

Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

February 16, 2023

Fresno Council of Governments
Board Room
2035 Tulare Street
Fresno, California

AND

Via teleconference / videoconference

Occupational Safety and Health Standards Board

Meeting Agenda

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



MISSION STATEMENT

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

AGENDA

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

February 16, 2023 at 10:00 a.m.

Attend the meeting in person:

Fresno Council of Governments
Board Room
2035 Tulare Street
Fresno, CA 93721

Attend the meeting via Video-conference:

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

Attend the meeting via Teleconference:

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

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

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

Public Comment Queue:

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

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

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

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

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

I. **CALL TO ORDER AND INTRODUCTIONS**

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

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

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

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

A. PUBLIC COMMENT

B. ADJOURNMENT OF THE PUBLIC MEETING

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

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

A. PROPOSED VARIANCE DECISIONS FOR ADOPTION

1. **Consent Calendar**

B. REPORTS

1. Division Update

2. Legislative Update
3. Executive Officer's Report

C. NEW BUSINESS

1. Future Agenda Items

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

D. CLOSED SESSION

Matters Pending Litigation

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

Personnel

E. RETURN TO OPEN SESSION

1. Report from Closed Session

F. ADJOURNMENT OF THE BUSINESS MEETING

Next Meeting: March 16, 2023
Ronald Reagan State Building
Auditorium
300 South Spring Street
Los Angeles, CA 90013
10:00 a.m.

CLOSED SESSION

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

PUBLIC COMMENT

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

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

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

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

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

DISABILITY ACCOMMODATION NOTICE

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

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

TRANSLATION

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

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

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

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

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

Occupational Safety and Health Standards Board

Meeting Notice

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



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

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

PUBLIC MEETING: On **February 16, 2023**, at 10:00 a.m.
in the Board Room of the Fresno Council of Governments
2035 Tulare Street, Fresno, California

as well as via the following:

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

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

BUSINESS MEETING: On **February 16, 2023**, at 10:00 a.m.
in the Board Room of the Fresno Council of Governments
2035 Tulare Street, Fresno, California

as well as via the following:

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

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

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

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

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

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

DAVE THOMAS, Chairman

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting

Proposed Variance Decisions

**CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS
FEBRUARY 16, 2023, MONTHLY BUSINESS MEETING
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON JANUARY 25, 2023

