Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

February 17, 2022

Via teleconference / videoconference

Board Meeting Packet
Occupational Safety and Health Standards Board

Meeting Agenda
February 17, 2022 at 10:00 a.m.
TELECONFERENCE AGENDA

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

PLEASE NOTE: In accordance with section 11133 of the Government Code, this Board Meeting will be conducted via teleconference.

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 – NEW PROCESS:

Those 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.
NOTE: In accordance with section 11133 of the Government Code, Board Members will participate via video-conference and/or teleconference.

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 Section 11125.7).

Any individual or group planning 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 SAFETY ORDER FOR ADOPTION

1. TITLE 8: CONSTRUCTION INDUSTRY SAFETY ORDERS

   Subchapter 4, Article 2, Definitions, section 1504;
   Article 12, Pile Driving and Pile Extraction, section 1600;
   Article 15, Cranes and Derricks in Construction,
   sections 1610, 1610.1, 1610.2, 1610.3, 1610.4, 1610.5,
   1610.6, 1610.7, 1610.8, 1610.9, 1611, 1611.1, 1611.2,
   1611.3, 1611.4, 1611.5, 1612, 1612.1, 1612.2, 1612.3,
   1612.4, 1613, 1613.1, 1613.2, 1613.3, 1613.4, 1613.5,
   1613.6, 1613.7, 1613.8, 1613.9, 1613.10, 1613.11, 1613.12,
   1614, 1615, 1615.1, 1615.2, 1615.3, 1616, 1616.1, 1616.2,
   1616.3, 1616.4, 1616.5, 1616.6, 1616.7, 1617, 1617.1,
   1617.2, 1617.3, 1618, 1618.1, 1618.2, 1618.3, 1618.4, 1619,
   (continues on next page)
CONSTRUCTION INDUSTRY SAFETY ORDERS (cont.)
1619.1, 1619.2, 1619.3, 1619.4, and 1619.5; and
Article 28, Miscellaneous Construction Tools and Equipment, section 1694

ELECTRICAL SAFETY ORDERS
Subchapter 5, Group 2, High-Voltage Electrical Safety Orders
Article 37, Provisions for Preventing Accidents Due to Proximity to Overhead Lines, section 2946

GENERAL INDUSTRY SAFETY ORDERS
Subchapter 7, Group 1, General Physical Conditions and Structures Orders, Article 1, Definitions, section 3207;
Group 13, Cranes and Other Hoisting Equipment, new sections 4880, 4881, 4883; section 4884; new section 4884.1; section 4885; Article 93, Boom-Type Mobile Cranes, section 4924; new section 4928.1; Article 94, Hydraulic Cranes and Excavators, section 4949; Article 95, Derricks, new section 4959; section 4960; new sections 4960.1, 4960.2, 4960.3, 4960.4; section 4961; and new section 4962.1; Article 96, Tower Cranes, section 4965; new section 4965.1; sections 4966, 4968; new sections 4968.1, 4968.2;
New Article 97.1, Floating Cranes/Derricks and Land Cranes/Derricks on Barges, new sections 4988.1, 4988.2, 4988.3, 4988.4, 4988.5, 4988.6, 4988.7, 4988.8; Article 98, Operating Rules, section 4991; new section 4991.1; sections 4994, 4999, 5001; new sections 5001.1, 5001.2, 5001.3; section 5002; new sections 5003.1, 5003.2, 5003.3, 5003.4; sections 5004, 5005, 5006.1; new section 5006.2; section 5008; new sections 5008.1, 5010, 5010.1, 5010.2, 5010.3, 5010.4, 5011, 5012; New Article 98.1, Safety Devices and Operational Aids, new sections 5017, 5018; Article 99, Testing, section 5022; Article 100, Inspection and Maintenance, section 5031; new sections 5031.1, 5031.2, 5031.3, 5033.1, 5036, 5037; and Group 26, Article 153, Commercial Diving Operations, section 6060

Proposal to Consolidate Construction Safety Orders, Article 15 (Cranes and Derricks in Construction), into General Industry Safety Orders, Group 13 (Cranes and Other Hoisting Equipment)
(Heard at the May 20, 2021, Public Hearing)

B. PROPOSED VARIANCE DECISIONS FOR ADOPTION

1. Consent Calendar
C. REPORTS

1. Division Update
2. Legislative Update
3. Executive Officer’s Report

D. 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. (Government Code sections 11125 & 11125.7(a).)

E. CLOSED SESSION

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
3. Western Growers Association, California Farm Bureau Federation, et. al. v OSHSB, et al., County of San Francisco, CA Superior Court Case No. CPF-21-517344
4. Personnel

F. RETURN TO OPEN SESSION

1. Report from Closed Session

G. ADJOURNMENT OF THE BUSINESS MEETING

Next Meeting: March 17, 2022
Teleconference and Video-conference
(In accordance with section 11133 of the Government Code)
10:00 a.m.
CLOSED SESSION

1. If necessary, consideration of personnel matters. (Government Code section 11126(a)(1)).

2. If necessary, consideration of pending litigation pursuant to Government Code 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 Government Code 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. (Gov. Code, §11125.7, subd. (b).)

Pursuant to section 11133 of the Government Code, certain provisions of the Bagley-Keene Open Meeting Act are suspended until January 31, 2022. Executive Order N-1-22 has suspended the sunset date of Government Code section 11133, subdivision (g), until March 31, 2022. This meeting of the Occupational Safety and Health Standards Board will be conducted remotely via video/teleconference only. None of the locations from which the Board Members will participate will be open to the public. 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
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 February 17, 2022, at 10:00 a.m. 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 February 17, 2022, at 10:00 a.m. 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
Standards for Adoption

Proposal to Consolidate Construction Safety Orders, Article 15 (Cranes and Derricks in Construction), into General Industry Safety Orders, Group 13 (Cranes and Other Hoisting Equipment)
MOVED, That the following resolution be adopted:

WHEREAS, On April 2, 2021, the Occupational Safety and Health Standards Board, pursuant to Government Code Section 11346.4, fixed the time and place for a Public Hearing to consider the revisions to Title 8, Construction Safety Orders, New Section 5141.1 Subchapter 4, Article 2, Definitions, section 1504; Article 12, Pile Driving and Pile Extraction, section 1600; Article 15, Cranes and Derricks in Construction, sections 1610, 1610.1, 1610.2, 1610.3, 1610.4, 1610.5, 1610.6, 1610.7, 1610.8, 1610.9, 1611, 1611.1, 1611.2, 1611.3, 1611.4, 1611.5, 1612, 1612.1, 1612.2, 1612.3, 1612.4, 1613, 1613.1, 1613.2, 1613.3, 1613.4, 1613.5, 1613.6, 1613.7, 1613.8, 1613.9, 1613.10, 1613.11, 1613.12, 1614, 1615, 1615.1, 1615.2, 1615.3, 1616, 1616.1, 1616.2, 1616.3, 1616.4, 1616.5, 1616.6, 1616.7, 1617, 1617.1, 1617.2, 1617.3, 1618, 1618.1, 1618.2, 1618.3, 1618.4, 1619, 1619.1, 1619.2, 1619.3, 1619.4, and 1619.5; and Article 28, Miscellaneous Construction Tools and Equipment, section 1694; Electrical Safety Orders, Subchapter 5, Group 2, High-Voltage Electrical Safety Orders, Article 37, Provisions for Preventing Accidents Due to Proximity to Overhead Lines, section 2946; General Industry Safety Orders, Subchapter 7, Group 1, General Physical Conditions and Structures Orders, Article 1, Definitions, section 3207; Group 13, Cranes and Other Hoisting Equipment, new sections 4880, 4881, 4883; section 4884; new section 4884.1; section 4885; Article 93, Boom-Type Mobile Cranes, section 4924; new section 4928.1; Article 94, Hydraulic Cranes and Excavators, section 4949; Article 95, Derricks, new section 4959; section 4960; new sections 4960.1, 4960.2, 4960.3, 4960.4; section 4961; and new section 4962.1; Article 96, Tower Cranes, section 4965; new section 4965.1; sections 4966, 4968; new sections 4968.1, 4968.2; New Article 97.1, Floating Cranes/Derricks and Land Cranes/Derricks on Barges, new sections 4988.1, 4988.2, 4988.3, 4988.4, 4988.5, 4988.6, 4988.7, 4988.8; Article 98, Operating Rules, section 4991; new section 4991.1; sections 4994, 4999, 5001; new sections 5001.1, 5001.2, 5001.3; section 5002; new sections 5003.1, 5003.2, 5003.3, 5003.4; sections 5004, 5005, 5006.1; new section 5006.2; section 5008; new sections 5008.1, 5010, 5010.1, 5010.2, 5010.3, 5010.4, 5011, 5012; New Article 98.1, Safety Devices and Operational Aids, new sections 5017, 5018; Article 99, Testing, section 5022; Article 100, Inspection and Maintenance, section 5031; new sections 5031.1, 5031.2, 5031.3, 5033.1, 5036, 5037; and Group 26, Article 153, Commercial Diving Operations, section 6060, Proposal to Consolidate Construction Safety Orders, Article 15 (Cranes and Derricks in Construction), into General Industry Safety Orders, Group 13 (Cranes and Other Hoisting Equipment).

WHEREAS, Such Public Hearing was held via teleconference and videoconference in Sacramento, California, on May 20, 2021, and there are now before the Occupational Safety and Health Standards Board the proposed revisions to Title 8, Construction Safety Orders, New Section 5141.1 Subchapter 4, Article 2, Definitions, section 1504; Article 12, Pile Driving and Pile Extraction, section 1600; Article 15, Cranes and Derricks in Construction, sections 1610, 1610.1, 1610.2, 1610.3, 1610.4, 1610.5, 1610.6, 1610.7, 1610.8, 1610.9, 1611, 1611.1, 1611.2, 1611.3, 1611.4, 1611.5, 1612, 1612.1, 1612.2, 1612.3, 1612.4, 1613, 1613.1, 1613.2, 1613.3, 1613.4, 1613.5, 1613.6, 1613.7, 1613.8, 1613.9, 1613.10, 1613.11, 1613.12, 1614, 1615, 1615.1, 1615.2, 1615.3, 1616, 1616.1, 1616.2, 1616.3, 1616.4, 1616.5, 1616.6, 1616.7, 1617, 1617.1, 1617.2, 1617.3, 1618, 1618.1, 1618.2, 1618.3, 1618.4, 1619, 1619.1, 1619.2, 1619.3, 1619.4, and 1619.5; and Article 28, Miscellaneous Construction Tools and Equipment, section 1694; Electrical Safety Orders, Subchapter 5, Group 2, High-Voltage Electrical Safety Orders, Article 37, Provisions for Preventing Accidents Due to Proximity to Overhead Lines, section 2946; General Industry Safety Orders, Subchapter 7, Group 1, General Physical Conditions and Structures Orders, Article 1, Definitions, section 3207; Group 13, Cranes and Other Hoisting Equipment, new sections 4880, 4881, 4883; section 4884; new section 4884.1; section 4885; Article
RESOLVED by the Occupational Safety and Health Standards Board in regular meeting held via teleconference and videoconference in Sacramento, California, on February 17, 2022, that the proposed revisions to Title 8, Construction Safety Orders, New Section 5141.1 Subchapter 4, Article 2, Definitions, section 1504; Article 12, Pile Driving and Pile Extraction, section 1600; Article 15, Cranes and Derricks in Construction, sections 1610, 1610.1, 1610.2, 1610.3, 1610.4, 1610.5, 1610.6, 1610.7, 1610.8, 1610.9, 1611, 1611.1, 1611.2, 1611.3, 1611.4, 1611.5, 1612, 1612.1, 1612.2, 1612.3, 1612.4, 1613, 1613.1, 1613.2, 1613.3, 1613.4, 1613.5, 1613.6, 1613.7, 1613.8, 1613.9, 1613.10, 1613.11, 1613.12, 1614, 1615, 1615.1, 1615.2, 1615.3, 1616, 1616.1, 1616.2, 1616.3, 1616.4, 1616.5, 1616.6, 1616.7, 1617, 1617.1, 1617.2, 1617.3, 1618, 1618.1, 1618.2, 1618.3, 1618.4, 1619, 1619.1, 1619.2, 1619.3, 1619.4, and 1619.5; and Article 28, Miscellaneous Construction Tools and Equipment, section 1694; Electrical Safety Orders, Subchapter 5, Group 2, High-Voltage Electrical Safety Orders, Article 37, Provisions for Preventing Accidents Due to Proximity to Overhead Lines, section 2946; General Industry Safety Orders, Subchapter 7, Group 1, General Physical Conditions and Structures Orders, Article 1, Definitions, section 3207; Group 13, Cranes and Other Hoisting Equipment, new sections 4880, 4881, 4883; section 4884; new section 4884.1; section 4885; Article 93, Boom-Type Mobile Cranes, section 4924; new section 4928.1; Article 94, Hydraulic Cranes and Excavators, section 4949; Article 95, Derricks, new section 4959; section 4960; new sections 4960.1, 4960.2, 4960.3, 4960.4; section 4961; and new section 4962.1; Article 96, Tower Cranes, section 4965; new section 4965.1; sections 4966, 4968; new sections 4968.1, 4968.2; New Article 97.1, Floating Cranes/Derricks and Land Cranes/Derricks on Barges, new sections 4988.1, 4988.2, 4988.3, 4988.4, 4988.5, 4988.6, 4988.7, 4988.8; Article 98, Operating Rules, section 4991; new section 4991.1; sections 4994, 4999, 5001; new sections 5001.1, 5001.2, 5001.3; section 5002; new sections 5003.1, 5003.2, 5003.3, 5003.4; sections 5004, 5005, 5006.1; new section 5006.2; section 5008; new sections 5008.1, 5010, 5010.1, 5010.2, 5010.3, 5010.4, 5011, 5012; New Article 98.1, Safety Devices and Operational Aids, new sections 5017, 5018; Article 99, Testing, section 5022; Article 100, Inspection and Maintenance, section 5031; new sections 5031.1, 5031.2, 5033.1, 5036, 5037; and Group 26, Article 153, Commercial Diving Operations, section 6060, Proposal to Consolidate Construction Safety Orders, Article 15 (Cranes and Derricks in Construction), into General Industry Safety Orders, Group 13 (Cranes and Other Hoisting Equipment); therefore, be it
RESOLVED That the Occupational Safety and Health Standards Board shall file with the Office of Administrative Law a sufficient number of copies of said filing documents and a copy of the rulemaking file for use by the Office of Administrative Law.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

DAVE THOMAS, CHAIRMAN

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Certified As A Regulation
Of the Occupational Safety
And Health Standards Board

BY: Christina Shupe, Executive Officer

DATED: February 17, 2022
TITLE 8

VARIOUS SECTIONS WITHIN CSO, HVESCO AND GISO

CONSOLIDATE CONSTRUCTION SAFETY ORDERS, ARTICLE 15 (CRANES AND DERRICKS IN CONSTRUCTION), INTO GENERAL INDUSTRY SAFETY ORDERS, GROUP 13 (CRANES AND OTHER HOISTING EQUIPMENT)

HYPERLINKS TO RULEMAKING DOCUMENTS:

TEXT FOR BOARD CONSIDERATION

FINAL STATEMENT OF REASONS

INITIAL STATEMENT OF REASONS

15-DAY NOTICE OF PROPOSED MODIFICATIONS
## CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS  
FEBRUARY 17, 2021, MONTHLY BUSINESS MEETING  
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

### A. AMERICA CENTER I & II OWNER LLC—HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
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<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
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<td>08-V-005M3</td>
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### B. AMERICA CENTER I & II OWNER LLC—HEARD JANUARY 26, 2022

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### C. ESSEX PROPERTY TRUST, INC.—MIO APARTMENTS—HEARD JANUARY 26, 2022

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<td>Essex Property Trust, Inc.—Mio Apartments</td>
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### D. FREMONT PROPERTY SUB, LLC—HEARD JANUARY 26, 2022

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### E. MORE PLATINUM PARK INVESTORS, LLC—HEARD JANUARY 26, 2022

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F. 855 MAIN STREET RWC, LLC — HEARD JANUARY 26, 2022

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<td>855 Main Street RWC, LLC</td>
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G. LOS ANGELES WORLD AIRPORTS—HEARD JANUARY 26, 2022

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H. UNIVERSAL STUDIOS HOLLYWOOD—HEARD JANUARY 26, 2022

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I. LENNAR — HEARD JANUARY 26, 2022

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J. LENNAR—HEARD JANUARY 26, 2022

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K. LENNAR—HEARD JANUARY 26, 2022

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M. BMR-700 Gateway LP — HEARD JANUARY 26, 2022

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N. BMR-700 Gateway LP — HEARD JANUARY 26, 2022

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O. Los Angeles World Airports — HEARD JANUARY 26, 2022

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P. Pulte Home Company, LLC — HEARD JANUARY 31, 2022

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Q. Otis Elevator Gen2(O) and/or Gen2L Alterations w/Variant Governor (Group IV) — HEARD JANUARY 26, 2022

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## TK ELEVATOR EVOLUTION (GROUP IV) — HEARD JANUARY 26, 2022

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S. **KONE MONOSPACE 500 ELEVATORS (GROUP IV)— HEARD JANUARY 26, 2022**

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T. SCHINDLER MODEL 5500 ELEVATORS (GROUP IV) — HEARD JANUARY 26, 2022

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### U. SCHINDLER 3300 WITH SIL-RATED DRIVE TO DE-ENERGIZE DRIVE MOTOR (GROUP IV) — HEARD JANUARY 26, 2022

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### V. TK ELEVATOR WIRE ROPES (GROUP IV) — HEARD JANUARY 26, 2022

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### W. OTIS GEN2S ELEVATORS (GROUP IV) — HEARD JANUARY 26, 2022

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<td>21-V-613</td>
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<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-615</td>
<td>238 Vernon LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-617</td>
<td>RCP Holdings VI, LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-619</td>
<td>1180 LaBrea LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-620</td>
<td>Bel Air Country Club</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-621</td>
<td>Broadstone Alton, LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-622</td>
<td>Glendale Community College</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-638</td>
<td>5533 Virginia LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-639</td>
<td>Anaheim &amp; Walnut Housing LP</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-640</td>
<td>University of California, Irvine</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-644</td>
<td>Wakeland Price UB LP</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-645</td>
<td>Western Plaza Capital Holding LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-646</td>
<td>Western Plaza Capital Holding LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-651</td>
<td>Abode Communities</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-652</td>
<td>Abode Communities</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-653</td>
<td>Allied 2595 Depot L.P.</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-654</td>
<td>Anton Santa Cruz LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-655</td>
<td>Boombat Properties LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-656</td>
<td>Pulte Home Company LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-657</td>
<td>SOLA Impact Fund II-SPV, LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-658</td>
<td>St. Mary's Medical Plaza, LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-659</td>
<td>The Olympic Club</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>
### X. SCHINDLER MODEL 3300 ELEVATORS WITH VARIANT GOV. ROPES & SHEAVES (GROUP IV)—HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-564</td>
<td>San Jose Evergreen Community College District</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-608</td>
<td>National Community Renaissance of California</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-650</td>
<td>245 S Westlake LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-664</td>
<td>SJ4 Burbank, LLC</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>

### Y. SCHINDLER SLEEP MODE ESCALATORS — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-569</td>
<td>Los Angeles World Airports</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>

### Z. OTIS RADAR SLEEPMODE ESCALATORS (VIRGINIA CONTROLLER) — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-573</td>
<td>Los Angeles World Airports (LAWA)</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>

### AA.TK ELEVATOR WIRE ROPES AND SHEAVES (GROUP IV) — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-606-</td>
<td>Peninsula Arts Guild</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
<tr>
<td>21-V-607</td>
<td>Santos Manuel Student Union</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>
### BB. OTIS ELEVATOR CONTROLLER ALTERATION (GROUP IV) — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-614</td>
<td>Fifty California Street LLC, a Delaware Limited Liability Company</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>

### CC. SPACE BACK BAY LLC/SPACE INVESTMENTS PARTNERS — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-625</td>
<td>Space Back Bay LLC/Space Investments Partners</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>

### DD. MITSUBISHI ELEVATORS (GROUP IV) — HEARD JANUARY 26, 2022

<table>
<thead>
<tr>
<th>OSHSB FILE NUMBER</th>
<th>APPLICANT NAME</th>
<th>SAFETY ORDERS</th>
<th>PROPOSED DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-626</td>
<td>Museum Associates</td>
<td>Elevator</td>
<td>GRANT</td>
</tr>
</tbody>
</table>
In the Matter of Application to Modify
Permananet Variance by:
America Center I & II Owner LLC

OSHSB File No.: 08-V-005M3
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
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: February 17, 2022

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 to Modify Permanent Variance by:

America Center I & II Owner LLC

OSHSB File No.: 08-V-005M3

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations\(^1\), for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>08-V-005M2</td>
<td>US ER America Center I LLC</td>
<td>6001 America Center Dr. San Jose, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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.

