Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

December 16, 2021

Via teleconference / videoconference

Board Meeting Packet

Occupational Safety and Health Standards Board

Meeting Agenda

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

Tel: (916) 274-5721 Fax: (916) 274-5743

www.dir.ca.gov/oshsb



MISSION STATEMENT

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

December 16, 2021 at 10:00 a.m. TELECONFERENCE AGENDA

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

<u>PLEASE NOTE:</u> In accordance with <u>section 11133 of the Government Code</u>, 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.

<u>Live video stream and audio stream (English and Spanish):</u>

- 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.

December 2021 Agenda Page 2 of 6

NOTE: In accordance with <u>section 11133 of the Government Code</u>,

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. <u>BUSINESS MEETING All matters on this Business Meeting agenda are subject to such discussion and action as the Board determines to be appropriate.</u>

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

- A. PROPOSED EMERGENCY SAFETY ORDER FOR RE-ADOPTION (GOV. CODE SEC. 11346.1)
 - 1. <u>TITLE 8:</u> <u>GENERAL INDUSTRY SAFETY ORDERS</u>
 Chapter 4, Subchapter 7, new sections 3205, 3205.1, 3205.2, 3205.3, and 3205.4
 COVID-19 Prevention
- B. PROPOSED VARIANCE DECISIONS FOR ADOPTION
 - 1. Consent Calendar
- C. REPORTS
 - 1. Division Update

December 2021 Agenda Page 3 of 6

- 2. Legislative Update
- 3. Executive Officer's Report

D. <u>PANEL DISCUSSION (COVID-19 Prevention – Permanent Regulation Options)</u>

- **a.** The Board will hold a discussion with invited panel members on recent developments that have the potential to impact non-emergency COVID-19 Prevention regulations, including the following topics:
 - i. Recent OSH Appeals Board Decisions
 - ii. Alternate approaches for regulation (i.e. IIPP)
 - iii. Roles and Responsibilities
- **b.** Public Comment on Panel Discussion

E. 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).).

F. CLOSED SESSION

- 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
- 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

G. RETURN TO OPEN SESSION

1. Report from Closed Session

December 2021 Agenda Page 4 of 6

H. ADJOURNMENT OF THE BUSINESS MEETING

Next Meeting: January 20, 2022

Teleconference and Video-conference

(In accordance with section 11133 of the Government

Code) 10:00 a.m. December 2021 Agenda Page 5 of 6

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.

December 2021 Agenda Page 6 of 6

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. 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

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

Tel: (916) 274-5721 Fax: (916) 274-5743

www.dir.ca.gov/oshsb



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

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

PUBLIC MEETING: On **December 16, 2021,** at 10:00 a.m. via the following:

- Video-conference at <u>www.webex.com</u> (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 December 16, 2021, 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
Proposed Emergency Safety Order
For Re-adoption
(GOV. CODE SEC. 11346.1)

COVID-19 Prevention

TITLE 8 GENERAL INDUSTRY SAFETY ORDERS

PROPOSED EMERGENCY TEMPORARY STANDARD FOR RE-ADOPTION

CHAPTER 4, SUBCHAPTER 7, NEW SECTIONS 3205, 3205.1, 3205.2, 3205.3, AND 3205.4

COVID-19 PREVENTION

THE FOLLOWING DOCUMENTS CAN BE FOUND UNDER THE HEADING READOPTION DOCUMENTS (DECEMBER 16, 2021)

- NOTICE OF PROPOSAL FOR READOPTION OF EMERGENCY ACTION
- FINDING OF EMERGENCY/INFORMATIVE DIGEST
- PROPOSED REGULATORY TEXT FOR READOPTION
- PROPOSED REGULATORY TEXT FOR READOPTION (SHOWING CHANGES FROM CURRENT EMERGENCY REGULATION – COURTESY COPY)

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS DECEMBER 16, 2021, MONTHLY BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

A. KRE EXCHANGE OWNER, LLC — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
16-V-252M3	KRE Exchange Owner, LLC	Elevator	GRANT

B. YBI PHASE 1 INVESTORS, LLC — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
19-V-483M1	YBI Phase 1 Investors, LLC	Elevator	GRANT

C. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-279	The Regents of the University of California	Elevator	GRANT

D. DSP HOSPITALITY LLC — HEARD DECEMBER 1, 2021

OSHSB FILE	APPLICANT NAME	SAFETY	PROPOSED
NUMBER		ORDERS	DECISION
21-V-360	DSP Hospitality LLC	Elevator	GRANT

E. LAWRENCE BERKELEY NATIONAL LABORATORY — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-452	Lawrence Berkeley National Laboratory	Elevator	GRANT

F. SCHINDLER MODEL 3300 ELEVATORS WITH SIL-RATED DRIVE TO DE-ENERGIZE DRIVE MOTOR (GROUP IV) — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-453	3912 - 3924 Arizona, LLC	Elevator	GRANT
21-V-494	Bayer Healthcare	Elevator	GRANT
21-V-506	Prince Hospitality LLC	Elevator	GRANT
21-V-520	Bahman Shokoufandeh	Elevator	GRANT
21-V-521	Parkhouse Residences LLC	Elevator	GRANT
21-V-522	Parkhouse Residences LLC	Elevator	GRANT
21-V-523	Parkhouse Residences LLC	Elevator	GRANT
21-V-526	448 5th Street Venture, LLC	Elevator	GRANT
21-V-540	Vintedge Winery LLC	Elevator	GRANT
21-V-541	Parkhouse Residences LLC	Elevator	GRANT
21-V-542	Parkhouse Residences LLC	Elevator	GRANT
21-V-543	Main 50 Housing, LP	Elevator	GRANT
21-V-544	Montezuma West LLC	Elevator	GRANT

G. KONE MONOSPACE 500 ELEVATORS (GROUP IV) — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-454	The Roman Catholic Welfare Corporation of Oakland	Elevator	GRANT
21-V-455	5774 West 3rd, LLC	Elevator	GRANT
21-V-456	7500 Sunset Owner LLC	Elevator	GRANT
21-V-457	7500 Sunset Owner LLC	Elevator	GRANT
21-V-514	Barrington 505, LLC	Elevator	GRANT

21-V-515	Adams Terrace, LP	Elevator	GRANT
21-V-516	Sharp Healthcare	Elevator	GRANT
21-V-517	Hoag Memorial Hospital Presbyterian	Elevator	GRANT
21-V-519	1721 Colby Ave., L.P.	Elevator	GRANT

H. OTIS GEN2S ELEVATORS (GROUP IV) — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-458	Anton South Street Venture, LLC	Elevator	GRANT
21-V-459	Diamond Shield Investments, LLC	Elevator	GRANT
21-V-482	SEED LA	Elevator	GRANT
21-V-483	1317 SGA QOZB LLC	Elevator	GRANT
21-V-484	City of Hope	Elevator	GRANT
21-V-485	HCP Callan Road, LLC	Elevator	GRANT
21-V-486	HCP Callan Road, LLC	Elevator	GRANT
21-V-487	Community Corp of Santa Monica	Elevator	GRANT
21-V-488	HHP-LOG, LLC	Elevator	GRANT
21-V-489	JSF Long Beach Avenue, LLC	Elevator	GRANT
21-V-490	MP Midway Associates I, L.P.	Elevator	GRANT
21-V-491	MP Midway Associates I, L.P.	Elevator	GRANT
21-V-492	SFII 101 Utah, LLC	Elevator	GRANT
21-V-505	Urban Catalyst	Elevator	GRANT
21-V-527	Welcome To The Depot LLC	Elevator	GRANT
21-V-528	Balboa Park Housing Partners, L.P.	Elevator	GRANT
21-V-529	Chevron	Elevator	GRANT

21-V-530	John Muir Health	Elevator	GRANT
21-V-531	John Muir Health	Elevator	GRANT
21-V-532	Lincoln Lot 7 (SM), LLC	Elevator	GRANT
21-V-533	Los Angeles Community College District	Elevator	GRANT
21-V-534	SoCal Arena Company, LLC	Elevator	GRANT
21-V-535	Anton South Street Venture, LLC	Elevator	GRANT
21-V-536	CREI1-1264, LLC	Elevator	GRANT
21-V-537	Linc Library APTS, LP	Elevator	GRANT
21-V-538	QALICB, FHCSD El Cerrito, LLC	Elevator	GRANT

I. KONE MONOSPACE 500 ELEVATORS WITH RETRACTABLE PLATFORM GUARD — HEARD DECEMBER 1, 2021

OSHSB FILE	APPLICANT NAME	SAFETY	PROPOSED
NUMBER		ORDERS	DECISION
21-V-460	KBS III 201 Spear Street, LLC	Elevator	GRANT

J. SCHINDLER MODEL 3300 ELEVATORS (GROUP IV) WITH VARIANT GOV. ROPES & SHEAVES (GROUP IV) — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-493	Bayer Healthcare	Elevator	GRANT
21-V-524	Bonita Glen Owner, LLC	Elevator	GRANT

K. <u>SCHINDLER MODEL 6400 ELEVATORS (GROUP IV, STM ALTERATION) — HEARD DECEMBER 1, 2021</u>

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-495	Olive/Hill Street Partners, LLC	Elevator	GRANT
21-V-496	Olive/Hill Street Partners, LLC	Elevator	GRANT

