existing law creates a cause of action for wages for the time an employee laid off or discharged for a refusal is without work as a result. Existing law authorizes an employee who believes they have been discharged or otherwise discriminated against in violation of that provision to file a complaint with the Labor Commissioner, as specified.

This bill would create a rebuttable presumption that the cannabis delivery employer violates the above-described prohibition if the employer lays off, discharges, or subjects an employee to an adverse employment action within 90 days of the employee reporting or documenting an incomplete delivery or refusing to complete a delivery that would create a real and apparent hazard, as described above.

Board staff is monitoring for potential impacts on Board operations.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-1766 Division of Occupational Safety and Health: regulations. (2023-2024) - **UPDATED**

AB-1766	AB 1766 Division of Occupational Safety and Health: regulations. (2023-2024)	
	(Kalra, Flora, Chen, Haney, Ortega, and Reyes)	
	Date	Action
	07/27/23	Chaptered by Secretary of State - Chapter 133, Statutes of 2023.
	07/23/23	Approved by the Governor.
	07/25/23	Enrolled and presented to the Governor at 4 p.m.
	07/13/23	In Assembly. Ordered to Engrossing and Enrolling.
	07/13/23	Read third time. Passed. Ordered to the Assembly. (Ayes 37. Noes 0.)
	07/03/23	From committee: Be ordered to second reading file pursuant to Senate Rule 28.8 and ordered to Consent Calendar.
	06/22/23	From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 5. Noes 0.) Re-referred to Com. on APPR.
	06/07/23	Referred to Com. on L., P.E. and R.
	05/25/23	Read third time. Passed. Ordered to the Senate.
05/18/23	Read second time. Ordered to Consent Calendar.	
05/17/23	From committee: Do pass. To Consent Calendar. (Ayes 15. Noes 0.) (May 17).	

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

04/27/23	From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (April 26). Re-referred to Com. on APPR.
04/17/23	Re-referred to Com. on L. & E.
04/13/23	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
04/13//23	Referred to Com. on L. & E.
03/21/23	From printer. May be heard in committee April 20.

Summary:

AB 1766, as amended, Committee on Labor and Employment. Division of Occupational Safety and Health: regulations.

(1) Existing law grants the Division of Occupational Safety and Health, which is within the Department of Industrial Relations, jurisdiction over all employment and places of employment, with the power necessary to enforce and administer all occupational health and safety laws and standards, including standards for the operation of passenger tramways. Under existing law, the Occupational Safety and Health Standards Board, an independent entity within the department, has the exclusive authority to adopt occupational safety and health standards within the state.

This bill would require the division to formulate and propose rules and regulations for adoption by the Occupational Safety and Health Standards Board for the safe design, manufacture, installation, repair, maintenance, use, operation, and inspection of all passenger tramways as necessary to protect the public. The bill would require the division to adopt all other rules and regulations necessary for the administration and enforcement of these provisions on passenger tramways.

(2) Existing law establishes a workers' compensation system, administered by the Administrative Director of the Division of Workers' Compensation, that generally requires employers to secure the payment of workers' compensation for injuries incurred by their employees that arise out of, or in the course of, employment. Existing law defines "employee" for those purposes.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

	<p>This bill would correct an obsolete cross-reference within the provision that defines “employee.”</p> <p>(3) Existing federal law, the Workforce Innovation and Opportunity Act of 2014, repeals and supersedes the federal Workforce Investment Act of 1998 and provides for the establishment of a state workforce development board to develop strategies to support the use of career pathways for the purpose of providing individuals with workforce investment activities, education, and support services necessary for them to enter the workforce or retain employment. Existing law contains various programs for job training and employment investment.</p> <p>Conforming to the federal act, existing state law, the California Workforce Innovation and Opportunity Act, renames the California Workforce Investment Board the California Workforce Development Board and renames local workforce investment boards as local workforce development boards. Existing law establishes the Employment Training Panel within the Employment Development Department and prescribes the functions and duties of the panel with respect to certain employment training programs. Existing law relating to the panel references the superseded federal act and refers to the state and local boards by their former names. Existing law declares the intent of the Legislature that programs developed pursuant to these provisions not replace, parallel, supplant, compete with, or duplicate in any way already existing approved apprenticeship programs.</p> <p>This bill would delete the above-described intent provision. The bill would update statutory references in provisions relating to the panel to refer to the federal Workforce Innovation and Opportunity Act of 2014, the California Workforce Development Board, and local workforce development boards.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>
--	--