2. At the hearing, Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

\(^1\) Unless otherwise noted, all references are to California Code of Regulations, title 8.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application for modification of Permanent Variance</td>
</tr>
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<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant also requests modification of the owner of the ownership of the location where the conveyances are located, from US ER America Center I LLC to America Center I & II Owner LLC.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the owner of the property is America Center I & II Owner LLC.

3. The Division has evaluated the request for modification of variance location address and change in owner name, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 08-V-005.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 08-V-005 was, in part, based.

E. Decision and Order:

1. Permanent Variance Application No. 08-V-005M3 modifies Board records to reflect the change in ownership. The name of the current owner is America Center I & II Owner LLC.

2. Permanent Variance No. 08-V-005, being only modified as to the change in ownership specified in above Decision and Order Sections 1 and 2, is otherwise unchanged and
remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 08-V-005M3.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by: America Center I & II Owner LLC

OSHSB File No.: 08-V-027M3 Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

America Center I & II Owner LLC

OSHSB File No.: 08-V-027M3

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations\(^1\), for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>08-V-027M2</td>
<td>US ER America Center 2 LLC</td>
<td>America Center, Building 2 6201 America Center Drive San Jose, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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.

2. At the hearing, Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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\(^1\) Unless otherwise noted, all references are to California Code of Regulations, title 8.
Proposed Variance Decision

OSHSB File No. 08-V-027M3

Hearing Date: January 26, 2022

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
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</thead>
<tbody>
<tr>
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<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant also requests modification of the owner of the ownership of the location where the conveyances are located, from US ER America Center 2 LLC to America Center I & II Owner LLC.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the owner of the property is America Center I & II Owner LLC.

3. The Division has evaluated the request for modification of variance location address and change in owner name, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 08-V-027.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 08-V-027 was, in part, based.

E. Decision and Order:

1. Permanent Variance Application No. 08-V-027M3 modifies Board records to reflect the change in ownership. The name of the current owner is America Center I & II Owner LLC.

2. Permanent Variance No. 08-V-027, being only modified as to the change in ownership specified in above Decision and Order Sections 1 and 2, is otherwise unchanged and
remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 08-V-027M3.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by: Essex Property Trust, Inc. - Mio Apartments

OSHSB File No.: 14-V-203M1 Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
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: February 17, 2022

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 to Modify Permanent Variance by:

Essex Property Trust, Inc. - Mio Apartments

OSHSB File No.: 14-V-203M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations\(^1\), for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-V-203</td>
<td>Ajisai Luxury Apartments Venture LLC</td>
<td>602 N. 7th St., San Jose, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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.

2. At the hearing, Andrew Ferris, with TK Elevator, appeared on behalf of the Applicant; 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.

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

\(^1\) Unless otherwise noted, all references are to California Code of Regulations, title 8.
Proposed Variance Decision

OSHSB File No. 14-V-203M1

Hearing Date: January 26, 2022

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<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 14-V-203.

2. The Applicant also requests modification of the owner of the ownership of the location where the conveyances are located, from Ajisai Luxury Apartments Venture, LLC to Essex Property Trust Inc. - Mio Apartments.

3. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 14-V-203 is in effect, in fact is more completely, and correctly the different address specified in below subsection D.5, and the owner is Essex Property Trust Inc. - Mio Apartments.

4. The Division has evaluated the request for modification of variance location address and change in owner name, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 14-V-203.

5. The Board finds the above subpart D.3 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 14-V-203 was, in part, based.

6. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 14-V-203, to be:
E. Decision and Order:

1. Permanent Variance Application No. 14-V-203M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 14-V-203, and 14-V-203M1, shall have the following address designation:

   688 N. 7th St
   San Jose, CA

2. Permanent Variance Application No. 14-V-203M1 also modifies Board records to reflect the change in ownership. The name of the current owner is Essex Property Trust Inc. – Mio Apartments.

3. Permanent Variance No. 14-V-203, being only modified as to the subject location address and change in ownership specified in above Decision and Order Sections 1 and 2, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 14-V-203M1.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by:

Fremont Property Sub, LLC

OSHSB File No.: 19-V-188M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________
DAVID THOMAS, Chairman

________________________
BARBARA BURGEL, Member

________________________
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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

Fremont Property Sub, LLC

OSHSB File Nos.: 19-V-188M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. **Subject Matter**

1. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations, for subject elevators identified herein:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Preexisting Variance Holder of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-V-188</td>
<td>ABP Manager LLC</td>
</tr>
</tbody>
</table>

B. **Jurisdiction**

1. This proceeding is conducted in accordance with the Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.

C. **Procedural**

1. This hearing was held on January 26, 2022, in Sacramento, California, via teleconference, by delegation of 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.

2. At the hearing, Jennifer Linares, with the Schindler Elevator Corporation, appeared on behalf of Applicants; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmida 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:
Official notice is taken of the Board’s rulemaking recordings and variance decisions concerning the safety order requirements at issue. At close of hearing on January 26, 2022, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings of Fact

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

   a. The Applicant request modification of the Board’s records to change from “ABP Manager LLC” to “Fremont Property Sub, LLC”, the variance holder of record previously granted Permanent Variance Nos. 19-V-188.

   b. Application Section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that presently Fremont Property Sub, LLC is the owner of the property at the variance location of record in Permanent Variance No. 19-V-188M1.

   c. The Division has evaluated the request for modification (see Exhibit PD-4), finds no issue with it, and recommends the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance Nos. 19-V-188.

   d. The Board finds the above Section D.1.b, referenced document to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing upon the findings of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 19-V-188 was, in significant part, based.

E. Decision and Order

1. Variance application 19-V-188M1 is conditionally GRANTED, as specified below, such that henceforth the permanent variance holder of record in Permanent Variance Nos. 19-V-188 and 19-V-188M1, shall be:

   Fremont Property Sub, LLC
2. Permanent Variance No. 19-V-188 only being modified as to the variance holder of record, otherwise is unchanged and remaining in full force and effect, as hereby incorporated by reference into the present Decision and Order.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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 to Modify
Permanent Variance by:
More Platinum Park Investors, LLC

OSHSB File No.: 19-V-307M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity (‘‘Applicant’’) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-V-307</td>
<td>More Platinum Park Investors, LLC</td>
<td>1910 S Jacaranda Anaheim, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Andrew Ferris, with TK Elevator, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (‘‘Division’’); and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application for modification of Permanent Variance</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 19-V-307.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 19-V-307 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 19-V-307.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 19-V-307 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 19-V-307, to be:

   1912 S Jacaranda
   Anaheim, CA
E. Decision and Order:

1. Permanent Variance Application No. 19-V-307M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 19-V-307, and 19-V-307M1, shall have the following address designation:

   1912 S Jacaranda
   Anaheim, CA

2. Permanent Variance No. 19-V-307, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 19-V-307M1.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by:

855 Main Street RWC, LLC

OSHSB File No.: 19-V-387M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

David Thomas, Chairman

Barbara Burgel, Member

Kathleen Crawford, Member

David Harrison, Member

Nola Kennedy, Member

Chris Laszcz-Davis, Member

Laura Stock, Member

Date of Adoption: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

855 Main Street RWC, LLC

OSHSB File No.: 19-V-387M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-V-387</td>
<td>855 Main Street RWC, LLC</td>
<td>855 Main Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Redwood City, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Wolter Geesink, with Otis Elevator, and Dan Leacox of Leacox & Associates, appeared on behalf of each Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.
Proposed Variance Decision

OSHSB File No. 19-V-387M1

Hearing Date: January 26, 2022

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
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<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 19-V-387.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 19-V-387 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 19-V-387.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 19-V-387 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 19-V-387, to be:

855 Main Street (2 elevators)
Redwood City, CA
Proposed Variance Decision
OSHSB File No. 19-V-387M1
Hearing Date: January 26, 2022

847 Main Street (1 elevator)
Redwood City, CA

E. Decision and Order:

1. Permanent Variance Application No. 19-V-387M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 19-V-387, and 19-V-387M1, shall have the following address designation:

   855 Main Street (2 elevators)
   Redwood City, CA

   847 Main Street (1 elevator)
   Redwood City, CA

2. Permanent Variance No. 19-V-387, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 19-V-387M1.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by: Los Angeles World Airports

OSHSB File No.: 20-V-476M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

______________________________
DAVID THOMAS, Chairman

______________________________
BARBARA BURGEL, Member

______________________________
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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

Los Angeles World Airports

OSHSB File No.: 20-V-476M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-V-476</td>
<td>Los Angeles World Airports</td>
<td>Los Angeles International Airport (LAX)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LAX Consolidated Rent-A-Car (CONRAC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5401 98th Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Los Angeles, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, appeared on behalf of the Applicant’s representative, the Schindler Elevator Corporation; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.
Proposed Variance Decision
OSHSB File No. 20-V-476M1
Hearing Date: January 26, 2022

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
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</thead>
<tbody>
<tr>
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<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
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</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 20-V-476.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 20-V-476 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 20-V-476.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 20-V-476 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 20-V-476, to be:
Proposed Variance Decision
OSHSB File No. 20-V-476M1
Hearing Date: January 26, 2022

Los Angeles International Airport (LAX)
LAX Consolidated Rent-A-Car (CONRAC)
5251 W 98th St.
Los Angeles, CA

E. Decision and Order:

1. Permanent Variance Application No. 20-V-476M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 20-V-476, and 20-V-476M1, shall have the following address designation:

Los Angeles International Airport (LAX)
LAX Consolidated Rent-A-Car (CONRAC)
5251 W 98th St.
Los Angeles, CA

2. Permanent Variance No. 20-V-476, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 20-V-476M1.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify
Permanent Variance by:

Universal Studios Hollywood

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OSHSB File No.: 20-V-504M1
Proposed Decision Dated: February 1, 2022

DECISION

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

Universal Studios Hollywood

OSHSB File No.: 20-V-504M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-V-504</td>
<td>Universal Studios Hollywood</td>
<td>MK - 3290 3rd Street Universal City, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Daniel May, with KONE, Inc., appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
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<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
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<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 20-V-504.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 20-V-504 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 20-V-504.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 20-V-504 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 20-V-504, to be:

   100 Universal Studios Plaza
   Universal City, CA
E. Decision and Order:

1. Permanent Variance Application No. 20-V-504M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 20-V-504, and 20-V-504M1, shall have the following address designation:

   100 Universal Studios Plaza
   Universal City, CA

2. Permanent Variance No. 20-V-504, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 20-V-504M1.

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: February 1, 2022

[Signature]
Autumn Gonzalez, Hearing Officer
In the Matter of Application to ModifyPermanent Variance by:

Lennar

OSHBS File No.: 21-V-131M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
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: February 17, 2022

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.
A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the below specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Variance Address of Record</th>
<th>Preexisting Number of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-131</td>
<td>Lennar</td>
<td>3710 Innovation Way</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fremont, CA</td>
<td></td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the subject modification of
permanent variance application captioned above as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application(s) for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

D. Findings and Basis:

1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 21-V-131, to decrease the quantity of elevators from two (2) to one (1).

2. Application Section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 21-V-131.

3. The Division has evaluated the immediate request for modification of variance, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-131.

4. The Board finds the Section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 21-V-131, decreasing the quantity of subject elevators from two (2) to one (1), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-131 was, in part, based.

E. Decision and Order:

1. Application for Modification of Permanent Variance, No. 21-V-131M1, is conditionally GRANTED, as specified below, such that a total of one (1) elevators are the subject of Permanent Variance No. 21-V-131, as hereby modified.

2. Permanent Variance No. 21-V-131, being only modified as to the subject quantity of elevators specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 21-V-131M1.
Proposed Variance Decision
OSHSB File No.: 21-V-131M1
Hearing Date: January 26, 2022

3. 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.

4. 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 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: February 1, 2022

_____________________________
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 to Modify
Permanent Variance by:

Lennar

OSHSB File No.: 21-V-132M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
KATHLEEN CRAWFORD, Member

________________________________________
DAVID HARRISON, Member

________________________________________
NOLA KENNEDY, Member

________________________________________
CHRIS LASZCZ-DAVIS, Member

________________________________________
LAURA STOCK, Member

OSHSB File No.: 21-V-132M1
Proposed Decision Dated: February 1, 2022

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 to Modify Permanent Variance by:

Lennar

OSHSB File No.: 21-V-132M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the below specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Variance Address of Record</th>
<th>Preexisting Number of Elevators</th>
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</thead>
<tbody>
<tr>
<td>21-V-132</td>
<td>Lennar</td>
<td>3488 Innovation Way</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fremont, CA</td>
<td></td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmida appeared on behalf of Board staff.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the subject modification of
permanent variance application captioned above as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application(s) for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

D. Findings and Basis:

1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 21-V-132, to decrease the quantity of elevators from two (2) to one (1).

2. Application Section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 21-V-132.

3. The Division has evaluated the immediate request for modification of variance, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-132.

4. The Board finds the Section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 21-V-132, decreasing the quantity of subject elevators from two (2) to one (1), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-132 was, in part, based.

E. Decision and Order:

1. Application for Modification of Permanent Variance, No. 21-V-132M1, is conditionally GRANTED, as specified below, such that a total of one (1) elevators are the subject of Permanent Variance No. 21-V-132, as hereby modified.

2. Permanent Variance No. 21-V-132, being only modified as to the subject quantity of elevators specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 21-V-132M1.
3. 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.

4. 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 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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by:

Lennar

OSHSB File No.: 21-V-133M1

Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

_________________________________________
DAVID THOMAS, Chairman

_________________________________________
BARBARA BURGEL, Member

_________________________________________
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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

Lennar

OSHSB File No.: 21-V-133M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the below specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
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<tbody>
<tr>
<td>21-V-133</td>
<td>Lennar</td>
<td>3508 Innovation Way Fremont, CA</td>
<td>2</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the subject modification of
permanent variance application captioned above as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application(s) for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

D. Findings and Basis:

1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 21-V-133, to decrease the quantity of elevators from two (2) to one (1).

2. Application Section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 21-V-133.

3. The Division has evaluated the immediate request for modification of variance, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-133.

4. The Board finds the Section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 21-V-133, decreasing the quantity of subject elevators from two (2) to one (1), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-133 was, in part, based.

E. Decision and Order:

1. Application for Modification of Permanent Variance, No. 21-V-133M1, is conditionally GRANTED, as specified below, such that a total of one (1) elevators are the subject of Permanent Variance No. 21-V-133, as hereby modified.

2. Permanent Variance No. 21-V-133, being only modified as to the subject quantity of elevators specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 21-V-133M1.
3. 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.

4. 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 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: February 1, 2022

_____________________________
Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by: Lennar

OSHSB File No.: 21-V-134M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

Lennar

OSHSB File No.: 21-V-134M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the below specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
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<th>Preexisting Number of Elevators</th>
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</thead>
<tbody>
<tr>
<td>21-V-134</td>
<td>Lennar</td>
<td>3690 Innovation Way</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fremont, CA</td>
<td></td>
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B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the subject modification of
permanent variance application captioned above as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application(s) for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

D. Findings and Basis:

1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 21-V-134, to decrease the quantity of elevators from two (2) to one (1).

2. Application Section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 21-V-134.

3. The Division has evaluated the immediate request for modification of variance, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-134.

4. The Board finds the Section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 21-V-134, decreasing the quantity of subject elevators from two (2) to one (1), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-134 was, in part, based.

E. Decision and Order:

1. Application for Modification of Permanent Variance, No. 21-V-134M1, is conditionally GRANTED, as specified below, such that a total of one (1) elevators are the subject of Permanent Variance No. 21-V-134, as hereby modified.

2. Permanent Variance No. 21-V-134, being only modified as to the subject quantity of elevators specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 21-V-134M1.
Proposed Variance Decision
OSHSB File No.: 21-V-134M1
Hearing Date: January 26, 2022

3. 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.

4. 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 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: February 1, 2022

[Signature]
Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify
Permanent Variance by:

BMR-700 Gateway LP

OSHSB File No.: 21-V-204M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

__________________________________________
DAVID THOMAS, Chairman

__________________________________________
BARBARA BURGEL, Member

__________________________________________
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: February 17, 2022

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.
In the Matter of Application to Modify Permanent Variance by:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-204</td>
<td>BMR-700 Gateway LP</td>
<td>710 Gateway Blvd. South San Francisco, CA</td>
</tr>
</tbody>
</table>

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Daniel May, with KONE, Inc., appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application for modification of Permanent Variance</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 21-V-204.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 21-V-204 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-204.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-204 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 21-V-204, to be:

    760 Gateway Blvd.
    South San Francisco, CA
Proposed Variance Decision
OSHSB File No. 21-V-204M1
Hearing Date: January 26, 2022

E. Decision and Order:

1. Permanent Variance Application No. 21-V-204M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 21-V-204, and 21-V-204M1, shall have the following address designation:

   760 Gateway Blvd.
   South San Francisco, CA

2. Permanent Variance No. 21-V-204, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 21-V-204M1.

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: February 1, 2022

[Signature]
Autumn Gonzalez, Hearing Officer
In the Matter of Application to Modify Permanent Variance by:

BMR-700 Gateway LP

OSHSB File No.: 21-V-205M1
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: February 17, 2022

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 to Modify Permanent Variance by:

BMR-750 Gateway LP

OSHSB File No.: 21-V-205M1

PROPOSED DECISION

Hearing Date: January 26, 2022

A. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

<table>
<thead>
<tr>
<th>Preexisting OSHSB File No.</th>
<th>Applicant Name</th>
<th>Preexisting Variance Address of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-205</td>
<td>BMR-750 Gateway LP</td>
<td>760 Gateway Blvd. South San Francisco, CA</td>
</tr>
</tbody>
</table>

B. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

C. Procedural Matters:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Daniel May, with KONE, Inc., appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.
Proposed Variance Decision
OSHSB File No. 21-V-205M1
Hearing Date: January 26, 2022

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application for modification of Permanent Variance</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 21-V-205.

2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 21-V-205 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.

3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-205.

4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-205 was, in part, based.