L. SCHINDLER SLEEP MODE ESCALATORS — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-497	County of Orange	Elevator	GRANT
21-V-500	San Francisco Bay Area Rapid Transit District	Elevator	GRANT
21-V-502	San Francisco Bay Area Rapid Transit District	Elevator	GRANT
21-V-504	San Francisco Bay Area Rapid Transit District	Elevator	GRANT

M. SCHINDLER MODEL 5500 ELEVATORS (GROUP IV) — HEARD DECEMBER 1, 2021

OSHSB FILE NUMBER	APPLICANT NAME	SAFETY ORDERS	PROPOSED DECISION
21-V-525	Murphy's Bowl LLC	Elevator	GRANT

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	OSHSB File No.: 16-V-252M3 Proposed Decision Dated: December 2, 2021
KRE Exchange Owner, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Autumn Gonzalez,	Standards Board hereby adopts the attached Hearing Officer.
	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE
KATTLELIV CKAWT OKD, WICHING	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY Mambar	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
LAURA STOCK, Member	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:

KRE Exchange Owner, LLC

PROPOSED DECISION
Hearing Date: December 1, 2021

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 each subject elevator identified herein:

Preexisting	Droovisting Variance Holder of Decord
OSHSB File No.	Preexisting Variance Holder of Record
16-V-252	Kilroy Realty Corporation
16-V-252M1	KR Mission Bay, LLC
16-V-252M2	KR Mission Bay, LLC

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 December 1, 2021, 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, Carolina Castaneda, with Mitsubishi Electric, appeared on behalf of the Applicant, David Morris appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of the Board staff acting 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:

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

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 December 1, 2021, 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 "KR Mission Bay, LLC" to "KRE Exchange Owner, LLC", the variance holder of record previously granted Permanent Variance Nos. 16-V-252, 16-V-252M1 and 16-V-252M2.
 - 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 KRE Exchange Owner, LLC is the owner of the property at the variance location of record in Permanent Variance No. 16-V-252M3.
 - 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. 16-V-252, 16-V-252M1 and 16-V-252M2.
 - 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 16-V-252, 16-V-252M1 and 16-V-252M2 was, in significant part, based.

Proposed Variance Decision KRE Exchange Owner, LLC

Hearing Date: December 1, 2021

E. <u>Decision and Order</u>

1. Variance application 16-V-252M3 is conditionally GRANTED, as specified below, such that henceforth the permanent variance holder of record in Permanent Variance Nos. 16-V-252, 16-V-252M1, 16-V-252M2 and 16-V-252M3, shall be:

KRE Exchange Owner, LLC

2. Permanent Variance No. 16-V-252, 16-V-252M1 and 16-V-252M2 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: December 2, 2021

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:	OSHSB File No.: 19-V-483M1 Proposed Decision Dated: December 2, 2021
YBI Phase 1 Investors, LLC	DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CURIC LACTOT DAVIG Advished	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
CHRIS LASZCZ-DAVIS, Member	
	Note: A copy of this Decision must be
LALIDA STOCK Mambar	posted for the Applicant's employees to
LAURA STOCK, Member	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:	OSHSB File No.: 19-V-483M1
YBI Phase 1 Investors, LLC	PROPOSED DECISION
	Hearing Date: December 01, 2021

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:

Preexisting OSHSB File No.	Applicant Name	Preexisting Variance Address of Record
19-V-483	YBI Phase 1 Investors, LLC	201 Macalla Road San Francisco, CA

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

C. <u>Procedural Matters</u>:

- 1. This hearing was held on December 01, 2021, 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.
- At the hearing, Dan Leacox of Leacox & Associates appeared on behalf of Otis and the Applicants; 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.

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance modification application per Section A
	Table
PD-2	OSHSB Notice of Hearing
PD-3	Board Staff Reviews of Variance Application
PD-4	Division Reviews of Variance Application
PD-5	Review Draft-1 Proposed Decision

Official notice is taken of the Board's rulemaking records and variance decisions concerning the safety order provisions from which variance has been requested. On December 01, 2021, 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 conveyance the subject of previously granted Permanent Variance 19-V-483.
 - 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-483 is in effect, in fact is more completely, and correctly the different address information 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-483.
 - 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-483 was, in part, based.
 - 5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 19-V-483, to be:

Proposed Variance Decision OSHSB File No. 19-V-483M1

Hearing Date: December 01, 2021

1 Bristol Court San Francisco, CA

E. <u>Decision and Order</u>:

1. Permanent Variance Application No. 19-V-483M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance Nos. 19-V-483, and 19-V-483M1, shall have the following address designation:

1 Bristol Court San Francisco, CA

2. Permanent Variance No. 19-V-483, 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-483M1.

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: <u>December 2, 2021</u>

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:	OSHSB File No.: 21-V-279 Proposed Decision Dated: December 2, 2021
The Regents of the University of California	DECISION
The Occupational Safety and Health PROPOSED DECISION by Autumn Gonzalez,	Standards Board hereby adopts the attached Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
LAURA STOCK, Member	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 By:	OSHSB File Nos.: See Section A.1 table below:
The Regents of the University of California	PROPOSED DECISION
	Hearing Date: December 1, 2021

A. Subject Matter:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-279	The Regents of the University of California	UCSF Mission Bay Building 23B Parking Structure 1630 – 3rd Street San Francisco, CA	2

2. The safety orders at issue are stated in the portion of Section F that precedes the variance conditions.

B. Jurisdiction:

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

C. <u>Procedural</u>:

- 1. This hearing was held on December 1, 2021, 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, Dan Leacox of Leacox & Associates appeared on behalf of Otis and the Applicants; Mark Wickens and David Morris appeared on behalf of the Division of

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

Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff.

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

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

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 December 1, 2021, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings:

- 1. Each Applicant intends to utilize Otis Gen2(O) and/or Otis Gen2L elevators at the location and in the numbers stated in the Section A.1 table (as used in this Proposed Decision, the term "Gen2(O)" refers to the original type of Gen2 elevator, as distinguished from other types with such designations as "Gen2L" or "Gen2S" or "Gen2 at 150").
- 2. The installation contract for these elevators was, or will be, signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
- 3. The Board incorporates by reference the 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;

Proposed Variance Decision
The Regents of the University of California
Hearing Date: December 1, 2021

- e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, regarding OSHSB File No. 14-V-170;
- f. Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, regarding OSHSB File No. 18-V-425; and
- g. Items 5 through 9, in the "Findings of Fact" section of the Proposed Decision adopted by the Board on June 18, 2010, regarding OSHSB File No. 08-V-108M1.
- 4. Both Board staff and Division safety engineers, 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.

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 California Code of Regulation, title 8, Elevator Safety Orders from which variance is being sought.

F. <u>Decision and Order</u>:

Each permanent variance application that is the subject of this proceeding is conditionally GRANTED, as below specified, and to the extent that, as of the date the Board adopts this Proposed Decision, each Applicant listed in the Section A.1 table of this Proposed Decision shall have a permanent variance from California Code of Regulations, Title 8, Section 3141, referencing ASME A17.1-2004:

- <u>Car top railing</u>: 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);
- <u>Suspension means</u>: Sections 2.20.1, 2.20.2.1(b), 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);

Proposed Variance Decision
The Regents of the University of California
Hearing Date: December 1, 2021

- Governor rope diameter: Section 2.18.5.1 (to the extent necessary to allow the use of reduced diameter governor rope);
- <u>Pitch diameter</u>: Section 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No.12(c);
- <u>Inspection transfer switch</u>: Section 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);
- <u>Seismic reset switch</u>: Section 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)]; and
- <u>Platform Guard</u>: 2.15.9.2 (Only to the extent necessary to permit the use of a two-section retractable platform guard (apron) where the depth of the pit is not sufficient enough to prevent the platform guard from contacting the floor when the car is resting on its fully compressed buffers or bumpers); and
- <u>Bottom Car Clearances</u>: 2.4.1.5 (Only to the extent necessary to permit the two-section retractable platform guard (apron) to the contact the pit floor.

Regarding car top railings, switches, and suspension ropes and connections, for the location and number of elevators listed in the Section A.1 table (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), subject to the following conditions:

The variance shall be subject to the following additional conditions:

- 1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
- 2. The suspension system shall comply with the following:
 - a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, Section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.