SB-544 Bagley-Keen Open Meeting Act: teleconference.(2023-2024) – **NEW!**

SB-544	SB-544 Bagley-Keen Open Meeting Act: teleconference.(2023-2024)	
	(Laird)	
	Date	Action
	07/18/23	From committee: Do pass as amended and re-refer to Com. on APPR. (Ayes 12. Noes 2.) (July 12).

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

05/26/23	Referred to Com. on G.O.
05/15/23	In Assembly. Read first time. Held at Desk.
05/15/23	Read third time. Passed. (Ayes 26. Noes 3. Page 1079.) Ordered to the Assembly.
05/09/23	Read second time. Ordered to third reading.
05/08/23	From committee: Be ordered to second reading pursuant to Senate Rule 28.8.
05/02/23	Set for hearing May 8.
04/27/23	Read second time and amended. Re-referred to Com. on APPR.
04/26/23	From committee: Do pass as amended and re-refer to Com. on APPR. (Ayes 9. Noes 0. Page 894.) (April 25).
04/13/23	Set for hearing April 25.
04/11/23	From committee: Do pass and re-refer to Com. on JUD. (Ayes 13. Noes 1. Page 656.) (April 11). Re-referred to Com. on JUD.
04/06/23	Set for hearing April 11.
03/29/23	Re-referred to Coms. on G.O. and JUD.
03/20/23	From committee with author's amendments. Read second time and amended. Re-referred to Com. on RLS.
02/22/23	Referred to Com. on RLS.
02/16/23	From printer. May be acted upon on or after March 18.
02/15/23	Introduced. Read first time. To Com. on RLS. for assignment. To print.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

Summary:

SB 544, as amended, Laird. Bagley-Keene Open Meeting Act: teleconferencing.

Existing law, the Bagley-Keene Open Meeting Act, requires, with specified exceptions, that all meetings of a state body be open and public and all persons be permitted to attend any meeting of a state body. The act authorizes meetings through teleconference subject to specified requirements, including, among others, that the state body post agendas at all teleconference locations, that each teleconference location be identified in the notice and agenda of the meeting or proceeding, that each teleconference location be accessible to the public, that the agenda provide an opportunity for members of the public to address the state body directly at each teleconference location, and that at least one member of the state body be physically present at the location specified in the notice of the meeting.

Existing law, until July 1, 2023, authorizes, subject to specified notice and accessibility requirements, a state body to hold public meetings through teleconferencing and suspends certain requirements of the act, including the above-described teleconference requirements.

This bill would amend existing law that will remain operative after July 1, 2023, to remove indefinitely the teleconference requirements that a state body post agendas at all teleconference locations, that each teleconference location be identified in the notice and agenda of the meeting or proceeding, and that each teleconference location be accessible to the public. The bill would require a state body to provide a means by which the public may remotely hear audio of the meeting, remotely observe the meeting, or attend the meeting by providing on the posted agenda a teleconference telephone number, an internet website or other online platform, and a physical address for at least one site, including, if available, access equivalent to the access for a member of the state body participating remotely. The bill would require any notice required by the act to specify the applicable teleconference telephone number, internet website or other online platform, and physical address indicating how the public can access the meeting remotely and in person. The bill would revise existing law to no longer require that members of the public have the opportunity to address the state body directly at each teleconference location, but would continue to require that the agenda provide an opportunity for members of the public to address the state body directly. The bill would require a member or staff to be physically present at the location specified in the notice of the meeting.