5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 21-V-205, to be:

    710 Gateway Blvd.
    South San Francisco, CA
Proposed Variance Decision
OSHSB File No. 21-V-205M1
Hearing Date: January 26, 2022

E. Decision and Order:

1. Permanent Variance Application No. 21-V-205M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 21-V-205, and 21-V-205M1, shall have the following address designation:

710 Gateway Blvd.
South San Francisco, CA

2. Permanent Variance No. 21-V-205, being only modified as to the subject location address specified in above Decision and Order Section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 21-V-205M1.

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: February 1, 2022

_____________________________
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 by:

Los Angeles World Airports

OSHSB File No.: see table in Item A.1. of
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

______________________________
BARBARA BURGEL, Member

______________________________
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: February 17, 2022

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.
In the Matter of Application for Permanent Variance by:

Los Angeles World Airports

OSHSB File Nos.: See Section A.1 table below

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Subject Matter and Jurisdiction:

1. Los Angeles World Airports ("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:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Variance Location Address</th>
<th>No. of Escalators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-206</td>
<td>Tom Bradley International Terminal 380 World Way Los Angeles, CA</td>
<td>6</td>
</tr>
<tr>
<td>21-V-207</td>
<td>Terminal 7 700 World Way Los Angeles, CA</td>
<td>2</td>
</tr>
</tbody>
</table>

2. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.

3. The safety orders at issue are California Code of Regulations, title 8, section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4,

B. Process and Procedure:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, title 8, section 426.

2. At the hearing, Jason Babcock and Amanda Dominguez, with Elevators Etc., appeared on behalf of Los Angeles World Airports; Mark Wickens appeared on behalf of the
Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application(s) for Permanent Variance per section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. Applicant proposes to install new escalators that include a “sleep mode” capability that will cause the escalator to run at a reduced speed when not in use to conserve energy. This arrangement does not comply with the Elevator Safety Orders that prohibit the intentional variation of an escalator’s speed after start-up, and thus variance is requested from California Code of Regulations, title 8, Elevator Safety Orders, Group IV, section 3141.11, incorporated ASME A17.1-2004, section 6.1.4.1 regarding limits of escalator speed, and A17.1-2004, section 6.1.6.4, regarding handrail speed. The Division has identified another closely related section 3141.11 incorporated ASME requirement from which variance would be needed, in order to for the escalator system to operate as proposed—ASME A17-1-2004, section 6.1.4.1, regarding escalator speed after start-up.

2. ASME A17.1-2004, section 6.1.4.1, states:

   “6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied."

3. A purpose of this regulation is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.
4. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the escalator, for a specified amount of time not less than three times the amount of time to transfer a passenger between landings, the control system will initiate the “sleep mode” function, decelerating the escalator to a “crawling speed”, no less than 0.05 m/s (10 ft./min). If passenger traffic is detected while the escalator is in “Sleep Mode,” a signal will be sent to the controller to “wake up” resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec².

5. Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.

6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in “sleep mode”, an alarm will sound and the escalator will exit “sleep mode” and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec². This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.

7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, “sleep mode” would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents “sleep mode” activation if the wiring is cut or disconnected.

8. The Division notes in its Review of Application (Exhibit PD-4) that the Applicant proposed “sleep mode” function meets the requirements of ASME A17.1-2010, section 6.1.4.1 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, the Division advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.
9. ASME A17.1-2010, section 6.1.4.1.2, states:

“Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:

(a) The acceleration and deceleration rates shall not exceed 0.3 m/s² (1.0 ft/sec²).

(b) The rated speed is not exceeded.

(c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).

(d) The speed shall not automatically vary during inspection operation.

(e) Passenger detection means shall be provided at both landings of the escalator such that

1. detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)

2. detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed (1.35 m/s (270 ft/min)) reaches the combplate

3. passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate

(f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

(g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only.”

10. The Division states correctly in its Review of Application, that Applicant’s proposed “sleep mode” function is materially similar to other installations for which a permanent variance has been granted (OSHSB File No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from
ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring, and the concluding conditional grant of variance provided for the disabling of the handrail-speed monitoring device while the escalator is operating in slow speed “sleep mode.”

11. ASME A17.1-2004, section 6.1.6.4, states:

   “Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type.”

12. The Division advises that the proposed “sleep mode” system incorporating the proposed handrail speed control specifications, subject to all conditions and limitations of the below Decision and Order will provide for safety equivalence.

13. The proposed “sleep mode” system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. OSHSB File No. 13-V-153, 15-V-236, 16-V-069), absent, to the Division’s reported knowledge, adverse effect upon passenger or workplace safety or health.

14. Both Division and Board staff recommend that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that which would otherwise prevail per the subject Elevator Safety Order requirements.

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 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.
E. Decision and Order:

The Application of each above section A table identified Applicant, is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A table specified quantity of “sleep mode” escalators units per Appendix A, at the specified location shall have permanent variance from the following subparts of ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, subject to each and all of the following requirements and limitations:

1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:

   (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s² (1 ft/sec²) when transitioning between speeds.

   (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s² (1 ft/sec²).

   (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.

   (d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate.

   (e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Exhibit 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

\[
d = (V_f - V_s) \times \left(\frac{V_w}{a}\right)
\]

where

- \(d\) = detection distance (ft)
- \(V_f\) = normal speed (ft/min) [not to exceed 100 ft/min]
- \(V_s\) = slow "sleep" speed (ft/min) [not less than 10 ft/min]
- \(V_w\) = passenger walking speed (4.5 ft/sec)
\[ a = \text{acceleration/deceleration rate (ft/sec}^2\text{)[not to exceed 1 ft/sec}^2\text{]} \]

(f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.

(g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.

(h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.

(i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:

1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

(j) The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.

2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning
between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.

4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).

5. Whenever practicable, as determined by the Applicant and subject to the concurrence of the Division, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.

6. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.

7. The Division shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by the Division and a "Permit to Operate" issued before the escalator may be placed in service.

8. 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.

9. 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 procedural accordance with title 8, section 411, et. seq.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
APPENDIX A

Permanent Variance is granted as to the below specified escalators, identified by the Applicant assigned designations in effect on the date of Decision and Order adoption:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Escalator ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES07: #186467</td>
</tr>
<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES08: #186468</td>
</tr>
<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES09: #186470</td>
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<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES10: #186469</td>
</tr>
<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES11: #186471</td>
</tr>
<tr>
<td>21-V-206</td>
<td>TBIT-01-C15-ES12: #186472</td>
</tr>
<tr>
<td>21-V-207</td>
<td>T7-ESC-02: #186456</td>
</tr>
<tr>
<td>21-V-207</td>
<td>T7-ESC-01: #188302</td>
</tr>
</tbody>
</table>
## Exhibit 1

Detection Distance Sleep Mode Operation

<table>
<thead>
<tr>
<th>d (ft.)</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
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<th>35</th>
<th>40</th>
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<th>75</th>
<th>80</th>
<th>85</th>
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<th>95</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>6.76</td>
<td>6.39</td>
<td>6.01</td>
<td>5.64</td>
<td>5.26</td>
<td>4.88</td>
<td>4.51</td>
<td>4.13</td>
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<td>1.50</td>
<td>1.13</td>
<td>0.75</td>
<td>0.38</td>
<td>0.00</td>
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<td>0.95</td>
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<td>6.72</td>
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\[ d = \left( V_f - V_s \right) \times \frac{V_w}{a} \]

- **d** Detection distance (ft.)
- **V_f** Escalator Rated Speed (Escalators with rated speeds of 100 ft./min.)
- **V_w** Passenger Walking Speed of 4.5 ft./sec.
- **V_s** Slow Speed (“Sleep mode” Speed) (ft./min.)
- a Acceleration/Deceleration Rate (ft./sec^2)

Note: 1 ft./min. = 0.0167 ft./sec.

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**Los Angeles World Airports**

**Proposed Variance Decision**

**Hearing Date: January 26, 2022**
In the Matter of Application for Permanent Variance by: Pulte Home Company LLC

OSHSB File No.: 21-V-332
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

______________________________
DAVID THOMAS, Chairman

______________________________
BARBARA BURGEL, Member

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KATHLEEN CRAWFORD, Member

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DAVID HARRISON, Member

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NOLA KENNEDY, Member

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CHRIS LASZCZ-DAVIS, Member

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LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: February 17, 2022

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.
In the Matter of Application for Permanent Variance by:

Pulte Home Company, LLC

OSHSB File No.: 21-V-332

PROPOSED DECISION

Hearing Date: January 31, 2022

A. Jurisdictional and Procedural Matters

1. On June 14, 2021, Pulte Home Company, LLC (Applicant) filed an application for permanent variance from title 8, section 3041, subdivision (e)(1)(C)\(^1\), an Elevator Safety Order requiring minimum cab dimensions for elevator cars designated for emergency service.

2. The application for permanent variance relates to one (1) conveyance located at 300 Waters Park Circle, in San Mateo, California. The location is a residential condominium building.

3. 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.

4. The hearing was held on January 31, 2022, in Sacramento, California and by video conference, by delegation of the Occupational Safety and Health Standards Board (Board). The Hearing Panelists were Board Members Kathleen Crawford and David Harrison. The Hearing Officer was Autumn Gonzalez. This proposed decision, prepared as directed by the Hearing Panel, is presented to the Board for its consideration, in accordance with section 426.

5. Appearing for the Applicant were Dan Leacox, of Leacox & Associates, and Wolter Geesink, Regional Code & Standards Manager for Otis Elevator Company. Maryrose Chan, Senior Safety Engineer, appeared in a technical advisory role apart from the Board. David Morris appeared for the Division of Occupational Safety and Health (Division).

6. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the Hearing Notice as Exhibit PD-1, Application for Permanent Variance dated June 14 as PD-2, Division Review of Application as PD-3, and

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\(^1\) Unless otherwise noted, all references are to California Code of Regulations, title 8.
Board Staff Review of Application as PD-4. Official notice was taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested.


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-inc (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.

C. Conclusive Findings

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

1. Both the Division and Board staff find that the Applicant’s proposal to comply with the California Building Code standard will provide equivalent safety to the existing Elevator Safety Order.

2. Board staff concurs with the following conditions recommended by the Division, as are outlined below.

3. The Applicant has no objections to the conditions as recommend by the Division.

D. Decision and Order

The Application for Permanent Variance of Pulte Home Company LLC, OSHSB File No. 21-V-332, is conditionally GRANTED, subject to the following conditions:

1. The medical emergency service elevator 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-inc (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. The medical emergency service elevator 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 the medical emergency service elevator.

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.

DATED: February 1, 2022

[Signature]

Autumn Gonzalez, Hearing Officer
In the Matter of Application for Permanently Variance regarding:

Otis Elevator Gen2(O) and/or Gen2L Alterations w/variant Governor (Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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:

Otis Elevators Gen2(O) and/or Gen2L Alteration w/Variant Governor (Group IV)

OSHSB File Nos.: See Section A.1 table below

1ST AMENDED PROPOSED DECISION

Hearing Date: January 26, 2022

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 Regulations, or applied to modify such variances, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

<table>
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<th>Variance No.</th>
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<td>City of Hope</td>
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2. The subject regulatory requirements are as enumerated per the below Decision and Order.

B. Jurisdiction:

This proceeding is conducted in accordance with Labor Code Section 143, and section 401, et. seq.

C. Procedural:

1. This hearing was held on January 26, 2022, in Sacramento, California, and 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.

2. At the hearing, Wolter Geesink, with Otis Elevator, and Dan Leacox of Leacox & Associates, appeared on behalf of each Applicant; Mark Wickens appeared on behalf of

1 Unless otherwise noted, all references are to title 8, California Code of Regulations.
the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.

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

<table>
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<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
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<td>PD-1</td>
<td>Permanent variance applications per Section A.1 table</td>
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<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
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<td>Board Staff Reviews of Variance Application</td>
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<td>PD-5</td>
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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 January 26, 2022, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings and Basis:

1. Each Applicant intends to alter elevators at the locations, and in the numbers, stated in the Section A.1 table such that each elevator becomes (or incorporates features of) an Otis Gen2(O) and/or Otis Gen2L elevator.

2. The belts and connections that each Applicant intends to install are the same as are used on new Otis Gen2(O)/Gen2L installations.

3. Each Applicant intends to alter elevators at the locations, and in the numbers, stated in the Section A.1 table with further variance as to the speed governor sheave pitch diameter and rope diameter.

4. The alterations will be performed after May 1, 2008, and the contracts for the alterations were or will be signed on or after May 1, 2008, making those alterations subject to the Group IV Elevator Safety Orders.

5. 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, regarding OSHSB File No. 08-V-247; (b) Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, regarding OSHSB File No. 09-V-042; (c) Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010,
regarding 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, regarding OSHSB File No. 12-V-146.

6. Regarding requested variance in governor sheave pitch diameter, and governor rope diameter, in variance from Title 8, Section 3141, incorporated ASME A17.1-2004, Section 2.18.7.4, and Section 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.

E. 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.

F. Decision and Order:

Each permanent variance application that is the subject of this proceeding is conditionally GRANTED, as specified below, to the extent that, as of the date the Board adopts this Proposed Decision, each Section A.1 table listed Applicant, at the specified variance location, and as to specified number of conveyances, shall have a permanent variance regarding switches, suspension rope, connection retrofits, speed governor ropes and speed governor sheaves (so long as the elevators are Gen2 (O) or Gen2L 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). The variance shall be from California Code of Regulations, Title 8, Sections 3141 and 3141.2(a), and shall only be to the extent necessary to allow variances from the following provisions of ASME A17.1-2004 made applicable by those title 8 provisions:
Proposed Variance Decision
Otis Elevators Gen2(O) and/or Gen2L Alteration w/Variant Governor (Group IV)

Hearing date: January 26, 2022

- Sections 8.7.1.1(b), 8.7.2.1.1, and 8.7.2.25.1(c) (to the extent necessary to permit variance from the ASME A17.1-2004 provisions listed in the next bullet points);

- 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),

- Section 2.18.7.4, (only to the extent necessary to permit the use of the speed governor system where the speed governor sheave pitch diameter is reduced to 240 mm [9.45 in.]).

- Section 2.18.5.1 (only to the extent necessary to permit the use of the speed governor rope, where the rope has a diameter of 8 mm [0.315 in.]);

- 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, (only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts [the belts proposed for use on these Gen2(O) and/or Gen2L elevators] in lieu of conventional steel suspension ropes),

- Sections 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)

- Sections 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)]

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 elevator 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 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.

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; and
   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 panels 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.
b. The top of the beveled area and/or the 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).

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

   a. The governor shall be used in conjunction with an 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 by Certified Competent Conveyance Mechanics who have been trained, and are competent, to perform those tasks on the Gen2(O) and/or Gen2L elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and all other terms and conditions 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. No elevator shall be placed in service prior to it being inspected and issued a Permit to Operate by the Division.

16. Each Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.

17. Each 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 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 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: **February 1, 2022**

[Signature]
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
Proposed Variance Decision
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**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.
In the Matter of Application for
Permanent Variance regarding:

TK Elevator Evolution (Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

__________________________________________
DAVID THOMAS, Chairman

__________________________________________
BARBARA BURGEL, Member

__________________________________________
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: February 17, 2022

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.
In the Matter of Application for
Permanent Variance Regarding:

TK Elevator
Evolution (Group IV)

OSHSB File Nos.: Per Section A.1 table

PROPOSED DECISION

Hearing Date: January 26, 2022

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 Regulations\(^1\), with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

<table>
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<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
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<td>21-V-461</td>
<td>1064 Mission, LP, A California Limited Partnership</td>
<td>1064 Mission St. San Francisco, CA</td>
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<td>21-V-462</td>
<td>1064 Mission, LP, A California Limited Partnership</td>
<td>1066 Mission St. San Francisco, CA</td>
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<td>21-V-463</td>
<td>CRP Valencia Pointe LP</td>
<td>5930 Division St., San Diego, CA</td>
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<td>Secoya Partners LP</td>
<td>3067 Fifth Ave. San Diego, CA</td>
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<tr>
<td>21-V-465</td>
<td>SIOF 3 Properties, LLC</td>
<td>321 - 325 E. Florence Ave. Los Angeles, CA</td>
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<tr>
<td>21-V-466</td>
<td>The Lightstone Group</td>
<td>1260 South Figueroa St. Los Angeles, CA</td>
<td>3</td>
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<tr>
<td>21-V-467</td>
<td>Tim Roth</td>
<td>6211 S. Vermont Ave. Los Angeles, CA</td>
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<td>21-V-468</td>
<td>316 12th St LLC</td>
<td>316 12th St. Oakland, CA</td>
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<tr>
<td>21-V-469</td>
<td>1614-1618 Hilts LLC</td>
<td>1618 Hilt Ave. Los Angeles, CA</td>
<td>2</td>
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\(^1\) Unless otherwise noted, references are to the California Code of Regulations, title 8.
Proposed Decision  
TK Elevator Evolution (Group IV)  
Hearing Date: January 26, 2022

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<th>Address</th>
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<td>21-V-470</td>
<td>1830 Alemany, LLC</td>
<td>1830 Alemany Blvd. San Francisco, CA</td>
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<td>21-V-471</td>
<td>Bando Dela Corp.</td>
<td>3170 W. Olympic Blvd. Los Angeles, CA</td>
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<td>21-V-472</td>
<td>Bariso Storage Investors, LLC</td>
<td>1612 South Catalina St. Los Angeles, CA</td>
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<td>Berendo Sage, LP</td>
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<td>21-V-474</td>
<td>CWV-PALM, LLC</td>
<td>425 N. Palm Dr. Beverly Hills, CA</td>
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<td>21-V-475</td>
<td>Etco Homes, Inc.</td>
<td>725 N Croft Ave. Los Angeles, CA</td>
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<td>21-V-476</td>
<td>NFF 1930 W 6th LA LLC</td>
<td>602 S. Westlake Ave. Los Angeles, CA</td>
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<td>Ocean Cregg LLC</td>
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<td>OODB2, LLC</td>
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<td>21-V-480</td>
<td>Riverside County Office of Education</td>
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<td>21-V-481</td>
<td>Victoria Crossing, LLC</td>
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<td>Ardmore Capital, LLC</td>
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<td>Bayshore Affordable LP</td>
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<td>21-V-509</td>
<td>Block 7 Retail Investors LLC</td>
<td>1407 California St. Redding, CA</td>
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<td>21-V-510</td>
<td>California State University, Fullerton</td>
<td>800 N. State College Blvd., Bldg 55 Fullerton, CA</td>
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<td>21-V-511</td>
<td>Horizon Real Estate Holdings</td>
<td>505 E Santa Clara Santa Clara, CA</td>
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2. These proceedings are conducted in accordance with Labor Code section 143, and section 401, et. seq.

3. This hearing was held on January 26, 2022, in Sacramento, California via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

4. At the hearing, Kathleen E. Finnerty of Finnerty Law Offices, Inc., Andrew Ferris, with TK Elevator appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.

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

<table>
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<th>Case No.</th>
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<th>Address</th>
<th>Page</th>
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<td>21-V-512</td>
<td>JFP Dunn, LLC</td>
<td>3838 Dunn Drive Culver City, CA</td>
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<td>21-V-513</td>
<td>Philena Investment Holdings LLC</td>
<td>12121 W. Olympic Blvd. Los Angeles, CA</td>
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<td>21-V-627</td>
<td>Peery Arrillaga</td>
<td>5407 Stevens Creek Blvd. Santa Clara, CA</td>
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<td>21-V-628</td>
<td>SJ Park Almaden LLC</td>
<td>200 Park Ave. San Jose, CA</td>
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<tr>
<td>21-V-629</td>
<td>Mansion Apartments Owner, LLC</td>
<td>1517 H St. Sacramento, CA</td>
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<tr>
<td>21-V-630</td>
<td>Chinatown Community Development Corp CCDC</td>
<td>55 Cravath St. San Francisco, CA</td>
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<tr>
<td>21-V-631</td>
<td>Yale SM Investors, LLC</td>
<td>2828 Santa Monica Blvd. Santa Monica, CA</td>
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</table>
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 January 26, 2022, 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
Proposed Decision
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Hearing Date: January 26, 2022

(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(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
Proposed Decision
TK Elevator Evolution (Group IV)
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(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.