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 14-V-067M2	BCORE 660 W El Camino Real TRS LLC	Elevator	GRANT
2. 15-V-396M1	Santa Clara Phase II, LLC	Elevator	GRANT
3. 16-V-142M1	Santa Clara Phase III EFH, LLC	Elevator	GRANT
4. 16-V-143M1	Santa Clara Phase III EFH, LLC	Elevator	GRANT
5. 16-V-144M1	Santa Clara Phase III EFH, LLC	Elevator	GRANT
6. 16-V-145M1	Santa Clara Phase III G, LLC	Elevator	GRANT
7. 19-V-432	Dragados USA	TSO	GRANT
8. 21-V-127M1	Olivewood Village LLC	Elevator	GRANT
9. 21-V-341M1	4th Street San Jose LP	Elevator	GRANT
10. 22-V-075M1	STC Venture Block 3RWS, LLC	Elevator	GRANT
11. 22-V-270	601 Wilshire LLC and Ideal 601 LLC	Elevator	GRANT
12. 22-V-499	Berkeley Commons Owner, LLC	Elevator	GRANT
13. 22-V-501	Berkeley Commons Owner, LLC	Elevator	GRANT
14. 22-V-517	Maudelle Shirek, L.P.	Elevator	GRANT
15. 22-V-518	Oakland Unified School District	Elevator	GRANT
16. 22-V-519	Ramona Metro Point, L.P.	Elevator	GRANT
17. 22-V-520	Ramona Metro Point, L.P.	Elevator	GRANT
18. 22-V-521	San Mateo County Sheriff's Office	Elevator	GRANT
19. 22-V-522	San Mateo County Sheriff's Office	Elevator	GRANT
20. 22-V-523	SC Cedar Street Apartments, LP	Elevator	GRANT
21. 22-V-524	Spudland, LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
22. 22-V-525	Spudland, LLC	Elevator	GRANT
23. 22-V-526	TB Milano Apartments, LLC	Elevator	GRANT
24. 22-V-527	United El Segundo, Inc.	Elevator	GRANT
25. 22-V-528	K-Elevate 10th Street Property LLC	Elevator	GRANT
26. 22-V-529	949 LLC	Elevator	GRANT
27. 22-V-530	1403 Locust Street, LLC	Elevator	GRANT
28. 22-V-531	The Avenue Azusa LLC	Elevator	GRANT
29. 22-V-532	Bridges Murrieta I Owner, LLC	Elevator	GRANT
30. 22-V-533	Bryant Property, LLC	Elevator	GRANT
31. 22-V-534	Chabot-Las Positas College Community District	Elevator	GRANT
32. 22-V-535	Chabot-Las Positas College Community District	Elevator	GRANT
33. 22-V-536	CRP Affordable Housing and Community Development	Elevator	GRANT
34. 22-V-537	CRP Affordable Housing and Community Development	Elevator	GRANT
35. 22-V-538	Grantville Trolley Family Housing, LP	Elevator	GRANT
36. 22-V-539	Los Olivos II Apartments LLC, a Delaware Liability Co	Elevator	GRANT
37. 22-V-540	Mountain View Condos Corp.	Elevator	GRANT
38. 22-V-541	MP Francis Scott Key 2 Associates, L.P. & MP Francis Scott Key 1, LLC	Elevator	GRANT
39. 22-V-542	Nadeau SH, L.P.	Elevator	GRANT
40. 22-V-543	Nadeau SH, L.P.	Elevator	GRANT
41. 22-V-544	Nash - Holland Gateway Crossing Lot 2 Project, LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
42. 22-V-545	Nash - Holland Gateway Crossing Lot 2 Project, LLC	Elevator	GRANT
43. 22-V-546	Nash - Holland Gateway Crossing Lot 1 Project, LLC	Elevator	GRANT
44. 22-V-547	Nash - Holland Gateway Crossing Lot 1 Project, LLC	Elevator	GRANT
45. 22-V-548	NH QOZB LLC	Elevator	GRANT
46. 22-V-549	Orange 12 LLC	Elevator	GRANT
47. 22-V-550	Orange 12 LLC	Elevator	GRANT
48. 22-V-551	Eden Freedom Investors, L.P.	Elevator	GRANT
49. 22-V-552	180 Jones Associates, L.P.	Elevator	GRANT
50. 22-V-553	180 Jones Associates, L.P.	Elevator	GRANT
51. 22-V-554	Newcastle Realty LLC	Elevator	GRANT
52. 22-V-555	6213 Montezuma, LLC	Elevator	GRANT
53. 22-V-556	Hoover 719 LLC	Elevator	GRANT
54. 22-V-558	BRJE Phase 2 Housing Partners, L.P.	Elevator	GRANT
55. 22-V-559	993 Laurel Street Associates	Elevator	GRANT
56. 22-V-560	GS HIP 1304 ECR, LP	Elevator	GRANT
57. 22-V-561	Quadrus Sand Hill LLC	Elevator	GRANT
58. 22-V-562	WIN, LP	Elevator	GRANT
59. 22-V-563	NP 30 LLC	Elevator	GRANT
60. 22-V-564	GS MP Portal Owner, LLC	Elevator	GRANT
61. 22-V-565	Michaels Development	Elevator	GRANT
62. 22-V-566	YBI Phase 3 Investors, LLC	Elevator	GRANT
63. 22-V-567	Anthem Cathedral Square Holdings Limited Partnership	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
64. 22-V-568	Stanford Health Care	Elevator	GRANT
65. 22-V-569	Tasman East Station Holdco, LLC	Elevator	GRANT
66. 22-V-570	Sierra Real Estate Holdings, LLC	Elevator	GRANT
67. 22-V-571	Gold Coast Properties CA 1, LLC	Elevator	GRANT
68. 22-V-572	Banner Catalina Storage, LLC	Elevator	GRANT
69. 22-V-574	412 Madison LLC	Elevator	GRANT
70. 22-V-575	NCRC Placentia LLC	Elevator	GRANT
71. 22-V-576	NCRC Placentia LLC	Elevator	GRANT
72. 22-V-577	Manhattan Beach Orthopaedic Management Company, LLC dba Golden State Bone and Joint Clinic	Elevator	GRANT
73. 22-V-578	Michael Seibert Successor Trustee of the Irrevocable Trust of Alice W H Yoon	Elevator	GRANT
74. 22-V-579	BNS Development, LLC	Elevator	GRANT
75. 22-V-580	BNS Development, LLC	Elevator	GRANT
76. 22-V-581	Stockton Street Properties, Inc.	Elevator	GRANT
77. 22-V-582	The Cove, LP	Elevator	GRANT
78. 22-V-583	Valerio, LLC	Elevator	GRANT
79. 22-V-584	Canopy Healdsburg, LLC	Elevator	GRANT
80. 22-V-585	Canopy Healdsburg, LLC	Elevator	GRANT
81. 22-V-586	Canopy Healdsburg, LLC	Elevator	GRANT
82. 22-V-587	Canopy Healdsburg, LLC	Elevator	GRANT
83. 22-V-588	Canopy Healdsburg, LLC	Elevator	GRANT
84. 22-V-589	Canopy Healdsburg, LLC	Elevator	GRANT
85. 22-V-590	CCD Pomona LLC	Elevator	GRANT
86. 22-V-591	Haroni Investments LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
87. 22-V-592	Heritage Square II, LP	Elevator	GRANT
88. 22-V-593	Los Lirios Apartments, L.P.	Elevator	GRANT
89. 22-V-594	Los Lirios Apartments, L.P.	Elevator	GRANT
90. 22-V-595	Manhattan East, LP	Elevator	GRANT
91. 22-V-596	SIOF 3 Properties, LLC	Elevator	GRANT
92. 22-V-597	SIOF 3 Properties, LLC	Elevator	GRANT
93. 22-V-599	Westview Village II LP	Elevator	GRANT
94. 22-V-600	Westview Village II LP	Elevator	GRANT
95. 22-V-601	ARE-SD Region No. 68, LLC	Elevator	GRANT
96. 22-V-602	SRI Ten 707 Wilshire LLC	Elevator	GRANT
97. 22-V-603	Mason Sutter Place HOA	Elevator	GRANT
98. 22-V-604	Sutter Health	Elevator	GRANT
99. 22-V-605	Commercial Piper LLC	Elevator	GRANT
100. 22-V-606	MP Midway Associates I, L.P.	Elevator	GRANT
101. 22-V-607	MP Midway Associates I, L.P.	Elevator	GRANT
102. 22-V-608	HSRE - PMB Orange, LLC	Elevator	GRANT
103. 22-V-609	Bayview Emeryville LLC	Elevator	GRANT
104. 22-V-610	D Avenue Housing Associates, LP	Elevator	GRANT
105. 22-V-611	D Avenue Housing Associates, LP	Elevator	GRANT
106. 22-V-612	Grand Pacific Carlsbad, L.P.	Elevator	GRANT
107. 22-V-613	CP-SRM San Jose, LLC	Elevator	GRANT
108. 22-V-614	Scripps Health	Elevator	GRANT
109. 22-V-615	Ray Holdings, LLC	Elevator	GRANT
110. 22-V-616	2099 MLK Owner LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
111. 22-V-617	KB 1417-1429 S. Robertson LLC	Elevator	GRANT
112. 22-V-618	4433 Cartwright Investments, LLC	Elevator	GRANT
113. 22-V-619	Bar Investors, JV dba Best Western plus South Coast Inn	Elevator	GRANT
114. 22-V-620	MP Downtown San Mateo Associates, L.P.	Elevator	GRANT
115. 22-V-621	University Waverley PA LP	Elevator	GRANT
116. 22-V-622	MP Downtown San Mateo Associates, L.P.	Elevator	GRANT
117. 22-V-623	Cherokee Bliss LLC	Elevator	GRANT
118. 22-V-624	Olivewood Village LLC	Elevator	GRANT
119. 22-V-625	Olivewood Village LLC	Elevator	GRANT
120. 22-V-626	CP VII Sixth Ave, LLC	Elevator	GRANT
121. 22-V-627	Fairfield Poway LLC	Elevator	GRANT
122. 22-V-628	Fairfield Poway LLC	Elevator	GRANT
123. 22-V-629	Mitchell Park, L.P.	Elevator	GRANT
124. 22-V-630	Los Angeles World Airports	Elevator	GRANT
125. 22-V-631	Jefferson Centerpointe, LLC	Elevator	GRANT
126. 22-V-633	Mercy Housing California 97, LP	Elevator	GRANT
127. 22-V-634	Allied 34320 Fremont, L.P.	Elevator	GRANT
128. 22-V-635	The Leon S. Kaplan Revocable Trust Leon S. Kaplan Trustee	Elevator	GRANT
129. 22-V-636	The Milford Apartments, LLC	Elevator	GRANT
130. 22-V-637	Choice DC, LLC	Elevator	GRANT
131. 22-V-638	MirKa 3481 Vista Lane Family LP	Elevator	GRANT
132. 22-V-639	Los Angeles World Airports	Elevator	GRANT

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

In the Matter of Application to Modify
Permanent Variance by:

BCORE 660 W El Camino Real TRS LLC

OSHSB File No.: 14-V-067M2
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application to Modify Permanent Variance by: BCORE 660 W El Camino Real TRS LLC	OSHSB File No.: 14-V-067M2 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
14-V-067	T Alliance Three Sunnyvale, LLC
14-V-067M1	T Alliance Three Sunnyvale, LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Caitlin Sharik, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 14-V-067 and 14-V-067M1.
2. Application Section E, declared to be wholly truthful under penalty of perjury by Application signatory, states that the person or entity named in Application Section A, BCORE 660 W El Camino Real TRS LLC, became the owner of the conveyance(s) subject to the existing variance referenced in Application Section E, as the term conveyance owner is defined per California Code of Regulations, Title 8, Section 403(o).
3. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 14-V-067 and 14-V-067M1, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 14-V-067 and 14-V-067M1.
4. The Board finds the Application Section E, 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. 14-V-067 and 14-V-067M1 was based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 14-V-067 and 14-V-067M1, to be in fact:

BCORE 660 W El Camino Real TRS LLC

E. Decision and Order:

1. Variance application 14-V-067M2 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 14-V-067, 14-V-067M1, and Permanent Variance No. 14-V-067M2, shall be:

BCORE 660 W El Camino Real TRS LLC

2. Permanent Variance No. 14-V-067 and 14-V-067M1, 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. 14-V-067M2.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Santa Clara Phase II, LLC

OSHSB File No.: 15-V-396M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application to Modify Permanent Variance by: Santa Clara Phase II, LLC	OSHSB File No.: 15-V-396M1 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
15-V-396	Santa Clara Campus Partners, LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Collette Brown, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 15-V-396.
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, Santa Clara Phase II, LLC, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 15-V-396, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 15-V-396.
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. 15-V-396 based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 15-V-396 to be in fact:

Santa Clara Phase II, LLC

E. Decision and Order:

1. Variance application 15-V-396M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 15-V-396 and Permanent Variance No. 15-V-396M1, shall be:

