Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

April 18, 2024

Gilroy City Hall Council Chambers 7351 Rosanna Street Gilroy, California

AND

Via teleconference / videoconference

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 www.dir.ca.gov/oshsb



MISSION STATEMENT

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

AGENDA

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

PLEASE NOTE: In accordance with section 11123 of the Government Code, Board members, as well as members of the public, may elect to participate via videoconference.

April 18, 2024 at 10:00 a.m.

Attend the meeting in person:

Gilroy City Hall Council Chambers 7351 Rosanna Street Gilroy, CA 95020

Attend the meeting via videoconference:

- 1. Go to www.webex.com
- 2. Select "Join a Meeting"
- 3. Enter the meeting number: 1469 63 6425
- 4. Join the meeting through your WebEx application OR through your browser
- 5. Videoconference will be opened to the public at 9:50 a.m.

Attend the meeting via teleconference:

- 1. Dial (844) 992-4726
- 2. Enter the meeting number **1469 63 6425** and follow the prompts
- 3. 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.

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Public Comment Queue:

Those attending the Occupational Safety and Health Standards Board (Board) meeting in person will be added to the public comment queue on the day of the meeting.

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

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

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

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

I. CALL TO ORDER AND INTRODUCTIONS

II. PUBLIC MEETING (Open for Public Comment)

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

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

Any individual or group wishing to make a presentation during the Public Meeting is requested to contact Sarah Money, Executive Assistant, at (916) 274-5721 at least three weeks 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</u> discussion and action as the Board determines to be appropriate.

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

April 2024 Agenda Page 3 of 6

A. PROPOSED VARIANCE DECISIONS FOR ADOPTION

1. Consent Calendar

B. REPORTS

- 1. Legislative Update
- 2. Division Update
- 3. Acting Executive Officer's Report

C. NEW BUSINESS

1. Future Agenda Items

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

D. CLOSED SESSION

Matters Pending Litigation

- 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

Matters on Appeal

1. 22-V-054T Operating Engineers Local 3, District 80

<u>Personnel</u>

E. RETURN TO OPEN SESSION

1. Report from Closed Session

April 2024 Agenda Page 4 of 6

F. ADJOURNMENT OF THE BUSINESS MEETING

Next Meeting: May 16, 2024

Cal/EPA Building

Byron Sher Auditorium

1001 | Street

Sacramento, CA 95814

10:00 a.m.

April 2024 Agenda Page 5 of 6

CLOSED SESSION

- 1. If necessary, consideration of personnel matters. (GC section 11126(a)(1)).
- 2. If necessary, consideration of pending litigation pursuant to GC section 11126(e)(1).
- 3. If necessary, to deliberate on a pending decision. (GC section 11126(c)(3)).

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 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 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.

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TRANSLATION

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

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

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

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

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

Occupational Safety and Health Standards Board

Meeting Notice

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

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 ("Board") of the State of California has set the time and place for a Public Meeting and Business Meeting:

PUBLIC MEETING: On April 18, 2024, at 10:00 a.m.

in the Council Chambers of the Gilrov City Hall

7351 Rosanna Street, Gilroy, California

as well as via the following:

Videoconference at www.webex.com (meeting ID 1469 63 6425)

- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- 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 April 18, 2024, at 10:00 a.m. in the Council Chambers of the Gilroy City Hall 7351 Rosanna Street, Gilroy, California

as well as via the following:

- Videoconference at www.webex.com (meeting ID 1469 63 6425)
- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- 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 Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1 (866) 326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1 (800) 735-2929 (TTY) or 1 (800) 855-3000 (TTY-Spanish).

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

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

OCCUPATIONAL SAFETY AND HEALTH

STANDARDS BOARD

DAVE THOMAS, Chairman

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS APRIL 18, 2024, MONTHLY BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON March 27, 2024

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 13-V-159M1	Park 20 Evergreen SPE, LLC	Elevator	GRANT
2. 18-V-533M1	GI TC Peery Park	Elevator	GRANT
3. 18-V-537M1	GI TC Peery Park	Elevator	GRANT
4. 20-V-476M2	Los Angeles World Airports	Elevator	GRANT
5. 22-V-534M1	Chabot-Las Positas College Community District	Elevator	GRANT
6. 22-V-535M1	Chabot-Las Positas College Community District	Elevator	GRANT
7. 23-V-010M1	Mercy Housing California 82, L.P.	Elevator	GRANT
8. 24-V-011	NOP - 560 Mission, LLC	Elevator	GRANT
9. 24-V-042	Clovis Rodeo Association	Elevator	GRANT
10. 24-V-059	Sutter Bay Hospitals dba ABSMC	Elevator	GRANT
11. 24-V-060	Bardas Investment Group	Elevator	GRANT
12. 24-V-061	RMG SBBC San Pedro, LP	Elevator	GRANT
13. 24-V-062	Crafton Hills College	Elevator	GRANT
14. 24-V-065	RMMK-II, LLC dba Omni Los Angeles Hotel at California Plaza	Elevator	GRANT
15. 24-V-066	Millennium Alvarado, LLC	Elevator	GRANT
16. 24-V-067	Cleveland Ave, LP	Elevator	GRANT
17. 24-V-068	The Kelsey Civic Center, L.P.	Elevator	GRANT
18. 24-V-069	The County of San Diego	Elevator	GRANT
19. 24-V-070	HANIMPJV North Rollins Burlingame CA LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
20. 24-V-071	120 Via Merida Owner LP	Elevator	GRANT
21. 24-V-072	County of Yuba	Elevator	GRANT
22. 24-V-073	Broadstone MV Owner, LLC	Elevator	GRANT
23. 24-V-074	Doheny-Vidovich Partners	Elevator	GRANT
24. 24-V-075	The Arizona/Third Street Partnership	Elevator	GRANT
25. 24-V-076	Backhouse Investors, LLC	Elevator	GRANT
26. 24-V-077	The Regents of the University of California	Elevator	GRANT
27. 24-V-078	ICG-Stream Polk Ave, LLC	Elevator	GRANT
28. 24-V-079	Metro Hospitality Services	Elevator	GRANT
29. 24-V-080	Ruby Street L.P.	Elevator	GRANT
30. 24-V-081	MacArthur A, LP	Elevator	GRANT
31. 24-V-082	Dignity Health	Elevator	GRANT
32. 24-V-083	San Francisco State University	Elevator	GRANT
33. 24-V-084	San Francisco State University	Elevator	GRANT
34. 24-V-085	MP Sonora Court Associates, L.P.	Elevator	GRANT
35. 24-V-086	8561 Belmont LLC	Elevator	GRANT
36. 24-V-087	BOZ SC Riverfront Owner, LLC	Elevator	GRANT
37. 24-V-088	MACT Health Board, Inc.	Elevator	GRANT
38. 24-V-089	Los Angeles City College	Elevator	GRANT
39. 24-V-090	Miramar Gold, L.P.	Elevator	GRANT
40. 24-V-091	SIC-Mountain Bay Plaza LLC	Elevator	GRANT
41. 24-V-092	Apple Seven SPE San Diego, Inc.	Elevator	GRANT
42. 24-V-093	CFT NV Developments, LLC	Elevator	GRANT
43. 24-V-094	Canal Alliance	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
44. 24-V-095	SSC Palmdale, L.P.	Elevator	GRANT
45. 24-V-096	San Bernardino City Unified School District	Elevator	GRANT
46. 24-V-097	TMP II Apts LLC	Elevator	GRANT
47. 24-V-098	Union Sanitary District	Elevator	GRANT
48. 24-V-099	1773 Oxford Street LLC	Elevator	GRANT
49. 24-V-100	Chinatown Service Center	Elevator	GRANT
50. 24-V-101	2361 Fox Hills Drive, LLC	Elevator	GRANT
51. 24-V-102	Bellarmine College Preparatory	Elevator	GRANT
52. 24-V-104	600 San Pedro LP	Elevator	GRANT
53. 24-V-105	Ion Aero LLC	Elevator	GRANT
54. 24-V-106	San Bernardino Extended Stay LLC	Elevator	GRANT
55. 24-V-107	1667 Allesandro 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

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In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 13-V-159M1 Proposed Decision Dated: March 28, 2024
Park 20 Evergreen SPE, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 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.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.

LAURA STOCK, Member

Note: A copy of this Decision must be posted for the Applicant's employees to

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

Representatives.