This bill would provide that it does not affect prescribed existing notice and agenda requirements and would require the state body to post an agenda on its internet website and, on the day of the meeting, at any physical meeting location designated in the notice of the meeting. The bill would prohibit the notice and agenda from disclosing information regarding any remote location from which a member is participating and define "remote location" for this purpose. The bill would provide that members of the public shall be entitled

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

	<p>to exercise their right to directly address the state body during the teleconferenced meeting without being required to submit public comments prior to the meeting or in writing.</p> <p>This bill would require a state body, upon discovering that a means of remote participation required by the bill has failed during a meeting and cannot be restored, to end or adjourn the meeting in accordance with prescribed adjournment and notice provisions, including information about reconvening.</p> <p>This bill would require a state body that holds a meeting through teleconferencing pursuant to the bill and allows members of the public to observe and address the meeting telephonically or otherwise electronically to implement and advertise, as prescribed, a procedure for receiving and swiftly resolving requests for reasonable modification or accommodation from individuals with disabilities, consistent with the federal Americans with Disabilities Act of 1990.</p> <p>This bill would require a member of a state body who attends a meeting by teleconference from a remote location to disclose whether any other individuals 18 years of age or older are present in the room at the remote location with the member and the general nature of the member’s relationship with any such individuals.</p> <p>Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.</p> <p>This bill would make legislative findings to that effect.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>
--	--

SB-553 Occupational safety: workplace violence. (2023-2024) - **UPDATED**

SB-553	SB-553 Occupational safety: workplace violence. (2023-2024)	
	(Cortese)	
	Date	Action
	07/10/23	Read second time and amended. Re-referred to Com. on APPR.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

07/06/23	From committee: Do pass as amended and re-refer to Com. on APPR. (Ayes 8. Noes 2.) (July 5).
06/29/23	From committee: Do pass and re-refer to Com. on JUD. (Ayes 5. Noes 2.) (June 28). Re-referred to Com. on JUD.
06/20/23	From committee with author's amendments. Read second time and amended. Re-referred to Com. on L. and E.
06/15/23	Referred to Coms. on L. and E. and JUD.
06/01/23	In Assembly. Read first time. Held at Desk.
05/31/23	Read third time. Passed. (Ayes 28. Noes 8.) Ordered to the Assembly.
05/23/23	Read third time and amended.
05/18/23	From committee: Do pass. (Ayes 5. Noes 2.) (May 18).
05/08/23	May 8 hearing: Placed on APPR suspense file.
05/01/23	Set for Hearing on May 8.
04/26/23	From committee: Do pass and re-refer to Com. on APPR. (Ayes 10. Noes 1.) (April 25). Re-referred to Com. on APPR.
04/19/23	Re-referred. to Com. on JUD.
04/14/23	Set for Hearing April 25 in JUD. Pending receipt.
04/13/23	From committee: Do pass as amended and re-refer to Com. on RLS. (Ayes 5. Noes 0.) (April 12)
03/28/23	From committee with author's amendments. Read second time and amended. Re-referred to Com. on L., P.E. & R.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

03/21/23	Set for hearing April 12.
03/20/23	From committee with author's amendments. Read second time and amended. Re-referred to Com. on L., P.E. & R.

Summary:

SB 553, as amended, Cortese. Occupational safety: workplace violence: restraining orders and workplace violence prevention plan.

Existing law authorizes any employer, whose employee has suffered unlawful violence or a credible threat of violence from any individual that can reasonably be construed to be carried out or to have been carried out at the workplace, to seek a temporary restraining order and an order after hearing on behalf of the employee and other employees at the workplace, as described.