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

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

- d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.
- e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
- 13. Retractable Platform Guards (Aprons)- in lieu of a straight vertical face (one piece) platform guard (aprons) required by section 3141 [ASME A17,1-2004, section 2.15.9.2], a two-section retractable platform guard consisting of a stationary upper section guard plate and a moveable lower section guard plate shall be installed and conformed to the following:
 - a. The stationary upper section guard plate shall have a straight vertical face, extending below the floor surface of the platform; the height shall be not less than 920 mm (36.2 in.).
 - b. The movable lower section guard plate shall:
 - i Comply with ASME A17.1-2004, section 2.15.9.3;
 - ii Be provided with rubber bumper at the center of the bottom edge of the plate to absorb the impact when the toe guard strikes the concrete pit floor;

Proposed Variance Decision The Regents of the University of California

Hearing Date: December 1, 2021

- iii Be provided with an electrical switch that indicates to the control system that the retractable platform guard is in its extended position (when car is away from the bottom landing), and be provided with a second electrical switch that indicates to the control system that the moveable lower section is in its retracted position (when the car is at the bottom landing), thereby overriding the first switch. Failure of either of these electrical switches or of the mechanical parts that activate these electrical switches shall cause the controller to remove power from the driving machine and brake.
- c. The two-section retractable platform guard shall be provided with smooth metal guard plates of not less than 1.5 mm (0.059 in.) think steel, or material of equivalent strength and stiffness, adequately reinforced and braced to the car platform and conforming to ASME A17.1-2004, sections 2.15.9.1 and 2.15.9.4.
- d. The overall height of the two-section retractable platform guard shall be not less than 1220 mm (48 in.) when the moveable lower section is in the fully extended (deployed) position.
- 14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the 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 the terms of this permanent variance.
- 15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 16. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
- 17. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
- 18. 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 sections 411.2 and 411.3.
- 19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety

Proposed Variance Decision
The Regents of the University of California
Hearing Date: December 1, 2021

and Health, or by the Board on its own motion, in accordance with the Board's procedural rules.

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

Dated: December 2, 2021

racanin confectoricaning conse

Proposed Variance Decision
The Regents of the University of California
Hearing Date: December 1, 2021

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

<u>Suspension Means – Replacement Reporting Condition</u>

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.

Proposed Variance Decision
The Regents of the University of California

Hearing Date: December 1, 2021

- 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	OSHSB File No.: 21-V-360
Permanent Variance by:	Proposed Decision Dated: December 2, 2021
DSP Hospitality LLC	DECISION
The Occupational Safety and Healt PROPOSED DECISION by Autumn Gonzalez	h Standards Board hereby adopts the attached z, Hearing Officer.
	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	THE TORTON ON A DIAMOT DE COMO NA DIAMOT
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
DAVID HARRICON, Marrie en	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST
NOLA RENNEDT, Wiembei	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
LAURA STOCK, Member	posted for the Applicant's employees to
LAGINA STOCK, MICHIDE	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 By:	OSHSB File Nos.: See Section A.1 Table Below
DSP Hospitality LLC	PROPOSED DECISION
	Hearing Date: December 1, 2021

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 Regulations¹, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-360	DSP Hospitality LLC	180 Northwoods Ave. Manteca, CA	2

2. The subject safety order requirements are set out within section 3141 incorporated ASME A17.1-2004, Sections 2.18.5.1 and 2.20.4.

B. <u>Procedural:</u>

- 1. This hearing was held on December 01, 2021, 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, Manish Sablok, with KONE, Inc., appeared on behalf of each Applicant; 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 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: permanent variance applications per

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

Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is sought. Upon close of hearing on December 01, 2021, the record closed and the matter was taken under submission by the Hearing Officer.

- C. <u>Findings of Fact</u>—Based on the record of this proceeding, the Board finds the following:
 - 1. Each respective Applicant intends to utilize the KONE Inc. Monospace 300 MRL 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 300 MRL 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 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 section 3141.7, subdivision (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 6 mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7, subdivision (a)(10), the specific parameters of which, being expressly set out within the 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 Elevator Safety Orders requirements, and therefore not be subject to issuance of permanent variance.
- 12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. OSHSB File Nos. 06-V-203, 08-V-245, and 13-V-303).
- 13. As noted by the Board in OSHSB File Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, as also noted by Board staff, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly

accounted for in the engineering of elevator suspension means, and associated components.

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

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

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
 N = number of runs of rope under load. For 2:1 roping,

 N shall be two times the number of ropes used, etc.

 S = manufacturer's rated breaking strength of one rope
 f = the factor of safety from Table 2.20.3

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

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

D. Conclusive Findings:

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

E. <u>Decision and Order:</u>

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, 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 300 MRL 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. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
- 10. 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.
- 11. The Applicant shall comply with suspension means replacement reporting condition stated in Exhibit 1; that conditions is incorporated 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 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 the Board's procedural regulations.

14. 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: December 2, 2021

utumn Gonzalez, Hearing

Appendix 1

	Monospace 300 MRL Suspension Ropes Appendix 1 Table			
OSHSB File No.	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
21-V-360	1	7	150	12,247
21-V-360	2	7	150	12,247

Exhibit 1: Suspension Means Replacement Reporting Condition

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

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

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

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

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance by:	OSHSB File No.: 21-V-452 Proposed Decision Dated: December 2, 2021
Lawrence Berkeley National Laboratory	DECISION
The Occupational Safety and Health PROPOSED DECISION by Autumn Gonzalez,	Standards Board hereby adopts the attached Hearing Officer.

DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DADDADA DUDGEL Marshar	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
,	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
LAURA STOCK, Member	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 by:

Lawrence Berkeley National Laboratory

OSHSB File No.: 21-V-452

PROPOSED DECISION

Hearing Date: December 1, 2021

A. Procedural Matters

1. Lawrence Berkeley National Laboratory ("Applicant") has applied for a permanent variance from provisions of title 8, of the California Code of Regulation regarding vertical platform (wheelchair) lifts, respect to one wheelchair lift proposed to be located at:

Lawrence Berkeley National Laboratory
Bldg. 73/73U
Centennial Drive
Berkeley, CA

- 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 December 1, 2021, 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 on behalf of the applicant was Jamie Doyle with Solas Architecture, Inc., and Dean Seblachek and Adan Perez, Mark Wickens and David Morris appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Senior Engineer Michael Nelmida appeared on behalf of Board staff acting 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:

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

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 December 1, 2021, the record was closed, and the matter taken under submission by the Hearing Officer.

B. Finding 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:

Lawrence Berkeley National Laboratory
Bldg. 73/73U
Centennial Drive
Berkeley, 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 Bruno, Model VPL-3314B, 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.).
- 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. <u>Decision and Order</u>

The Application for Permanent Variance of Lawrence Berkeley National Laboratory, OSHSB File No. 21-V-452, is conditionally GRANTED to the limited extent, upon the Board's adoption of this Proposed Decision, Lawrence Berkeley National Laboratory, 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 Bruno, Model VPL-3314B Vertical Platform Lift, subject to the following further conditions and limitations:

- 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.
- 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, 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.

Proposed Variance Decision OSHSB File No. 21-V-452

Hearing Date: December 1, 2021

- 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: December 2, 2021

Autumn Gonzalez Aearing Officer

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:

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

OSHSB File No.: See Section 1 Table of Proposed Decision Dated: December 2, 2021

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
_AURA STOCK, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	ricpi escritatives.

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

In the Matter of Application for Permanent Variance Regarding:

OSHSB File Nos.: Per table, in Jurisdictional

and Procedural Matters below

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

PROPOSED DECISION

Hearing Date: December 1, 2021

Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-453	3912 - 3924 Arizona, LLC	3924 Arizona St. San Diego, CA	1
21-V-494	Bayer Healthcare	800 Dwight Way Berkeley, CA	1
21-V-506	Prince Hospitality LLC	28700 Newhall Ranch Rd. Santa Clarita, CA	2
21-V-520	Bahman Shokoufandeh	4320 Inglewood Blvd. Los Angeles, CA	1
21-V-521	Parkhouse Residences LLC	4281 Uptown Newport Drive (Building 1) Newport Beach, CA	1
21-V-522	Parkhouse Residences LLC	4271 Uptown Newport Drive (Building 5) Newport Beach, CA	1
21-V-523	Parkhouse Residences LLC	4261 Uptown Newport Drive (Building 4) Newport Beach, CA	1
21-V-526	448 5th Street Venture, LLC	448 W 5th St. San Pedro, CA	2

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

Hearing Date: December 1, 2021

21-V-540	Vintedge Winery LLC	144 Gateway Road East Napa, CA	1
21-V-541	Parkhouse Residences LLC	4291 Uptown Newport Drive (Building 2) Newport Beach, CA	1
21-V-542	Parkhouse Residences LLC	4251 Uptown Newport Drive (Building 3) Newport Beach, CA	1
21-V-543	Main 50 Housing, LP	100 W. 55th St. Los Angeles, CA	1
21-V-544	Montezuma West LLC	6151 Montezuma Rd. San Diego, CA	1

- 2. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, section 401, et. seq.
- 3. This hearing was held on December 1, 2021, 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 the Schindler Elevator Corporation, appeared on behalf of each Applicant; 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.
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on December 1, 2021, 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 A.17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(B), 2.14.1.7.1, and 2.26.9.6.1]. The relevant language of those sections are below.

1. Suspension Means

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

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

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

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

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

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

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

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

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

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

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

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

where:

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

S= manufacturer's rated breaking strength of one rope

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

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

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

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

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

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

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

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge

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

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

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

2. Inspection Transfer Switch

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

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

(a) located in the machine room[.]