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 of the Elevator Safety Orders:

- 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.
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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 reused.

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.
Proposed Decision

TK Elevator Evolution (Group IV)

Hearing Date: January 26, 2022

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: February 1, 2022

Autumn Gonzalez, 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.
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.
In the Matter of Application for Permanent Variance regarding:

KONE Monospace 500 Elevators (Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
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: February 17, 2022

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.
A. Subject Matter:

1. 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:

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## Proposed Variance Decision

**KONE Monospace 500 Elevators**  
**Hearing Date: January 26, 2022**

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Proposed Variance Decision  
KONE Monospace 500 Elevators  
Hearing Date: January 26, 2022

2. 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:

1. This hearing was held on January 26, 2022, in Sacramento, California, via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Daniel May, with KONE, Inc., appeared on behalf of each Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff in a technical advisory capacity apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
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<tr>
<td>PD-1</td>
<td>Application(s) for Permanent Variance per section A.1 table</td>
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<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
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<td>PD-3</td>
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<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
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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 January 26, 2022, 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:
$W = \frac{(S \times N)}{f}$

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
Proposed Variance Decision
KONE Monospace 500 Elevators
Hearing Date: January 26, 2022

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
## Appendix 1

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### Proposed Variance Decision

**KONE Monospace 500 Elevators**

**Hearing Date: January 26, 2022**

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## Proposed Variance Decision

**KONE Monospace 500 Elevators**

**Hearing Date: January 26, 2022**

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<tr>
<td>21-V-666</td>
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<td>21-V-666</td>
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</tr>
<tr>
<td>21-V-666</td>
<td>4B</td>
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<td>350</td>
<td>11,706</td>
<td></td>
</tr>
</tbody>
</table>
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:
Schindler Model 5500 Elevators (Group IV)

OSHSB File No.: see table in Item A.1 of
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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.
In the Matter of Application for Permanent Variance Regarding:

Schindler Model 5500 Elevators
(Group IV)

OSHSB File Nos. See Section A.1 Table below

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Subject Matter:

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:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-539</td>
<td>Aztec Stadium</td>
<td>2101 Stadium Way San Diego, CA</td>
<td>7</td>
</tr>
<tr>
<td>21-V-576</td>
<td>Lithia Real Estate</td>
<td>636 W. Washington Blvd. Los Angeles, CA</td>
<td>1</td>
</tr>
</tbody>
</table>

2. The safety orders at issue are set out in below Section C.1.

B. Process and Procedure:

1. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

2. The installation contract for the subject elevators was signed after May 1, 2008. Therefore, the subject elevators fall within the scope of the Elevator Safety Orders (ESO) Group IV Section 3141, and as incorporated by reference therein, ASME A17.1-2004.

3. This hearing was held on January 26, 2022, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”) assigned 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 Schindler Elevator Corporation, appeared on behalf of the Applicants; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Permanent variance applications per Section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

Official notice is 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 January 26, 2022, the record was closed, and the matter taken under submission by the Hearing Officer.

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

**Requested Suspension Means Related Variance:**

1. As each pertains to the non-circular elastomeric coated suspension means characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Safety Code for Elevators and Escalators (ASME Code) A17.1-2004 sections and subsections:

   - Section 2.20.1—Wire rope suspension means
   - Section 2.20.2.1—Crosshead data plate
   - Subsection 2.20.2.2(a)—Wire rope data tag
   - Subsection 2.20.2.2(f)—ID of steel wire rope as preformed or nonpreformed
   - Section 2.20.3—Wire rope safety factor
   - Section 2.20.4—Number and diameter of wire ropes
   - Section 2.20.9.3.4—Wire rope end connections
   - Section 2.20.9.5.4—Wire rope sockets
Requested Car Top Railing Inset Variance:

2. As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 section:

   *Section 2.14.1.7.1—Top of Car Perimeter Railing Placement*

Requested Seismic Reset Switch Placement Variance:

3. 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 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code subsection:

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

Requested Transfer Switch Placement Variance:

4. 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 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 subsection:

   *Subsection 2.26.1.4.4(a)—Transfer Switch Placement in Machine Room*

Official Notice and Incorporation by Reference—OSHSB File No. 15-V-349:

5. Per hereby entered stipulation offered at hearing by Applicant, Division, and Board staff, concerning preexisting Board records, including decisions in matters of permanent variance from Elevator Safety Order requirements, the Board takes Official Notice and expressly incorporates herein by reference, OSHSB File No. 15-V-349, Decision and Order adopted November 17, 2016, Section D.1—D.75 findings, and therein entered record upon which it was based.

   *Positions of Division, and Board Staff:*

6. Having fully reviewed Applicant’s request for variance from the above identified Elevator Safety Order requirements, it is the concurrent opinion of Division and Board staff, that conditionally limited grant to Applicant of permanent variance as specified
per the below Decision and Order, will provide for elevator safety, and occupational safety and health, equivalent or superior to that of the Elevator Safety Order requirements from which variance is being sought. The present opinion of Division and Board staff, to any extent it may vary from those previously held with respect to the previously heard matter in OSHSB File No. 15-V-349, reflects further scrutiny of the subject matter, consultation between Division, Board staff, Applicant representatives, and refinement of recommended conditions and limitations.

D. Basis of Decision:

The afore stated procedural, statutory, regulatory, and factual matters establish a substantive 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.

E. Decision and Order:

Each above Section A.1 table specified Applicant, with respect to the also specified number of conveyance, and variance location, is hereby conditionally GRANTED Permanent Variance as stated below, to the limited extent that each enumerated conveyance at the given location shall be subject to conditionally limited permanent variance from the below specified ASME A17.1-2004, requirements incorporated by reference into California Code of Regulations, Title 8, Elevator Safety Orders, Section 3141.

Suspension Members: Applicant shall conditionally hold permanent variance from the following Title 8, Section 3141 incorporated sections and subsections of ASME A17.1-2004, to the limited extent variance is necessary to provide for use of noncircular elastomeric-coated steel suspension members and concomitant components, and configurations—Section 2.20.1; Section 2.20.2.1; Subsection 2.20.2.2(a); Subsection 2.20.2.2(f); Section 2.20.3; Section 2.20.4: Section 2.20.9.3.4; and Section 2.20.9.5.4.

Inspection Transfer Switch: 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 extent variance is necessary to having the requisite inspection transfer switch located elsewhere than a machine room, within a Security Group I.
Proposed Variance Decision  
Schindler Model 5500 Elevators (Group IV)  
Hearing Date: January 26, 2022

enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 2.26.1.4.4(a).

Seismic Safety Switch Placement: 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 having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 8.4.10.1.1(a)(2)(b).

Car Top Railing: 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 provide for the below specified insetting of the subject elevator's top of car railing: Section 2.14.1.7.1.

Further Conditions and Limitations:

1. The elevator suspension system shall comply with the following:

   1.1. 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

   1.2. Additionally, STMs shall meet or exceed all requirements of ASME 17.6-2010 Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.

   1.3. 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 of Occupational Safety and Health (Division) upon request.
1.4. STM member mandatory replacement criteria shall include:

1.4.1 Any exposed wire, strand or cord;

1.4.2 Any wire, strand or cord breaks through the elastomeric coating;

1.4.3 Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;

1.4.4 Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.

1.5. 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.

1.6. 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.

1.7. 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.

1.8. 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).

1.9. 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. Notwithstanding any less frequent periodic
testing requirement per Addendum 1 (Division Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.

1.10. Each elevator shall be provided with a device that electronically detects a reduction in residual strength of each STM member. The device shall be in compliance with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1, and incorporated herein by reference.

1.11. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, Section 2.20.2.1.

1.12. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, Section 2.20.2.2.

1.13. Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 1.2 and 1.3 specified criteria, shall be conducted and documented every six months by a CCCM.

1.14. The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 2, "Suspension Means Replacement Reporting Condition."

1.15. 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. Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:

2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 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.

2.2. 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.
3. Any and all inset car top railing shall comply with the following:

3.1. 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 anyone to stand or climb over the car top railing.

3.2. The distance that the railing can be inset shall be limited to not more than 12 inches.

3.3. 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 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.

3.4. 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 inch diagonal red and white stripes.

3.5. 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

3.6. 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).

4. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the Schindler Model 5500 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.

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
The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.

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 pursuant to California Code of Regulations, Title 8, Sections 411.2 and 411.3.

7. This Decision and Order shall remain in effect unless modified or revoked upon application by Applicant, affected employee(s), the Division, or by the Board on its own motion, in accordance with Title 8, Division 1, Chapter 3.5, procedural rules.

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
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 with SIL-Rated Drive
to De-energize Motor (Group IV)

OSHSB File No.: see table in Item 1 of
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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.
In the Matter of Application for Permanent Variance Regarding:

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

OSHSB File Nos.: Per table, in Jurisdictional and Procedural Matters below

PROPOSED DECISION

Hearing Date: January 26, 2022

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:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-546</td>
<td>1322 O St Investors LP</td>
<td>1322 O Street Sacramento, CA</td>
<td>1</td>
</tr>
<tr>
<td>21-V-548</td>
<td>LFT Lease Company</td>
<td>1315 Broadway Plaza Walnut Creek, CA</td>
<td>1</td>
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<tr>
<td>21-V-553</td>
<td>Fourth and Laurel LP</td>
<td>2426 Fourth Avenue San Diego, CA</td>
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<tr>
<td>21-V-565</td>
<td>The Press Owner, LLC</td>
<td>1375 Sunflower Avenue Costa Mesa, CA</td>
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<tr>
<td>21-V-566</td>
<td>462 Rexford Ventures LLC</td>
<td>462 S. Rexford Dr. Beverly Hills, CA</td>
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<td>21-V-571</td>
<td>PEP-JSW SDSU Investors, LP</td>
<td>5420 55th Street San Diego, CA</td>
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<tr>
<td>21-V-575</td>
<td>Lithia Real Estate</td>
<td>636 W. Washington Blvd. Los Angeles, CA</td>
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<tr>
<td>21-V-602</td>
<td>Mark A. Almeida Living Trust</td>
<td>4202 Telegraph Ave. Oakland, CA</td>
<td>1</td>
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<tr>
<td>21-V-605</td>
<td>Sidhu 151 LLC</td>
<td>2481 East Monte Vista Avenue Vacaville, CA</td>
<td>2</td>
</tr>
</tbody>
</table>
Proposed Variance Decision
Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)
Hearing Date: January 26, 2022

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 January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

4. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Permanent variance applications per Section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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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 January 26, 2022, 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
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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
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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);

• 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
Proposed Variance Decision
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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 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 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.
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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: February 1, 2022

Autumn Gonzalez, Hearing Officer
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
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.
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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.
In the Matter of Application for
Permanent Variance regarding:

TK Elevator wire ropes (Group IV)

OSHSB File No.: see table in Item A.1 of
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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.
A. **Subject Matter:**

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

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
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<tbody>
<tr>
<td>21-V-547</td>
<td>Coast Community College District</td>
<td>1700 West Coast Highway Newport Beach, CA</td>
<td>1</td>
</tr>
</tbody>
</table>

2. The subject safety orders requirements are specified in the prefatory part of the below Section E, Decision and Order.

B. **Procedural:**

1. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

2. This hearing was held on January 26, 2022, in Sacramento, California via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

3. At the hearing, Andrew Ferris, with TK Elevator appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.

4. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:
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 January 26, 2022, 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 Applicant intends to utilize TK Elevator in the numbers and at the locations stated in the above Section A.1 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. Each Applicant proposes to diverge from the safety orders by using 8x19 suspension ropes that are 8 mm in diameter (9.5 mm is the minimum diameter allowed by ASME A17.1-2004, Section 2.20.4) and that have outer wires that are 0.36 mm in diameter (0.56 mm is the minimum diameter allowed by ASME A17.1-2004, Section 2.20.4).

4. With respect to the ropes and outer wires, equivalent safety is to be provided by such measures as the following (some or all of which are intended to provide a factor of safety meeting or exceeding the safety factor required by ASME A17.1-2004, Table 2.20.3):

   a. Using a designated number of suspension ropes per elevator, in accordance with each elevator’s capacity;

   b. Providing a 2:1 roping ratio;

   c. Installing a device known as a loadweigher (a rope tension monitoring system);

   d. Limiting the car speed in accordance with TK Elevator engineering data;
e. Limiting the maximum suspended load of the elevator in accordance with the elevator’s design and specifications.

5. In many prior TK Elevator and KONE elevator variances, the Board has allowed the use of ropes and outer wires with diameters less than the minimums stated in ASME A17.1-2004, Section 2.20.4. In prior TK Elevator variances of this nature, the Board has made findings of fact to the following effect:
   a. Each Applicant has adopted the assertion that “One rope manufacturer, with an estimated 20% of the global market, has sold over 20 million meters of 8 mm rope with no indication of problems.”
   b. Tests performed on Drako brand 8 mm diameter rope generated data to the effect that “the breaking force applied in single bend for failure of the rope resulted in” forces of 7,910 to 9,550 pounds for the Drako rope; the breaking force when new and when using production rope shackles was calculated as 9,740 pounds for the Drako rope. As to Gustav Wolf brand 8 mm diameter wire rope (part number 80-056SC, 8X19 Warrington), test data include the following: cycling tests disclosed that the breaking force applied in single bend for failure of the rope resulted in a force of 8,360 pounds, and that the breaking force when new was calculated at 9,919 pounds using production rope shackles.
   c. Division evaluations have stated that “TK Elevator contends that the smaller diameter steel ropes are more pliable and less likely to kink thus reducing the probability of operational failures due to rope damage.”
   d. Each Applicant has asserted that the ropes proposed for use (both the Drako and the Gustav Wolf) have steel cores which augment the strength of the ropes so that the required factor of safety is achieved when 0.36 mm diameter outer wires are used.
   e. Each Applicant has asserted that the factor of safety for the proposed suspension ropes is at least equivalent to the factor of safety for code-compliant suspension ropes, and neither the Division nor the Board staff presented any evidence or argument to the contrary.

6. The number of suspension ropes per Condition No. 3, the maximum rated speed per Condition No. 6, and the total suspended load per Condition No. 7 in the Decision and Order result from the details of the proposed installations.

7. The Board incorporates by reference Section B.9, of the Proposed Decision adopted by the Board on September 25, 2014 in OSHSB File No. 14-V-117.

8. Safety is enhanced by the conditions set forth in the Decision and Order.
Proposed Variance Decision
TK Elevator wire ropes (Group IV)
Hearing Date: January 26, 2022

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 for Permanent Variance that is a subject of this proceeding, per Section A.1 table above, is conditionally GRANTED, as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, the Applicant shall have permanent variances from California Code of Regulations, Title 8, Section 3141 [ASME A17.1-2004, Section 2.20.4] (insofar as it requires that the “minimum diameter of hoisting and counter-weight ropes shall be 9.5 mm (0.375 in.)” and that the outer wires of the ropes “shall be not less than 0.56mm (0.024 in.) in diameter”), for the locations and numbers of elevators set forth in the Section A.1 table, subject to the following conditions:

1. Variance is granted from the Title 8 and ASME provisions referred to in the prefatory portion of this Decision and Order only to the extent necessary to allow the Applicant to use suspension ropes specified in Condition No. 2.

2. The diameter of the hoisting steel ropes shall be not less than 8 mm, and the outer wires of the suspension rope shall be not less than 0.36 mm in diameter. The rope shall be Drako brand 250T 8-strand EHS rated or Gustav Wolf brand, part no. 80-056SC, 8x19 Warrington IWRC, steel rope.

3. The number of suspension ropes for each elevator shall be not less than the number of ropes stated in Appendix 1 attached hereto and incorporated herein by this reference. The roping ratio for each elevator shall be two to one (2:1).

4. The ropes shall be inspected annually for wire damage (rouge, valley break, etc.) in accordance with the manufacturer’s recommendation for 8 mm steel wire rope.

5. The rope inspection log shall be maintained and shall be available in the elevator control room at all times.
6. The elevator rated speed shall not exceed the rated speed specified in Appendix 1, attached hereto, and incorporated herein by this reference.

7. The total suspended load for each elevator shall not exceed the total load stated in Appendix 1, attached hereto, and incorporated herein by this reference.

8. The Applicant shall provide and install a Rope Tension Monitoring System (RTMS) on each suspension rope. The RTMS shall monitor the tension in each suspension rope and immediately cut off power to the elevator machine and brakes if the differential between any single rope and the average tension in all ropes suspending the car exceeds ±40% for more than 3 seconds. The Applicant will take all reasonable steps to make sure that this system is set to operate if there is a “±40%” tension discrepancy; however, no violation of this condition will be deemed to occur if, on a given occasion, the system goes into operation when the tension discrepancy is between “±40%” and “±45%.”

9. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the elevator shall be provided a copy of the variance decision. Before any CQCC works on any of these elevators, the Applicant will ensure that the CQCC has personnel who are trained and available to perform CQCC duties with respect to the RTMS referred to in Condition No. 8 and that such work is performed only by trained and qualified personnel.

10. The Division shall be notified when the elevator is ready for inspection, and the elevator shall not be put into service prior to having been inspected, and issued a Permit to Operate by the Division.

11. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Appendix 2; that condition is incorporated herein by this reference.

12. 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.