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

In the Matter of A	pplication to Modify	Permanent Variance No.: 13-V-159M1
Park 20 Evergreen	·	PROPOSED DECISION
Turk 20 Evergreen	131 L, LLC	Hearing Date: March 27, 2024 Location: Zoom

A. Subject Matter

1. 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 Regulations¹. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
13-V-159	Essex Elkhorn, LP

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing, Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 13-V-159.
- Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states that the person or entity named in Application section 1, became the owner of the conveyance(s) subject to the existing variance referenced in Application section 2, as the term conveyance owner is defined per California Code of Regulations, title 8, section 403(o).
- 3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 13-V-159M1, 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 Permanent Variance No. 13-V-159.
- 4. The Board finds the Application section 3, declaratory statements of the Applicant signatory 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, in substantial part, grant of preexisting Permanent Variance No. 13-V-159 was based.
- 5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 13-V-159M1, to be in fact:

Park 20 Evergreen SPE, LLC

D. Decision and Order

1. Variance application 13-V-159M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 13-V-159M1, and Permanent Variance No.13-V-159, shall be:

Park 20 Evergreen SPE, LLC

- 2. Permanent Variance No. 13-V-159, only being modified as 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. 13-V-159M1.
- 3. 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.
- 4. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Michelle Jorio
Michelle Iorio, Hearing Officer

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

Dated: 3/28/2024

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:	Permanent Variance No.: 18-V-533M1 Proposed Decision Dated: March 28, 2024
GI TC Peery Park	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

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

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 18-V-533M1
GI TC Peery Park	PROPOSED DECISION
	Hearing Date: March 27, 2024
	Location: Zoom

A. Subject Matter

1. 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 Regulations¹. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
18-V-533	Bravelane III Property LLC

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. Seq. of the Occupational and Safety and Health Standards Board's ('Board" or "OSHSB") procedural regulations.

B. Procedural

- This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing Amanda Costelli, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 18-V-533.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states that the person or entity named in Application section 1, became the owner of the conveyance(s) subject to the existing variance referenced in Application section 2, as the term conveyance owner is defined per section 403(o).
- 3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 18-V-533, 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 Permanent Variance No. 18-V-533.
- 4. The Board finds the Application section 3, declaratory statements of the Applicant signatory 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, in substantial part, grant of preexisting Permanent Variance No. 18-V-533 was based.
- 5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 18-V-533 and 18-V-533M1, to be in fact:

GITC Peery Park

D. Decision and Order

1. Variance application is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 18-V-533, and Permanent Variance No. 18-V-533M1, shall be:

GITC Peery Park

2. Permanent Variance No. 18-V-533, being only modified as 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. 18-V-533M1.

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

Dated: March 28, 2024

Michelle Jorio
Michelle Iorio, 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:	Permanent Variance No.: 18-V-537M1 Proposed Decision Dated: March 28, 2024
GI TC Peery Park	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Health	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	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
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.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

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

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 18-V-537M1
GI TC Peery Park	PROPOSED DECISION
	Hearing Date: March 27, 2024
	Location: Zoom

A. Subject Matter

1. 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 Regulations¹. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
18-V-537	Bravelane III Property LLC

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. Seq. of the Occupational and Safety and Health Standards Board's ('Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing Amanda Costelli, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 18-V-537.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states that the person or entity named in Application section 1, became the owner of the conveyance(s) subject to the existing variance referenced in Application section 2, as the term conveyance owner is defined per section 403(o).
- 3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 18-V-537, 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 Permanent Variance File No. 18-V-537.
- 4. The Board finds the Application section 3, declaratory statements of the Applicant signatory 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, in substantial part, grant of preexisting Permanent Variance No. 18-V-537 was based.
- 5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 18-V-537 and 18-V-537M1, to be in fact:

GITC Peery Park

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

1. Variance application is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 18-V-537, and Permanent Variance No. 18-V-537M1, shall be:

GITC Peery Park

2. Permanent Variance No. 18-V-537, being only modified as 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. 18-V-537M1.

Michelle Lorio

Michelle Iorio, Hearing Officer

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

Dated: March 28, 2024

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:	Permanent Variance No.: 20-V-476M2 Proposed Decision Dated: March 28, 2024
Los Angeles World Airports	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	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
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

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

In the Matter of Application to Modify Permanent Variance by:	OSHSB File No.: 20-V-476M2
Los Angeles World Airports	PROPOSED DECISION
Los Angeles World Amports	Hearing Date: March 27, 2024

A. Subject Matter

1. 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 Regulations¹, for each conveyance having the specified preexisting variance location address of record:

Preexisting OSHSB File No.	Applicant Name	Preexisting Variance Address of Record	Preexisting No. of Escalators
20-V-476M1 and 20-V-476	Los Angeles World Airports	Los Angeles Interntational Airport (LAX) LAX Consolidated Rent-A- Car (CONRAC) 5251 W. 98th Street, Los Angeles, CA	18

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

B. <u>Procedural:</u>

1. This hearing was held on March 27, 2024 via videoconference by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.

2. At the hearing, Jennifer Linares appeared on behalf of the Applicant's representative, the Schindler Elevator Corporation, and Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Order Provisions

Applicant seeks a permanent variance from Section 3141.11 and ASME A17.1-2004 Sections 6.1.4.1, 6.1.4.1.2, and 6.1.6.4. The relevant language of those sections are below:

- Section 3141.11 [ASME A17.1-2004, Section 6.1.4.1] states:
 "6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel.
 The speed attained by an escalator after start-up shall not be intentionally varied."
- 2. Section 3141.11 [ASME A17.1-2010, Section 6.1.4.1.2] states: "Variation of the escalator speed after start-up shall be permitted provided the

escalator installation conforms to all of the following:

- (a) The acceleration and deceleration rates shall not exceed 0.3 m/s2 (1.0 ft/sec2).
- (b) The rated speed is not exceeded.
- (c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).
- (d) The speed shall not automatically vary during inspection operation.
- (e) Passenger detection means shall be provided at both landings of the escalator such that
 - (1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)
 - (2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate (3) passenger detection means shall remain active at the egress landing to detect
 - any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate

- (f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.
- (g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only."
- 3. Section 3141.11 [ASME A17.1-2004, Section 6.1.6.4] states: "6.1.6.4 Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type."

D. <u>Findings of Fact</u>:

- 1. On February 18, 2021, the Board granted a permanent variance (OSHSB File No. 20-V-476) to Los Angeles World Airports, for eighteen (18) conveyance(s) located at Los Angeles International Airport (LAX), LAX Consolidated Rent-A-Car (CONRAC), 5401 98th Street, Los Angeles, California.
- 2. On February 17, 2022, the Board granted a permanent variance modification (OSHSB File No. 20-V-476M1) to modify the address to Los Angeles World Airports, for eighteen (18) conveyance(s) located at Los Angeles International Airport (LAX), LAX Consolidated Rent-A-Car (CONRAC), 5251 W. 98th Street, Los Angeles, California.
- 3. The Applicant now requests modification of previously granted Permanent Variance 20-V-476M1 to include the addition of Photocell Infrared Sensors, also referred to as Skirt Light Barries located at the top and bottom comb plates.
- 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. The Applicant states that the sensors used to detect passenger traffic will 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. The Applicant states 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 to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.
- 7. The Applicant states that the sensors used to detect passenger traffic are installed and arranged in a double redundant, fail-safe fashion with 2 sensors installed at each end of the escalator providing the same coverage field. This arrangement allows for passenger traffic detection in the case of any single sensor failure and provides 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. The passenger traffic sensors are wired to the escalator controller in a fail-safe manner that prevents "sleep mode" activation if the wiring is cut or disconnected.
- 8. The Applicant indicates that additional to the radar sensors, photocell infrared sensors (also referend to as Skirt Light Barriers) are provided at the upper and lower comb plates for extra monitoring and faster detection of radar sensor failures. The Applicant asserts "these photocell sensors are not used for passenger detection and do not trigger escalator acceleration from crawl speed to full speed".
- 9. Cal/OSHA notes that the Applicant proposed "sleep mode" function meets the requirements of ASME A17.1-2010, Section 6.1.4.1.2 regarding the varying the speed of an escalator after start-up.
- 10. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (OSHSB File No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring. Conditions set forth in the previous variance decisions allow for the disabling of the handrail speed monitoring device while the escalator is operating in slow speed "sleep mode".
- 11. The Applicant intends to disable the handrail speed monitoring during sleep mode operation.
- 12. The apparatus that monitors handrail speed is designed to be effective while the escalator is running at rated speed and may not be capable of detecting handrail speed anomalies in compliance with the Elevator Safety Orders at a reduced speed. Cal/OSHA supports this arrangement as it occurs when no passengers are expected to be riding the escalator.
- 13. Cal/OSHA believes the "sleep mode", function as proposed by the Applicant along with the recommended conditions provides equivalent safety.