3. Seismic Reset Switch

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

- (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
- (1) seismic zone 3 or greater: a minimum of one seismic switch per building
- (2) seismic zone 2 or greater:
 - (a) a displacement switch for each elevator
 - (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

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

Hearing Date: December 1, 2021

4. Car-top Railings

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

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

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

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

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

Findings of Fact

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

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

8. Applicant intends to use an elevator control system, model CO NX100NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

Conclusive Findings:

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

Decision and Order:

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

Elevator Safety Orders:

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

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

Hearing Date: December 1, 2021

Conditions:

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

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
- ii. Any wire, strand or cord breaks through the elastomeric coating;
- iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
- iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for

correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

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

containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

- 4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

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

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

Proposed Variance Decision

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

Hearing Date: December 1, 2021

- 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: December 2, 2021

Autumn Gonzalez Hearing Officer

Proposed Variance Decision

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

Hearing Date: December 1, 2021

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

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

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

Hearing Date: December 1, 2021

- h. All information provided on the crosshead data plate per ASME Al7.I-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

	<u></u>
In the Matter of Application for Permanent Variance regarding:	OSHSB File No.: See Section A.1 Table of Proposed Decision Dated: December 2, 2022
KONE Monospace 500 Elevators (Group IV)	DECISION
The Occupational Safety and Healt PROPOSED DECISION by Autumn Gonzalez	h Standards Board hereby adopts the attached , Hearing Officer.
	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	•
	THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE
Willelia Civital Civit	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST
NOLA REINIEDT, MICHIGET	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be

LAURA STOCK, Member

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:

OSHSB File Nos.: See Section A.1 Table Below

KONE Monospace 500 Elevators (Group IV)

PROPOSED DECISION

Hearing Date: December 1, 2021

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:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-454	The Roman Catholic Welfare Corporation of Oakland	9500 Stearns Ave. Oakland, CA	1
21-V-455	5774 West 3rd, LLC	5768 - 5774 W. 3rd St. Los Angeles, CA	1
21-V-456	7500 Sunset Owner LLC	7520 Sunset Blvd. Los Angeles, CA	2
21-V-457	7500 Sunset Owner LLC	7566 Sunset Blvd. Los Angeles, CA	2
21-V-514	Barrington 505, LLC	505 Barrington Ave. Los Angeles, CA	2
21-V-515	Adams Terrace, LP	4314 W Adams Blvd. Los Angeles, CA	1
21-V-516	Sharp Healthcare	8695 Spectrum Center Boulevard San Diego, CA	2
21-V-517	Hoag Memorial Hospital Presbyterian	West Parking Structure 16300 Sand Canyon Ave. Irvine, CA	3

21-V-519	1721 Colby Ave., L.P.	1721 Colby Ave. Los Angeles, CA	1
----------	-----------------------	------------------------------------	---

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. <u>Procedural:</u>

- This hearing was held on December 1, 2021, 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, Manish Sablok, with KONE, Inc., appeared on behalf of each Applicant; 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 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: permanent variance applications per Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is sought. Upon close of hearing on December 1, 2021, the record closed and the matter was taken under submission by the Hearing Officer.
- C. <u>Findings of Fact</u>—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;

Proposed Variance Decision KONE Monospace 500 Elevators Hearing Date: December 1, 2021

- 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:

Proposed Variance Decision KONE Monospace 500 Elevators Hearing Date: December 1, 2021

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

where

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
 N = number of runs of rope under load. For 2:1 roping,

 N shall be two times the number of ropes used, etc.

 S = manufacturer's rated breaking strength of one rope
 f = the factor of safety from Table 2.20.3

- 16. ASME A17.1-2010 Sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by both Board staff and Division as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.
- 17. Board staff and Division are in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators.* Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.
- 18. Both Board staff, and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, are of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings:

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

in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of California Code of Regulation, Title 8, Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order:</u>

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.

Proposed Variance Decision KONE Monospace 500 Elevators Hearing Date: December 1, 2021

- 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: <u>December 2, 2021</u>

Autumn Gonzalez, Hearing Office

Appendix 1

	Monospace 500 Suspension Ropes Appendix 1 Table			
OSHSB File No.	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
21-V-454	1	7	150	12,247
21-V-455	1	7	200	11,556
21-V-456	1	7	200	11,556
21-V-456	2	7	200	11,556
21-V-457	1	7	200	11,556
21-V-457	2	7	200	11,556
21-V-514	1	7	150	12,247
21-V-514	2	7	150	12,247
21-V-515	1	7	150	12,247
21-V-516	1	8	350	11,706
21-V-516	2	8	350	11,706
21-V-517	1	7	150	12,247
21-V-517	2	7	150	12,247
21-V-517	3	7	150	12,247
21-V-519	1	7	150	12,247

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.

Proposed Variance Decision

KONE Monospace 500 Elevators

Hearing Date: December 1, 2021

- 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:	OSHSB File No.: See Section A.1 Table of Proposed Decision Dated: December 2, 2021
Otis Gen2S Elevators (Group IV)	DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
,	Note: A convertible Designer recet be
	Note: A copy of this Decision must be
LAURA STOCK, Member	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:

PROPOSED DECISION

Otis Elevators Gen2S (Group IV)

Hearing Date: December 1, 2021

OSHSB File Nos.: See Section A table below

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:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-458	Anton South Street Venture, LLC	901 E. South Street Anaheim, CA	4
21-V-459	Diamond Shield Investments, LLC	340 S. Rexford Dr. Beverly Hills, CA	1
21-V-482	SEED LA	8400 S. Vermont Ave. Los Angeles, CA	3
21-V-483	1317 SFA QOZB LLC	1317 S Grand Avenue Los Angeles, CA	1
21-V-484	City of Hope	North Parking Structure 1000 Fivepoint Irvine, CA	2
21-V-485	HCP Callan Road, LLC	Building A 3020 Callan Road San Diego, CA	3
21-V-486	HCP Callan Road, LLC	Building B 3030 Callan Road San Diego, CA	3
21-V-487	Community Corp of Santa Monica	1834 14th Street Santa Monica, CA	1

21-V-488	HHP-LOG, LLC	735 North Orange Grove Blvd. Pasadena, CA	2
21-V-489	JSF Long Beach Avenue, LLC	4500 S. Long Beach Ave. East Los Angeles, CA	2
21-V-490	MP Midway Associates I, L.P.	80 Park Street Daly City, CA	2
21-V-491	MP Midway Associates I, L.P.	88 Park Street Daly City, CA	1
21-V-492	SFII 101 Utah, LLC	101 Utah Street San Francisco, CA	1
21-V-505	Urban Catalyst	201 South 2nd Street San Jose, CA	2
21-V-527	Welcome To The Depot LLC	3609 S 10th Ave Los Angeles, CA	1
21-V-528	Balboa Park Housing Partners, L.P.	Balboa Park Upper Yard 2340 San Jose Avenue San Francisco, CA	2
21-V-529	Chevron	Chevron Richmond Lubricants Plant 841 Chevron Way Richmond, CA	1
21-V-530	John Muir Health	Service Building 133 La Casa Via Walnut Creek, CA	1
21-V-531	John Muir Health	Outpatient Specialty Center 177 La Casa Via Walnut Creek, CA	3
21-V-532	Lincoln Lot 7 (SM), LLC	2903 Lincoln Blvd. Santa Monica, CA	1

21-V-533	Los Angeles Community College District	Los Angeles Mission College Student Services Center/Admin Building 13356 Eldridge Ave Sylmar, CA	2
21-V-534	SoCal Arena Company, LLC	Coachella Valley Arena 75702 Varner Rd. Thousand Palms, CA	3
21-V-535	Anton South Street Venture, LLC	903 E. South Street Anaheim, CA	2
21-V-536	CREI1-1264, LLC	1264 N. Harper Ave. West Hollywood, CA	1
21-V-537	Linc Library APTS, LP	The Nook 14433 Leffingwell Rd. Whittier, CA	1
21-V-538	QALICB, FHCSD El Cerrito, LLC	5472 El Cajon Blvd. San Diego, CA	4

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. <u>Procedural</u>

- 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 December 1, 2021, 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 appeared on behalf of Otis and the Applicants; 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.

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

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

Official notice is taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on December 1, 2021, 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. <u>Decision and Order:</u>

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:

- <u>Car top railing</u>: 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);
- <u>Speed governor over-speed switch</u>: 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);
- <u>Governor rope diameter</u>: 2.18.5.1 (only to the extent necessary to allow the use of reduced diameter governor rope);
- <u>Pitch diameter</u>: 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No. 13.c);
- <u>Suspension means</u>: 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;

- <u>Inspection transfer switch</u>: 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
- <u>Seismic reset switch</u>: 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.

Proposed Variance Decision
Otis Gen2S Elevators (Group IV)
Hearing Date: December 1, 2021

- 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.
- 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: <u>December 2, 2021</u>

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

<u>Suspension Means – Replacement Reporting Condition</u>

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.