13. 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.
Proposed Variance Decision
TK Elevator wire ropes (Group IV)
Hearing Date: January 26, 2022

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: February 1, 2022

[Signature]

Autumn Gonzalez, Hearing Officer
### Proposed Variance Decision

**TK Elevator wire ropes (Group IV)**

**Hearing Date: January 26, 2022**

**APPENDIX 1**

<table>
<thead>
<tr>
<th>OSHSB File Number</th>
<th>Car ID</th>
<th>Minimum Suspension Ropes per Elevator (per Cond. No. 3)</th>
<th>Roping Ratio</th>
<th>Max. Rated Speed In Feet per Minute (per Condition No. 6)</th>
<th>Maximum Suspended Load per Elevator (+5%) (per Cond. No. 7)</th>
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<tr>
<td>21-V-547</td>
<td>1</td>
<td>6</td>
<td>2:1</td>
<td>150</td>
<td>6,748</td>
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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
Proposed Variance Decision
TK Elevator wire ropes (Group IV)
Hearing Date: January 26, 2022

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 Section 2.a above.
In the Matter of Application for Permanent Variance regarding:
Otis Gen2S Elevators (Group IV)

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

______________________________  ________________________________  ________________________________  ________________________________  ________________________________  ________________________________
DAVID THOMAS, Chairman  OCTUATIONAL SAFETY AND HEALTH STANDARDS BOARD
BARBARA BURGEL, Member  Date of Adoption:  February 17, 2022
KATHLEEN CRAWFORD, Member  THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member  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.
NOLA KENNEDY, Member  YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.
CHRIS LASZCZ-DAVIS, 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.
LAURA STOCK, Member
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 Regulations, with respect to the listed conveyance or conveyances, in the specified quantity, at the specified location:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
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<tr>
<td>21-V-550</td>
<td>C3 DLG 414 Main Street LLC</td>
<td>Shorehouse 424 Main Street Huntington Beach, CA</td>
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<tr>
<td>21-V-551</td>
<td>Chapman University</td>
<td>School of Dance 350 North Cypress Street Orange, CA</td>
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<td>21-V-552</td>
<td>Sunstone Management</td>
<td>456 Elm Ave Long Beach, CA</td>
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<tr>
<td>21-V-570</td>
<td>URSA 1421 Adams Blvd., LLC</td>
<td>1421 W. Adams Blvd. Los Angeles, CA</td>
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<tr>
<td>21-V-572</td>
<td>Pulte Home Company LLC</td>
<td>210 Waters Park Circle San Mateo, CA</td>
<td>1</td>
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<tr>
<td>21-V-574</td>
<td>Rose Hill Courts I Housing Partners, L.P.</td>
<td>4466 E. Florizel Street (1 elevator) Los Angeles, CA 4486 E. Florizel Street (1 elevator) Los Angeles, CA</td>
<td>2</td>
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### Proposed Variance Decision
**Otis Gen2S Elevators (Group IV)**

**Hearing Date: January 26, 2022**

<table>
<thead>
<tr>
<th>Proposed Variance Decision</th>
<th>Otis Gen2S Elevators (Group IV)</th>
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<tr>
<td><strong>Hearing Date:</strong> January 26, 2022</td>
<td><strong>Proposed Variance Decision</strong></td>
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<tr>
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<th>Otis Gen2S Elevators (Group IV)</th>
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<tr>
<td><strong>Hearing Date:</strong> January 26, 2022</td>
<td><strong>Proposed Variance Decision</strong></td>
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<table>
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<tr>
<th>21-V-586</th>
<th>200 North Vermont QOZB, LP</th>
<th>200 N. Vermont Avenue Los Angeles, CA</th>
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<td>21-V-587</td>
<td>1410 Highland Venture, LLC</td>
<td>1410 N Highland Ave Los Angeles, CA</td>
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<td>21-V-588</td>
<td>220 Park Road Owner, LLC</td>
<td>220 Park Road Burlingame, CA</td>
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<td>21-V-589</td>
<td>Blossom Hill L.P.</td>
<td>399 Blossom Hill Road San Jose, CA</td>
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<td>21-V-590</td>
<td>Core OZ Figueroa, LLC</td>
<td>2722 S. Figueroa Los Angeles, CA</td>
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<tr>
<td>21-V-591</td>
<td>Federal Realty Investment Trust</td>
<td>1202 3rd Street Santa Monica, CA</td>
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<td>21-V-592</td>
<td>Heritage Building and Development</td>
<td>1800 Santa Carolina Rd. Chula Vista, CA</td>
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<td>21-V-593</td>
<td>Lexington 26 LLC</td>
<td>5612 W. Lexington Ave. Los Angeles, CA</td>
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<td>21-V-594</td>
<td>MP Moorpark Associates, L.P.</td>
<td>670 Leigh Avenue San Jose, CA</td>
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<td>Pandora Equities LLC</td>
<td>1813-1821 S Pandora Avenue Los Angeles, CA</td>
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<tr>
<td>21-V-596</td>
<td>R&amp;V MGT INVESTORS, LLC</td>
<td>4360 Twain Avenue San Diego, CA</td>
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<td>21-V-597</td>
<td>The Regents of the University of California</td>
<td>Clinical Building 520 Illinois Street San Francisco, CA</td>
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<td>21-V-598</td>
<td>Union Grantville, LLC</td>
<td>4520 Alvarado Canyon Rd San Diego, CA</td>
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<tr>
<td>21-V-599</td>
<td>Western &amp; Franklin, LLC</td>
<td>1860 N. Western Ave. Los Angeles, CA</td>
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<tr>
<td>21-V-611</td>
<td>Miracle Mile Properties, LP</td>
<td>2277 Harbor Boulevard Costa Mesa, CA</td>
<td>3</td>
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<thead>
<tr>
<th>Proposed Variance Decision</th>
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<tr>
<td>Otis Gen2S Elevators (Group IV)</td>
</tr>
<tr>
<td>Hearing Date: January 26, 2022</td>
</tr>
</tbody>
</table>

| 21-V-612 | The Regents of the University of California | UCSF Mission Bay Block 34 Parking Garage 590 Illinois Street San Francisco, CA | 2 |
| 21-V-613 | Sun Commons, LP | 6329 N. Clybourn Avenue North Hollywood, CA | 2 |
| 21-V-615 | 238 Vernon LLC | 3001 W Beverly Blvd Los Angeles, CA | 1 |
| 21-V-617 | RCP Holdings VI, LLC | 3516 Schaefer St. Culver City, CA | 1 |
| 21-V-619 | 1180 LaBrea LLC | 5067 W. 12th Street Los Angeles, CA | 2 |
| 21-V-620 | Bel Air Country Club | 10768 Bellagio Rd. Los Angeles, CA | 1 |
| 21-V-621 | Broadstone Alton, LLC | Parking Structure 1100 Steely Irvine, CA | 3 |
| 21-V-622 | Glendale Community College | 1500 N. Verdugo Rd Glendale, CA | 2 |
| 21-V-638 | 5533 Virginia LLC | 5533 W Virginia Ave. Los Angeles, CA | 1 |
| 21-V-639 | Anaheim & Walnut Housing LP | 1500 E. Anaheim Street Long Beach, CA | 2 |
| 21-V-640 | University of California, Irvine | Medical Center Parking Structure 19204 Jamboree Rd. Irvine, CA | 3 |
| 21-V-644 | Wakeland Price UB LP | 4020 44th St. San Diego, CA | 2 |
| 21-V-645 | Western Plaza Capital Holding LLC | 800 S. Western Ave. Los Angeles, CA | 3 |
| 21-V-646 | Western Plaza Capital Holding LLC | 808 S. Western Ave. Los Angeles, CA | 1 |
| 21-V-651 | Abode Communities | 242 N. Soto Street Los Angeles, 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, and California Code of Regulations, Title 8, Section 401, et. seq.

2. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

3. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Mark Wickens appeared on behalf of
the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
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</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Permanent variance applications per Section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, 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 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 OSHSB File No. 12-V-093 and Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 in OSHSB File No. 14-V-206.

4. Both Board staff and Division, 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) 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 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 California Code of Regulations, Title 8, 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 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 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 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.
Proposed Variance Decision  
Otis Gen2S Elevators (Group IV)  
Hearing Date: January 26, 2022

12. 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.

13. 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.).

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 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 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: February 1, 2022

Autumn Gonzalez, Hearing Officer
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.
In the Matter of Application for Permanent Variance regarding:
Schindler Model 3300 Elevators with variant Gov. Ropes & Sheaves (Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

______________________________
DAVID THOMAS, Chairman

______________________________
BARBARA BURGEL, Member

______________________________
KATHLEEN CRAWFORD, Member

______________________________
DAVID HARRISON, Member

______________________________
NOLA KENNEDY, Member

______________________________
CHRISS LASZCZ-DAVIS, Member

______________________________
LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: February 17, 2022

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:

Schindler Model 3300 Elevators with variant Gov. Ropes & Sheaves (Group IV)

OSHSB File Nos.: See Section A.1 table below

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Subject Matter and Jurisdiction:

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:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-564</td>
<td>San Jose Evergreen Community College District</td>
<td>3095 Yerba Buena Rd. San Jose, CA</td>
<td>1</td>
</tr>
<tr>
<td>21-V-608</td>
<td>National Community Renaissance of California</td>
<td>4639 E. 3rd St. Los Angeles, CA</td>
<td>1</td>
</tr>
<tr>
<td>21-V-650</td>
<td>245 S Westlake LLC</td>
<td>245 S. Westlake Ave. Los Angeles, CA</td>
<td>1</td>
</tr>
<tr>
<td>21-V-664</td>
<td>SJ4 Burbank, LLC</td>
<td>636 N. Front Street Burbank, CA</td>
<td>6</td>
</tr>
</tbody>
</table>

2. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

3. The safety orders at issue are set out in below Section C.1—C.4.

B. Process and Procedure:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.
Proposed Variance Decision
Schindler Model 3300 Elevators w/variant Gov. Rope & Sheaves
Hearing Date: January 26, 2022

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Permanent variance applications per Section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Reviews of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

Official notice is 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 January 26, 2022, the record was closed, and the matter taken under submission by the Hearing Officer.

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

Requested Suspension Means Related Variance:

1. As each pertains to the non-circular elastomeric coated suspension means characteristic of the Schindler Model 3300 elevator, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Safety Code for Elevators and Escalators (ASME Code) A17.1-2004, sections and subsections:

   - Section 2.20.1—Wire rope suspension means
   - Section 2.20.2.1—Crosshead data plate
   - Subsection 2.20.2.2(a)—Wire rope data tag
   - Subsection 2.20.2.2(f)—ID of steel wire rope as preformed or nonpreformed
   - Section 2.20.3—Wire rope safety factor
   - Section 2.20.4—Number and diameter of wire ropes
   - Section 2.20.9.3.4—Wire rope end connections
   - Section 2.20.9.5.4—Wire rope sockets
Requested Car Top Railing Inset Variance:

2. 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, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004, section:

Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

Requested Seismic Reset Switch Placement Variance:

3. 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, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code subsection:

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

Requested Transfer Switch Placement Variance:

4. 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, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:

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

Requested Governor Sheave to Rope Diameter Ratio Variance:

5. As it pertains to installation of requisite pitch diameter of the governor sheaves and governor tension sheaves, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:

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.”
Proposed Variance Decision
Schindler Model 3300 Elevators w/variant Gov. Rope & Sheaves

Hearing Date: January 26, 2022

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter

<table>
<thead>
<tr>
<th>Rated Speed, m/s (ft/min)</th>
<th>Number of Strands</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 or less (200 or less)</td>
<td>6</td>
<td>42</td>
</tr>
<tr>
<td>1.00 or less (200 or less)</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Over 1.00 (over 200)</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>Over 1.00 (over 200)</td>
<td>8</td>
<td>32</td>
</tr>
</tbody>
</table>

50 mm (2 in.) when tested in accordance with ASTM E 8. Forged, cast, or welded parts shall be stress relieved. Cast iron shall have a factor of safety of not less than 10.

6. Per the Application, the proposal is stated as follows: “The approved speed governor provided for this elevator has a sheave diameter-to-governor rope diameter ratio \([D/d]\) of 33. This is not compliant with the current Group IV Elevator Safety Orders which require a \([D/d]\) of 42-46. Equivalent safety will be attained by providing a governor rope with a breaking strength that provides a factor of safety greater than that required by the Elevator Safety Orders, and a governor sheave diameter which complies with the requirements of ASME A17.1-2010, Section 2.18.5.1, and Section 2.18.7.4, which, under certain conditions, permits the use of a governor rope and governor sheave ratio \([D/d]\) of not less than 30.”

7. Having analyzed the request, as reflected in its Review of Application (Exhibit PD-4) Division is of the well informed professional opinion that the proposal, in as much as it is to use a governor with sheave pitch diameter of not less than the product of the governor rope diameter and a multiplier of 30, in conjunction with a steel governor rope with a diameter of 6 mm (0.25 in.), 6-strand construction, and a factor of safety of 8 or greater, will provide safety, and workplace safety and health equivalent or superior to that of the ASME A17.1-2004, Section 2.18.7.4. Division also correctly notes Applicant’s proposed governor sheave pitch diameter, and reduced diameter governor rope installation is similar to installations for which a permanent variance has been previously conditionally granted. (e.g. OSHSB File No. 19-V-076)

Official Notice and Incorporation by Reference—OSHSB File No. 15-V-349:

8. Per hereby entered stipulation offered at hearing by Applicant, Division, and Board staff, concerning preexisting Board records, including decisions in matters of permanent variance from Elevator Safety Order requirements, the Board takes Official Notice and expressly incorporates herein by reference, OSHSB File No. 15-V-349, Decision and Order adopted November 17, 2016, Section D.1—D.75 findings, and therein entered record upon which it was based.
Proposed Variance Decision
Schindler Model 3300 Elevators w/variant Gov. Rope & Sheaves
Hearing Date: January 26, 2022

Positions of Division, and Board Staff:

9. Having fully reviewed each Applicant’s request for variance from the above identified Elevator Safety Order requirements, it is the concurrent opinion of Division and Board staff, that conditionally limited grant to each Applicant of permanent variance as specified per the below Decision and Order, will provide for elevator safety, and occupational safety and health, equivalent or superior to that of the Elevator Safety Order requirements from which variance is being sought. The present opinion of Division and Board staff, to any extent it may vary from those previously held with respect to the previously heard matter in OSHSB File No. 15-V-349, reflects further scrutiny of the subject matter, consultation between Division, Board staff, Applicant representatives, and refinement of recommended conditions and limitations.

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 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.

E. Decision and Order:

Each Section A table identified 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 Schindler Model 3300 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 California Code of Regulations, Title 8, Section 3141.

Suspension Members: Each Applicant shall conditionally hold permanent variance from the following Title 8, Section 3141, incorporated sections and subsections of ASME A17.12004, to the limited extent variance is necessary to provide for use of noncircular elastomeric-coated steel suspension members and concomitant components, and configurations—Section 2.20.1; Section 2.20.2.1; Subsection 2.20.2.2(a); Subsection 2.20.2.2(f); Section 2.20.3; Section 2.20.4: Section 2.20.9.3.4; and Section 2.20.9.5.4.
Inspection Transfer Switch: Each 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 extent variance is necessary to having the requisite inspection transfer switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 2.26.1.4.4.

Seismic Safety Switch Placement: Each 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 having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 8.4.10.1.1.

Car Top Railing: Each 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 provide for the below specified insetting of the subject elevator's top of car railing: Section 2.14.1.7.1.

Governor Rope and Sheave: Each 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.

Further Conditions and Limitations:

1. The elevator suspension system shall comply to the following:

   1.1. 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

   1.1.1 Additionally, STMs shall meet or exceed all requirements of ASME 17.6-2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.
1.2. 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 of Occupational Safety and Health (Division) upon request.

1.3. STM member mandatory replacement criteria shall include:

1.3.1 Any exposed wire, strand or cord;
1.3.2 Any wire, strand or cord breaks through the elastomeric coating;
1.3.3 Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
1.3.4 Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.

1.4. 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.

1.5. 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.

1.6. 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.

1.7. 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).

1.8. 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. Notwithstanding any less frequent periodic testing requirement per Addendum 1 (Division Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.

1.9. Each elevator shall be provided with a device that electronically detects a reduction in residual strength of each STM member. The device shall be in compliance with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1, and incorporated herein by reference.

1.10. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, Section 2.20.2.1.

1.11. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, Section 2.20.2.2.

1.12. Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 1.2 and 1.3 specified criteria, shall be conducted and documented every six months by a CCCM.

1.13. The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 2, “Suspension Means Replacement Reporting Condition.”

1.14. 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. Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:

2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 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.

2.2. 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.

3. Any and all inset car top railing shall comply with the following:

   3.1. 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 anyone to stand or climb over the car top railing.

   3.2. The distance that the railing can be inset shall be limited to not more than 6 inches.

   3.3. 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 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.

   3.4. 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 inch diagonal red and white stripes.

   3.5. 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

   3.6. 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).

4. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the Schindler Model 3300 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.

5. The speed governor rope and sheaves shall comply with the following:
5.1. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6-strand, regular lay construction.

5.2. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

5.3. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).

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 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. 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 procedural accordance with Title 8, Sections 411, et. seq.

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: February 1, 2022

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.
In the Matter of Application for
Permanent Variance regarding:

Schindler Sleep Mode Escalators

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

__________________________
DAVID THOMAS, Chairman

__________________________
BARBARA BURGEL, Member

__________________________
KATHLEEN CRAWFORD, Member

__________________________
DAVID HARRISON, Member

__________________________
NOLA KENNEDY, Member

__________________________
CHRIS LASZCZ-DAVIS, Member

__________________________
LAURA STOCK, Member

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: February 17, 2022

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.
In the Matter of Application for Permanent Variance Regarding:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Escalators</th>
</tr>
</thead>
</table>
| 21-V-569     | Los Angeles World Airports | Terminal 3  
300 World Way  
Los Angeles, CA       | 8                              |

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Subject Matter and Jurisdiction:

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:

2. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

3. The safety orders at issue are California Code of Regulations, Title 8, Section 3141.11, incorporated ASME A17.1-2004, Sections 6.1.4.1., and 6.1.6.4,

B. Process and Procedure:

1. This hearing was held on January 26, 2022, 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 California Code of Regulations, Title 8, Section 426.

2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:
C. Findings of Fact—Based upon the record of this proceeding, the Board finds the following:

1. Applicant proposes to install new escalators that include a “sleep mode” capability that will cause the escalator to run at a reduced speed when not in use to conserve energy. This arrangement does not comply with the Elevator Safety Orders that prohibit the intentional variation of an escalator’s speed after start-up, and thus variance is requested from California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.11, incorporated ASME A17.1-2004, Sections 6.1.4.1 regarding limits of escalator speed, and A17.1-2004, Section 6.1.6.4, regarding handrail speed. The Division has identified another closely related Section 3141.11 incorporated ASME requirement from which variance would be needed, in order to for the escalator system to operate as proposed—ASME A17-1-2004, Section 6.1.4.1, regarding escalator speed after start-up.

2. ASME A17.1-2004, Section 6.1.4.1, states:

   “6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied.”

3. A purpose of this regulation is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.

4. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the escalator, for a specified amount of time not less than three times the amount of time to transfer a passenger between landings, the control system will initiate the “sleep
Proposed Variance Decision  
Los Angeles World Airports  
Hearing Date: January 26, 2022

mode” function, decelerating the escalator to a “crawling speed”, no less than 0.05 m/s (10 ft./min). If passenger traffic is detected while the escalator is in “Sleep Mode,” a signal will be sent to the controller to “wake up” resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec².

5. Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.

6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in “sleep mode”, an alarm will sound and the escalator will exit “sleep mode” and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec². This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.

7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, “sleep mode” would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents “sleep mode” activation if the wiring is cut or disconnected.

8. The Division notes in its Review of Application (Exhibit PD-4) that the Applicant proposed “sleep mode” function meets the requirements of ASME A17.1-2010, Section 6.1.4.1 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, the Division advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.

9. ASME A17.1-2010, Section 6.1.4.1.2, states:

“Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:
(a) The acceleration and deceleration rates shall not exceed 0.3 m/s² (1.0 ft/sec²).

(b) The rated speed is not exceeded.

(c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).

(d) The speed shall not automatically vary during inspection operation.

(e) Passenger detection means shall be provided at both landings of the escalator such that

   (1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)

   (2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate

   (3) passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate

(f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

(g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only.”

10. The Division states correctly in its Review of Application, that Applicant’s proposed “sleep mode” function is materially similar to other installations for which a permanent variance has been granted (OSHSB File No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring, and the concluding conditional grant of variance provided for the disabling of the handrail-speed monitoring device while the escalator is operating in slow speed “sleep mode.”
11. ASME A17.1-2004, Section 6.1.6.4, states:

   “Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type.”

12. The Division advises that the proposed “sleep mode” system incorporating the proposed hand rail speed control specifications, subject to all conditions and limitations of the below Decision and Order will provide for safety equivalence.

13. The proposed “sleep mode” system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. OSHSB File No. 13-V-153, 15-V-236, 16-V-069), absent, to the Division’s reported knowledge, adverse effect upon passenger or workplace safety or health.

14. Both Division and Board staff recommend that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that which would otherwise prevail per the subject Elevator Safety Order requirements.

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 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.

E. Decision and Order:

The Application of each above section A table identified Applicant, is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A table specified quantity of “sleep mode” escalators units
per Appendix A, at the specified location shall have permanent variance from the following subparts of ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, subject to each and all of the following requirements and limitations:

1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:

   (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s² (1 ft/sec²) when transitioning between speeds.