- 14. The Applicant's proposal to provide "sleep mode" capability to existing escalators is similar to other installations for which a permanent variance has been granted (OSHSB File No. 23-V-433).
- 15. Cal/OSHA recommends that a 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.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

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

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 Section 3141.11 and ASME A17.1-2004 Sections 6.1.4.1, 6.1.4.1.2, and 6.1.6.4, subject to each and all of the following requirements and limitations:

- 1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:
 - (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s2 (1 ft/sec2) when transitioning between speeds.
 - (b) Failure of a single proximity sensor, including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s2 (1 ft/sec2).
 - (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.
 - (d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.
 - (e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according

to Appendix 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

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d = (Vf - Vs) x (Vw / a) where

d = detection distance (ft)

Vf = normal speed (ft/min) [not to exceed 100 ft/min]

Vs = slow "sleep" speed (ft/min) [not less than 10 ft/min]

Vw = passenger walking speed (4.5 ft/sec)

a = acceleration/deceleration rate (ft/sec2)[not to exceed 1 ft/sec2]
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- (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. Photocell Infrared Sensors, also referred to Skirt Light Barriers located at the top and bottom comb plates, shall not cause the escalator to accelerate or decelerate the speed under any conditions or circumstances.
- 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. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.
- 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 Cal/OSHA, 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. Cal/OSHA shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by Cal/OSHA 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 sections 411.2 and 411.3.

9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in procedural accordance with 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 Board for consideration of adoption.

Dated: March 28, 2024 Michelle Corio

Michelle Iorio, 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:	Permanent Variance No.: 22-V-534M1 Proposed Decision Dated: March 28, 2024
Chabot-Las Positas College Community District	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 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	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:

PROPOSED DECISION

Chabot-Las Positas College Community District

Hearing Date: March 27, 2024

Permanent Variance No.: 22-V-534M1

Location: Zoom

A. Subject Matter

1. 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 Regulations¹, for each elevator having the specified preexisting variance location address of record:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22-V-534	Chabot-Las Positas College Community District	Chabot College Library 2555 Hesperian Blvd. Hayward, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. Seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-534.
- 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 22-V-534 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 3. Cal/OSHA 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 Permanent Variance No. 22-V-534.
- 4. The Board finds the above subpart C.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 22-V-534 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-534, to be:

Chabot College Library 25555 Hesperian Blvd. Hayward, CA

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

1. Permanent Variance Application No. 22-V-534M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-534, and 22-V-534M1, shall have the following address designation:

Chabot College Library 25555 Hesperian Blvd. Hayward, CA

2. Permanent Variance No. 22-V-534, 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. 22-V-534M1.

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

Dated: March 28, 2024

Michelle Jorio
Michelle Iorio, 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:	Permanent Variance No.: 22-V-535M1 Proposed Decision Dated: March 28, 2024
Chabot-Las Positas College Community District	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Health	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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 STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS
CLIDIC LACTOT DAVIS March or	OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

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

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

In the Matter of Application to Modify

Permanent Variance by:

Permanent Variance No.: 22-V-535M1

Chabot-Las Positas College

Community District

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

A. Subject Matter

1. 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 Regulations¹, for each elevator having the specified preexisting variance location address of record:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22-V-535	Chabot-Las Positas College Community District	Chabot College Library 2555 Hesperian Blvd. Hayward, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. Seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
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PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-535.
- 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 22-V-535 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 3. Cal/OSHA 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 Permanent Variance No. 22-V-535.
- 4. The Board finds the above subpart C.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 22-V-535 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-535, to be:

Chabot College Library 25555 Hesperian Blvd. Hayward, CA

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

1. Permanent Variance Application No. 22-V-535M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-535, and 22-V-535M1, shall have the following address designation:

Chabot College Library 25555 Hesperian Blvd. Hayward, CA

2. Permanent Variance No. 22-V-535, 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. 22-V-535M1.

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

Dated: March 28, 2024

Michelle Lorio

Michelle Iorio, 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:	Permanent Variance No.: 23-V-010M1 Proposed Decision Dated: March 28, 2024
Mercy Housing California 82, L.P.	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 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.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.

LAURA STOCK, Member

Note: A copy of this Decision must be posted for the Applicant's employees to

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

Representatives.

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

In the Matter of Application to Modify
Permanent Variance by:

Mercy Housing California 82, L.P.

Permanent Variance No.: 23-V-010M1

PROPOSED DECISION

Hearing Date: March 27, 2024
Location: Zoom

A. Subject Matter

1. 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 Regulations¹, for each elevator having the specified preexisting variance location address of record:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
23-V-010	Mercy Housing California 82, L.P.	Treasure Island C3.1 1 Avenue of the Palms San Francisco, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. Seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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		Description of Exhibit	
PD-1	Application for modification of Permanent Variance			
PD-2	OSHSB Notice of Hearing			
PD-3	Cal/OSHA Review of Variance Application			
PD-4	Review Draft-1 Proposed Decision			

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 23-V-010.
- 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 23-V-010 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 3. Cal/OSHA 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 Permanent Variance No. 23-V-010.
- 4. The Board finds the above subpart C.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 23-V-010 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 23-V-010, to be:

Treasure Island C3.1 78 Johnson St. San Francisco, CA

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

1. Permanent Variance Application No. 23-V-010M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 23-V-010, and 23-V-010M1, shall have the following address designation:

Treasure Island C3.1 78 Johnson St. San Francisco, CA

2. Permanent Variance No. 23-V-010, 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. 23-V-010M1.

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

Dated: March 28, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

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

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

In the Matter of Application for Permanent Variance regarding:

Otis Gen2O and/or Gen3Peak Alteration with Variant Governor Rope and Sheaves (Group IV)

Permanent Variance No.: see section

A.1 table of

Proposed Decision Dated: March 28, 2024

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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
LAUDA STOCK AA	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:	Permanent Variance No: Per Section A.1 Table
Otis Gen2O and/or Gen3Peak Alteration with Variant Governor Rope and Sheaves	PROPOSED DECISION
(Group IV)	Hearing Date: March 27, 2024 Location: Zoom

A. Subject Matter

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
24-V-011	NOP - 560 Mission, LLC	560 Mission St. San Francisco, CA	3

2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024 via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens, appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA")
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

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

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulations

- The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Applicability of Alteration Requirements; 8.7.1.1(b) (to permit variance from the code sections below);
 - b. 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 (to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - c. Cartop Railing: 2.14.1.7.1 (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);
 - d. Inspection transfer switch: 2.26.1.4.4(a) (to permit the inspection transfer switch to reside at a location other than the machine room);
 - e. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (to permit the seismic reset switch to reside at a location other than the machine room);
 - f. Governor Rope Diameter: 2.18.5.1 (to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.
 - g. Pitch Diameter: 2.18.7.4 (to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

D. Findings of Fact

1. The Board incorporates by reference the findings stated in:

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

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from sections 3141 and

3141.2(a), only to the extent necessary to allow variances from the following provisions of ASME A17.1-2004 made applicable by those provisions:

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

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

- 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 Cal/OSHA 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 Cal/OSHA.
- 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 Cal/OSHA.
- g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.
- 3. With respect to each elevator subject to this variance, the Applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
- 4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.
- 5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person who, or organization that, installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;
 - g. Lubrication information.
- 6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control

- panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
- 10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

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

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
- 12. The speed governor rope and sheaves shall comply with the following:

- a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
- b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
- c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
- 13. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
- 14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 15. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, 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; that condition is incorporated herein by this reference.
- 17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per 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), Cal/OSHA, or by the Board on its own motion in the procedural manner prescribed.

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

Dated: 3/28/2024

Michelle Iorio, Hearing Officer

Michelle Lorio

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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-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 Cal/OSHA 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 Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA 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:	Permanent Variance No.: 24-V-042 Proposed Decision Dated: March 28, 2024
Arrow Lift Symmetry Vertical Platform Lift	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024
	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.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be

provided to the employees' Authorized

Representatives.

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

In the Matter of Application for Permanent Variance Regarding:

Arrow Lift Symmetry Vertical Platform Lift

Permanent Variance No.: Per table, in

Procedural Matters below

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

A. Procedural Matters

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-042	Clovis Rodeo Association	748 Rodeo Drive Clovis, CA	1

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et.seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024 via videoconference, by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Patrick Austin with Arrow Lift of California, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, rerferences are to the california Code of Regulations, title 8.

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews of variance application
PD-4	Review Draft-1 Proposed Decision

Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

B. Findings of Fact

1. Each respective Applicant intends to utilize the vertical platform (wheelchair) lift(s) in the quantity, at the location, specified per the above Section A.1 table.

748 Rodeo Drive Clovis, CA

- 2. The subject vertical lift is proposed to be a Symmetry Model VPL/VPC SLH-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12 foot maximum vertical rise allowed by ASME A18.1-2003, section 2.7.1—the State of California standard in force at the time of this Decision.
- 3. 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.).
- 4. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, absent subsequent harm attributable to such variance being reported by Division. (E.g. OSHSB File Nos. 13-V-260, 15-V-097, 17-V-270, 18-V-278, 19-V-256).
- 5. With respect to the equivalence or superior of safety, conditions and limitations of the Decision and Order are in material conformity with findings and conditions of prior Board permanent variance decisions, including the above cited.
- 6. Per its written Review of Application for Permanent Variance, Exhibit PD-3, it is the informed opinion of Division that equivalent safety (at minimum) will be achieved upon grant of presently requested permanent variance, subject to conditions and limitations incorporated into the below Decision and Order.