This bill, commencing January 1, 2025, would also authorize a collective bargaining representative of an employee, as described, to seek a temporary restraining order and an order after hearing on behalf of the employee and other employees at the workplace, as described. The bill would require an employer or collective bargaining representative of an employee, before filing such a petition, to provide the employee who has suffered unlawful violence or a credible threat of violence from any individual an opportunity to decline to be named in the temporary restraining order. Under the bill, an employee's request to not be named in the temporary restraining order would not prohibit an employer or collective bargaining representative from seeking a temporary restraining order on behalf of other employees at the workplace, and, if appropriate, other employees at other workplaces of the employer. The bill would make various conforming changes.

Existing law, the California Occupational Safety and Health Act of 1973, imposes safety responsibilities on employers and employees, including the requirement that an employer establish, implement, and maintain an effective injury prevention program, and makes specified violations of these provisions a crime. The act is enforced by the Division of Occupational Safety and Health within the Department of Industrial Relations, including the enforcement of standards adopted by the Occupational Safety and Health Standards Board.

This bill would require every employer, as defined, to also establish, implement, and maintain, at all times in all of the employer's facilities, a workplace violence prevention plan as part of the injury prevention program, as described. The bill would require the employer to record information in a violent incident log about every incident, postincident response, and workplace violence injury investigation required to be performed as part of the workplace violence prevention plan, as described. The bill would require the employer to establish and implement a system to review, at least annually and in conjunction with employees and their collective bargaining representatives, if any, the effectiveness of the

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

	<p>workplace violence prevention plan, as described. The bill would require the employer to provide effective training to employees that addresses the workplace violence risks that employees may reasonably anticipate to encounter in their jobs, as described. The bill would require records of workplace violence hazard identification, evaluation, and correction to be created and maintained in accordance with specified law, except as provided. The bill would provide that an employer shall not prohibit an employee from, and shall not take punitive or retaliatory action against an employee for, seeking assistance and intervention from local emergency services or law enforcement when a violent incident occurs.</p> <p>Because this bill would expand the scope of a crime, the bill would impose a state-mandated local program.</p> <p>The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.</p> <p>This bill would provide that no reimbursement is required by this act for a specified reason.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>
--	---

SB-686 Domestic workers: occupational safety.(2023-2024) – **NO UPDATE**

SB-686	SB-686 Domestic workers: occupational safety.(2023-2024)	
	(Durazo)	
	Date	Action
	06/29/23	From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (June 28). Re-referred to Com. on APPR.
	06/08/23	Referred to Com. on L. and E.
	05/26/23	In Assembly. Read first time. Held at Desk.
05/26/23	Read third time. Passed. (Ayes 23. Noes 8.) Ordered to the Assembly.	

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

05/18/23	Read second time. Ordered to third reading.
05/18/23	From committee: Do pass. (Ayes 5. Noes 2.) (May 18).
05/08/23	May 8 hearing: Placed on APPR suspense file.
05/01/23	Set for hearing on May 8.
04/26/23	From committee: Do pass and re-refer to Com. on APPR. (Ayes 4. Noes 1.) (April 26). Re-referred to Com. on APPR.
04/13/23	Set hearing for April 26.
03/01/23	Referred to Com. on L., P.E. & R.
02/17/23	From printer. May be acted upon on or after March 19.
2/16/23	Introduced. Read first time. To Com. on RLS. for assignment. To print.

Summary:

SB 686, as introduced, Durazo. Domestic workers: occupational safety.

Existing law establishes within the Department of Industrial Relations the Division of Labor Standards Enforcement and the Division of Occupational Safety and Health, with duties and powers, as prescribed.

Existing law, the California Occupational Safety and Health Act of 1973, requires employers to comply with certain standards ensuring healthy and safe working conditions, as specified. The act charges the Division of Occupational Safety and Health with enforcement of the act, subject to oversight by the Chief of the Division of Occupational Safety and Health. The act excludes household domestic service from the definition of "employment." The act requires the chief, or a representative of the chief, to convene an advisory committee for the purposes of creating voluntary guidance and making recommendations to the department and the Legislature on policies the state may adopt to protect the health and safety of privately funded household domestic service employees, except publicly funded household domestic service and family daycare homes, as specified. The act requires the advisory committee to develop voluntary industry-specific occupational health and safety guidance relating to workplace hazards and the prevention or minimization of work-related injuries and illnesses. The act requires the advisory committee to make recommendations, as specified, on additional policies to protect the health and safety of household domestic service employees. Under specified circumstances, a violation of the act is a crime.