Santa Clara Phase II, LLC

2. Permanent Variance No. 15-V-396 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. 15-V-396M1.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Santa Clara Phase III EFH, LLC

OSHSB File No.: 16-V-142M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application to Modify Permanent Variance by: Santa Clara Phase III EFH, LLC	OSHSB File No.: 16-V-142M1 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
16-V-142	Santa Clara Property Owner I LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Collette Brown, appeared on behalf of the Applicant; Jose Caja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 16-V-142.
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, Santa Clara Phase III EFH, LLC, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 16-V-142, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 16-V-142.
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. 16-V-142 based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 16-V-142 to be in fact:

Santa Clara Phase III EFH, LLC

E. Decision and Order:

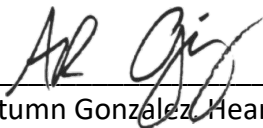
1. Variance application 16-V-142M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 16-V-142 and Permanent Variance No. 16-V-142M1, shall be:

Santa Clara Phase III EFH, LLC

2. Permanent Variance No. 16-V-142 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. 16-V-142M1.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Santa Clara Phase III EFH, LLC

OSHSB File No.: 16-V-143M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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DECISION, A PETITION FOR REHEARING
MAY BE FILED BY ANY PARTY WITH THE
STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

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

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

In the Matter of Application to Modify Permanent Variance by: Santa Clara Phase III EFH, LLC	OSHSB File No.: 16-V-143M1 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
16-V-143	Santa Clara Property Owner I LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Collette Brown, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 16-V-143.
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, Santa Clara Phase III EFH, LLC, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 16-V-143, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 16-V-143.
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. 16-V-143 based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 16-V-143 to be in fact:

Santa Clara Phase III EFH, LLC

E. Decision and Order:

1. Variance application 16-V-143M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 16-V-143 and Permanent Variance No. 16-V-143M1, shall be:

Santa Clara Phase III EFH, LLC

2. Permanent Variance No. 16-V-143 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. 16-V-143M1.

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

Dated: January 26, 2023



Autumn Gonzalez Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Santa Clara Phase III EFH, LLC

OSHSB File No.: 16-V-144M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application to Modify Permanent Variance by:</p> <p style="text-align: center;">Santa Clara Phase III EFH, LLC</p>	<p>OSHSB File No.: 16-V-144M1</p> <p style="text-align: center;"><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
16-V-144	Santa Clara Property Owner I LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Collette M. Brown, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 16-V-144.
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, Santa Clara Phase III EFH, LLC, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 16-V-144, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 16-V-144.
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. 16-V-144 based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 16-V-144 to be in fact:

Santa Clara Phase III EFH, LLC

E. Decision and Order:

1. Variance application 16-V-144M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 16-V-144 and Permanent Variance No. 16-V-144M1, shall be:

Santa Clara Phase III EFH, LLC

2. Permanent Variance No. 16-V-144 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. 16-V-144M1.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Santa Clara Phase III G, LLC

OSHSB File No.: 16-V-145M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

THE FOREGOING VARIANCE DECISION WAS
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IF YOU ARE DISSATISFIED WITH THE
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STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

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

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

In the Matter of Application to Modify Permanent Variance by: <p style="text-align: center;">Santa Clara Phase III G, LLC</p>	OSHSB File No.: 16-V-145M1 <p style="text-align: center;"><u>PROPOSED DECISION</u></p> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
16-V-145	Santa Clara Property Owner I LLC

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Collette M. Brown, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 16-V-145.
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, Santa Clara Phase III G, LLC, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 16-V-145, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 16-V-145.
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. 16-V-145 based.
5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 16-V-145 to be in fact:

Santa Clara Phase III G, LLC

E. Decision and Order:

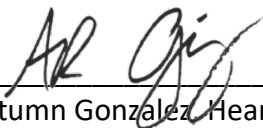
1. Variance application 16-V-145M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 16-V-145 and Permanent Variance No. 16-V-145M1, shall be:

Santa Clara Phase III G, LLC

2. Permanent Variance No. 16-V-145 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. 16-V-145M1.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application for
Permanent Variance by:

Dragados USA

OSHSB File No.: 19-V-432

Proposed Decision Dated: February 1, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance By: Dragados USA, LLC	OSHSB File No.: 19-V-432 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Jurisdictional and Procedural Matters

1. On October 18, 2019, and as amended on September 14, 2020, Dragados USA, LLC (Applicant) has applied for permanent variance from certain provisions of California Code of Regulations, title 8¹, section 8427, subdivision (b), a tunnel safety order.
2. This proceeding is conducted in accordance with Labor Code Section 143, and section 401, et. seq. of the Board’s procedural regulations.
3. The hearing was held on January 25, 2023 by Zoom conference, in Sacramento, California, by delegation of the Occupational Safety and Health Standards Board (Board). The hearing panelists are Board Members Barbara Burgel and Chris Laszcz-Davis, and the hearing officer is Autumn Gonzalez. This proposed decision, prepared as directed by the hearing panel, is presented to the Board for its consideration, in accordance with section 426 of the Board’s rules of procedure.
4. Appearing for the Applicant were Nick Karlin, Project Engineer, Ryan Swift, Safety Manager, and Matt Kendall, Project Manager. Michael Nelmidia, Senior Safety Engineer, appeared on behalf of the Board, and Eric Berg, Deputy Chief of Health, and Keummi Park, Senior Safety Engineer appeared for 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: subject original and First Amended Applications for Permanent Variance as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Division Review of Application as PD-3, Board Staff Review of Application as PD-4, and official notice taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested.
6. The hearing was closed on January 25, 2023.

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

B. Findings of Fact

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

1. The Applicant requests a permanent variance from sections 8427, subdivision (b), a tunnel safety regulation. The application pertains to a tunneling project for the Los Angeles County Sanitation Districts, for construction of a 7 mile long, 18 foot diameter tunnel to convey treated water from the Joint Water Pollution Control Plant in Carson to existing ocean outfalls at Royal Palms Beach in San Pedro.
2. Applicant proposes to engage in construction of the tunnel utilizing a Slurry Tunnel Boring Machine (STBM); completion date of the work is estimated for July 2024.
3. The STBM is a horizontal cylindrical metal shield that bores through earth and builds an underground tunnel. The STBM has at its front end a large circular plate covered with cutting teeth. The circular plate is called a cutting wheel; it rotates slowly and excavates the tunnel while the STBM pushes forward. Soil passes through the opening in the wheel into an enclosed excavation chamber located directly behind the cutting wheel. A mix of bentonite and water slurry is pumped into the excavation chamber at pressure equal or slightly above that of the existing ground, to support the ground ahead of the tunnel face and to prevent inflows of water and soil.
4. The excavated materials (“muck”) consists of ground materials and bentonite slurry. This muck is pumped from the excavation chamber to a separation plan located on the surface, via enclosed pipelines. The bentonite slurry is recycled after separation. Employees who operate the STBM are located inside the STBM behind the excavation chamber, and work in atmospheric conditions while being protected by the installed tunnel lining and the pressure bulkhead.
5. Applicant has completed representative vertical test holds, and seeks a variance from horizontal and 45 degrees test holes, as it believes the regulation was written for traditional open face mechanized tunneling methods, where employees are in physical contact with unsupported ground and are thus exposed to naturally occurring hazards.

C. Applicable Regulations

As stated above, the Applicant requests a variance from requirements to bore horizontal test holes under Section 8427, subdivision (b), a tunnel safety order that reads as follows:

(b) Whenever any working place in a tunnel is being advanced within 200 feet of areas that contain or are likely to contain dangerous accumulations of water, gas, petroleum products, or mud, representative vertical test holes shall be drilled from the surface where possible to determine if a hazard is present. Where the likelihood of a dangerous accumulation does exist, horizontal test holes of sufficient depth shall be drilled in advance of such workings to insure that at least 20 feet of tested ground remains

beyond the face. Test holes 20 feet deep shall also be drilled at angles of 45 degrees into the walls, roof, and floors when necessary.