C. Conclusive Findings

A preponderance of the evidence supports the finding 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 the Elevator Safety Orders from which variance is being sought.

D. Decision and Order

The Application for Permanent Variance of OSHSB File No. 24-V-042 is conditionally GRANTED to limited extent, upon the Board's adoption of this Proposed Decision. They 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 it restricts the vertical rise of a wheelchair lift to a maximum of 12 feet, with respect to one (1) Vertical Platform Lift Symmetry Model VPL/VPC SLH-168, to be located at:

The above referenced vertical platform lift shall be subject to the following further conditions and limitations:

- a. 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.
- b. 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 otherwise.
- c. 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.
- d. 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:
 - Platform driving means examination;
 - ii. Platform examination;
 - iii. Suspension means examination;
 - iv. Platform alignment;
 - v. Vibration examination;
 - vi. Door/gate electrical; and
 - vii. Mechanical lock examination.
- e. 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.
- f. 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.
- g. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.
- h. 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.
- i. The Applicant shall provide training on the safe operation of the lift in accordance with section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify the Division in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to the Division upon request.
- j. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.
- k. 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.
- 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.
- m. 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 accordance with title 8, Division 1, Chapter 3.5, rules and procedures.

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

Dated: March 28, 2024

Michelle Sorio
Michelle Iorio, 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:	Permanent Variance No.: Per Section A.1 Table in Jurisdictional and Procedural Matters
Schindler Model 6400 Elevators (Group IV, STM Alteration)	Proposed Decision Dated: March 28, 2024
	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 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.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be

provided to the employees' Authorized

Representatives.

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

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 6400 Elevators (Group IV, STM Alteration)

Permanent Variance No: Per section A.1 table, in Jurisdictional and Procedural Matters below

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

A. Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-059	Sutter Bay Hospitals dba ABSMC	2001 Dwight Way Berkeley, CA	4
24-V-065	RMMK-II, LLC dba Omni Los Angeles Hotel at California Plaza	251 S Olive Street Los Angeles, CA	3

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024 via videoconference by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Jennifer Linares with Schindler Elevator Corporation appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews of variance application
PD-4	Review Draft-1 of Proposed Decision

6. Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. <u>Findings of Fact</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 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 Suspension Means</u>. 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</u> On Crosshead Data Plate. 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</u> On Rope Data Taq. 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 Elevator Safety Orders.

Official Notice and Incorporation by Reference—Permanent Variance No. 15-V-349:

13. Per hereby entered stipulation offered at hearing by Applicant and the Division 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, Permanent Variance 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.

Position of the Division:

14. It is the concurrent well informed opinion of the Division and its Elevator Unit 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.

C. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. Decision and Order

Each 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 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 section 3141 incorporated sections and subsections of ASME A17.1-2004:
 - 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 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 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 the Board's procedural rules.

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

Dated: March 28, 2024 Michelle Florio

Michelle Iorio, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

Parties SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

The removed device must be replaced or returned to proper service within 30 days.

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

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

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

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

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

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

Debra Tudor
Principal
Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

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

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

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

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

In the Matter of Application for Permanent Variance by:	Permanent Variance No.: 24-V-060 Proposed Decision Dated: March 28, 2024
Mitsubishi Elevators (Group IV)	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Health	n Standards Board hereby adopts the attached aring Officer.
DAVID THOMAS, Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024 THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
DAVID HARRISON, Member	MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
CHRIS LASZCZ-DAVIS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

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

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See section A.1 Table
Mitsubishi Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024 Location: Zoom

A. Procedural Matters:

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-060	Bardas Investment Group	N. Melrose Avenue 717 Seward Street Los Angeles, California	2

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024 via videoconference by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Matt Jaskiewicz with Mitsubishi Electric, Elevator Division appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence:

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of variance application
PD-4	Review Draft-1 Proposed Decision

6. Official Notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed and the matter taken under submission by the Hearing Officer.

B. <u>Findings of Fact:</u>

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

C. Conclusive Findings:

A preponderance of the evidence supports the finding 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 the Elevator Safety Orders from which variance is being sought.

D. Decision and Order:

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

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

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING.

PERSONNEL ARE PROHIBITED FROM REMOVING HANDRAIL

UNLESS THE EQUIPMENT HAS BEEN SECURED FROM MOVEMENT

AND APPROVED PERSONAL FALL PROTECTION IS USED.

- 6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).
- 7. A mechanical means (e.g., locking bar mechanism) that will secure the car to the guide rail to prevent unintended movement shall be provided and used during machine and/or governor car-top work. The mechanical means (e.g., locking bar mechanism) shall have a safety factor of not less than 3.5 for the total unbalanced load.
- 8. An electrical switch or a lockout/tagout procedure shall be provided that will remove power from the driving machine and brake when the mechanical means (e.g., locking bar mechanism) is engaged.
- 9. In order to inhibit employees from working outside the car top railing, sections shall not be hinged and they shall be installed by means that will inhibit (but not necessarily completely

preclude) removal. The Applicant shall ensure that all persons performing work that requires removal of any part of the car top railing are provided with fall protection that is appropriate and suitable for the assigned work. That fall protection shall consist of a personal fall arrest system or fall restraint system that complies with California Code of Regulations, title 8, section 1670.

- 10. The bevel utilized by the Applicant in accordance with the variance granted from ASME A17.1-2004, section 2.10.2.4 shall slope at not less than 75 degrees from the horizontal to serve as the toe board; however, that slope may be reduced to a minimum of 40 degrees from the horizontal as may be required for sections where machine encroachment occurs.
- 11. If the Applicant directs or allows its employees to perform tasks on the car top, the Applicant shall develop, implement, and document a safety training program that shall provide training to Applicant employees. Components of the training shall include, but not necessarily be limited to, the following: car blocking procedures; how examination, inspection, adjustment, repair, removal and replacement of elevator components are to be performed safely, consistent with the requirements of the variance conditions; applicable provisions of the law and other sources of safety practices regarding the operation of the elevator. A copy of the training program shall be located in the control room of each elevator that is the subject of this variance, and a copy of the training program shall be attached to a copy of this variance that shall be retained in any building where an elevator subject to this variance is located. The Applicant shall not allow Certified Qualified Conveyance Company (CQCC) or other contractor personnel to work on the top of any elevator subject to this variance unless the Applicant first ascertains from the CQCC or other contractor that the personnel in question have received training equivalent to, or more extensive than, the training components referred to in this condition.
- 12. Any CQCC performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 13. The Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
- 14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
- 15. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

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

Dated: March 28, 2024

Michelle Lorio
Michelle Iorio, 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

n the Matter of Application for	Permanent Variance No.: Per Section
Permanent Variance Regarding:	Table in Jurisdictional and Procedural
	Matters

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

Proposed Decision Dated: March 28, 2024

Per Section 1.A

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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, Marabar	posted for the Applicant's employees to
LAURA STOCK, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	- h

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

Permanent Variance No: Per section A.1 table, in Jurisdictional and Procedural Matters

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

A. Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-061	RMG SBBC San Pedro, LP	10400 S. San Pedro St. Los Angeles, CA	1
24-V-095	SSC Palmdale, L.P.	39330 Trade Center Drive Palmdale, CA	2
24-V-096	San Bernardino City Unified School District	Welcoming Resource Center 746 N. E Street San Bernardino, CA	3
24-V-106	San Bernardino Extended Stay LLC	864 E. Harriman Place San Bernardino, CA	1
24-V-107	1667 Allesandro LLC	1661 Allesandro St Los Angeles, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.

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

- 3. This hearing was held on March 27, 2024 via videoconference by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Jennifer Linares with Schindler Elevator Corporation appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 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	Cal/OSHA Reviews of variance application
PD-4	Review Draft-1 of Proposed Decision

6. Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

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

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.

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[.]

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

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.

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.

B. Findings of Fact

- Each respective Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations, specified per the above Section A.1 table in Jurisdictional and Procedural Matters.
- 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.

C. Conclusive Findings

A preponderence of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

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

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

Elevator Safety Orders:

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

Conditions:

- 1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 Minimum Number of Suspension Members
 - 2.20.3 Factor of Safety
 - 2.20.9 Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA 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 Cal/OSHA 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.
- 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.
- 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 Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Cal/OSHA, 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 Cal/OSHA.
- 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 duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

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

Michelle Iorio
Michelle Iorio, Hearing Officer

DATED: March 28, 2024

Page 11 of 14

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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, to the following address (or to such other address as the Cal/OSHA 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 PERMANENT VARIANCE NO. 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 AI7.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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to the Cal/OSHA, 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 Cal/OSHA 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 (Group IV)		
	DECISION	
The Occupational Safety and Health S PROPOSED DECISION by Michelle Iorio, Hear	standards Board hereby adopts the attached ing Officer.	