   (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s² (1 ft/sec²).

   (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.

   (d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.

   (e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Exhibit 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

   
   $$d = (V_f - V_s) \times \left(\frac{V_w}{a}\right)$$

   where

   - \(d\) = detection distance (ft)
   - \(V_f\) = normal speed (ft/min) [not to exceed 100 ft/min]
   - \(V_s\) = slow "sleep" speed (ft/min) [not less than 10 ft/min]
   - \(V_w\) = passenger walking speed (4.5 ft/sec)
   - \(a\) = acceleration/deceleration rate (ft/sec²)[not to exceed 1 ft/sec²]

   (f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator
alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.

(g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.

(h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.

(i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:

1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

(j) The handrail speed monitoring device required by Section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.

2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.
4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).

5. Whenever practicable, as determined by the Applicant and subject to the concurrence of the Division, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.

6. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.

7. The Division shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by the Division and a "Permit to Operate" issued before the escalator may be placed in service.

8. 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.

9. 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 procedural accordance with Title 8, Section 411, et. seq.

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: February 1, 2022

[Signature]

Autumn Gonzalez, Hearing Officer
APPENDIX A

Permanent Variance is granted as to the below specified escalators, identified by the Applicant assigned designations in effect on the date of Decision and Order adoption:

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**Proposed Variance Decision**  
**Schindler Sleep Mode Escalators**  
**Hearing Date: January 26, 2022**

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**Exhibit 1**  
Detection Distance Sleep Mode Operation  
Acceleration Rate (ft./sec²) vs. Escalator Sleep Mode Speed (ft./min)

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<th>Speed (ft./min.)</th>
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\[d = (V_f - V_s) \times \frac{V_w}{a}\]

- **d** = Detection distance (ft.)
- **V_f** = Elevator Rated Speed Escalators with rated speeds of 100 ft./min.
- **V_s** = Slow Speed (“Sleep mode” Speed) (ft./min.)
- **V_w** = Passenger Walking Speed of 4.5 ft./sec.
- **a** = Acceleration/Deceleration Rate (ft./sec²)

Note: 1 ft./min. = 0.0167 ft
The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

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: February 17, 2022

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:
Otis Radar Sleepmode Escalators
(Virginia Controller)

OSHSB File Nos. See Section A.1 Table below

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Procedural Matters

1. Each of the following entities applied for a permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations, for the listed number of conveyances at the listed location:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Escalators</th>
</tr>
</thead>
</table>
| 21-V-573     | Los Angeles World Airports (LAWA) | Los Angeles International Airport - Terminal 6  
600 World Way  
Los Angeles, CA | 1 |

2. The safety orders at issue are set forth in the prefatory portion of the Decision and Order.

3. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et seq.

4. This hearing was held on January 26, 2022, 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 California Code of Regulations, title 8, section 426.

5. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of the Applicants’ representative, the Otis Elevator Company; Mark Wickens and David Morris appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.
6. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
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<tbody>
<tr>
<td>PD-1</td>
<td>Application(s) for Permanent Variance per section A.1 table</td>
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<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
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<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
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<td>PD-4</td>
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<td>PD-5</td>
<td>Review Draft-1 &amp; 2 Proposed Decision</td>
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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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Findings

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

1. Applicant seeks variance from certain California Code of Regulations, title 8, Elevator Safety Orders, toward the stated purpose of installing new escalators that include a “sleep mode” capability that will cause the escalator to run at a reduced speed when not in use, thus resulting in conservation of electrical energy.

2. The Applicant’s proposed sleep mode feature is not compliant with existing California Code of Regulation title 8, Elevator Safety Orders, which prohibits the intentional variation of an escalator’s speed after start-up.

3. In order to install escalators that include a sleep mode capability, Applicant requires a permanent variance from the provisions of California Code of Regulations, title 8, Elevator Safety Orders, Group IV, section 3141.11 [ASME A17.1-2004, section 6.1.4.1] regarding the variation of escalator speed.


   "6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the
5. As quoted above, an intent of section 3141.11 is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.

6. The Applicant contends that equivalent safety is achieved through use of a “Virginia” controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. Per the Applicant’s proposed design, if one of the paired passenger detection sensors is disconnected from the control system, the control system shall, without intentional delay, generate a fault while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the reconnected sensor begins to function properly. Also per this design, when passenger traffic is detected while the escalator is in “Sleep Mode”, a signal would be sent to the controller to “wake up” resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec\(^2\).

7. Applicant proposes using passenger traffic sensors capable of detecting passengers at a distance greater than a walking person could travel in 2 seconds, thereby causing the escalator to be running at normal speed prior to passenger boarding.

8. Applicant proposes design features such that if a passenger detected approaching the escalator opposite the motion of the escalator steps on it while it is in “sleep mode”, an alarm will sound and the escalator will exit “sleep mode” and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec\(^2\). Applicant contends this arrangement will safely discourage passengers from entering the escalator opposite the motion of the steps while it is idling at reduced speed.

9. The Applicant proposes sensors used to detect passenger traffic being installed and arranged in a double redundant, fail-safe fashion with 2 sensors installed at each end of the escalator providing the same coverage field.

10. Applicant’s proposed sensor arrangement and redundancy can be reasonably expected to provide for passenger traffic detection in the event of any single sensor failure and provide for signal comparison by the controller to detect sensor failure.
11. Applicant proposes a design in which detected failure of any one of the passenger traffic sensors, result in a disabling of “sleep mode” such that the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition the proposed design would have passenger traffic sensors wired to the escalator controller in a fail-safe manner that prevents “sleep mode” activation if the sensor wiring is cut or disconnected.

12. As evidenced by written Review of Application (Exhibit PD-4), as well as statements at hearing, it is the well informed opinion of Division that the Applicant proposed “sleep mode” function meets the requirements of ASME A17.1-2010, section 6.1.4.1.2 regarding the varying the speed of an escalator after start-up.

13. ASME A17.1-2010, section 6.1.4.1.2 states:

“Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:

(a) The acceleration and deceleration rates shall not exceed 0.3 m/s² (1.0 ft/sec²).

(b) The rated speed is not exceeded.

(c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).

(d) The speed shall not automatically vary during inspection operation.

(e) Passenger detection means shall be provided at both landings of the escalator such that

(1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)

(2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate
Proposed Variance Decision
Otis Radar Sleepmode Escalators (Virginia Controller)

Hearing Date: January 26, 2022

(3) passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate.

(f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

(g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only.”

14. The Applicant’s proposed “sleep mode” function is similar to other installations for which a permanent variance has been granted (OSHSB File No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring. Conditions set forth in the previous variance decisions allow for the disabling of the handrail speed monitoring device while the escalator is operating in slow speed “sleep mode.”

15. Concerning handrail speed monitoring, section 3141.11 [ASME A17.1-2004, section 6.1.6.4] states:

“6.1.6.4 Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual reset type.”

16. It is the well informed professional opinion of Division (see Exhibit PD-4), and Board staff (See Exhibit PD-3), that that the escalator “sleep mode” function design, as proposed by the Applicant, subject to certain conditions and limitations, will provide occupational safety and health equivalent or superior to the Code of Regulations, title 8, Elevator Safety Order requirements from which variance is being sought, and recommends that the applied for
C. **Basis of Decision**

The preceding procedural elements, legal authority, and factual findings, supported by hearing testimony, and documents entered into evidence in this case, lead the Board to conclude that the Applicant has complied with the statutory and regulatory requirements that must be met before an application for a permanent variance may be granted and that a preponderance of the evidence establishes that the Applicant’s proposals, combined with the conditions set forth in the Decision and Order, will provide employment and a place of employment that are as safe and healthful as those that would prevail if the Applicant complied with the safety orders at issue.

D. **Decision and Order**

Each above section A.1 table specified Applicant is conditionally GRANTED permanent variance, at the respectively specified location, as to respectively specified number of conveyances (listed in Appendix A), subject to all below enumerated conditions and limitations:

Permanent variance is granted, as conditionally limited below, from the following sections of ASME A17.1-2004 made applicable by CCR title 8, section 3141.11:

- 6.1.4.1, to allow intentionally varied speed; and
- 6.1.6.4, to allow the disabling of handrail speed monitoring at reduced speeds.

1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:

   (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s² (1 ft/sec²) when transitioning between speeds.

   (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s² (1 ft/sec²).

   (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.
(d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate.

(e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Exhibit 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

\[ d = (V_f - V_s) \times \left( \frac{V_w}{a} \right) \]

where:

- \( d \) = detection distance (ft)
- \( V_f \) = normal speed (ft/min) [not to exceed 100 ft/min]
- \( V_s \) = slow "sleep" speed (ft/min) [not less than 10 ft/min]
- \( V_w \) = passenger walking speed (4.5 ft/sec)
- \( a \) = acceleration/deceleration rate (ft/sec\(^2\)) [not to exceed 1 ft/sec\(^2\)]

(f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.

(g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "Sleep Mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.

(h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.
(i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:

1. If one of the paired passenger detection sensors is disconnected from the control system, the control system shall, without intentional delay, generate a fault while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the reconnected sensor begins to function properly.

2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exist the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

(j) The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.

2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.

4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).

5. Whenever practicable, as determined by the Applicant and subject to the concurrence of Division, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in
connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.

6. Any CQCC performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.

7. Division shall be notified when each subject conveyance is ready for inspection to determine compliance with the permanent variance pursuant to this Decision and Order. Each subject conveyance shall have been inspected by Division to determine compliance with this Decision and Order, and a Permit to Operate shall have been issued and in effect, before the conveyance is placed in service.

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 California Code of Regulations, title 8, 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), Division of Occupational Safety and Health, or by the Board on its own motion, in the manner prescribed pursuant to 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: February 1, 2022

Autumn Gonzalez, Hearing Officer
Proposed Variance Decision  
Otis Radar Sleep Mode Escalators, Virginia Controller  
Hearing Date: January 26, 2022

APPENDIX A

Permanent Variance is granted as to the below specified escalators, identified by the Applicant assigned designations in effect on the date of Decision and Order adoption:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Escalator ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-573</td>
<td>T6-ES-15</td>
</tr>
</tbody>
</table>
**Proposed Variance Decision**

*Otis Radar Sleep Mode Escalators, Virginia Controller*

**Hearing Date: January 26, 2022**

**Exhibit 1**

Detection Distance Sleep Mode Operation

<table>
<thead>
<tr>
<th>Acceleration Rate (ft./sec²)</th>
<th>Escalator Sleep Mode Speed (ft./min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>1.00</td>
<td>6.76</td>
</tr>
<tr>
<td>0.95</td>
<td>7.12</td>
</tr>
<tr>
<td>0.90</td>
<td>7.52</td>
</tr>
<tr>
<td>0.85</td>
<td>7.96</td>
</tr>
<tr>
<td>0.80</td>
<td>8.45</td>
</tr>
<tr>
<td>0.75</td>
<td>9.02</td>
</tr>
<tr>
<td>0.70</td>
<td>9.66</td>
</tr>
<tr>
<td>0.65</td>
<td>10.41</td>
</tr>
<tr>
<td>0.60</td>
<td>11.27</td>
</tr>
<tr>
<td>0.55</td>
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</tr>
<tr>
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<tr>
<td>0.30</td>
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<tr>
<td>0.25</td>
<td>27.05</td>
</tr>
<tr>
<td>0.20</td>
<td>33.82</td>
</tr>
<tr>
<td>0.15</td>
<td>45.09</td>
</tr>
<tr>
<td>0.10</td>
<td>67.64</td>
</tr>
<tr>
<td>0.05</td>
<td>135.27</td>
</tr>
</tbody>
</table>

\[ d = (V_f - V_s) \times \frac{V_w}{a} \]

- \(d\) Detection distance (ft.)
- \(V_f\) Escalator Rated Speed (Escalators with rated speeds of 100 ft./min.)
- \(V_s\) Slow Speed (“Sleep mode” Speed) (ft./min.)
- \(V_w\) Passenger Walking Speed of 4.5 ft./sec.
- \(a\) Acceleration/Deceleration Rate (ft./sec²)

Note: 1 ft./min. = 0.0167 ft./sec.
The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

__________________________
DAVID THOMAS, Chairman

__________________________
BARBARA BURGEL, Member

__________________________
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: February 17, 2022

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 wire ropes and sheaves
(Group IV)

OSHSB File Nos.: Per Section A.1 table

PROPOSED DECISION

Hearing Date: January 26, 2022

A. Subject Matter:

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

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-606</td>
<td>Peninsula Arts Guild</td>
<td>949 El Camino Real Menlo Park, CA</td>
<td>1</td>
</tr>
<tr>
<td>21-V-607</td>
<td>Santos Manuel Student Union</td>
<td>5500 University Parkway San Bernardino, CA</td>
<td>2</td>
</tr>
</tbody>
</table>

2. The subject safety orders requirements are specified in the prefatory part of the Section E, Decision and Order.

B. Procedural:

1. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

2. This hearing was held on January 26, 2022, in Sacramento, California via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

3. At the hearing, Andrew Ferris, with TK Elevator appeared on behalf of the Applicants, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.
4. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-1</td>
<td>Application(s) for Permanent Variance per section A.1 table</td>
</tr>
<tr>
<td>PD-2</td>
<td>OSHSB Notice of Hearing</td>
</tr>
<tr>
<td>PD-3</td>
<td>Board Staff Review of Variance Application</td>
</tr>
<tr>
<td>PD-4</td>
<td>Division Review of Variance Application</td>
</tr>
<tr>
<td>PD-5</td>
<td>Review Draft-1 Proposed Decision</td>
</tr>
</tbody>
</table>

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 January 26, 2022, 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 Applicant intends to utilize TK elevators in the numbers and at the locations stated in the above Section A.1 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 (ESO).

3. Each Applicant proposes to diverge from the safety orders by using:

   a. 8x19 suspension ropes that are 8 mm in diameter (9.5 mm is the minimum diameter allowed by ASME A17.1-2004, Section 2.20.4) and that have outer wires that are 0.36 mm in diameter (0.56 mm is the minimum diameter allowed by ASME A17.1 2004, Section 2.20.4); and

   b. Non-metallic deflector and idler sheaves (specifically, Schwartz Optamid-6 thermoplastic cast sheaves).

4. With respect to the ropes and outer wires, equivalent safety is to be provided by such measures as the following (some or all of which are intended to provide a factor of safety meeting or exceeding the safety factor required by ASME A17.1-2004, Table 2.20.3):

   a. Using a designated number of suspension ropes per elevator, in accordance with each elevator’s capacity;

   b. Providing a 2:1 roping ratio;
c. Installing a device known as a loadweigher (a rope tension monitoring system);

d. Limiting the car speed in accordance with ThyssenKrupp engineering data; and

e. Limiting the maximum suspended load of the elevator in accordance with the elevator’s design and specifications.

5. In many prior ThyssenKrupp and KONE elevator variances, the Board has allowed the use of ropes and outer wires with diameters less than the minimums stated in ASME A17.1-2004, Section 2.20.4. In prior ThyssenKrupp variances of this nature, the Board has made findings of fact to the following effect:

a. Each Applicant has adopted the assertion that “One rope manufacturer, with an estimated 20% of the Global market, has sold over 20 million meters of 8 mm rope with no indication of problems.”

b. Tests performed on Drako brand 8 mm diameter rope generated data to the effect that “the breaking force applied in single bend for failure of the rope resulted in” forces of 7910 pounds to 9550 pounds for the Drako rope; the breaking force when new and when using production rope shackles was calculated as 9740 pounds for the Drako rope. As to Gustav Wolf brand 8 mm diameter wire rope (part number 80-056SC, 8X19 Warrington), test data include the following: cycling tests disclosed that the breaking force applied in single bend for failure of the rope resulted in a force of 8360 pounds, and that the breaking force when new was calculated at 9919 pounds using production rope shackles.

c. Division evaluations have stated that “ThyssenKrupp Elevator contends that the smaller diameter steel ropes are more pliable and less likely to kink thus reducing the probability of operational failures due to rope damage.”

d. Each Applicant has asserted that the ropes proposed for use (both the Drako and the Gustav Wolf) have steel cores which augment the strength of the ropes so that the required factor of safety is achieved when 0.36 mm diameter outer wires are used.

e. Each Applicant has asserted that the factor of safety for the proposed suspension ropes is at least equivalent to the factor of safety for code-compliant suspension ropes, and neither the Division nor the Board staff presented any evidence or argument to the contrary.

6. With respect to the sheaves, the Board has made findings of fact to the following effect in prior, similar variance matters:
a. Documentation has stated that similar Schwartz Optamid-6 thermoplastic cast sheaves “have been used successfully throughout the world since 1970.”

b. Such sheaves have been used in ThyssenKrupp ISIS-1 and ISIS-2 elevator systems in California, starting with a temporary/experimental variance issued in 2004, and the Board staff is not aware of any service problems related to the thermoplastic sheaves.

c. Each Applicant has asserted that the proposed thermoplastic sheaves have advantages in these areas: noise reduction, reduction in vibration, resistance to rope lubricants and increased rope life.

d. Each Applicant has asserted that the factor of safety for the proposed non-metallic sheaves is at least equivalent to the factor of safety for code-compliant sheaves, and neither the Division nor the Board staff has presented any evidence or argument to the contrary.

7. The number of suspension ropes per Condition No. 3, the maximum rated speed per Condition No. 6, and the total suspended load per Condition No. 7 in the Decision and Order result from the details of the proposed installations.

8. The Board incorporates by reference Section B.9, of the Proposed Decision adopted by the Board on September 25, 2014, in OSHSB File No. 14-V-117.

9. Conditions set forth in the present Decision and Order are necessary and sufficient to provide for, at minimum, safety equivalent to that which would exist upon non-variant conformity with the ESO requirements from which variance is to be granted.

10. Both Division and Board staff, by means of respective written submissions to the record (Exhibits PD-4, and PD-3), as well as consistent statements of position at hearing, have made clear their concurrence of opinion and recommending that grant of permanent variance, subject to the conditions and limitations incorporated into the present Decision and Order, will provide, at minimum, safety equivalent to that of non-variant compliance with the ESO requirements at issue.

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
Proposed Variance Decision
TK Elevator wire ropes and sheaves (Group IV)
Hearing Date: January 26, 2022

establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent conveyance and workplace safety and health to that which would prevail upon full compliance with the ESO requirements from which variance is being sought.

E. Decision and Order:

Each Application for Permanent Variance that is a subject of this proceeding, per Section A.1 table above, is conditionally GRANTED, as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, the Applicant shall have permanent variances from California Code of Regulations, Title 8, Section 3141 [ASME A17.1-2004, Section 2.20.4 (insofar as it requires that the “minimum diameter of hoisting and counter-weight ropes shall be 9.5 mm (0.375 in.)” and that the outer wires of the ropes “shall be not less than 0.56mm (0.024 in.) in diameter”) and 2.24.2.1 (to the extent necessary to allow the Applicant to use the cast thermoplastic deflector and idler sheaves proposed in the subject permanent variance application)], for the locations and numbers of elevators set forth in the Section A.1 table, subject to the following conditions:

1. Variance is granted from the Title 8 and ASME provisions referred to in the prefatory portion of this Decision and Order only to the extent necessary to allow the Applicant to use suspension ropes specified in Condition No. 2 and the non-metallic sheaves specified in Condition No. 10.

2. The diameter of the hoisting steel ropes shall be not less than 8 mm, and the outer wires of the suspension rope shall be not less than 0.36 mm in diameter. The rope shall be Drako brand 250T 8 strand EHS rated or Gustav Wolf brand, part no. 80-056SC, 8x19 Warrington IWRC, steel rope.