D. Conclusive Findings

The record contains a reasonable and adequate basis for concluding that the Applicant has complied with the statutory and regulatory requirements that must be met before an application for a permanent variance may be conditionally granted. Further, the record supports a conclusion that the preponderance of the evidence establishes that the Applicant's proposals, subject to all conditions set forth in the below Decision and Order, will provide employment, and a place of employment, as safe and healthful as would prevail if the Applicant complied with the safety order requirements at issue.

Decision and Order

The Application for Permanent Variance of Dragados USA, LLC< OSHSB File No. 19-V-432, is conditionally GRANTED subject to the following conditions:

1. During tunneling, the STBM shall be operated at all times in the closed-face mode. During tunneling, the cutter-head pressure seals and other pressure seals between the STBM and the tunnel walls and/or lining shall be effective in preventing hazardous gases, mud or water from entering the tunnel and shall be inspected, serviced and maintained as recommended by the manufacturer.
2. If loss of pressure in the cutter-head results in the intrusion of liquids, gas, petroleum products or mud inside the tunnel, Cal/OSHA may require additional protective measures, including forward probe holes.
3. Human entry in the cutter-head area, excavation chamber, and machine room shall not be made until the area has been tested for oxygen, flammable, and toxic gases and determined to be safe for entry by a person certified by Cal/OSHA as required by Labor Code section 7999. The ground shall be stabilized by grouting, pressurizing or other appropriate methods approved by Cal/OSHA. Entry shall require continuous monitoring for oxygen, flammable and toxic gases.
4. There shall be an effective auxiliary exhaust ventilation system within close proximity of the transport pipeline extension area which exhausts directly to the main ventilation system for the tunnel.
5. The Applicant shall establish, implement, and maintain effective written transport pipeline extension procedures to ensure employees are not exposed to excavated materials during the pipeline extension. The pipeline extension procedures shall include, but not be limited to, pipeline flushing, lockout and tag out, ventilation and air monitoring procedures.
6. There shall be an effective means of communication between the STBM operator and the pipe extension foreman.

7. The Applicant shall train all affected employees on the procedures required by condition 5 prior to working in the pipeline extension area and have a copy of the procedures immediately available to all affected employees during the pipeline extension operation.
8. The following gas sensors shall be properly installed, calibrated, maintained and operated to provide a continuous display at the STBM Operator's Station at all times the TBM is in use or otherwise occupied. Gas sensors shall include oxygen, flammable gases, carbon monoxide, hydrogen sulfide and other toxic gases as necessary. The gas sensors shall be located at:
 - a. The crown area of the heading,
 - b. The invert of the heading and configured and calibrated to monitor heavy hydrocarbons in addition to the gases listed above,
 - c. The return air duct of the ventilation system (to provide an early warning if flammable gas is encountered), and
 - d. The transport pipeline extension area.
9. A Certified Gas Tester shall be present at all times when employees are present to continuously monitor oxygen, explosive and toxic gas levels (including but not limited to hydrogen sulfide, carbon monoxide, and benzene).
10. All employees in the tunnel shall be equipped with personal hydrogen sulfide gas monitors. The personal hydrogen sulfide gas monitor shall be inspected, calibrated and maintained as recommended by the manufacturer.
11. The Applicant shall ensure that all employees in the tunnel are provided with and carry emergency escape respirators necessary for full evacuation. The respirators shall be certified in accordance with section 5144 to protect employees against carbon monoxide, hydrogen sulfide, oxygen deficiency and other toxic gases that may be encountered in the tunnel. The escape respirators shall be inspected, maintained, and used as recommended by the manufacturer.
12. The Applicant shall establish written procedures acceptable to Cal/OSHA on what action to take in the event that:
 - a. Percentage of oxygen is above 22% or below 19.5%,
 - b. Concentration of hydrogen sulfide is above 5 ppm and above 10 ppm,
 - c. Concentration of carbon monoxide is above 10 ppm and above 25 ppm,
 - d. Flammable gases detected at or above 5% of the Lower Explosive Limit (LEL) and at or above 20% of the LEL, and/or
 - e. Concentration of benzene is above 0.5 ppm and above 1 ppm.

13. The Applicant shall train all affected employees on the procedures required by condition 12 and have a copy of the procedures immediately available to all affected employees during STBM use or entry into the cutter-head chamber.
14. The Applicant shall provide a copy of the procedures required by conditions 5 and 12 to Cal/OSHA at least seven days prior to the beginning of work covered by this variance.
15. The tunnel liner segments shall be bolted and/or welded in their sealed, watertight mode. Openings for grout installation and water drainage shall be properly controlled to prevent accidental discharge of liquids, muck and gases into the tunnel.
16. The STBM shall be of such design that, in case a forward probe hole is required, it can be drilled from the tunnel at ambient pressure.
17. A probe hole must be driven prior to excavating any cross tunnels.
18. The Applicant shall submit to Cal/OSHA, at least once every three months, a report explaining all Lower Explosive Limit (LEL) monitor readings in excess of 5%, the duration of such readings and the effectiveness of the STBM in maintaining a safe work area.
19. Where oil or gas well casings or similar hazards may be encountered during tunnel construction, the applicant shall use appropriate methods, such as record searches, magnetometer surveys, or ground-penetrating radar to detect casings or similar hazards. The Applicant shall modify excavation procedures to minimize the excavation and tunnel intrusion hazards.
20. 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.
21. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), the Division, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

I hereby certify that the above Proposed Decision is the decision of the Hearing Panel, and the Hearing Panel recommends its adoption by the Occupational Safety and Health Standards Board as the Board's decision in this proceeding.

DATED: February 1, 2023



Autumn Gonzalez Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

Olivewood Village LLC

OSHSB File No.: 21-V-127M1
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application to Modify Permanent Variance by: Olivewood Village LLC	OSHSB File No.: 21-V-127M1 PROPOSED DECISION Hearing Date: January 25, 2023
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A. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations, for each elevator having the below specified preexisting variance location address of record:

Preexisting OSHSB File No.	Applicant Name	Variance Address of Record	Preexisting Number of Elevators
21-V-127	Olivewood Village LLC	111 N. Madison Ave. Pasadena, CA	5

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”) with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Jennifer Linares appeared on behalf of the Applicants’ representative, the Schindler Elevator Corporation; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the subject modification of

permanent variance application captioned above as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application(s) for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

D. Findings and Basis:

1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 21-V-127, to decrease the quantity of elevators from five (5) to one (1).
2. Application section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 21-V-127.
3. The Division has evaluated the immediate request for modification of variance, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-127.
4. The Board finds the section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 21-V-127, decreasing the quantity of subject elevators from five (5) to one (1), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 21-V-127 was, in part, based.

E. Decision and Order:


1. Application for Modification of Permanent Variance, No. 21-V-127M1, is conditionally GRANTED, as specified below, such that a total of one (1) elevators are the subject of Permanent Variance No. 21-V-127, as hereby modified.
2. Permanent Variance No. 21-V-127, being only modified as to the subject quantity of elevators specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 21-V-127M1.
3. The applicant shall notify its employees or their authorized representative(s), or both, of

this order in the same way that the Applicant was required to notify them of the application for permanent variance, per California Code of Regulations, title 8, sections 411.2 and 411.3.