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., Member	THE FOREGOING VARIANCE DECISION WAS
KATH FEN CRAWFORD Momber	ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE
KATHLEEN CRAWFORD, Member	
	DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	
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	111LE 6, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
LAUDA STOCK Mombor	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:	Permanent Variance Nos.: See Section A.1 Table Below
KONE Monospace 500 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024 Location: Zoom

A. Subject Matter

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-062	Crafton Hills College	11711 San Canyon Rd., BLDG. 17 Yucaipa, CA	1
24-V-092	Apple Seven SPE San Diego, Inc.	1531 Pacific Highway San Diego, CA	3
24-V-093	CFT NV Developments, LLC	3468 E. Foothill Blvd. Pasadena, CA	2

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 March 27, 2024, in Sacramento, California, via
videoconference, by delegation of the Occupational Safety and Health Standards Board
("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on
its merit, as a basis of proposed decision to be advanced to the Board for its
consideration, in accordance with section 426.

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

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

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

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 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 Cal/OSHA, 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 Cal/OSHA 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 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 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. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).
- 13. As noted by the Board in Permanent Variance 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. Cal/OSHA 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 Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.
- 17. Cal/OSHA is 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. Cal/OSHA, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, is 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

 A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

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

Each permaent variance application 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 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 Cal/OSHA approval).
- 5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.

- 6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
- 7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
- 8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
- 10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
- 11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA 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 sections 411.2 and 411.3.
- 14. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

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

Dated: March 28, 2024

Michelle Iorio, Hearing Officer

Michelle clore

Appendix 1

Monospace 500 Suspension Appendix 1 Table.

Variance Number	Elevator ID	Minimum	Maximum Speed	Maximum
		Quantity of Ropes	in Feet per Minute	Suspended Load
		(per Condition 3)	(per Condition 6)	(per Condition 7)
24-V-062	1	7	150	12247
24-V-092	1	6	150	10497
24-V-092	2	6	150	10497
24-V-092	3	6	150	10497
24-V-093	PE 1	7	200	11556
24-V-093	PE 2	7	200	11556

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 Cal/Osha 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 Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA referencing the information contained in above Appendix 2, section 2, Subsection (a), above.

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

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

In the Matter of Application for Permanent Variance regarding:

Otis Gen2S/ Gen3Edge Elevator & Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section

A.1 table of

Proposed Decision Dated: March 28, 2024

DECISION

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

OCCUPATIONAL SAFETY AND HEALTH DAVID THOMAS, Chairman STANDARDS BOARD Date of Adoption: April 18, 2024 JOSEPH M. ALIOTO JR., Member THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE KATHLEEN CRAWFORD, Member 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 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:	

Permanent Variance Nos.: See section A.1

table below

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

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

Subject Matter

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-066	Millennium Alvarado, LLC	6535 Alvarado Rd. San Diego, CA	4
24-V-067	Cleveland Ave, LP	Albany Family Housing 755 Cleveland Ave. Albany, CA	1
24-V-068	The Kelsey Civic Center, L.P.	240 Van Ness Ave. San Francisco, CA	2
24-V-069	The County of San Diego	Operations Center Parking Structure B2 (PSB2) 5610 Overland Ave. San Diego, CA	2
24-V-070	HANIMPJV North Rollins Burlingame CA LLC	1881 Rollins Rd. Burlingame, CA	4
24-V-073	Broadstone MV Owner, LLC	1908 Hotel Circle North San Diego, CA	4
24-V-075	The Arizona/Third Street Partnership	360 N. Hayworth Ave. Los Angeles, CA	1

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

		252 Church Ave.	
24-V-076	Backhouse Investors, LLC	Chula Vista, CA	1
		3090 Polk Ave.	_
24-V-078	ICG-Stream Polk Ave, LLC	San Diego, CA	2
		Courtyard by Marriott	
24-V-079	Metro Hospitality Services	808 M St.	2
		Fresno, CA	
24.1/.000	Dulay Charact I D	22447 Ruby St.	2
24-V-080	Ruby Street L.P.	Castro Valley, CA	2
24.1/ 001	MacAuthur A. I.D.	671 MacArthur Ave.	1
24-V-081	MacArthur A, LP	Los Angeles, CA	1
		Mercy Southwest Hospital	
24-V-082	Dignity Health	400 Old River Rd.	4
		Bakersfield, CA	
		SFSU West Campus Green	
24-V-083	San Francisco State University	Student Housing Building	2
24-7-065	San Francisco State Oniversity	700 Font Blvd.	2
		San Francisco, CA	
		SFSU West Campus Green	
24-V-084	San Francisco State University	Health Center Building	2
24-V-064	Sail Francisco State Offiversity	730 Font Blvd.	۷
		San Francisco, CA	
		Ira D Hall Square	
24-V-085	MP Sonora Court Associates, L.P.	1178 Sonora Court	2
		Sunnyvale, CA	
24-V-086	8561 Belmont LLC	8561 Belmont St.	1
24 7 000	6501 Bellione LLC	Cypress, CA	1
		444, 450, 500 Front Street	
		(1 Elevator Each)	
24-V-087	BOZ SC Riverfront Owner, LLC	414 Front Street	3
		(Overall Street Address)	
		Santa Cruz, CA	
		LACCD - LACC Cesar Chavez	
		Administration	
24-V-089	Los Angeles City College	and Workforce Replacement Building	2
		855 N. Vermont Ave.	
		Los Angeles, CA	

24-V-090	Miramar Gold, L.P.	1434 Miramar St. Los Angeles, CA	2
24-V-097	TMP II Apts LLC	13732 Jamboree Rd. Irvine, CA	4
24-V-098	Union Sanitary District	Campus Building 5072 Benson Rd. Union City, CA	1
24-V-099	1773 Oxford Street LLC	1773 Oxford St. Berkeley, CA	1
24-V-100	Chinatown Service Center	CSC Health Regional Center 726 South Main St. Alhambra, CA	2
24-V-101	2361 Fox Hills Drive, LLC	2365 S. Fox Hills Dr. Los Angeles, CA	1

2. This Proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja, appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 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	Cal/OSHA Reviews of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on March 27, 2024, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

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

E. Decision and Order

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

- <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).
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the "Gen2 Master File") maintained

by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

- 1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA 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 Cal/OSHA.
 - 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 Cal/OSHA.
- 2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA 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 Cal/OSHA upon request.
- 4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;

- e. The month and year the flat coated steel belts were first shortened;
- f. The name or trademark of the manufacturer of the flat coated steel belts; and
- g. Lubrication information.
- 5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 7. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
 - c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION DO NOT STAND ON OR CLIMB OVER RAILING

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

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

- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).
- 13. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;
 - The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position."
 - b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
- 15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
- 17. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

- 18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
- 19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Michelle Lorio
Michelle Iorio, Hearing Officer

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

Dated: March 28, 2024

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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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-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 Cal/OSHA 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:

- A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA referencing the information contained in item 2a above.

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

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

In the Matter of Application for
Permanent Variance regarding:

Otis Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: March 28, 2024

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., Member	THE FORECOING WARRANGE DECISION WAS
	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 AA	MAY BE FILED BY ANY PARTY WITH THE
DAVID HARRISON, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
NOLA KENNEDY Marchar	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
LAUDA CTOCK Marris en	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:	Permanent Variance No.: See Section A.1 Table Below
Otis Medical Emergency Elevator Car Dimensions (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024
	Location: Zoom

A. Subject Matter

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

Permanent Variance No.	Applicant Name	Variance Location Address
24-V-071	120 Via Merida Owner LP	120 S. Via Merida Thousand Oaks, CA
24-V-072	County of Yuba	Sheriffs Medical and Mental Health Facility 215 5th St. Marysville, CA
24-V-074	Doheny-Vidovich Partners	3225 El Camino Real Palo Alto, CA
24-V-088	MACT Health Board, Inc.	Angels Camp Museum & Administration Building 52 S. Main St. Angels Camp, CA
24-V-102	Bellarmine College Preparatory	960 W. Hedding St., Bldg 4 San Jose, CA

2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

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

- 3. This hearing was held on March 27, 2024, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 4. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 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	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on March 27, 2024, the record was closed, and the matter taken under submission by the Hearing Officer.