3. The number of suspension ropes for each elevator shall be not less than the number of ropes stated in Appendix 1 attached hereto and incorporated herein by this reference. The roping ratio for each elevator shall be two to one (2:1).

4. The ropes shall be inspected annually for wire damage (rouge, valley break, etc.) in accordance with the manufacturer’s recommendation for 8 mm steel wire rope.

5. The rope inspection log shall be maintained and shall be available in the elevator control room at all times.

6. The elevator rated speed shall not exceed the rated speed specified in Appendix 1, attached hereto, and incorporated herein by this reference.
7. The total suspended load for each elevator shall not exceed the total load stated in Appendix 1, attached hereto, and incorporated herein by this reference.

8. The Applicant shall provide and install a Rope Tension Monitoring System (RTMS) on each suspension rope. The RTMS shall monitor the tension in each suspension rope and immediately cut off power to the elevator machine and brakes if the differential between any single rope and the average tension in all ropes suspending the car exceeds ±40% for more than 3 seconds. The Applicant will take all reasonable steps to make sure that this system is set to operate if there is a “±40%” tension discrepancy; however, no violation of this condition will be deemed to occur if, on a given occasion, the system goes into operation when the tension discrepancy is between “±40%” and “±45%.”

9. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the elevator shall be provided a copy of the variance decision. Before any CQCC works on any of these elevators, the Applicant will ensure that the CQCC has personnel who are trained and available to perform CQCC duties with respect to the RTMS referred to in Condition No. 8 and that such work is performed only by trained and qualified personnel.

10. If non-metallic deflector and/or idler sheave(s) are installed, they shall be a Schwartz thermoplastic cast polyamide 6 “Optamid”. The ratio of the sheave diameter to the rope diameter (D/d ratio) shall be not less than 40:1.

11. The Division shall be notified when the elevator is ready for inspection, and the elevator shall not be put into service prior to having been inspected, and issued a Permit to Operate by the Division.

12. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Appendix 2; that condition is incorporated herein by this reference.

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.
Proposed Variance Decision
TK Elevator wire ropes and sheaves (Group IV)
Hearing Date: January 26, 2022

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
APPENDIX 1

<table>
<thead>
<tr>
<th>OSHSB File Number</th>
<th>Car</th>
<th>Minimum Suspension Ropes per Elevator (per Condition No. 3)</th>
<th>Roping Ratio</th>
<th>Max. Rated Speed In Feet per Minute (per Condition No. 6)</th>
<th>Maximum Suspended Load per Elevator (+5%) (per Cond.No. 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-606</td>
<td>1</td>
<td>6</td>
<td>2:1</td>
<td>150</td>
<td>6,893</td>
</tr>
<tr>
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<td>1</td>
<td>6</td>
<td>2:1</td>
<td>150</td>
<td>7,003</td>
</tr>
<tr>
<td>21-V-607</td>
<td>2</td>
<td>6</td>
<td>2:1</td>
<td>150</td>
<td>7,003</td>
</tr>
</tbody>
</table>
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.
Proposed Variance Decision
TK Elevator wire ropes and sheaves (Group IV)
Hearing Date: January 26, 2022

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 Section 2.a above.
In the Matter of Application for
Permanent Variance regarding:

Otis Elevator Controller Alteration
(Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

________________________________________
DAVID THOMAS, Chairman

________________________________________
BARBARA BURGEL, Member

________________________________________
KATHLEEN CRAWFORD, Member

________________________________________
DAVID HARRISON, Member

________________________________________
NOLA KENNEDY, Member

________________________________________
CHRIS LASZCZ-DAVIS, Member

________________________________________
LAURA STOCK, 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.

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:

Otis Elevator Controller Alteration (Group IV)

OSHSB File Nos.: See Section A.1 table below

PROPOSED DECISION

Hearing Date: January 26, 2022

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 Regulations, with respect to the listed conveyance or conveyances, in the specified quantity, at the specified location:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-614</td>
<td>Fifty California Street LLC, a Delaware Limited Liability Company</td>
<td>50 California Street San Francisco, CA</td>
<td>6</td>
</tr>
</tbody>
</table>

2. The safety orders at issue is California Code of Regulations, Title 8, Elevator Safety Order (ESO), Section 3141, incorporated ASME A17.1-2004, Section 2.26.9.4.

B. Procedural

1. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

2. This hearing was held on January 26, 2022, in Sacramento, California, and 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 California Code of Regulations, Title 8, Section 426.

3. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of the Applicants’ representative, the Otis Elevator Company; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

4. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:
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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Respecting, and for the purpose of alteration to, each above Section A.1 table listed conveyance at the specified variance locations, in the specified quantities, each Section A.1 table listed Applicant has applied for a permanent variance from California Code of Regulations, Title 8, Section 3141 incorporated ASME A17.1-2004, Section 2.26.9.4, requirements (per Section 8.7.2.27.4(a)).

2. ASME A17.1-2004, Section 2.26.9.4, states:

   “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.”

3. A principal intent of this code requirement is to avoid hazards that would be created by the failure of critical elevator safety circuits. Toward this purpose, use of software as the sole method of controlling such critical elevator safety circuits is prohibited.
4. Each 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. Elevator electrical protective devices (EPDs) and other control devices are connected to these control boards. Software specifically designed for this SIL system would continuously monitor these devices and performs certain elevator safety functions. The design of this SIL rated software system and its related circuits includes a redundant (software) means to remove the power from the driving machine motor and brake under certain conditions.

5. The proposed Otis E2 elevator control system is to interface with a software system and related circuits having a certain Safety Integrity Level (SIL) rating, to monitor, process, and execute certain safety functions of the elevator, in a manner and configuration noncompliant with California EOS incorporated ASME A17.1-2004, Section 2.26.9.4, preclusion of safety system redundancy solely dependent upon a software controlled means.

6. The Applicant contends that the proposed SIL rated software system and its circuits conform to the relevant newer ASME A17.1 provisions—namely ASME A17.1-2013, Section 2.26.9.3.2.

7. ASME A17.1-2013, Section 2.26.9.3.2, states:

   “2.26.9.3.2 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.”

8. The Division has performed a safety analyzes of the proposed SIL rated software system and its related circuits, and determined the proposed system to be in conformity with relevant requirements of ASME A17.1-2013, Section 2.26.9.3.2, addressing safety issues associated with the proposed use of such a software system.
Proposed Variance Decision
Otis Elevator Controller Alteration (Group IV)
Hearing Date: January 26, 2022

9. The equivalence of ASME A17.1-2013, Section 2.26.9.3.2, compliant control systems of the proposed type, with the safety of ASME A17.1-2004, Section 2.26.9.4, systems controlling the same critical safety functions, has been the subject of previous Division analyses, and Board decisions, concerning Otis Skyrise Elevators. In each of these prior matters, it was the recommendation of Division, with concurrence of Board engineering staff, and conclusion of the Board, that the type of ASME A17.1-2013, Section 2.26.9.3.2, compliant control system (as proposed in the present matter), subject to conditions in material conformity with those of the present Decision and Order, would provide for safety equivalent of superior to that of a ASME A17.1-2004, Section 2.26.9.4, compliant control system.

10. As provided per Title 8, Section 424.1, and as stipulated by the parties (see above Section B.4) The Board takes Official Notice of its decision, and respective Division and Board staff review of application, in the matters of OSHSB Permanent Variance File Nos. 14-V-090, 17-V-064, and 18-V-303. The permanent variances conditionally issued in the afore cited matters, exemplify numerous such previously issued variances providing for utilization of ASME A17.1-2013, Section 2.26.9.3.2, compliant control systems of the type presently proposed—absent known diminution in passenger or worker safety to date.

11. As to additional foundational evidence and findings concerning the essential safety rating and its indicative nomenclature to be labeled or marked on the subject software system and related circuits, as specified in the below Decision and Order, the Board also takes Official Notice of its Decision, and therein referenced exhibits, in OSHSB Permanent Variance File No. 15-V-397M1.

12. Both by way of its written evaluation (Exhibit PD-4), and statements at hearing, Division has taken the position that each Applicant’s proposal for permanent variance and means of safety equivalence, subject to conditions in material conformity with those found in the below Decision and Order, will provide safety equivalent to the Title 8 standards from which permanent variance is sought. Further, by way of written evaluation (Exhibit PD-3), and statements at hearing, Board staff concurs with Division in recommending that such conditional grant will provide for safety equivalence.

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 modification of permanent variance may be conditionally granted, and

(2) a preponderance of the evidence establishes that Applicant’s proposal, as below revised and subject to all conditions and limitations set forth in the below Decision
E. Decision and Order

Upon adoption of this Decision and Order by the Board, each above Section A.1 table listed Applicant, with respect to the corresponding listed number of conveyances and variance location, is conditionally Granted permanent variance from California Code of Regulations, Title 8, Elevator Safety Orders from which modified variance is being sought.

1. 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 A17.1-2013 Section 2.26.4.3.2.

   c. The access doors or covers of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exteriors 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.
Proposed Variance Decision
Otis Elevator Controller Alteration (Group IV)
Hearing Date: January 26, 2022

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.

2. 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 D.1(d), and other terms of this permanent variance.

3. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

4. 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.

5. 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.

6. 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
Proposed Variance Decision
Otis Elevator Controller Alteration (Group IV)
Hearing Date: January 26, 2022

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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application for Permanent Variance by:
Space Back Bay LLC/Space Investments Partners

OSHSB File No.: 21-V-625
Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman
BARBARA BURGEL, Member
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: February 17, 2022

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.
In the Matter of Application for Permanent Variance by:

Space Back Bay LLC/Space Investments Partners

OSHSB File No.: 21-V-625

Proposed Decision

Hearing Date: January 26, 2022

A. Procedural Matters

1. Space Back Bay LLC/Space Investments Partners ("Applicant") has applied for a permanent variance from provisions of Title 8 of the California Code of Regulations regarding vertical platform (wheelchair) lifts, with respect to one vertical platform (wheelchair) lift proposed to be located at:

   2651 Irvine Ave.
   Costa Mesa, CA

2. The safety orders at issue are stated in the prefatory part of the Decision and Order. 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 January 26, 2022, in Sacramento, California, via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

4. Appearing at hearing were Craig Fiore with McKinley Elevator Corporation appearing on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.

5. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:
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 January 26, 2022, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Findings of Fact

Based on the record of this proceeding, and officially noticed Board records per (above Section A.5) stipulation of Applicant and Division—inclusive of permanent variance file records of sworn testimony, findings and decisions in OSHSB File No. 15-V-297, the Board finds the following:

1. The Applicant proposes to install one vertical platform (wheelchair) lift at a location having the address of:
   
   2651 Irvine Ave.  
   Costa Mesa, CA

2. Applicant requests variance solely from Title 8, Section 3142(a) and Section 3142.1.

3. The subject vertical lift is proposed to be a Garaventa Lift, Model GVL-SW-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12-foot maximum vertical rise allowed by ASME A18.1-2003, Section 2.7.1—the State of California standard in force at the time of this Decision.

4. The Division’s evaluation in this Matter, states that the more recent consensus code, ASME A18.1-2005, allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).

5. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, without subsequent safety problems attributable to such variance being reported. (e.g. OSHSB File Nos. 13-V-260, 15-V-097, 15-V-297, 18-V-069)

6. It is the well informed professional opinion of Board staff and Division (per Exhibits PD-3, and PD-4, respectively) that equivalent safety will be achieved upon grant of
presently requested permanent variance, subject to conditions materially equivalent to those imposed by Board adopted Decision and Order, In Matters of Application for Permanent Variance Nos. 15-V-297, and 18-V-069. Board Staff concurs with Division (per Exhibit PD-3) in recommending such conditional grant.

7. With respect to the equivalence or superior of safety, conditions and limitations of the below Decision and Order are in material conformity with those of previously issued Permanent Variance Nos. 15-V-297, and 18-V-069.

C. Conclusive Findings

On the basis of the above procedural matters, legal authority, and findings of fact, the Board finds that Applicant has complied with the statutory and regulatory requirements that must be met before an application for a permanent variance may be granted and that a preponderance of the evidence establishes that the Applicant’s proposal, subject to all limiting conditions set forth in the below Decision and Order, will provide both conveyance safety, and employment and a place of employment that are as safe and healthful as those that would prevail if the Applicant complied with the safety orders at issue.

D. Decision and Order

The Application for Permanent Variance of Space Back Bay LLC/Space Investments Partners, OSHSB File No. 21-V-625, is conditionally GRANTED to the limited extent, upon the Board’s adoption of this Proposed Decision, Space Back Bay LLC/Space Investments Partners, shall have permanent variance from California Code of Regulations, Title 8, Sections 3142(a) and 3142.1 incorporated ASME A18.1-2003, Section 2.7.1, inasmuch as each restricts the vertical rise of a wheelchair lift to a maximum of 12 feet, with respect to one (1) Garaventa Lift, Model GVL-SW-168 Vertical Platform Lift, to be located at:

2651 Irvine Ave.
Costa Mesa, CA

The above referenced vertical platform lift shall be subject to the following further conditions and limitations:

1. This lift may travel up to 168 inches, unless the manufacturer’s instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.
2. The wheelchair lift shall be installed and operated in accordance with the manufacturer’s instructions, unless the provisions of this variance or applicable provisions of the law provide or require otherwise.

3. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.

4. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by Section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:

   (a) Platform driving means examination;
   
   (b) Platform examination;
   
   (c) Suspension means examination;
   
   (d) Platform alignment;
   
   (e) Vibration examination;
   
   (f) Door/gate electrical; and
   
   (g) Mechanical lock examination.

5. The lift shall be tested annually for proper operation under rated load conditions. The Division’s Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.

6. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.

7. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.

8. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to the Division. The shutdown
information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.

9. The Applicant shall provide training on the safe operation of the lift in accordance with Section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify the Division in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to the Division upon request.

10. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.

11. The Division shall be notified when the lift is ready for inspection, and the lift shall be inspected by the Division and a Permit to Operate shall be issued before the lift is put into service.

12. 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.

13. 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 procedural manner prescribed 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: February 1, 2022

Autumn Gonzalez, Hearing Officer
In the Matter of Application for Permanent Variance regarding:

Mitsubishi Elevators (Group IV)

OSHSB File No.: see table in Item A.1 of Proposed Decision Dated: February 1, 2022

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Autumn Gonzalez, Hearing Officer.

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRISS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: February 17, 2022

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.
**In the Matter of Application for Permanent Variance Regarding:**

**Mitsubishi Elevators (Group IV)**

**OSHSB File Nos.:** See Section A.1 Table

**PROPOSED DECISION**

Hearing Date: January 26, 2022

### A. Procedural Matters:

1. 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 Regulations, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

<table>
<thead>
<tr>
<th>Variance No.</th>
<th>Applicant Name</th>
<th>Variance Location Address</th>
<th>No. of Elevators</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-V-626</td>
<td>Museum Associates</td>
<td>5905 Wilshire Blvd. Los Angeles, CA</td>
<td>9</td>
</tr>
</tbody>
</table>

2. 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 California Code of Regulations, Title 8, Section 401, et. seq.

3. This hearing was held on January 26, 2022, in Sacramento, California, via teleconference, by delegation of 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 California Code of Regulations, Title 8, Section 426.

4. At the hearing, Carolina Castaneda, with Mitsubishi Electric, Elevator Division, appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.

5. At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence:
Proposed Variance Decision
Mitsubishi Elevators (Group IV)
Hearing Date: January 26, 2022

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 January 26, 2022, 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.


3. As reflected in the record of this matter, including Board staff Pending Application for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, and testimony at hearing, it is the professionally informed opinion of Board staff and 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 California Code of Regulation, Title 8, Elevator Safety Orders 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 California Code of Regulations, Title 8, 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 California Code of Regulations, Title 8, 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 California Code of Regulations, Title 8, 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 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: February 1, 2022

Autumn Gonzalez, Hearing Officer
Occupational Safety and Health Standards Board

Business Meeting

Legislative Update
SUMMARY OF CHANGES

AB-2 Regulations: legislative review: regulatory reform. (2021-2022) UPDATE

AB-29 State bodies: meetings. (2021-2022) UPDATE

AB-62 Income taxes: credits: costs to comply with COVID-19 regulations. (2021-2022) UPDATE

AB-257 Food facilities and employment. (2021-2022) UPDATE


AB-885 Bagley-Keene Open Meeting Act: teleconferencing. (2021-2022) UPDATE

AB-893 Emergency regulations: Division of Occupational Safety and Health: State Department of Public Health. (2021-2022) UPDATE

AB-1175 Division of Occupational Safety and Health: inspections and investigations: advance notice. (2021-2022) UPDATE

(Fong)

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<th>Date</th>
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<tr>
<td>1/31/2022</td>
<td>Died pursuant to Art. IV, Sec. 10(c) of the Constitution.</td>
</tr>
<tr>
<td>05/20/21</td>
<td>In committee: Held under submission.</td>
</tr>
<tr>
<td>05/20/21</td>
<td>Joint Rule 62(a), file notice suspended.</td>
</tr>
<tr>
<td>05/19/21</td>
<td>In committee: Set, first hearing. Referred to APPR. suspense file.</td>
</tr>
<tr>
<td>04/29/21</td>
<td>From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (April 28). Re-referred to Com. on APPR.</td>
</tr>
</tbody>
</table>

Summary:

AB 2, as introduced, Fong. Regulations: legislative review: regulatory reform.

The Administrative Procedure Act governs the procedure for the adoption, amendment, or repeal of regulations by state agencies and for the review of those regulatory actions by the Office of Administrative Law. That act requires an agency, prior to submitting a proposal to adopt, amend, or repeal an administrative regulation, to determine the economic impact of that regulation, in accordance with certain procedures. The act defines a major regulation as a regulation, as specified, that will have an economic impact on California business enterprises and individuals in an amount exceeding $50,000,000, as estimated by the agency. The act requires the office to transmit a copy of a regulation to the Secretary of State for filing if the office approves the regulation or fails to act on it within 30 days. The act provides that a regulation or an order of repeal of a regulation becomes effective on a quarterly basis, as prescribed, except in specified instances.

This bill would require the office to submit to each house of the Legislature for review a copy of each major regulation that it submits to the Secretary of State. The bill would add another exception to those currently provided that specifies that a regulation does not become effective if the Legislature enacts a statute to override the regulation.

The Administrative Procedure Act requires the Office of Administrative Law and a state agency proposing to adopt, amend, or repeal a regulation to review the proposed changes for, among other things, consistency with existing state regulations.

This bill would require each state agency to, on or before January 1, 2023, review that agency’s regulations, identify any regulations that are duplicative, overlapping, inconsistent,
or out of date, to revise those identified regulations, as provided, and report to the Legislature and Governor, as specified. The bill would repeal these provisions on January 1, 2024.

Board staff are monitoring this legislation to determine if regulatory action by the Board is called for.
**AB-29 State bodies: meetings. (2021-2022)**  
(Cooper and Rubio)

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>1/31/2022</td>
<td>Died pursuant to Art. IV, Sec. 10(c) of the Constitution.</td>
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<tr>
<td>05/20/21</td>
<td>In committee: Held under submission.</td>
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<tr>
<td>04/21/21</td>
<td>In committee: Set, first hearing. Referred to APPR. suspense file.</td>
</tr>
<tr>
<td>04/12/21</td>
<td>From committee: Do pass and re-refer to Com. on APPR. (Ayes 22. Noes 0.) (April 8). Re-referred to Com. on APPR.</td>
</tr>
</tbody>
</table>

**Summary:**

AB 29, as introduced, Cooper. State bodies: meetings.