Proposed Variance Decision
Otis Gen2S Elevators (Group IV)
Hearing Date: December 1, 2021

- 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:

KONE Monospace 500 Elevators with Retractable Platform Guard

OSHSB File No.: See Section A.1 Table of Proposed Decision Dated: December 2, 2021

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
<u>-</u>	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
CIRIS LASZCZ-DAVIS, MEITIDEI	
	Note: A copy of this Decision must be
LAURA STOCK, Member	posted for the Applicant's employees to
LAONA STOCK, WEITIBET	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:

OSHSB File Nos.: See Section A.1 Table Below

KONE Monospace 500 Elevators with Retractable Platform Guard

PROPOSED DECISION

Hearing Date: December 01, 2021

A. <u>Subject Matter:</u>

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:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-460	KBS III 201 Spear Street, LLC	201 Spear Street San Francisco, CA	1

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, 2.20.4, 2.4.1.5 and 2.15.9.2.

B. <u>Procedural:</u>

- This hearing was held on December 1, 2021, 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, Manish Sablok, with KONE, Inc., appeared on behalf of each Applicant; 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 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: permanent variance applications per Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is sought. Upon close of hearing on December 1, 2021, the record closed and the matter was taken under submission by the Hearing Officer.
- C. <u>Findings of Fact</u>—Based on the record of this proceeding, the Board finds the following:
 - 1. Each respective Applicant intends to utilize the KONE Inc. Monospace 500 type elevator, in the quantity, at the location, specified per the above Section A.1 table.
 - 2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
 - 3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, Section 2.20.4.
 - 4. In relevant part, ASME A17.1-2004, Section 2.20.4 states:
 - 2.20.4 Minimum Number and Diameter of Suspension Ropes
 - ...The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.
 - 5. An intent of the afore cited requirement of ASME A17.1-2004, Section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.
 - 6. KONE has represented to Division and Board staff, having established an engineering practice for purposes of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010, Section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.

- 7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject to Division approval).
- 8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from Title 8, Section 3141, incorporated ASME A17.1-2004, Section 2.18.5.1.
- 9. ASME A17.1-2004, Section 2.18.5.1, specifies, in relevant part:
 - 2.18.5.1 Material and Factor of Safety.
 - ... [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5...
- 10. The Board takes notice of Title 8, Elevator Safety Order Section 3141.7, subpart (a)(10):

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

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

Board staff, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

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

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

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
 N = number of runs of rope under load. For 2:1 roping,

 N shall be two times the number of ropes used, etc.

 S = manufacturer's rated breaking strength of one rope
 f = the factor of safety from Table 2.20.3

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

Hearing Date: December 1, 2021

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. The Board incorporates by reference the following findings of fact: Subsections 5 through 9, set forth in the "Findings of Fact" Section of the Proposed Decision adopted by the Board on June 18, 2010 regarding OSHSB File No. 08-V-108M1.
- 19. Applicant proposes to install a two-section retractable platform guard (apron) consisting of a stationary upper section guard plate and a moveable lower section guard plate. To monitor the retractable mechanism, an electrical switching system will be provided to monitor for malfunction.
- 20. Section 3141 [ASME A17.1-2004, Section 2.15.9.2] states, in part:

2.15.9.2 The guard plate shall have a straight vertical face, extending below the floor surface of the platform, conforming to one of the following:

(a) where the elevator is required to conform to 2.19.2.2(b) the depth of the truck zone, where provided, plus 75 mm (3 in.), but in no case less than 1,220 mm (48 in.).

An intent of this code section is to guard a hazardous opening to the hoistway if the elevator car is intentionally or unintentionally positioned above the landing zone, by providing a guard that extends below the car platform to obstruct the opening.

- 21. Section 3141 [ASME A17.1-2004, Section 2.4.1.5] states, in part:
 - 2.4.1.5 When the car is resting on its fully compressed buffers or bumpers, no part of the car, or any equipment attached thereto or equipment traveling with the car, shall strike any part of the pit or any equipment mounted therein.
- 22. An intent of this code section is to prevent any equipment attached to the elevator car from striking any part of the pit. This could damage the elevator equipment, which may result in unsafe operation or injury.
- 23. Per Division's Review of Application (Exhibit PD-4) Applicant's proposed platform guard is similar in all material respects to installations for which a permanent variance previously has been granted. (e.g. 18-V-010M1).

KONE Monospace 500 Elevators with Retractable Platform Guard (Group IV)

Hearing Date: December 1, 2021

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

D. Conclusive Findings:

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

E. <u>Decision and Order:</u>

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:

- Minimum Diameter of Suspension Ropes: 2.20.4 (Only to the extent necessary to permit the use of 8 mm [0.0315 in.] diameter suspension ropes, where the Elevator Safety Orders require a minimum diameter of 9.5 mm [0.375]);
- Platform Guard: 2.15.9.2 (Only to the extent necessary to permit the use of a two-section retractable platform guard (apron) where the depth of the pit is not sufficient enough to prevent the platform guard from contacting the floor when the car is resting on its fully compressed buffers or bumpers); and
- Bottom Car Clearances: 2.4.1.5 (Only to the extent necessary to permit the two-section retractable platform guard (apron) to contact the pit floor).

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. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
- 11. In lieu of the straight vertical face (one-piece) platform guards (aprons) required by Section 3141 [ASME A17.1-2004, Section 2.15.9.2], a two-section retractable platform guard consisting of a stationary, upper-section guard plate and a moveable, lower-section guard plate shall be installed to conform to the following:
 - a. The stationary, upper-section guard plate shall have a straight vertical face, extending below the floor surface of the platform; the height shall be not less than 920 mm (36.2 in).

Proposed Variance Decision

KONE Monospace 500 Elevators with Retractable Platform Guard (Group IV)

Hearing Date: December 1, 2021

- b. The movable, lower-section guard plate shall:
 - i. Comply with ASME A17.1-2004, Section 2.15.9.3;
 - ii. Be provided a rubber bumper at the center of the bottom edge of the plate to absorb the impact when the toe guard strikes the concrete pit floor;
 - iii. Be provided with an electrical switch that indicates to the control system that the retractable platform guard is in its extended position (when car is away from the bottom landing), and be provided with a second electrical switch that indicates to the control system that the moveable lower section is in its retracted position (when the car is at the bottom landing), thereby overriding the first switch. Failure of either of these electrical switches or of the mechanical parts that activate these electrical switches shall cause the controller to remove power from the driving machine and brake.
- c. The two-section retractable platform guard shall be provided with smooth metal guard plates of not less than 1.5 mm (0.059 in) thick steel, or material of equivalent strength and stiffness, adequately reinforced and braced to the car platform and conforming to ASME A17.1-2004, sections 2.15.9.1 and 2.15.9.4.
- d. The overall height of the two-section retractable platform guard shall be not less than 1220 mm (48 in) when the moveable lower section is in the fully extended (deployed) position.
- e. The elevator rated speed shall be equal to or less than 200 feet per minute.
- f. 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.
- 12. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing 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" 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.

Proposed Variance Decision

KONE Monospace 500 Elevators with Retractable Platform Guard (Group IV)

Hearing Date: December 1, 2021

15. 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: December 2, 2021

Autumn Gonzalez Hearing Office

Proposed Variance Decision KONE Monospace 500 Elevators with Retractable Platform Guard (Group IV) Hearing Date: December 1, 2021

Appendix 1

	Monospace 500 Suspension Ropes Appendix 1 Table			
OSHSB File No.	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
21-V-460	077637	5	150	8,748

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

OSHSB File No.: See Section A.1 Table in Proposed Decision Dated: December 2, 2021

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: December 16, 2021
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)

PROPOSED DECISION

Hearing Date: December 1, 2021

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

A. <u>Subject Matter and Jurisdiction</u>:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-493	Bayer Healthcare	800 Dwight Way Berkeley, CA	2
21-V-524	Bonita Glen Owner, LLC	240 Bonita Glen Rd. Chula Vista, CA	2

- 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 December 1, 2021, 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 the Schindler Elevator Corporation, appeared on behalf of each Applicant; 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.

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

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

Official notice is taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on December 1, 2021, the record was closed, and the matter taken under submission by the Hearing Officer.

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

Requested Suspension Means Related Variance:

 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."

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter

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

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.

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.

<u>Suspension Members:</u> 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.

<u>Seismic Safety Switch Placement:</u> 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.

<u>Car Top Railing:</u> 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.

<u>Governor Rope and Sheave:</u> 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: December 2, 2021

Autumn Gonzalez Aearing Office

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

Hearing Date: December 1, 2021

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

<u>Suspension Means – Replacement Reporting Condition</u>

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 OSHSB File No.:
Permanent Variance by: Proposed Decision

Schindler Model 6400 Elevators (Group IV, STM Alteration)

OSHSB File No.: See Section A.1 Table in Proposed Decision Dated: December 2, 2021

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
CHRIS LASZCZ-DAVIS, Wieilibei	
	Note: A copy of this Decision must be
LAURA STOCK, Member	posted for the Applicant's employees to
LAONA STOCK, Member	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

OSHSB File Nos. See Section A.1 Table below

Permanent Variance by:

PROPOSED DECISION

Schindler Model 6400 Elevators (Group IV, STM Alteration)

Hearing Date: December 1, 2021

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:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-495	Olive/Hill Street Partners, LLC	150 West 12th Street Los Angeles, CA	4
21-V-496	Olive/Hill Street Partners, LLC	1133 South Olive Street Los Angeles, CA	2

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

B. <u>Process and Procedure:</u>

- 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 December 1, 2021, 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 each Applicant; 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.
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice is taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on December 1, 2021, the record was closed, and the matter taken under submission by the Hearing Officer.