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

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

4th Street San Jose LP

OSHSB File No.: 21-V-341M1

Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application to Modify Permanent Variance by: 4 th Street San Jose LP	OSHSB File No.: 21-V-341M1 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter and Jurisdiction:

1. The above named person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. The subject permanent variance file, and preexisting variance holder of record therein, are as follows:

Preexisting OSHSB File No.	Preexisting Variance Holder of Record
21-V-341	Path Ventures

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff in a technical advisory role apart from the Board.

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

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

- D. Based on the record of this hearing, the Board makes the following findings of fact:
 1. The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 21-V-341.
 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, 4th Street San Jose LP, 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. The Division has evaluated the request for modification of person or entity of record holding Permanent Variance No. 21-V-341M1, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 21-V-341M1.
 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. 21-V-341 was based.

5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 21-V-341M1, to be in fact:

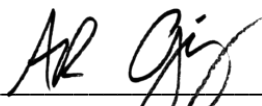
4th Street San Jose LP

E. 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. 21-V-341 and Permanent Variance No. 21-V-341M1, shall be: 4th Street San Jose LP.
2. Permanent Variance No. 21-V-341, 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. 21-V-341M1.
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 California Code of Regulations, title 8, sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division, or by the Board on its own motion, in the manner prescribed for its issuance or per duly adopted superseding procedural rules.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application to Modify
Permanent Variance by:

STC Venture Block 3RWS, LLC

OSHSB File No.: 22-V-075M1

Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

THE FOREGOING VARIANCE DECISION WAS
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STANDARDS BOARD WITHIN TWENTY (20)
DAYS AFTER SERVICE OF THE DECISION.
YOUR PETITION FOR REHEARING MUST
FULLY COMPLY WITH THE REQUIREMENTS
OF CALIFORNIA CODE OF REGULATIONS,
TITLE 8, SECTIONS 427, 427.1 AND 427.2.

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

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

In the Matter of Application to Modify Permanent Variance by: STC Venture Block 3RWS, LLC	OSHSB File No.: 22-V-075M1 <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. The following person or entity (“Applicant”) has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of Regulations, for each elevator having the specified preexisting variance location address of record:

Preexisting OSHSB File No.	Applicant Name	Preexisting Variance Address of Record
22-V-075	STC Venture Block 3RWS, LLC	200 S. Taaffe Street Sunnyvale, CA

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

C. Procedural Matters:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.
2. At the hearing, Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff in a technical advisory role apart from the Board.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Board Staff Reviews of Variance Application
PD-4	Division Reviews of Variance Application
PD-5	Review Draft-1 Proposed Decision

Official notice is taken of the Board’s rulemaking records and variance decisions concerning the safety order provisions from which variance has been requested. On January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each conveyance the subject of previously granted Permanent Variance 22-V-075.
2. Application Section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 22-V-075 is in effect, in fact is more completely, and correctly the different address information specified in below subsection D.5.
3. The Division has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in OSHSB Permanent Variance File No. 22-V-075.
4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 22-V-075 was, in part, based.
5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 22-V-075, to be:

240 S. Taaffe St.
Sunnyvale, CA

E. Decision and Order:

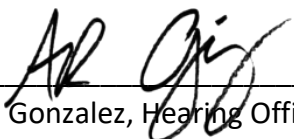
1. Permanent Variance Application No. 22-V-075M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance Nos. 22-V-075, and 22-V-075M1, shall have the following address designation:

240 S. Taaffe St.
Sunnyvale, CA

2. Permanent Variance No. 22-V-075, 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-075M1 .

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application for
Permanent Variance regarding:

Otis Gen2S/Gen3Edge Elevator (Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance Regarding: Otis Gen2S/Gen3Edge Elevator (Group IV)	OSHSB File Nos.: see grid below <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-270	601 Wilshire LLC and Ideal 601 LLC	601 Wilshire Blvd. Los Angeles, CA	1
22-V-519	Ramona Metro Point, L.P.	11016 Ramona Blvd. El Monte, CA	1
22-V-521	San Mateo County Sheriff's Office	Old Maguire Jail 330 Bradford St. Redwood City, CA	2
22-V-524	Spudland, LLC	139 S. Occidental Blvd. Los Angeles, CA	2
22-V-534	Chabot-Las Positas College Community District	Chabot College Library 2555 Hesperian Blvd. Hayward, CA	2
22-V-536	CRP Affordable Housing and Community Development	6035 Old Redwood Highway Windsor, CA	2
22-V-538	Grantville Trolley Family Housing, LP	4470 Alvarado Canyon San Diego, CA	2
22-V-542	Nadeau SH, L.P.	1216 Nadeau St. Los Angeles, CA	2
22-V-544	Nash - Holland Gateway Crossing Lot 2 Project, LLC	350 Chastain Place Santa Clara, CA	4

22-V-546	Nash - Holland Gateway Crossing Lot 1 Project, LLC	1200 Rickabaugh Way Santa Clara, CA	3
22-V-548	NH QOZB LLC	1419 N. New Hampshire Ave. Los Angeles, CA	1
22-V-549	Orange 12 LLC	10700 W. Tabor St. Los Angeles, CA	2
22-V-552	180 Jones Associates, L.P.	180 Jones St. San Francisco, CA	1
22-V-579	BNS Development, LLC	101 S. Chapel Ave. Alhambra, CA	1
22-V-585	Canopy Healdsburg, LLC	151 Sawmill Circle Healdsburg, CA	1
22-V-587	Canopy Healdsburg, LLC	171 Sawmill Circle Healdsburg, CA	1
22-V-589	Canopy Healdsburg, LLC	131 Sawmill Circle Healdsburg, CA	1
22-V-593	Los Lirios Apartments, L.P.	111 S. Soto St. Los Angeles, CA	1
22-V-596	SIOF 3 Properties, LLC	4101 S. Somerset Dr. Los Angeles, CA	1
22-V-599	Westview Village II LP	247 W. Warner St. Ventura, CA	1

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

B. Procedural

1. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
2. This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
3. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja appeared on behalf of the

Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

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

Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis:

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

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

D. Conclusive Findings:

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

E. Decision and Order:

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from California Code of Regulations, title 8, section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

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

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

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

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

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

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

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

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

- e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
 - f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to the Division upon request.
13. The speed governor rope and sheaves shall comply with the following:
- a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).
14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
15. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
16. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.

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

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

In the Matter of Application for
Permanent Variance regarding:

Otis Gen 20, and/or Gen3Peak
(Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2022

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

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

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

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Otis Gen20, and/or Gen3Peak (Group IV)</p>	<p>OSHSB File No: see grid below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Procedural & Jurisdictional Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
22-V-499	Berkeley Commons Owner, LLC	600 Addison St. Berkeley, CA	4
22-V-501	Berkeley Commons Owner, LLC	601 Bancroft Way Berkeley, CA	4
22-V-581	Stockton Street Properties, Inc.	48 Stockton St. San Francisco, CA	4

- The subject safety order requirements are specified in B. Applicable Regulations below.
- These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Board’s procedural regulations.
- This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”) with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
- At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmda appeared on behalf of the Board.

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

6. 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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	Review Draft-1 Proposed Decision

7. Official notice is taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Applicable Regulation

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - b. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
 - c. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
 - d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

C. Findings of Fact

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

- d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in OSHSB File No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in OSHSB File No. 14-V-170.
2. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders (“ESO”).
 3. Both Board staff and Division safety engineers, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

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

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

E. Decision and Order

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

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);

- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

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

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:
 - a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.

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

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
11. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.
 - c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.
 - e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

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

12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
14. The Division shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by the Division, and a Permit to Operate shall be issued before each elevator is placed in service.
15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
16. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per California Code of Regulations, title 8, sections 411.2 and 411.3.
17. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per title 8, division 1, chapter 3.5.