B. Findings of Fact and Applicable Regulations

- 1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:
 - (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:

•••

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

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

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

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

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

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

C. <u>Conclusive Findings</u>

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. <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.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

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

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

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

- 3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
- 5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, 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 Cal/OSHA.
- 6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

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

DATED: 3/28/2024

Michelle Iorio, Hearing Officer

Michelle clorio

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

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

In the Matter of Application for Permanent Variance regarding:

Otis Gen2O, and/or Gen3Peak with Variant Governor Rope and Sheaves with MES (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: March 28, 2024

DECISION

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

DAVID THOMAS, Chairman STANDARDS BOARD JOSEPH M. ALIOTO JR., Member KATHLEEN CRAWFORD, Member DAVID HARRISON, Member NOLA KENNEDY, Member CHRIS LASZCZ-DAVIS, Member LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH

Date of Adoption: April 18, 2024

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:

ant

Otis Gen2O, and/or Gen3Peak with Variant Governor Rope and Sheaves with MES (Group IV)

PROPOSED DECISION

Hearing Date: March 27, 2024

Permanent Variance No: See Section A.1

Location: Zoom

Table Below

A. Subject Matter

 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:

Permanent	Applicant Name	Variance Location Address	No. of
Variance No.			Conveyances
24-V-077	The Regents of the University	UCLA Neuropsychiatric	4
	of California	Replacement Hospital	
		5900 West Olymic Blvd.	
		Los Angeles, CA	

2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on March 27, 2024, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance section 426.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

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

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulation

- 1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4,
 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - b. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
 - c. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
 - d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
 - e. Governor Rope Diameter: 2.18.5.1 (Only to the extent necessary to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.
 - f. Pitch Diameter: 2.18.7.4 (Only to the extent necessary to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

g. Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

D. Findings of Fact

- 1. The Board incorporates by reference the findings stated in:
 - a. Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in Permanent Variance No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in Permanent Variance No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in Permanent Variance No. 10 V 029;
 - d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in Permanent Variance No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in Permanent Variance No. 14-V-170.
 - f. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions.
- 2. Regarding requested variance in governor sheave diameter, and governor rope diameter, in variance from title 8, section 3141, incorporated ASME A17.1-2004, sections 2.18.7.4 and 2.18.5.1, respectively, the Board incorporates by reference the following previous findings of record: Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, in Permanent Variance No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.
- 3. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").
- 4. Cal/OSHA safety engineers, by way of written submissions to the record (Exhibit PD-3), 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. Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and
- 2. a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

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

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

Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the
extent necessary to comply with the performance-based requirements of the 2019
California Building Code section 3002.4.1a)

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

- 1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
- 2. The suspension system shall comply with the following:
 - a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA 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 Cal/OSHA.
 - 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 Cal/OSHA.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.
- 3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
- 4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.

- 5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person who, or organization that, installed the flat coated steel belts:
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;
 - g. Lubrication information.
- 6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
- 10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 11. If there is an inset car top railing:

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

CAUTION DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
- 13. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
- 14. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;
 - The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-

inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5 inch (127 mm) radius corners] in the horizontal, open position."

- All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
- c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 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. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each 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), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

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

DATED: 3/28/2024

Michelle Iorio, Hearing Officer

Michelle Lorio

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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-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 Cal/OSHA 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 Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA referencing the information contained in item 2a above.

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

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

In the Matter of Application for
Permanent Variance regarding

Otis Gen2O and/or Gen3Peak Alteration (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: March 28, 2024

DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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.
	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:	Permanent Variance No: See Section A.1 Table Below
Otis Gen2O and/or Gen3Peak Alteration (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024 Location: Zoom

A. Subject Matter

 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:

Permanent	Applicant Name	Variance Location	No. of Conveyances
Variance No.		Address	
24.1/.004	IC Marratain Day Diago II C	444 Castro St.	4
24-V-091 SIC-Mountain Bay Plaza LLC		Mountain View, CA	4

- 2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024, in Sacramento, California, and via videoconference, by Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 4. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

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

6. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Applicable Regulations

- The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Applicability of Alteration Requirements; 8.7.1.1(b) (Only to the extent necessary to permit variance from the code sections below);
 - b. 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.);
 - c. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
 - d. 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);
 - e. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

C. Findings of Fact

- 1. The Board incorporates by reference the findings stated in:
 - a. Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in Permanent Variance No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, Permanent Variance No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in Permanent Variance No. 10 V 029;

- d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in Permanent Variance No. 12-V-146; and
- e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in Permanent Variance No. 14-V-170.
- 2. The alterations will be performed after May 1, 2008, and the contracts for the alterations were or will be signed on or after May 1, 2008, making those alterations subject to the Group IV Elevator Safety Orders.
- 3. Cal/OSHA safety engineers, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

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

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

E. Decision and Order

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

- Applicability of Alteration Requirements; 8.7.1.1(b) (Only to the extent necessary to permit variance from the code section below);
- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);

- Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

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

- 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 Cal/OSHA 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 Cal/OSHA.
 - 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 Cal/OSHA.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.
- 3. With respect to each elevator subject to this variance, the Applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

- 4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.
- 5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person who, or organization that, installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;
 - g. Lubrication information.
- 6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

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

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
- 12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
- 13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 14. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
- 15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.

- 16. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.
- 17. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

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

Michelle Lorio

Michelle Iorio, Hearing Officer

Dated: March, 28, 2024

Page **7** of **10**

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 Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-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 Cal/OSHA 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:

- A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA 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:	Permanent Variance No.: see section A.1 table of
Permanent variance regarding:	
KONE Monospace 300 Elevators (Group IV)	Proposed Decision Dated: March 28, 2024
,	DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., Member	THE FORECOING VARIANCE REGISION WAS
	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 Regarding:	Permaent Variance Nos.: See Section A.1 Table Below
KONE Monospace 300 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024 Location: Zoom

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:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-094	Canal Alliance	711 Grand Ave. San Rafael, 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. Procedural

- This hearing was held on March 27, 2024, in Sacramento, California, via videoconference, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

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

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each respective Applicant intends to utilize the KONE Inc. Monospace 300 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 Cal/OSHA, having established an engineering practice for purposes of Monospace 300 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 Cal/OSHA 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. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).
- 13. As noted by the Board in permanent Variance 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. Cal/OSHA 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

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 Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.
- 17. Cal/OSHA is 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. Cal/OSHA, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, is 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

 A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

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 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 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 Cal/OSHA approval).
- 5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
- 6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.

- 7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
- 8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
- 10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
- 11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA 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 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), Cal/OSHA of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed.

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

Dated: March 28, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

Appendix 1

Monospace 300 Suspension Ropes Appendix 1 Table

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
24-V-094	1	5	150	8748

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 Cal/OSHA 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 Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA 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 Permanent Variance 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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, 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 Cal/OSHA 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:	Permanent Variance No.: See Section 1.A Table
Mitsubishi Elevators (Group IV)	Proposed Decision Dated: March 28, 2024
	DECISION

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

	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
	Date of Adoption: April 18, 2024
JOSEPH M. ALIOTO JR., 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 March or	posted for the Applicant's employees to
LAURA STOCK, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	-1

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

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See section A.1 Table
Mitsubishi Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: March 27, 2024 Location: Zoom

A. Procedural Matters:

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

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-104	600 San Pedro LP	600 San Pedro Street Los Angeles, CA	3

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024 via videoconference by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Matt Jaskiewicz with Mitsubishi Electric, Elevator Division appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence:

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of variance application
PD-4	Review Draft-1 Proposed Decision

6. Official Notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record closed and the matter taken under submission by the Hearing Officer.

B. Findings of Fact:

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

C. Conclusive Findings:

A preponderance of the evidence supports the finding 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 the Elevator Safety Orders from which variance is being sought.

D. <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.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

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

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING.

PERSONNEL ARE PROHIBITED FROM REMOVING HANDRAIL

UNLESS THE EQUIPMENT HAS BEEN SECURED FROM MOVEMENT

AND APPROVED PERSONAL FALL PROTECTION IS USED.

- 6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).
- 7. A mechanical means (e.g., locking bar mechanism) that will secure the car to the guide rail to prevent unintended movement shall be provided and used during machine and/or governor car-top work. The mechanical means (e.g., locking bar mechanism) shall have a safety factor of not less than 3.5 for the total unbalanced load.
- 8. An electrical switch or a lockout/tagout procedure shall be provided that will remove power from the driving machine and brake when the mechanical means (e.g., locking bar mechanism) is engaged.
- 9. In order to inhibit employees from working outside the car top railing, sections shall not be hinged and they shall be installed by means that will inhibit (but not necessarily completely

preclude) removal. The Applicant shall ensure that all persons performing work that requires removal of any part of the car top railing are provided with fall protection that is appropriate and suitable for the assigned work. That fall protection shall consist of a personal fall arrest system or fall restraint system that complies with California Code of Regulations, title 8, section 1670.