- C. <u>Findings of Fact—Based upon the record of this proceeding, the Board finds the following:</u>
 - As each pertains to the non-circular elastomeric coated suspension members characteristic of the proposed Schindler Traction Media (STM) suspension means, 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—Wire rope sockets;

- 2. ASME A17.1-2004, Section 2.20.1 states in relevant part:
 - <u>2.20.1</u> 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.
- 3. ASME A17.1-2004, Section 2.20.2.1 states in relevant part:
 - <u>2.20.2.1 On Crosshead Data Plate</u>. 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.)
- 4. ASME A17.1-2004, Section 2.20.2.2 state in relevant part:
 - <u>2.20.2.2 On Rope Data Taq</u>. 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
- 5. ASME A17.1-2004, Section 2.20.3 states:
 - <u>2.20.3 Factor of Safety</u>. 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:

 $f = S \times N/W$ 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

6. ASME A17.1-2004, Section 2.20.4 states:

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.

7. ASME A17.1-2004, Section 2.20.9.3.4 states:

2.20.9.3.4. 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 E8, 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.).

8. ASME A17.1-2004, Section 2.20.9.5.4 states:

2.20.9.5.4. 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.

9. A central intent of these code requirements is to ensure that the material used for suspending an elevator car is steel wire rope. Steel wire rope has long been the only accepted method for suspending elevators due to its ability to be visually examined and its proven robust construction. The steel wire rope and attachment specifications contained in the current Elevator Safety Orders are not uniformly suitable for

- application to the proposed non-circular elastomeric coated steel belt suspension due to its dissimilar construction and fastening to that of wire rope.
- 10. Applicant proposes to utilize an engineered belt-type suspension product that arranges steel tension members horizontally in an elastomeric coating using specifically designed fastenings for attachment. This suspension product is provided by Schindler Elevator Corporation and is designated as "Suspension Traction Media" (STM). This suspension product has been the subject of previous permanent variance proceedings in which the Board did find equivalent safety would prevail upon grant of permanent variance subject to conditions and limitations in substantial conformity with those presently set out in the below Decision and Order (e.g. OSHSB File Nos. 15-V-349; 18-V-143).
- 11. Applicant asserts that the use of the STM product, along with the following conditions, will provide equivalent safety:
 - The STM's will be maintained in accordance with the Schindler 6400 Maintenance Control Program (MCP), Chapter 4, Special Procedures Suspension Traction Media.
 - A "traction loss monitoring" system complying with ASME A17.1-2016 will be provided.
 - A means to detect a broken STM will be provided that will cause the elevator to automatically stop at the next available landing on detection of a parted STM.
 - A means to count the number of STM bending cycles to estimate through correlation the remaining residual strength of the STMs.
 - A means to monitor the actual residual strength of the STMs in accordance with the Division issued Circular Letter E-10-04, will be provided.
 - Visual inspections of STM conducted semiannually, per MCP (Application attachment 7E & 7F).
- 12. Attached to each respective Application are documentation of laboratory testing and third party certification attesting to the suitability of the STM product for use as an elevator suspension means. The Application also contains the statement: "The STM meets or exceeds 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." ASME A17.6 is a model standard for elevator suspension means, including non-circular elastomeric coated steel belts such as the Schindler STM product. However, it does bear noting that it is not a standard referenced or incorporated into the current Title 8, Elevator Safety Orders.

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

13. 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 (see above B.4), 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.5—D.51 findings, and therein entered record upon which it was based.

Positions of Division, and Board Staff:

14. It is the concurrent well informed opinion of Division, its Elevator Unit staff, and Board staff, that grant to Applicant of permanent variance, subject to conditions and limitations in full accord with those 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.

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. <u>Decision and Order:</u>

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.

<u>Suspension Members</u>—to the limited extent variance is necessary to provide for below conditionally specified use of noncircular elastomeric-coated steel suspension members, concomitant components, and configurations, permanent variance is granted from the following Title 8, Section 3141 incorporated sections and subsections of ASME A17.1-2004:

Proposed Variance Decision Schindler Model 6400 Elevators (Group IV, STM Alteration) Hearing Date: December 1, 2021

- 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—Wire rope sockets;

Further Conditions and Limitations of Permanent Variance:

- 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:
 - Section 2.20.4.3 Minimum Number of Suspension Members
 - Section 2.20.3 Factor of Safety
 - Section 2.20.9 Suspension Member Fastening
 - 1.1.1 Additionally, the subject STMs 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.
 - 1.2. The Applicant shall not utilize the elevator unless the manufacturer has provided 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. The 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. 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 6400 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.
- 3. 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.
- 4. 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.
- 5. 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.

Proposed Variance Decision Schindler Model 6400 Elevators (Group IV, STM Alteration)

Hearing Date: December 1, 2021

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: December 2, 2021

Autumn Gon ale / Hearing Office

Proposed Variance Decision Schindler Model 6400 Elevators (Group IV, STM Alteration)

Hearing Date: December 1, 2021

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor Principal Engineer DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

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

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

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:	OSHSB File No.: See Section A.1 Table of Proposed Decision Dated: December 2, 2021
Schindler Sleep Mode Escalator (Group IV)	DECISION
The Occupational Safety and Health S PROPOSED DECISION by Autumn Gonzalez, H	Standards Board hereby adopts the attached Hearing Officer.
	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	'
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
DAVID HARRISON, Member	MAY BE FILED BY ANY PARTY WITH THE
DAVID TRANSON, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	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
LAUDA CTOCK Marshar	posted for the Applicant's employees to

read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

LAURA STOCK, Member

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 Sleep Mode Escalators

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

Hearing Date: December 1, 2021

A. <u>Subject Matter and Jurisdiction:</u>

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

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
21-V-497	County of Orange	Units A-A, A-B, A-C, A-D, B-A, and B-B 13420 Alton Parkway Irvine, CA	6
21-V-500	San Francisco Bay Area Rapid Transit District	Units S5, S7, S8 and S9 598 Market Street San Francisco, CA	4
21-V-502	San Francisco Bay Area Rapid Transit District	Units S1, S2, S6, S7, S8 899 Market Street San Francisco, CA	5
21-V-504	San Francisco Bay Area Rapid Transit District	Unit S3, S5 and S11 1150 Market Street San Francisco, CA	3

- 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,

Proposed Variance Decision Schindler Sleep Mode Escalators Hearing Date: December 1, 2021

B. Process and Procedure:

- 1. This hearing was held on December 1, 2021, 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 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.
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: Application for Permanent Variance as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and 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 December 1, 2021, the record was closed, and the matter taken under submission by the Hearing Officer.
- C. <u>Findings of Fact</u>—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.

Proposed Variance Decision Schindler Sleep Mode Escalators Hearing Date: December 1, 2021

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 1ft/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 1ft/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/s 2 (1.0 ft/sec 2).
- (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

Proposed Variance Decision Schindler Sleep Mode Escalators Hearing Date: December 1, 2021

- (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 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 Schindler escalators, 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/s^2 (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 (V_w / a) 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 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.

Proposed Variance Decision Schindler Sleep Mode Escalators Hearing Date: December 1, 2021

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: December 2, 2021

Page **9** of **10**

Proposed Variance Decision Schindler Sleep Mode Escalators Hearing Date: December 1, 2021

Exhibit 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) vs. Escalator Sleep Mode Speed (ft./min)