Existing law, the Bagley-Keene Open Meeting Act, requires that all meetings of a state body, as defined, be open and public, and that all persons be permitted to attend any meeting of a state body, except as otherwise provided in that act. Existing law requires the state body to provide notice of its meeting, including specified information and a specific agenda of the meeting, as provided, to any person who requests that notice in writing and to make that notice available on the internet at least 10 days in advance of the meeting.

This bill would require that notice to include all writings or materials provided for the noticed meeting to a member of the state body by the staff of a state agency, board, or commission, or another member of the state body that are in connection with a matter subject to discussion or consideration at the meeting. The bill would require those writings or materials to be made available on the state body’s internet website, and to any person who requests the writings or materials in writing, on the same day as the dissemination of the writings and materials to members of the state body or at least 72 hours in advance of the meeting, whichever is earlier. The bill would prohibit a state body from discussing those writings or materials, or from taking action on an item to which those writings or materials pertain, at a meeting of the state body unless the state body has complied with these provisions.

Board staff are monitoring this legislation for cost and impacts to its meeting requirements.
AB-62 Income taxes: credits: costs to comply with COVID-19 regulations. (2021-2022) (Gray)

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<th>Date</th>
<th>Action</th>
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<tr>
<td>1/31/2022</td>
<td>Died pursuant to Art. IV, Sec. 10(c) of the Constitution.</td>
</tr>
<tr>
<td>03/22/21</td>
<td>In committee: Hearing postponed by committee.</td>
</tr>
</tbody>
</table>

Summary:

AB 62, as introduced, Gray. Income taxes: credits: costs to comply with COVID-19 regulations.

The Personal Income Tax Law and the Corporation Tax Law allow various credits against the taxes imposed by those laws. Existing law requires any bill authorizing a new tax credit to contain, among other things, specific goals, purposes, and objectives that the tax credit will achieve, detailed performance indicators, and data collection requirements.

This bill would allow a credit against those taxes for each taxable year beginning on or after January 1, 2021, to a qualified taxpayer, as defined, in an amount equal to the total amount paid or incurred during the taxable year by the qualified taxpayer to comply with the regulations adopted by the Occupational Safety and Health Standards Board on November 19, 2020, relating to COVID-19 prevention and approved by the Office of Administrative Law. The bill also would state the intent of the Legislature to comply with the additional information requirement for any bill authorizing a new income tax credit.

This bill would take effect immediately as a tax levy.

Board staff are monitoring this legislation for any potential impacts to its COVID-19 Emergency Temporary Standards.
### Legislative Update  
**Prepared February 4, 2022 for the February 17, 2022 Meeting of the Occupational Safety and Health Standards Board**

**AB-257 Food Facilities and Employment. (2021-2022)**

(Holden, Carrillo, Low, and Luz Rivas)

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>2/01/22</td>
<td>In Senate. Read first time. To Com. on RLS. for assignment.</td>
</tr>
<tr>
<td>01/31/22</td>
<td>Read third time. Passed. Ordered to the Senate.</td>
</tr>
<tr>
<td>01/27/22</td>
<td>Read third time and amended. Ordered to third reading. (Ayes 44. Noes 16.)</td>
</tr>
<tr>
<td>01/20/22</td>
<td>Read third time and amended. Ordered to third reading.</td>
</tr>
<tr>
<td>01/20/22</td>
<td>Ordered to third reading.</td>
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<tr>
<td>01/20/22</td>
<td>From inactive file.</td>
</tr>
<tr>
<td>01/20/22</td>
<td>Assembly Rule 63 suspended. (Ayes 42. Noes 14.)</td>
</tr>
<tr>
<td>01/20/22</td>
<td>Assembly Rule 78 suspended. (Ayes 42. Noes 14.)</td>
</tr>
<tr>
<td>01/20/22</td>
<td>Assembly Rule 47.1 suspended. (Ayes 42. Noes 14.)</td>
</tr>
<tr>
<td>06/28/21</td>
<td>Ordered to inactive file at the request of Assembly Member Lorena Gonzalez.</td>
</tr>
<tr>
<td>06/28/21</td>
<td>Reconsideration granted.</td>
</tr>
<tr>
<td>06/03/21</td>
<td>Motion to reconsider made by Assembly Member Lorena Gonzalez.</td>
</tr>
<tr>
<td>06/03/21</td>
<td>Read third time. Refused passage.</td>
</tr>
<tr>
<td>05/24/21</td>
<td>Read second time. Ordered to third reading.</td>
</tr>
<tr>
<td>05/20/21</td>
<td>From committee: Do pass. (Ayes 12. Noes 4.) (May 20).</td>
</tr>
<tr>
<td>05/20/21</td>
<td>Joint Rule 62(a), file notice suspended.</td>
</tr>
<tr>
<td>05/19/21</td>
<td>In committee: Set, first hearing. Referred to APPR. suspense file.</td>
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<tr>
<td>04/29/21</td>
<td>Re-referred to Com. on APPR.</td>
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<tr>
<td>04/28/21</td>
<td>Read second time and amended.</td>
</tr>
<tr>
<td>04/27/21</td>
<td>From committee: Amend, and do pass as amended and re-refer to Com. on APPR. (Ayes 7. Noes 3.) (April 27).</td>
</tr>
<tr>
<td>04/26/21</td>
<td>From committee: Do pass and re-refer to Com. on JUD. (Ayes 5. Noes 2.) (April 22). Re-referred to Com. on JUD.</td>
</tr>
<tr>
<td>04/19/21</td>
<td>(pending re-refer to Com. on JUD.)</td>
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<tr>
<td>04/19/21</td>
<td>Assembly Rule 56 suspended. (Page 1059.)</td>
</tr>
<tr>
<td>03/26/21</td>
<td>Re-referred to Com. on L. &amp; E.</td>
</tr>
<tr>
<td>03/25/21</td>
<td>From committee chair, with author's amendments: Amend, and re-refer to Com. on L. &amp; E. Read second time and amended.</td>
</tr>
<tr>
<td>03/25/21</td>
<td>Referred to Coms. on L. &amp; E. and JUD.</td>
</tr>
<tr>
<td>01/16/21</td>
<td>From printer. May be heard in committee February 15.</td>
</tr>
<tr>
<td>01/15/21</td>
<td>Read first time. To print.</td>
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Summary:

Enacts the Fast Food Accountability and Standards (FAST) Recovery Act that establishes the Fast Food Sector Council (Council) and tasks the council with conducting a full review every three years on the adequacy of fast food restaurant health, safety, and employment standards and establishing sectorwide minimum health, safety, wage, working hours, and employment standards. Requires a report be provided to the Legislature at least 60 days before a standard is effective.

Major Provisions

1) Establishes a Fast Food Sector Council (Council), comprised of 11 members appointed by the Governor, Speaker of the Assembly and Senate Rules Committee, to set sectorwide standards on wages and working conditions in the fast food industry.

2) Authorizes the Council to issue standards, rules or regulations to carry out its purpose, and provides that the Council's standards prevail in application to fast food restaurant workers, franchisees and franchisors if there is a conflict with regulations issued by another state agency, except the Division of Occupational Safety and Health (DOSH). The Council
must review adopted standards every three years and hold public hearings every six months.

3) Requires the Council to recommend standards to OSHSB to protect restaurant worker health and safety, and requires OSHSB to adopt and enforce the Council's recommendations, unless OSHSB finds the recommendation is outside DOSH's statutory authority or unlawful.

4) Grants a cause of action to any fast food restaurant worker discharged, discriminated or retaliated against for exercising their rights, creates a rebuttable presumption of unlawful discrimination or retaliation for any adverse action taken against the worker within 90 days of the franchisor or franchisee having knowledge of the worker exercising their rights and allows the Labor Commissioner (LC) to enforce violations without receiving a complaint.

5) Requires a fast food restaurant franchisor to ensure a franchisee complies with worker and public health laws, including standards issued by the Council. This bill makes a franchisor jointly and severally liable for any penalties or fines for a violation incurred by the franchisee, and provides that any agreement by a franchisee to indemnify the franchisor for liability is contrary to public policy, void and unenforceable.

6) States that nothing in this bill is intended to encroach on the Legislature's ability to establish workplace standards for workers including fast food restaurant workers. The intent of the Legislature is to ensure that legislators have sufficient time to review and take legislative action, if appropriate, with respect to fast food standards promulgated under the bill pursuant to notice-and-comment rulemaking procedures.

7) Provides that a standard, repeal or amendment of a standard shall not take effect until the submission of a report to the Legislature, as specified, that contains the standard, repeal or amendment and the reasons for it.

8) Specifies that the standard, repeal or amendment shall not take effect until at least 60 days have passed from the Legislature's receipt of the Council's report.

9) States that nothing in this bill shall be construed to give the Council the authority to create or amend statutes.

Board staff is monitoring for potential impacts on Board operations.
**Summary:**

AB 420, as introduced, Quirk-Silva. Public health: amusement parks and COVID-19.

Existing law, the California Emergency Services Act, authorizes the Governor to declare a state of emergency during conditions of disaster or extreme peril to persons or property, including epidemics. Pursuant to this authority, on March 4, 2020, the Governor declared a state of emergency relating to the novel coronavirus 2019 (COVID-19) pandemic. On August 28, 2020, the executive branch implemented a 4-tier “Blueprint for a Safer Economy,” which identifies a county’s COVID-19 risk level for business operations on a scale from widespread risk to minimal risk. On October 20, 2020, the State Department of Public Health and the Division of Occupational Safety and Health issued a guidance document, “COVID-19 INDUSTRY GUIDANCE: Amusement Parks and Theme Parks,” which authorizes a small amusement park to operate at limited capacity when its county is in the moderate tier, and authorizes any other amusement park to operate at 25% capacity when its county is in the minimal tier.

This bill would express the intent of the Legislature that the executive branch adjust the “COVID-19 INDUSTRY GUIDANCE: Amusement Parks and Theme Parks” document and place all amusement parks, regardless of size, within the moderate risk tier, rather than the minimal risk tier. If the executive branch takes those actions, the bill would require the Department of Industrial Relations to administer a competitive grant for amusement parks to be used by amusement parks to purchase personal protective equipment for their employees. The bill would appropriate $500,000 from the General Fund for the grant program. The bill would also make related findings and declarations.
| Board staff are monitoring this legislation to determine if regulatory action by the Board is called for. |
AB-885 Bagley-Keene Open Meeting Act: teleconferencing. (2021-2022)
(Quirk)

<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>1/31/2022</td>
<td>Died pursuant to Art. IV, Sec. 10(c) of the Constitution.</td>
</tr>
<tr>
<td>03/25/21</td>
<td>Re-referred to Com. on G.O.</td>
</tr>
<tr>
<td>03/24/21</td>
<td>From committee chair, with author's amendments: Amend, and re-refer to Com. on G.O. Read second time and amended.</td>
</tr>
<tr>
<td>02/25/21</td>
<td>Referred to Com. on G.O.</td>
</tr>
<tr>
<td>02/18/21</td>
<td>From printer. May be heard in committee March 20.</td>
</tr>
<tr>
<td>02/17/21</td>
<td>Read first time. To print.</td>
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Summary:

AB 885, as amended, Quirk. Bagley-Keene Open Meeting Act: teleconferencing.

The Bagley-Keene Open Meeting Act (Bagley-Keene Act), requires, with specified exceptions, that all meetings of a state body, as defined, be open and public, and all persons be permitted to attend any meeting of a state body, except as provided. The Bagley-Keene Act, among other things, requires a state body that elects to conduct a meeting or proceeding by teleconference to make the portion of the meeting that is required to be open to the public audible to the public at the location specified in the notice of the meeting. The Bagley-Keene Act requires a state body that elects to conduct a meeting or proceeding by teleconference to post agendas at all teleconference locations, identify each teleconference location in the notice and agenda of the meeting or proceeding, and requires each teleconference location to be accessible to the public. That law authorizes any meeting of a state body that is an advisory board, advisory commission, advisory committee, advisory subcommittee, or similar multimember advisory body to hold an open meeting by teleconference if the meeting complies with the requirements of the act, except as provided. Existing law requires that when a member of a multimember state advisory body participates remotely the body provide a means by which the public may remotely hear audio of the meeting or remotely observe the meeting. Existing law requires a multimember state advisory body to end or adjourn a meeting if it discovers that a required means of remote access has failed during the meeting, and, if the meeting is to adjourn and reconvene on the same day, that law
requires the body to communicate, among other things, how a member of the public may hear audio of the meeting or observe the meeting.

This bill would require a state body that elects to conduct a meeting or proceeding by teleconference to make the portion that is required to be open to the public both audibly and visually observable. The bill would require a state body that elects to conduct a meeting or proceeding by teleconference to post an agenda at the designated primary physical meeting location in the notice of the meeting where members of the public may physically attend the meeting and participate. The bill would extend the above requirements of meetings of multimember advisory bodies that are held by teleconference to meetings of all multimember state bodies. The bill would require a multimember state body to provide a means by which the public may both audibly and visually remotely observe a meeting if a member of that body participates remotely. The bill would further require any body that is to adjourn and reconvene a meeting on the same day to communicate how a member of the public may both audibly and visually observe the meeting. The bill would also make nonsubstantive changes to those provisions.

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.

This bill would make legislative findings to that effect.

Board staff are monitoring this legislation for cost and impacts to its meeting requirements.
AB-893 Emergency regulations: Division of Occupational Safety and Health: State Department of Public Health. (2021-2022)

(Davies)

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<tr>
<td>02/25/21</td>
<td>Referred to Com. on A. &amp; A.R.</td>
</tr>
<tr>
<td>02/18/21</td>
<td>From printer. May be heard in committee March 20.</td>
</tr>
<tr>
<td>02/17/21</td>
<td>Read first time. To print</td>
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Summary:

AB 893, as introduced, Davies. Emergency regulations: Division of Occupational Safety and Health: State Department of Public Health.

Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations to adopt occupational health and safety standards to protect the welfare of employees. The Division of Occupational Safety and Health enforces occupational safety and health standards and orders.

Existing law establishes the State Department of Public Health, within the California Health and Human Services Agency, and vests the department with certain duties, powers, functions, jurisdiction, and responsibilities over specified public health programs.

Existing law, the Administrative Procedure Act, governs, among other things, the procedures for the adoption, amendment, or repeal of regulations, including emergency regulations, by state agencies and for the review of those regulatory actions by the Office of Administrative Law.

This bill would require the Division of Occupational Safety and Health or the State Department of Public Health, within 14 calendar days of the release of a federal recommendation that conflicts with an emergency regulation related to COVID-19 issued by the division or the department, to review the conflicting emergency regulation and make a determination to either amend the regulation or submit a report to the Legislature on the decision not to amend the regulation, as specified. The bill would require the division or department, before determining whether to amend the emergency regulation, to provide...
public notice and an opportunity for public comment. The bill would repeal these provisions 90 days after the termination of the state of emergency related to the COVID-19 pandemic declared by the Governor.

This bill would declare that it is to take effect immediately as an urgency statute.

Board staff are monitoring this legislation to determine if regulatory action by the Board is called for.
AB-1175 Division of Occupational Safety and Health: inspections and investigations: advance notice. (2021-2022)

(Aguiar-Curry)

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<td>03/15/21</td>
<td>Re-referred to Com. on L. &amp; E.</td>
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<tr>
<td>03/11/21</td>
<td>From committee chair, with author's amendments: Amend, and re-refer to Com. on L. &amp; E. Read second time and amended.</td>
</tr>
<tr>
<td>03/11/21</td>
<td>Referred to Com. on L. &amp; E.</td>
</tr>
<tr>
<td>02/19/21</td>
<td>From printer. May be heard in committee March 21.</td>
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<tr>
<td>02/18/21</td>
<td>Read first time. To print.</td>
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</table>

AB-1175 Summary:

AB 1175, as amended, Aguiar-Curry. Division of Occupational Safety and Health: inspections and investigations: advance notice.

Existing law, the California Occupational Safety and Health Act of 1973, vests the Division of Occupational Safety and Health within the Department of Industrial Relations with the power, jurisdiction, and supervision over every employment and place of employment, which is necessary adequately to enforce and administer all laws and lawful standards and orders, or special orders requiring such employment and place of employment to be safe, and requiring the protection of the life, safety, and health of every employee in such employment or place of employment, including to inspect and investigate employments and places of employment, as prescribed. The Occupational Safety and Health Administration (OSHA), except as provided, prohibits a person or employer from being given advance warning of an inspection or investigation by any authorized representative of the division. OSHA authorizes the Chief of the Division of Occupational Safety and Health or an authorized representative to permit advance notice of an inspection or investigation as prescribed by the Director of Industrial Relations. OSHA prohibits the authorization of advance notice when the investigation or inspection is to be made as a result of an employee complaint, unless there is imminent danger to the health or safety of an
employee or employees. OSHA makes it a crime, punishable as prescribed, for any person to give unauthorized advance notice of any inspection to be conducted.

This bill would revise those advance warning provisions to prohibit any representative of the division from giving advance notice of an inspection or investigation to an employer or other person unless authorized under OSHA. The bill would authorize the chief or their authorized representatives to permit advance notice of an inspection or investigation when advance notice is necessary to ensure availability of essential personnel or access to the site, equipment, or process, as prescribed by the director. The bill would delete the prohibition on the authorization of advance notice when the investigation or inspection is to be made as a result of an employee complaint. The bill would expand the crime to apply to unauthorized advance notice of an investigation to be conducted, thereby imposing a state-mandated local program.

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 are monitoring this legislation.

(Cortese)

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<tr>
<td>01/19/22</td>
<td>Referred to Coms. on L., P.E. &amp; R. and JUD.</td>
</tr>
<tr>
<td>01/04/22</td>
<td>From printer. May be acted upon on or after February 3.</td>
</tr>
<tr>
<td>01/03/22</td>
<td>Introduced. Read first time. To Com. on RLS. for assignment. To print.</td>
</tr>
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</table>

Summary:

SB 831, as introduced, Cortese. Entertainment productions: firearms: safety.

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, requires employers to comply with certain standards ensuring healthy and safe working conditions, as specified, and charges the division with enforcement of the act. Other existing law relating to occupational safety imposes special provisions on certain industries and charges the division with enforcement of these provisions.

This bill would prohibit a live gun, functioning gun-like weapon, and blank ammunition containing gunpowder or other explosive charge on entertainment productions for certain purposes, including rehearsal, filming of an on-camera sequence, or other development of content, except under specified conditions. The bill would require a qualified armorist, prop or property master, or designee handling a firearm to have completed certain training in firearms and have a specified permit for the use of the firearm.

This bill would prohibit live ammunition, as defined, from being permitted on film, television, and commercial sets, except in limited circumstances, including while filming a reality television project that uses firearms and live ammunition and follows certain safety rules and laws. The bill would require an employer to ensure that any employee in proximity to the use of firearms on set completes a specific firearm training or equivalent training, as prescribed. The bill would establish exemptions from its provisions for specified registered security guards and peace officers.
This bill would require the division to enforce its provisions and, before July 1, 2023, to propose to the standards board, for its review and adoption on or before January 1, 2024, a standard that protects the health and safety of entertainment production employees with regard to the storage, handling, and use of firearms, gun-like projectile weapons, and ammunition on set. The bill would require the division, in the development of the proposed safety standard, to consider and incorporate, to the extent feasible and consistent with the bill, the provisions of specified joint industry-labor safety bulletins. The bill would establish unspecified civil penalties for specified violations.

Board staff are monitoring this legislation to determine if regulatory action by the Board is called for.
Occupational Safety and Health Standards Board

Business Meeting

Executive Officer's Report