- 10. The bevel utilized by the Applicant in accordance with the variance granted from ASME A17.1-2004, section 2.10.2.4 shall slope at not less than 75 degrees from the horizontal to serve as the toe board; however, that slope may be reduced to a minimum of 40 degrees from the horizontal as may be required for sections where machine encroachment occurs.
- 11. If the Applicant directs or allows its employees to perform tasks on the car top, the Applicant shall develop, implement, and document a safety training program that shall provide training to Applicant employees. Components of the training shall include, but not necessarily be limited to, the following: car blocking procedures; how examination, inspection, adjustment, repair, removal and replacement of elevator components are to be performed safely, consistent with the requirements of the variance conditions; applicable provisions of the law and other sources of safety practices regarding the operation of the elevator. A copy of the training program shall be located in the control room of each elevator that is the subject of this variance, and a copy of the training program shall be attached to a copy of this variance that shall be retained in any building where an elevator subject to this variance is located. The Applicant shall not allow Certified Qualified Conveyance Company (CQCC) or other contractor personnel to work on the top of any elevator subject to this variance unless the Applicant first ascertains from the CQCC or other contractor that the personnel in question have received training equivalent to, or more extensive than, the training components referred to in this condition.
- 12. Any CQCC performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 13. The Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
- 14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
- 15. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

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

Dated: March 28, 2024

Michelle Jorio
Michelle Iorio, Hearing Officer

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

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

In the Matter of Application for Permanent Variance Regarding: Schindler Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)	Permanent Variance No.: See Table in Jurisdictional and Procedural Matters Proposed Decision Dated: March 28, 2024 DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
	OCCUPATIONAL SAFETY AND HEALTH
DAVID THOMAS, Chairman	STANDARDS BOARD
JOSEPH M. ALIOTO JR., Member	Date of Adoption: April 18, 2024
	THE FOREGOING VARIANCE DECISION WAS
KATHLEEN CRAWFORD, Member	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
DAVID HARRISON, Member	STANDARDS BOAR D WITHIN TWENTY (20) DAYS AFTER
NOLA KENNEDY, Member	SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA
CHRIS LASZCZ-DAVIS, Member	CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.
LAURA STOCK, Member	Note: A copy of this Decision must be posted for the Applicant's employees to

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

Representatives.

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

In the Matter of Application for Permanent Variance regarding:

Schindler Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)

Permanent Variance No.: See table in Jurisdictional and Procedural Matters

PROPOSED DECISION

Hearing Date: March 27, 2024

Location: Zoom

A. Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-105	Ion Aero LLC	8555 Aero Dr. San Diego, CA	3

- 2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on March 27, 2024 via videoconference, by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Jennifer Linares, with the Schindler Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per table
	in Jurisdictional and Procedural Matters
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of variance application
PD-4	Review Draft-1 Proposed Decision

6. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 27, 2024, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

B. Relevant Safety Order Provisions

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

The relevant language of those sections are below.

1. Suspension Means

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

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

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

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

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

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

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

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

[...]

(f) whether the ropes were non preformed or preformed

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

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

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

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

where:

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

S= manufacturer's rated breaking strength of one rope

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

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

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

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

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

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

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

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

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

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

2. Requested Transfer Switch Placement Variance

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

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

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

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

- (a) located in the machine room[.]
- 3. Requested Seismic Reset Switch Placement Variance

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

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

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

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

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

Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

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

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

5. Pitch Diameter of Governor Sheaves

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

"The pitch diameter of governor sheaves and governor tension sheaves shall be not less than the product of the diameter of the rope and the applicable multiplier listed in Table 2.18.7.4, based on the rated speed and the number of strands in the rope."

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

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

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

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

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

C. Findings of Fact

- Each respective Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity at the locations specified in Jurisdictional and Procedural Matters, section 1.
- 2. The installation contract for these elevators was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders. They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
- 4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.

- 5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
- 6. Due to the use of a 6 mm (0.25 in.) governor rope with 6-strand construction, the provided governor sheave pitch diameter is less than that required by the Elevator Safety Orders.
- 7. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
- 8. Applicant proposes to insert the car-top railings at the perimeter of the car top.
- Applicant intends to use an elevator control system, model CO NX100NA or CO NX300NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

D. Conclusive Findings

A preponderance of the evidence supports the finding 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 the Elevator Safety Order from which variance is being sought.

E. Decision and Order:

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

Elevator Safety Orders:

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

- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Governor Rope and Sheave: The Applicant shall conditionally hold permanent variance from certain requirements of the following title 8, section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: section 2.18.7.4.
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

- 1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 Minimum Number of Suspension Members
 - 2.20.3 Factor of Safety
 - 2.20.9 Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members, fastenings, related monitoring and detection systems, and criteria for STM replacement. The Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA 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 Cal/OSHA 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.
- The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.

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

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

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

- 5. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6 strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).
- 6. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
 - a. The SIL-rated devices and circuits shall consist of a Variodyn SIL3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013, VAF023, or VAF043 labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
 - b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
 - c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL-rated devices.

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

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.

- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.
- k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
- 7. The Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Cal/OSHA, 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 Cal/OSHA.
- 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per sections 411.2 and 411.3.

9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Cal/OSHA of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed per the Board's procedural regulations.

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

DATED: March 28, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

The California Labor Code section 7318 allows the Cal/OSHA 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 Cal/OSHA 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 Cal/OSHA, 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 Cal/OSHA 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 Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer CAL/OSHA-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 Cal/OSHA 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 Cal/OSHA, to the following address (or to such other address as the Cal/OSHA might specify in the future): CAL/OSHA 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 Permanent Variance file number that identifies the permanent variance.
 - 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 AI7.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 Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to the Cal/OSHA, 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 Cal/OSHA referencing the information contained in item 2a above.

Occupational Safety and Health Standards Board

Business Meeting Legislative Update

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

(Ting)

Date	Action
12/06/22	From printer.
12/05/22	Read first time. To print.

Summary:

AB-1

AB 1, as introduced, Ting. Oil refineries: maintenance.

The California Refinery and Chemical Plant Worker Safety Act of 1990 requires, among other things, every petroleum refinery employer to submit to the Division of Occupational Safety and Health a full schedule of planned turnarounds, meaning a planned, periodic shutdown of a refinery process unit or plant to perform maintenance, overhaul, and repair operations and to inspect, test, and replace process materials and equipment, as provided.

This bill would express the intent of the Legislature to enact subsequent legislation to ensure that only one oil refinery in the state is undergoing scheduled maintenance at a time.

Board staff is monitoring for potential impacts on Board operations.

AB-1976 Occupational safety and health standards: first aid kits: naloxone hydrochloride. (2023-2024) - UPDATE

AB-1976	AB-1976 Occupational safety and health standards: first aid kits: naloxone hydrochloride. (2023-2024)	
	(Haney)	

Date	Action
4/4/24	From committee: Do pass and re-refer to Com. on APPR. (Ayes 6. Noes 0.) (April 3). Re-referred to Com. on APPR.
4/3/24	Set FOR Hearing ON 03-APR-24 1:30 p.m
03/13/24	In committee: Set, first hearing. Hearing canceled at the request of author.
02/12/24	Referred to Com. On L. and E.
01/31/24	From printer. May be heard in committee March 1.
01/30/24	Read first time. To print.

Summary:

AB 1976, as introduced, Haney. Occupational safety and health standards: first aid kits: naloxone hydrochloride.

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

Existing law requires the division, before December 1, 2025, to submit to the standards board a rulemaking proposal to consider revising certain standards relating to the prevention of heat illness, protection from wildfire smoke, and toilet facilities on construction jobsites. Existing law also requires the standards board to review the proposed changes and consider adopting revised standards on or before December 31, 2025.

This bill would require the standards board, before December 1, 2026, to draft a rulemaking proposal to revise a regulation on first aid materials to require all first aid kits in a workplace to include nasal spray naloxone hydrochloride. The bill would require the standards board to adopt revised standards for the standards described above on or before December 31, 2026.

Board staff is monitoring for potential impacts on Board operations.

AB-2975 Occupational safety and health standards: workplace violence prevention plan. (2023-2024) - UPDATE

AB-2975 Occupational safety and health standards: workplace violence prevention plan. **(2023-2024)**

(Gipson)

Date	Action
04/03/24	Re-referred to Com. on L. & E.
04/02/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
04/01/24	Re-referred to Com. on L. & E.
03/21/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/21/24	Referred to Com. On L. and E.
02/17/24	From printer. May be heard in committee March 18.
02/16/24	Read first time. To print.

AB-2975

Summary:

AB 2975, as amended, Gipson. Occupational safety and health standards: workplace violence prevention plan.

Existing law, the California Occupational Safety and Health Act of 1973, imposes safety responsibilities on employers and employees, including the requirement that an employer establish, implement, and maintain an effective injury prevention program, and makes specified violations of these provisions a crime. Existing law also requires the Occupational Safety and Health Standards Board to adopt standards developed by the Division of Occupational Safety and Health that require specified types of hospitals to adopt a workplace violence prevention plan as part of the hospital's injury and illness prevention plan to protect health care workers and other facility personnel from aggressive and violent behavior.

This bill would require the standards board, by March 1, 2025, to amend the standards to include a requirement that a hospital maintain metal detectors at specific entrances of a hospital, a requirement that a hospital assign appropriate security personnel who meet training standards, a requirement that the hospital have reasonable protocols for alternative search and screening for patients, family, or visitors who refuse to undergo metal detector screening, and a requirement that a hospital adopt reasonable protocols for storage of patient, family, or visitor property that might be used as a weapon.

This bill would require that the standards include a requirement that a hospital post, within reasonable proximity of any metal detectors maintained at public entrances, a notice adopted by the standards board, notifying the public that the hospital conducts screenings for weapons upon entry but that no person shall be refused medical care for failure to undergo screening by a metal detector.

By expanding the scope of an existing crime, this bill would impose 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 is monitoring for potential impacts on Board operations.