	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
1.00	6.76	6.39	6.01	5.64	5.26	4.88	4.51	4.13	3.76	3.38	3.01	2.63	2.25	1.88	1.50	1.13	0.75	0.38	0.00
0.95	7.12	6.72	6.33	5.93	5.54	5.14	4.75	4.35	3.96	3.56	3.16	2.77	2.37	1.98	1.58	1.19	0.79	0.40	0.00
0.90	7.52	7.10	6.68	6.26	5.85	5.43	5.01	4.59	4.18	3.76	3.34	2.92	2.51	2.09	1.67	1.25	0.84	0.42	0.00
0.85	7.96	7.52	7.07	6.63	6.19	5.75	5.30	4.86	4.42	3.98	3.54	3.09	2.65	2.21	1.77	1.33	0.88	0.44	0.00
0.80	8.45	7.98	7.52	7.05	6.58	6.11	5.64	5.17	4.70	4.23	3.76	3.29	2.82	2.35	1.88	1.41	0.94	0.47	0.00
0.75	9.02	8.52	8.02	7.52	7.01	6.51	6.01	5.51	5.01	4.51	4.01	3.51	3.01	2.51	2.00	1.50	1.00	0.50	0.00
0.70	9.66	9.13	8.59	8.05	7.52	6.98	6.44	5.90	5.37	4.83	4.29	3.76	3.22	2.68	2.15	1.61	1.07	0.54	0.00
0.65	10.41	9.83	9.25	8.67	8.09	7.52	6.94	6.36	5.78	5.20	4.62	4.05	3.47	2.89	2.31	1.73	1.16	0.58	0.00
0.60	11.27	10.65	10.02	9.39	8.77	8.14	7.52	6.89	6.26	5.64	5.01	4.38	3.76	3.13	2.51	1.88	1.25	0.63	0.00
0.55	12.30	11.61	10.93	10.25	9.56	8.88	8.20	7.52	6.83	6.15	5.47	4.78	4.10	3.42	2.73	2.05	1.37	0.68	0.00
0.50	13.53	12.78	12.02	11.27	10.52	9.77	9.02	8.27	7.52	6.76	6.01	5.26	4.51	3.76	3.01	2.25	1.50	0.75	0.00
0.45	15.03	14.20	13.36	12.53	11.69	10.86	10.02	9.19	8.35	7.52	6.68	5.85	5.01	4.18	3.34	2.51	1.67	0.84	0.00
0.40	16.91	15.97	15.03	14.09	13.15	12.21	11.27	10.33	9.39	8.45	7.52	6.58	5.64	4.70	3.76	2.82	1.88	0.94	0.00
0.35	19.32	18.25	17.18	16.10	15.03	13.96	12.88	11.81	10.74	9.66	8.59	7.52	6.44	5.37	4.29	3.22	2.15	1.07	0.00
0.30	22.55	21.29	20.04	18.79	17.54	16.28	15.03	13.78	12.53	11.27	10.02	8.77	7.52	6.26	5.01	3.76	2.51	1.25	0.00
0.25	27.05	25.55	24.05	22.55	21.04	19.54	18.04	16.53	15.03	13.53	12.02	10.52	9.02	7.52	6.01	4.51	3.01	1.50	0.00
0.20	33.82	31.94	30.06	28.18	26.30	24.42	22.55	20.67	18.79	16.91	15.03	13.15	11.27	9.39	7.52	5.64	3.76	1.88	0.00
0.15	45.09	42.59	40.08	37.58	35.07	32.57	30.06	27.56	25.05	22.55	20.04	17.54	15.03	12.53	10.02	7.52	5.01	2.51	0.00
0.10	67.64	63.88	60.12	56.36	52.61	48.85	45.09	41.33	37.58	33.82	30.06	26.30	22.55	18.79	15.03	11.27	7.52	3.76	0.00
0.05	135.27	127.76	120.24	112.73	105.21	97.70	90.18	82.67	75.15	67.64	60.12	52.61	45.09	37.58	30.06	22.55	15.03	7.52	0.00

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

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./sec.2)

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

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:	OSHSB File No.: See Section A.1 Table in Proposed Decision Dated: December 2, 2021
Schindler Model 5500 Elevators (Group IV)	DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: December 16, 2021
BARBARA BURGEL, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
KATHLEEN CRAWFORD, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
NOLA KENNEDY, Member	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
LALIDA CTOCK Manakan	posted for the Applicant's employees to
LAURA STOCK, Member	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:

OSHSB File Nos. See Section A.1 Table below

(Group IV)

Schindler Model 5500 Elevators

PROPOSED DECISION

Hearing Date: December 1, 2021

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:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
21-V-525	Murphy's Bowl LLC	10117 S. Prairie Avenue Inglewood, CA	4

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

В. 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.
- This hearing was held on December 1, 2021, in Sacramento, California, via 3. 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 each Applicant; 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.
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice is taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on December 1, 2021, 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:

 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

Hearing Date: December 1, 2021

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. <u>Basis of Decision:</u>

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. <u>Decision and Order:</u>

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.

<u>Inspection Transfer Switch</u>: 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(a).

<u>Seismic Safety Switch Placement:</u> 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).

<u>Car Top Railing:</u> 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.

Hearing Date: December 1, 2021

- 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.

Proposed Variance Decision Schindler Model 5500 Elevators (Group IV) Hearing Date: December 1, 2021

- 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

Proposed Variance Decision Schindler Model 5500 Elevators (Group IV)

Hearing Date: December 1, 2021

issued. 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: December 2, 2021

Proposed Variance Decision Schindler Model 5500 Elevators (Group IV) Hearing Date: December 1, 2021

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

Suspension Means – Replacement Reporting Condition

ADDENDUM 2

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.

Proposed Variance Decision
Schindler Model 5500 Elevators (Group IV)

Hearing Date: December 1, 2021

- 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.

Occupational Safety and Health Standards Board

Business Meeting Legislative Update

SUMMARY OF CHANGES

AB-2 Regulations: legislative review: regulatory reform. (2021-2022) No Update

AB-29 State bodies: meetings. (2021-2022) No Update

AB-62 Income taxes: credits: costs to comply with COVID-19 regulations. (2021-2022) No Update

AB-420 Public health: amusement parks and COVID-19. (2021-2022) No Update

AB-885 Bagley-Keene Open Meeting Act: teleconferencing. (2021-2022) No Update

AB-893 Emergency regulations: Division of Occupational Safety and Health: State Department of Public Health. (2021-2022) No Update

AB-1175 Division of Occupational Safety and Health: inspections and investigations: advance notice. (2021-2022) No Update

AB-1578 AB-1578 Judiciary omnibus. (2021-2022) No Update

AB-2 Regulations: legislative review: regulatory reform. (2021-2022) (Fong)

Date	Action
05/20/21	In committee: Held under submission.
05/20/21	Joint Rule 62(a), file notice suspended.
05/19/21	In committee: Set, first hearing. Referred to APPR. suspense file.
04/29/21	From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (April 28). Re-referred to Com. on APPR.

Summary:

AB 2, as introduced, Fong. Regulations: legislative review: regulatory reform.

AB-2

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

Legis	slature and Governor, as specified. The bill would repeal these provisions on January I.
	d staff are monitoring this legislation to determine if regulatory action by the Board ${\sf d}$ for.

AB-29 State bodies: meetings. (2021-2022)

(Cooper and Rubio)

Date	Action
05/20/21	In committee: Held under submission.
04/21/21	In committee: Set, first hearing. Referred to APPR. suspense file.
04/12/21	From committee: Do pass and re-refer to Com. on APPR. (Ayes 22. Noes 0.) (April 8). Re-referred to Com. on APPR.

Summary:

AB 29, as introduced, Cooper. State bodies: meetings.

AB-29

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)

Date	Action
03/22/21	In committee: Hearing postponed by committee.

Summary:

AB 62, as introduced, Gray. Income taxes: credits: costs to comply with COVID-19 regulations.

AB-62

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.

AB-420 Public health: amusement parks and COVID-19. (2021-2022)

(Quirk-Silva and Valladares)

Date	Action
03/01/21	Re-referred to Com. on A.,E.,S.,T., & I.M
02/25/21	From committee chair, with author's amendments: Amend, and re-refer to Com. on A.,E.,S.,T., & I.M. Read second time and amended.
02/25/21	Referred to Coms. on A.,E.,S.,T., & I.M. and L. & E.
02/05/21	From printer. May be heard in committee March 7.
02/04/21	Read first time. To print.

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, AB-420 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)

Date	Action
03/25/21	Re-referred to Com. on G.O.
03/24/21	From committee chair, with author's amendments: Amend, and re-refer to Com. on G.O. Read second time and amended.
02/25/21	Referred to Com. on G.O.
02/18/21	From printer. May be heard in committee March 20.
02/17/21	Read first time. To print.

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, AB-885 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)

Date	Action
02/25/21	Referred to Com. on A. & A.R.
02/18/21	From printer. May be heard in committee March 20.
02/17/21	Read first time. To print

Summary:

AB 893, as introduced, Davies. Emergency regulations: Division of Occupational Safety and Health: State Department of Public Health.

AB-893

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)

Date	Action
03/15/21	Re-referred to Com. on L. & E.
03/11/21	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/11/21	Referred to Com. on L. & E.
02/19/21	From printer. May be heard in committee March 21.
02/18/21	Read first time. To print.

Summary:

AB-1175

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.

AB-1578 Judiciary omnibus.(2021-2022)

(Frazier)

Date	Action
09/30/21	Chaptered by Secretary of State - Chapter 401, Statutes of 2021.
09/30/21	Approved by the Governor.
09/20/21	Enrolled and presented to the Governor at 3 p.m.
09/09/21	Senate amendments concurred in. To Engrossing and Enrolling. (Ayes 66. Noes 0.).
09/08/21	In Assembly. Concurrence in Senate amendments pending.
09/08/21	Read third time. Passed. Ordered to the Assembly. (Ayes 36. Noes 1.).
09/07/21	Read second time. Ordered to third reading.
09/03/21	Read third time and amended. Ordered to second reading.

AB-1578

Summary:

AB 1578, Committee on Judiciary. Judiciary omnibus.

(1) Existing law, known as the Automobile Sales Finance Act, prohibits the seller or holder of a conditional sale contract for a motor vehicle from accelerating the maturity of any part or all of the amount due under the contract or repossessing the vehicle in the absence of default in the performance of any of the buyer's obligations under the contract. That act establishes a right in the buyer to reinstate a conditional sale contract for a motor vehicle after default, details various methods by which to cure the default, and in all cases requires reimbursing the seller or holder for all reasonable and necessary collection and repossession costs and fees incurred. A willful violation of these provisions is a crime.