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

Existing law, until July 1, 2024, requires the Division of Labor Standards Enforcement, upon appropriation of funding for this purpose, to establish and maintain an outreach and education program for the purpose of promoting awareness of, and compliance with, labor protections that affect the domestic work industry and fair and dignified labor standards in this industry and other low-wage industries. Existing law requires the Division of Labor Standards Enforcement to issue a competitive request to community-based organizations (CBOs) to provide education and outreach services in this connection and prescribes requirements for these organizations. Existing law makes CBOs responsible for developing and consulting with the Division of Labor Standards Enforcement regarding the core education and outreach materials, as specified. Existing law requires the Division of Labor Standards Enforcement and CBOs to meet at least biannually to coordinate efforts around outreach, education, and enforcement, including sharing information, in accordance with applicable privacy and confidentiality laws, that will shape and inform the overall enforcement strategy of the division regarding low-wage industries, including the domestic work industry. Existing law prohibits the Division of Labor Standards Enforcement from expending more than 5% of the budget allocation on the administration of the program.

This bill would make CBOs responsible for developing and consulting with the Division of Occupational Safety and Health regarding the core education and outreach materials regarding health and safety standards, retaliation, and the division's workplace safety complaint and retaliation process, including specific issues that affect the domestic work industry differently. The bill would make CBOs responsible for all costs related to the development, printing, advertising, or distribution of the education and outreach materials. The bill, on and after July 1, 2024, would require the chief, representatives of the consultation services and enforcement branches of the Division of Occupational Safety and Health, and CBOs to meet periodically, as specified, to coordinate efforts around outreach, education, and enforcement. The bill would prohibit the Division of Labor Standards Enforcement and the Division of Occupational Safety and Health from expending more than 5% of the budget allocation on the administration of the program. The bill would remove the repeal date, thereby making these provisions operative indefinitely.

This bill, for purposes of the California Occupational Safety and Health Act of 1973, would narrow the exclusion of household domestic service from the definition of "employment" to exclude only publicly funded household domestic service and family daycare homes, as specified. The bill would require the Division of Occupational Safety and Health, by July 1, 2024, to adopt industry guidance to assist household domestic service employers on their legal obligations under existing occupational safety and health laws and regulations that apply to the work activity of household domestic service employees. The bill would require the guidance to be consistent with the voluntary industry guidelines established by the advisory committee. The bill would require a household domestic services employer, by January 1, 2025, to comply with, and adhere to, all applicable occupational safety and health regulations. The bill would require the Division of Occupational Safety and Health, if the division determines that additional industry-specific regulations are necessary, to propose

Legislative Update
Prepared August 3, 2023 for the August 17, 2023
Meeting of the Occupational Safety and Health Standards Board

those regulations to the standards board for its review, and would require the standards board to adopt regulations by January 1, 2026.

The bill would require the Division of Occupational Safety and Health, upon appropriation of funds by the Legislature to the division for the specified purpose, to establish and administer the Household Domestic Services Employment Safety and Technical Assistance Program for the purpose of providing one-time grants and technical assistance to household domestic service employers, as prescribed. The bill would prohibit the Division of Occupational Safety and Health from expending more than 5% of the budget allocation on the administration of the program. The bill would require the program to commence by July 1, 2024, and continue until July 1, 2029, with an opportunity to expand or renew contingent on the additional allocation of state funds or identification of other revenue sources.

By expanding the application of criminal penalties under the act to household domestic service employers, this bill would impose a state-mandated local program.

The bill would make related legislative findings and declarations.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Board staff is monitoring for potential impacts on Board operations.

Occupational Safety and Health Standards Board

Business Meeting Executive Officer's Report