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

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

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

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

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

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

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

In the Matter of Application for
Permanent Variance regarding:

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

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Otis Gen2S/Gen3Edge Elevator & Medical Emergency Elevator Car Dimensions (Group IV)</p>	<p>OSHSB File Nos.: see grid below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-517	Maudelle Shirek, L.P.	Maudelle Miller Shirek Community 2001 Ashby Ave. Berkeley, CA	2
22-V-523	SC Cedar Street Apartments, LP	525 Cedar St. Santa Cruz, CA	1
22-V-526	TB Milano Apartments, LLC	1331 Columbia St. San Diego, CA	1
22-V-531	The Avenue Azusa LLC	850 N. Azusa Ave. Azusa, CA	2
22-V-532	Bridges Murrieta I Owner, LLC	Bldg. 2 (1 Elevator) & Bldg. 8 (1 Elevator) 40628 Los Alamos Rd. Murrieta, CA	2
22-V-539	Los Olivos II Apartments LLC, a Delaware Liability Co	9101 Miramonte Irvine, CA	3
22-V-540	Mountain View Condos Corp.	21010 W. Erwin St. Woodland Hills, CA	5

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

22-V-541	MP Francis Scott Key 2 Associates, L.P. & MP Francis Scott Key 1, LLC	1360 43rd Ave. San Francisco, CA	2
22-V-582	The Cove, LP	2121 Williams St. Long Beach, CA	2
22-V-590	CCD Pomona LLC	Pomona Student Housing 851 Corporate Center Dr. Pomona, CA	2
22-V-591	Haroni Investments LLC	5144 S. Crenshaw Blvd. Los Angeles, CA	2
22-V-595	Manhattan East, LP	988 S. Manhattan Place Los Angeles, CA	2
22-V-608	HSRE - PMB Orange, LLC	St. Joseph Hospital of Orange Medical Office Building 363 S. Main St. Orange, CA	4
22-V-613	CP-SRM San Jose, LLC	3315 Almaden Expressway San Jose, CA	3
22-V-615	Ray Holdings, LLC	350 N. Garey Ave. Pomona, CA	1
22-V-616	2099 MLK Owner LLC	2099 Martin Luther King Jr. Way Berkeley, CA	1
22-V-617	KB 1417-1429 S. Robertson LLC	1425 S. Robertson Blvd. Los Angeles, CA	2
22-V-626	CP VII Sixth Ave, LLC	3840 Sixth Ave. San Diego, CA	2
22-V-627	Fairfield Poway LLC	12831 Poway Rd. Poway, CA	1
22-V-628	Fairfield Poway LLC	12857 Poway Rd. Poway, CA	1
22-V-629	Mitchell Park, L.P.	525 E. Charleston Rd. Palo Alto, CA	2
22-V-633	Mercy Housing California 97, LP	600 7th St. San Francisco, CA	3

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

B. Procedural

1. This proceeding is conducted in accordance with Labor Code section 143.
2. This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration.
3. 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 (“Division”), and Michael Nelmidia appeared on behalf of the Board.
4. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

5. Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis:

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

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A table.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
 - a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for OSHSB File No. 12-V-093;

- b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for OSHSB File No. 14-V-206; and
 - c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for OSHSB File No. 22-V-302 regarding medical emergency car dimensions.
4. Both Board staff and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings:

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

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

E. Decision and Order:

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

- Car top railing: sections 2.14.1.7.1 (only to the extent necessary to permit an inset car top railing, if, in fact, the car top railing is inset);
- Speed governor over-speed switch: 2.18.4.2.5(a) (only insofar as is necessary to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);

- Governor rope diameter: 2.18.5.1 (only to the extent necessary to allow the use of reduced diameter governor rope);
- Pitch diameter: 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No. 13.c);
- Suspension means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these “suspension means” provisions are only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- Inspection transfer switch: 2.26.1.4.4(a) (only to the extent necessary to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (only to the extent necessary to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code Section 3002.4.1a)

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

1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

- d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
2. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.
 3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to the Division upon request.
 4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts; and
 - g. Lubrication information.
 5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
 6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service

personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

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

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The 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.

12. The governor speed-reducing switch function shall comply with the following:

- a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
- b. The velocity encoder shall be coupled to the driving machine motor shaft. The "C" channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from "C" channel of the encoder shall be verified with the "A" and "B" channels for failure. If a failure is detected then an emergency stop shall be initiated.
- c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
- d. It shall be used in conjunction with approved car-mounted speed governors only.
- e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
- f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
- g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
- h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to the Division upon request.

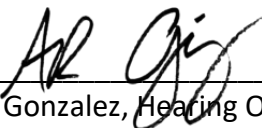
13. The speed governor rope and sheaves shall comply with the following:

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

14. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), Section 3002.4.1a;
The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.”
 - b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, Section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to the Division, at the time of inspection, for all medical emergency service elevator(s).
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with the Board’s procedural regulations at section 426, subdivision (b).

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

In the Matter of Application for
Permanent Variance regarding:

Otis Medical Emergency Elevator Car
Dimensions (Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Otis Medical Emergency Elevator Car Dimensions (Group IV)</p>	<p>OSHSB File No.: see grid below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address
22-V-518	Oakland Unified School District	OUSD Central Administrative Center at Cole Campus 1011 Union St. Oakland, CA
22-V-520	Ramona Metro Point, L.P.	11016 Ramona Blvd. El Monte, CA
22-V-522	San Mateo County Sheriff's Office	Old Maguire Jail 330 Bradford St Redwood City, CA
22-V-525	Spudland, LLC	139 S. Occidental Blvd. Los Angeles, CA
22-V-529	949 LLC	949 10th St. Santa Monica, CA
22-V-530	1403 Locust Street, LLC	1403 Locust St. Walnut Creek, CA
22-V-535	Chabot-Las Positas College Community District	Chabot College Library 2555 Hesperian Blvd. Hayward, CA
22-V-537	CRP Affordable Housing and Community Development	6035 Old Redwood Highway Windsor, CA

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

22-V-543	Nadeau SH, L.P.	1216 Nadeau St. Los Angeles, CA
22-V-545	Nash - Holland Gateway Crossing Lot 2 Project, LLC	350 Chastain Place Santa Clara, CA
22-V-547	Nash - Holland Gateway Crossing Lot 1 Project, LLC	1200 Rickabaugh Way Santa Clara, CA
22-V-550	Orange 12 LLC	10700 W. Tabor St. Los Angeles, CA
22-V-551	Eden Freedom Investors, L.P.	1482 Freedom Blvd. Watsonville, CA
22-V-553	180 Jones Associates, L.P.	180 Jones Street San Francisco, CA
22-V-580	BNS Development, LLC	101 S. Chapel Ave. Alhambra, CA
22-V-583	Valerio, LLC	14200 W. Runnymede St. Van Nuys, CA
22-V-584	Canopy Healdsburg, LLC	131 Sawmill Circle Healdsburg, CA
22-V-586	Canopy Healdsburg, LLC	151 Sawmill Circle Healdsburg, CA
22-V-588	Canopy Healdsburg, LLC	171 Sawmill Circle Healdsburg, CA
22-V-592	Heritage Square II, LP	710 North Fair Oaks Ave. Pasadena, CA
22-V-594	Los Lirios Apartments, L.P.	111 S. Soto St. Los Angeles, CA
22-V-597	SIOF 3 Properties, LLC	4101 S. Somerset Dr. Los Angeles, CA
22-V-600	Westview Village II LP	247 W. Warner St. Ventura, CA
22-V-605	Commercial Piper LLC	725 Main St. Pleasanton, CA
22-V-606	MP Midway Associates I, L.P.	Midway Village Phase I 88 Park St. Daly City, CA
22-V-607	MP Midway Associates I, L.P.	Midway Village Phase I 80 Park St. Daly City, CA

22-V-609	Bayview Emeryville LLC	6701 Shellmound St. Emeryville, CA
22-V-634	Allied 34320 Fremont, L.P.	34320 Fremont Blvd. Fremont, CA

2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Board’s rules of practice and procedure.
3. This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
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 (“Division”), and Michael Nelmidia appeared on behalf of the Board.
5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

B. Findings of Fact and Applicable Regulations

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

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

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

...