AB-2408 Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances. (2023-2024) - UPDATE

AB-2408 Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances. **(2023-2024)**

(Haney)

AB-2408

Date	Action
04/01/24	Re-referred to Com. on E.S. & T.M.
03/21/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on E.S. & T.M. Read second time and amended.

03/21/24	Referred to Coms. on E.S. & T.M. and L. & E.
02/13/24	From printer. May be heard in committee March 14.
02/12/24	Read first time. To print.

Summary:

AB 2408, as amended, Haney. Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances.

Existing law requires any person that sells firefighter personal protective equipment to provide written notice to the purchaser if the equipment contains intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS). Existing law requires the seller to retain a copy of the written notice and provide the notice to specified law enforcement entities, including the Attorney General, upon request. Existing law makes a violation of those provisions subject to a penalty of up to \$5,000 for a first violation and up to \$10,000 for a subsequent violation.

This bill, commencing July 1, 2026, would prohibit a person from manufacturing, knowingly selling, offering for sale, distributing for sale, distributing for use, or using in this state firefighter personal protective equipment containing PFAS. The bill would make a violation of this provision subject to the civil penalty provisions described above. The bill would specify that an individual firefighter shall not be personally liable for payment of the civil penalty.

Existing law requires the Occupational Safety and Health Standards Board, in consultation with the Department of Industrial Relations, every 5 years, as specified, to review all revisions to National Fire Protection Association (NFPA) standards pertaining to personal protective equipment covered by specified safety orders. If the review finds the revisions provide a greater degree of personal protection than the safety orders, existing law requires the board to consider modifying existing safety orders and to render a decision regarding changing safety orders or other standards and regulations to maintain alignment of the safety orders with the NFPA standards no later than July 1 of the subsequent year.

This bill would require the board, in consultation with the department, within one year of the NFPA updating a specified standard on protective ensemble for structural firefighting and proximity firefighting to include PFAS-free turnout gear, to update the applicable safety orders, or other standards or regulations, to maintain alignment with the NFPA standard.

The bill would state related findings and declarations of the Legislature.

Board staff is monitoring for potential impacts on Board operations.

AB-3043 Occupational safety: fabrication activities. (2023-2024) - NO UPDATE

AB-3043 Occupational safety: fabrication activities (2023-2024)

(Rivas)

Date	Action
03/21/24	In committee: Set, first hearing. Hearing canceled at the request of author.
03/11/24	Referred to Coms. on L. & E. and JUD.
02/17/24	From printer. May be heard in committee March 18.
02/16/24	Read first time. To print.

Summary:

AB-3043

AB 3043, as introduced, Luz Rivas. Occupational safety: fabrication activities.

Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations to promulgate and enforce occupational safety and health standards for the state, including standards dealing with exposure to harmful airborne contaminants. Existing law requires the Division of Occupational Safety and Health within the department to enforce all occupational safety and health standards, as specified. A violation of these standards and regulations under specific circumstances is a crime.

This bill would prohibit a person engaged in fabrication activities or fabrication shops from using dry methods, and require the use of effective wet methods in any fabrication activities. The bill would make a violation of these provisions grounds for, among other disciplinary action, an immediate order prohibiting continued fabrication activities. The bill would authorize the Attorney General, upon request of the department, to petition the superior court to impose civil penalties for a violation of these provisions.

The bill would require, on or before July 1, 2025, the department to consult with representatives of approved apprenticeship programs to establish a training curriculum regarding the safe performance of fabrication activities that meets specified requirements, including classroom instruction, and to certify a person who has completed that curriculum immediately upon completion. The bill would prohibit, beginning January 1, 2026, an owner or operator of a slab product fabrication shop from permitting a person from performing

fabrication activities or employing a person to perform work near those activities, unless the person is certified by the department as having completed the training curriculum, except as specified.

The bill would require, on or before January 1, 2026, the department to develop an application and licensing process for fabrication shops to lawfully engage in fabrication activities known as a "slab product fabrication activity" license. The bill would authorize fabrication shops to engage in fabrication activities during the pendency of the application and licensing development process.

The bill would require, beginning January 1, 2026, the department to grant a 3-year license to a fabrication shop that demonstrates satisfaction of specified criteria involving workplace safety conditions and precautions, and would authorize license renewal, as specified. Among other conditions, the bill would establish certain regulatory fees in unspecified amounts for the license and renewal thereof. The bill would authorize the department to suspend or revoke a licensee in certain cases, including for gross negligence, as specified. The bill would prohibit a person or entity, or an employee thereof, from engaging in fabrication activities unless the person or entity has a license.

The bill would require, beginning January 1, 2026, an owner or operator of a slab product fabrication shop to comply with specified requirements with respect to employees who perform fabrication activities, including paying each employee at least the general prevailing rate of per diem wages for the geographic area, except as otherwise specified. The bill would authorize the department to, among other disciplinary action, suspend or revoke a license if the department finds that the owner or operator willfully violated these provisions.

The bill would prohibit, beginning January 1, 2026, a person from supplying a slab product directly to a person or entity engaged in fabrication activities if the person or entity does not have a valid license. The bill would require a person that, among other things, supplies a slab product to a person or entity engaged in fabrication services to verify the person or entity has a license, as specified. The bill would require a person that supplies a slab product to a person or entity that is not engaged in fabrication activities to rely on written certification issued under penalty of perjury that, among other things, they will not directly engage in fabrication activities with the product without a license. By expanding the scope of the crime of perjury, the bill would impose a state-mandated local program.

The bill would specify that a violation of any of the above-described provisions may be grounds for disciplinary action, as specified, but is not a crime. The bill would require moneys recovered pursuant to the above-described provisions to be deposited in an unspecified account, for expenditure by the department, upon appropriation by the Legislature.

The bill would require the Director of Industrial Relations to maintain a publicly accessible database on the department's internet website that includes, among other things, information on any active orders issued by the department in the prior 12 months prohibiting an activity at a fabrication shop, as specified. Beginning January 1, 2026, the bill would require

that internet website to contain additional information in the database, including information on fabrication shops in the state licensed under the bill's provisions.

On or before July 1, 2025, the bill would require the department, in consultation with specified agencies, to submit a report to the Legislature pursuant to prescribed requirements, including specifying the number of violations issued for failure to comply with any temporary or future standards adopted by the board. On or before January 1, 2027, and January 1, 2029, the bill would require the department, in consultation with other specified entities, to submit a report to the Legislature pursuant to prescribed requirements, including, in addition to the information contained in the initial report, the number of licenses issued by the department.

The bill would define various terms for these purposes. The bill would make findings and declarations related to these provisions.

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

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

Board staff is monitoring for potential impacts on Board operations.

AB-3106 School employees: COVID-19 cases: protections. (2023-2024) - UPDATE

	AB-3106 School employees: COVID-19 cases: protections (2023-2024)		
	(Schiavo)		
	Date	Action	
AB-3106	04/02/24	Re-referred to Com. on L. & E.	
7.5 6266	04/01/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.	
	03/11/24	Referred to Com. on L. & E.	
	02/17/24	From printer. May be heard in committee March 18.	

02/16/24	Read first time. To print.
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Summary:

AB 3106, as amended, Schiavo. School employees: COVID-19 cases: protections.

Existing law grants the Division of Occupational Safety and Health, which is within the Department of Industrial Relations, jurisdiction over all employment and places of employment, with the power necessary to enforce and administer all occupational health and safety laws and standards. The Occupational Safety and Health Standards Board, an independent entity within the department, has the exclusive authority to adopt occupational safety and health standards within the state. Existing law, the California Occupational Safety and Health Act of 1973, requires employers to comply with certain standards ensuring healthy and safe working conditions, as specified, and charges the division with enforcement of the act. Other existing law relating to occupational safety imposes special provisions on certain industries and charges the division with enforcement of these provisions.

This bill would require employer, defined to be a school district, county office of education, or charter school, to ensure that COVID-19 cases, defined as specified school employees, who have a positive COVID-19 test, are excluded from the workplace until prescribed return-towork requirements are met. To the extent administering these provisions imposes additional duties on local educational agencies, the bill would impose a state-mandated local program. The bill, with specified exceptions, would require an employer to continue and maintain an excluded school employee's earnings, wages, seniority, and all other employee rights and benefits, including the employee's right to their former job status, as if the employee had not been excluded from the workplace, as prescribed. The bill would require the standards board, by February 3, 2025, to adopt a standard that extends these protections to any occupational infectious disease covered by any permanent infectious disease standard adopted to succeed an existing standard for COVID-19 prevention for those school employees. The bill would require the division to enforce the bill by the issuance of a citation alleging a violation and a notice of civil penalty, as specified. The bill would authorize any person who receives a citation and penalty to appeal the citation and penalty to the Occupational Safety and Health Appeals Board.

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, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Board staff is monitoring for potential impacts on Board operations.

Occupational Safety and Health Standards Board

Business Meeting Acting Executive Officer's Report