This bill would instead establish that in order to cure a default by any method, the buyer is required to reimburse the seller or holder for all reasonable and necessary collection and repossession costs and fees actually paid by the seller or holder. By changing the definition of a crime, this bill would impose a state-mandated local program.

(2) Existing law, the Eminent Domain Law, authorizes any person authorized to acquire property for a particular use by eminent domain to enter upon property to make photographs, studies, surveys, examinations, tests, soundings, borings, samplings, or appraisals or to engage in similar activities reasonably related to acquisition or use of the property for that use. Existing law provides that if the entry and activities upon property cause actual damage to or substantial interference with the possession or use of the property, the owner may recover for the damage or interference in a civil action or by application to the court. If funds are on deposit, upon application of the owner, the court is required to determine and award the amount the owner is entitled to recover and order that amount paid out of the funds on deposit.

This bill, among other things, would provide that the civil action in which the owner could collect damages would be as a defendant in an eminent domain proceeding affecting the property. The bill would provide that when the owner seeks funds on deposit upon application to the court, the owner has a right to a jury trial, unless waived, on the amount of compensation for actual damage or substantial interference with the possession or use of the property. The bill would also provide that if the owner seeks damages, the answer is required to include a statement that the defendant claims compensation under the specified provision, but need not specify the amount of that compensation, and if the owner seeks compensation for losses caused by the plaintiff's unreasonable conduct prior to commencing the eminent domain proceeding, the answer is required to include a statement that the owner claims compensation for that loss, but need not specify the amount of the compensation.

(3) Existing law establishes procedures for the dismissal and suspension of school employees. Existing law prohibits a permanent school employee from being dismissed, except for one or more of certain enumerated causes, and authorizes the suspension of a permanent school employee on specified grounds. Existing law authorizes the governing board of a school district to notify the permanent school employee of its intention to dismiss or suspend the employee, and authorizes the employee to demand a hearing on the charges before a Commission on Professional Competence or an administrative law judge. Existing law requires the hearing to be conducted in a place selected by agreement among the members of the Commission on Professional Competence, and, in the absence of agreement, requires the place to be selected by the administrative law judge.

This bill, notwithstanding the latter provision, would authorize the parties to mutually agree to hold the hearing by telephone, videoconference, or other electronic means.

(4) Existing law requires an administrative hearing to be open to public observation, unless otherwise specified, and requires certain conditions to be met if the hearing is conducted by telephone, television, or other electronic means, including that the public have an opportunity to be physically present at the place where the presiding officer is conducting the hearing. Existing law prescribes specified locations where an administrative hearing is authorized to take place.

This bill would additionally specify that, to the extent a hearing is conducted by telephone, television, or other electronic means, and is not closed as otherwise required by law, the requirement that the meeting be open to public observation can be satisfied if members of the public have an opportunity to be virtually present where the presiding officer is conducting the hearing. The bill would define the term "present" as either by providing a designated location from which members of the public can observe the meeting via a live audio or a video feed of the hearing made available to the public on the internet or by teleconference.

Existing law requires a writing served to a person in conjunction with an administrative hearing to meet specified requirements, including that the writing be sent by mail to the person's last known mailing address. Existing law also specifies rules for discovery and evidence review in relation to an administrative hearing.

This bill would additionally authorize the writing to be an electronic document, and would allow a writing, electronic document, or notice to be delivered to the person's last known mailing address by electronic means. The bill would specify that discovery of certain categories of evidence may be conducted electronically by means prescribed by an administrative law judge.

Existing law authorizes the presiding officer of an administrative hearing to conduct all or part of a hearing by telephone, television, or other electronic means, as provided, unless a party objects.

This bill would instead limit a party to objecting only when the entire hearing is being conducted by telephone, television, or other electronic means and require the presiding officer to consider the party's objections. The bill would authorize the presiding officer, in their discretion, to structure the hearing to address the specific objections and to require specified persons to be present in a physical location during all or part of the hearing.

(5) Existing law requires the Fair Employment and Housing Council to adopt, promulgate, amend, and rescind suitable rules, regulations, and standards that either implement various provisions with regard to prohibiting discrimination or to carry out all other functions and duties of the council, as provided.

This bill would add the prohibition on sex discrimination in wages to the provisions with regard to discrimination.

(6) Existing law, on and after January 1, 2021, makes it an unlawful employment practice for any government employer or employer with 5 or more employees to refuse to grant a request by any employee with more than 12 months of service with the employer, and who has at least 1,250 hours of service with the employer during the previous 12-month period or who meets certain other requirements, to take up to a total of 12 workweeks in any 12-month period to, among other things, bond with a new child of the employee or to care for themselves or a child, parent, grandparent, grandchild, sibling, spouse, or domestic partner, as specified.

This bill would expand the population that an employee can take leave to care for to include parents-in-law.

(7) Existing law specifically grants the Department of Human Resources the powers, duties, and authority necessary to operate the state civil service system in accordance with Article VII of the California Constitution, the Government Code, the merit principle, and applicable rules duly adopted by the State Personnel Board. Existing law creates the Limited Examination and Appointment Program (LEAP), which the Department of Human Resources administers, to provide an alternative to the traditional civil service examination and appointment process to facilitate the hiring of persons with disabilities. Existing law also repeals, on January 1, 2022, certain provisions of LEAP regarding conducting competitive examinations to determine the qualifications and readiness of persons with disabilities for state employment.

This bill would extend the repeal date to January 1, 2023.

(8) Existing law makes a person who negligently, or in violation of the law, sets a fire, allows a fire to be set, or allows a fire kindled or attended by the person to escape onto any public or private property liable for the fire suppression costs incurred in fighting the fire, the cost of providing rescue or emergency medical services, the cost of investigating and making any reports with respect to the fire, and the costs relating to accounting for the fire and the collection of specified funds. Existing law applies the 2-year statute of limitations applicable to an action upon a contract, obligation, or liability not founded upon an instrument of writing to an action brought pursuant to these provisions.

Existing law provides that the statute of limitations for specified actions, including an action upon a liability created by statute other than a penalty or forfeiture action, is 3 years.

This bill would apply this 3-year statute of limitations to an action brought pursuant to the above-described provisions regarding liability for fires.

(9) Existing law provides that a transfer of payment rights from a settlement obligor or an annuity issuer under a structured settlement agreement is void unless the transfer has been approved in advance by a court based on specified court findings. Existing law defines "structured settlement agreement" for these purposes to mean an arrangement for periodic payment of damages established by settlement or judgment in resolution of a tort claim in which the payment of the judgment or award is paid in whole, or in part, in periodic tax-free payments rather than a lump-sum payment. Existing law requires a transferee, at the time of filing a petition for court approval of a transfer of structured settlement payment rights, to file with the Attorney General a copy of the transferee's petition for court approval, and other specified, related documents. Existing law authorizes the Attorney General to charge a reasonable fee for the filing of the transfer agreement.

This bill would eliminate the requirement to file those documents with the Attorney General and instead would require the transferee to retain those documents for 3 years after the date

of the last payment under the structured settlement agreement, or for 5 years after the date of the transfer, whichever date is later.

(10) Existing law, the Lanterman Developmental Disabilities Services Act, requires the State Department of Developmental Services to contract with regional centers to provide services and supports to individuals with developmental disabilities. Under existing law, the regional centers purchase needed services for individuals with developmental disabilities through approved service providers or arrange for those services through other publicly funded agencies. Existing law requires a service agency, defined, in part, as a developmental center or regional center, to have a fair hearing procedure that meets prescribed requirements, including adequate notice standards and that if a fair hearing is requested, the claimant has the right to appear in person with counsel or with other representatives of the claimant's choosing. Existing law requires the fair hearing to be held at a time and place reasonably convenient to the claimant and the authorized representative, as specified.

This bill would authorize a location for the above-described fair hearing to include a hearing by telephone, videoconference, or other electronic means, by agreement.

(11) Existing law requires all applications for change of names to be made to the superior court of the person's county of residence, except for minors with a court-appointed guardian. Existing law requires the court in which a petition for a change of name has been filed to issue an order to show cause inviting interested persons to file written objections to the proposed change of name, as specified.

Existing law authorizes a person to file a petition with the superior court seeking a judgment recognizing their change of gender. Existing law requires all petitions to recognize a change of gender for a minor with a court-appointed guardian to be filed with the court that appointed the guardian.

This bill would require a petition for a change of name or gender for a minor with a courtappointed guardian or a minor who is a ward of the juvenile court to be made in the court having jurisdiction over the minor. The bill would exempt an action for a change of name of a minor or nonminor dependent under the jurisdiction of the juvenile court from the requirement that the court issue an order to show cause.

- (12) The bill would also make nonsubstantive and conforming changes.
- (13) This bill would incorporate additional changes to Section 52.1 of the Civil Code proposed by SB 2, additional changes to Sections 1276 and 1277 of the Code of Civil Procedure proposed by AB 218, and additional changes to Section 12945.2 of the Government Code proposed by AB 1041 to be operative only if this bill and SB 2, AB 218, or AB 1041 are enacted and this bill is enacted last.

(14) 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 for cost and impacts to its meeting requirements.

Occupational Safety and Health Standards Board

Business Meeting Executive Officer's Report