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

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

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

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

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

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

C. Conclusive Findings

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

full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. Decision and Order

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

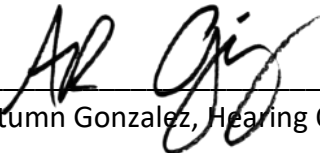
1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

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

2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to the Division, at the time of inspection, for all medical emergency service elevator(s).
4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
5. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), the Division, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application for
Permanent Variance regarding:

Mitsubishi Elevators (Group IV)

OSHSB File No.: See Section A.1 table of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Mitsubishi Elevators (Group IV)</p>	<p>OSHSB File Nos.: See section A.1 Table</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Procedural Matters:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-527	United El Segundo, Inc.	8497 Sunset Blvd. West Hollywood, CA	2

2. The safety orders at issue are set forth in the prefatory portion of the Decision and Order. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
3. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
4. At the hearing, Matt Jaskiewicz, with Mitsubishi Electric, Elevator Division, appeared on behalf of each Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff in a technical advisory role apart from the Board.
5. At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence:

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

Official Notice is taken of the Board’s rulemaking records and variance decisions concerning the safety order requirements from which variance is requested. At the close of hearing on January 25, 2023, the record was closed and the matter taken under submission by the Hearing Officer.

B. Findings of Fact:

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

1. Each section A table specified Applicant intends to utilize Mitsubishi elevators at the location and in the number stated in the table in Item A. The installation contracts for these elevators were signed on or after May 1, 2008, thus making the elevators subject to the Group IV Elevator Safety Orders.
2. The Board takes official notice and incorporates herein, Subsections D.3 through D.5 of the February 20, 2014, Decision of the Board in OSHSB Permanent Variance File No. 13-V-270.
3. As reflected in the record of this matter, including Board staff Pending Application for Permanent Variance Opinion Letter as PD-3, Division evaluation as PD-4, and testimony at hearing, it is the professionally informed opinion of Board staff and Division, that grant of requested variance, subject to conditions and limitations in substantial conforming with those set out per below Decision and Order, will provide Occupational Safety and Health equivalent or superior to that provided by the safety order requirements from which variance is sought.

C. Conclusive Findings:

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

D. Decision and Order:

As of such date as the Board adopts this Proposed Decision, each Application for Permanent Variance listed in the above section A.1 table, is conditionally GRANTED to the extent each Applicant of record shall have permanent variance from California Code of Regulations, title 8, section 3141 [ASME A17.1-2004, sections 2.10.2.2 (only to the extent necessary to permit the intermediate rail to be located at a point other than halfway between the top rail and the surface on which the railing is installed), 2.10.2.4 (only to the extent necessary to permit a bevel sloping that conforms with the variance conditions) and 2.14.1.7.1 (only to the extent necessary to permit the car top railing to be inset to clear obstructions when the conveyance is elevated to perform work on the machine and/or governor). The variance applies to the location and number of elevators stated in the section A.1 table, and the variance is subject to the above limitations and following conditions:

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

CAUTION

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

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

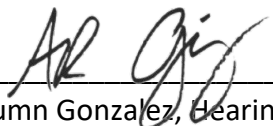
7. A mechanical means (e.g., locking bar mechanism) that will secure the car to the guide rail to prevent unintended movement shall be provided and used during machine and/or governor car-top work. The mechanical means (e.g., locking bar mechanism) shall have a safety factor of not less than 3.5 for the total unbalanced load.
8. An electrical switch or a lockout/tagout procedure shall be provided that will remove power from the driving machine and brake when the mechanical means (e.g., locking bar mechanism) is engaged.
9. In order to inhibit employees from working outside the car top railing, sections shall not be hinged and they shall be installed by means that will inhibit (but not necessarily completely preclude) removal. The Applicant shall ensure that all persons performing work that requires removal of any part of the car top railing are provided with fall protection that is appropriate and suitable for the assigned work. That fall protection shall consist of a personal fall arrest system or fall restraint system that complies with California Code of Regulations, title 8, section 1670.
10. The bevel utilized by the Applicant in accordance with the variance granted from ASME A17.1-2004, section 2.10.2.4 shall slope at not less than 75 degrees from the horizontal to serve as the toe board; however, that slope may be reduced to a minimum of 40 degrees from the horizontal as may be required for sections where machine encroachment occurs.
11. If the Applicant directs or allows its employees to perform tasks on the car top, the Applicant shall develop, implement, and document a safety training program that shall provide training to Applicant employees. Components of the training shall include, but not necessarily be limited to, the following: car blocking procedures; how examination, inspection, adjustment, repair, removal and replacement of elevator components are to be performed safely, consistent with the requirements of the variance conditions; applicable provisions of the law and other sources of safety practices regarding the operation of the elevator. A copy of the training program shall be located in the control room of each elevator that is the subject of this variance, and a copy of the training program shall be attached to a copy of this variance that shall be retained in any building where an elevator subject to this variance is located. The Applicant shall not allow Certified Qualified Conveyance Company (CQCC) or other contractor personnel to work on the top of any elevator subject to this variance unless the Applicant first ascertains from the CQCC or other contractor that the personnel in question have received training equivalent to, or more extensive than, the training components referred to in this condition.
12. Any CQCC performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
13. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.

14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.

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

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application for
Permanent Variance regarding:

KONE Monospace 500 Elevators (Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 500 Elevators (Group IV)	OSHSB File Nos.: see grid below <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-528	K-Elevate 10th Street Property LLC	502 10th Ave. San Diego, CA	2
22-V-560	GS HIP 1304 ECR, LP	1304 El Camino Real Redwood City, CA	1
22-V-561	Quadrus Sand Hill LLC	2450 Sand Hill Rd. Menlo Park, CA	1
22-V-563	NP 30 LLC	4555 30th St. San Diego, CA	2
22-V-569	Tasman East Station Holdco, LLC	2240 Calle De Luna Santa Clara, CA	4
22-V-614	Scripps Health	4555 Executive Dr. San Diego, CA	2
22-V-618	4433 Cartwright Investments, LLC	4433 Cartwright Ave. North Hollywood, CA	1
22-V-619	Bar Investors, JV dba Best Western plus South Coast Inn	5620 Calle Real Goleta, CA	1
22-V-620	MP Downtown San Mateo Associates, L.P.	480 E. 4th Ave. San Mateo, CA	2

22-V-621	University Waverley PA LP	384 University Ave. Palo Alto, CA	1
22-V-622	MP Downtown San Mateo Associates, L.P.	400 E. 5th Ave. San Mateo, CA	1
22-V-635	The Leon S. Kaplan Revocable Trust Leon S. Kaplan Trustee	5314 N. Cartwright Ave. North Hollywood, CA	2
22-V-636	The Milford Apartments, LLC	352 - 358 Milford St. Glendale, 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:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Fuei Saetern with KONE, Inc., appeared on behalf of each Applicant; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff in a technical advisory capacity apart from the Board.
3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

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

2.20.4 Minimum Number and Diameter of Suspension Ropes

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

5. An intent of the afore cited requirement of ASME A17.1-2004, Section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.
6. KONE has represented to Division and Board staff, having established an engineering practice for purposes of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010, Section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.
7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject to Division approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from title 8, section 3141, incorporated ASME A17.1-2004, Section 2.18.5.1.
9. ASME A17.1-2004, Section 2.18.5.1, specifies, in relevant part:

2.18.5.1 Material and Factor of Safety.

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

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

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

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with Section 3141.7(a)(10), the specific parameters of which, being expressly set out within title 8, Elevator Safety Orders, take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, Section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current title 8, Elevator Safety Orders requirements, and therefore not be subject to issuance of permanent variance.
12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. OSHSB File Nos. 06-V-203, 08-V-245, and 13-V-303).
13. As noted by the Board in OSHSB File Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, as also noted by Board staff, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.
14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Both Board staff and Division safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).

15. The applicant supplies tabulated data regarding the “Maximum Static Load on All Suspension Ropes.” To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, Section 2.20.3:

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

where

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

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

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 Sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by both Board staff and Division as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.

17. Board staff and Division are in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

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

D. Conclusive Findings:

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

establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of California Code of Regulation, title 8, Elevator Safety Orders from which variance is being sought.

E. Decision and Order:

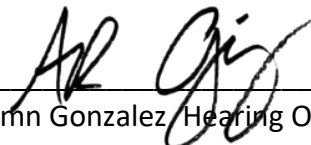
Each Application being the subject of this proceeding, per above Section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from California Code of Regulations, title 8, section 3141 incorporated ASME A17.1-2004, Section 2.20.4, in as much as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

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Division approval).
5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 Section 2.20.3.

10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division and a "Permit to Operate" issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
14. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per Title 8, Division 1, Chapter 3.5.

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

Dated: January 26, 2023



Autumn Gonzalez / Hearing Officer

Appendix 1

Monospace 500 Suspension Appendix 1 Table.

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
22-V-528	1	8	350	11706
22-V-528	2	8	350	11706
22-V-560	1	8	200	13207
22-V-561	1	8	200	13207
22-V-563	1	8	350	11706
22-V-563	3	8	350	11706
22-V-569	1	8	200	13207
22-V-569	2	8	200	13207
22-V-569	3	8	200	13207
22-V-569	4	8	200	13207
22-V-614	1	8	350	11706
22-V-614	2	8	350	11706
22-V-618	1	7	150	12247
22-V-619	1	7	150	12247
22-V-620	1	7	200	11556
22-V-620	2	7	200	11556
22-V-621	1	7	150	12247
22-V-622	1	7	200	11556
22-V-635	1	7	150	12247

22-V-635	2	7	150	12247
22-V-636	1	7	150	12247

Appendix 2

Suspension Means Replacement Reporting Condition

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

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

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

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

In the Matter of Application for
Permanent Variance by:

Bryant Property, LLC

OSHSB File No.:

Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance By: Bryant Property, LLC	OSHSB File No: see grid below <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Procedural & Jurisdictional Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
22-V-533	Bryant Property, LLC	555 Bryant St. San Francisco, CA	4

- The subject safety order requirements are specified in B. Applicable Regulations below.
- These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Board’s procedural regulations.
- This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”) with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
- At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmda appeared on behalf of the Board.
- 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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	Review Draft-1 Proposed Decision

7. Official notice is taken of the Board’s files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Applicable Regulation

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

C. Findings of Fact

1. The Board incorporates by reference the findings stated in:
 - a. Items 3 through 5.c, 5.e, and 5.f of the “Findings of Fact” section of the Proposed Decision adopted by the Board on February 19, 2009, in OSHSB File No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in OSHSB File No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in OSHSB File No. 10 V 029;
 - d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in OSHSB File No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in OSHSB File No. 14-V-170.
 - f. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for OSHSB File 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 OSHSB File No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.
3. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders (“ESO”).
4. Both Board staff and Division safety engineers, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

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

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

E. Decision and Order

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

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
- Governor Rope Diameter: 2.18.5.1 (Only to the extent necessary to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); *Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.*
- Pitch Diameter: 2.18.7.4 (Only to the extent necessary to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).
- 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 the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by the Division.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.
3. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to the Division upon request.
5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;

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

- b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.
- c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.
- e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION


DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
12. The speed governor rope and sheaves shall comply with the following:
- a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
13. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.
14. All medical emergency service elevators shall comply with the following:
- a. The requirements of the 2019 California Building Code (CBC), Section 3002.4.1a;
The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5 inch (127 mm) radius corners] in the horizontal, open position."

- b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, Section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to the Division, at the time of inspection, for all medical emergency service elevator(s).
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
 16. The Division shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by the Division, and a Permit to Operate shall be issued before each elevator is placed in service.
 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 California Code of Regulations, title 8, sections 411.2 and 411.3.
 19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per title 8, division 1, chapter 3.5.

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

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

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

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

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

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

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

In the Matter of Application for
Permanent Variance regarding:

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

OSHSB File No.: Per table, in Jurisdictional
and Procedural Matters below
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)</p>	<p>OSHSB File Nos.: Per table, in Jurisdictional and Procedural Matters below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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Jurisdictional and Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-554	Newcastle Realty LLC	10657 W. Moorpark St. Toluca Lake, CA	1
22-V-556	Hoover 719 LLC	719 S. Hoover St. Los Angeles, CA	1
22-V-562	WIN, LP	42525 Jackson St. Indio, CA	1
22-V-570	Sierra Real Estate Holdings, LLC	2020 S. Figueroa St. Los Angeles, CA	2
22-V-571	Gold Coast Properties CA 1, LLC	2370 Tuscany St. Corona, CA	1
22-V-575	NCRC Placentia LLC	1308 N. Angelina Dr. Placentia, CA	1
22-V-576	NCRC Placentia LLC	1320 N. Angelina Dr. Placentia, CA	1
22-V-577	Manhattan Beach Orthopaedic Management Company, LLC dba Golden State Bone and Joint Clinic	1762 Manhattan Beach Blvd. Manhattan Beach, CA	1
22-V-601	ARE-SD Region No. 68, LLC	11355 N. Torrey Pines Road San Diego, CA	1

22-V-610	D Avenue Housing Associates, LP	1221 D Avenue National City, CA	2
22-V-611	D Avenue Housing Associates, LP	605 E. 14th Street National City, CA	1
22-V-624	Olivewood Village LLC	88 N. Oakland Avenue Pasadena, CA	2
22-V-625	Olivewood Village LLC	533 E. Union St. Pasadena, CA	2
22-V-631	Jefferson Centerpointe, LLC	501 W. Crowther Ave. Placentia, CA	3
22-V-638	MirKa 3481 Vista Lane Family LP	3501 Vista Ln. San Ysidro, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
3. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
4. At the hearing, Jennifer Linares, with the Schindler Elevator Corporation, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

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

1. Suspension Means

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

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

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

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

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

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

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

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

[...]

(f) whether the ropes were non preformed or preformed

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

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

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

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

where:

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

S= manufacturer's rated breaking strength of one rope

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

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

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

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

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

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

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

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

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

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the

wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Inspection Transfer Switch

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

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

(a) located in the machine room[.]

3. Seismic Reset Switch

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

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

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

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

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

4. Car-top Railings

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

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

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

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

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

Findings of Fact

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

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

Conclusive Findings:

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

Decision and Order:

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

Elevator Safety Orders:

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

Conditions:

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

STM member mandatory replacement criteria shall include:

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

- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
- h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Division Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.
- i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
- l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.

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

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

- f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required 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 Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
7. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per California Code of Regulations, title 8, sections 411.2 and 411.3.
8. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed per title 8, Chapter 3.5, Subchapter 1.

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

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

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

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

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

In the Matter of Application for
Permanent Variance regarding:

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

OSHSB File No.: See section A.1 table
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Schindler Model 3300 Elevators with variant Gov. Ropes & Sheaves (Group IV)</p>	<p>OSHSB File Nos.: See section A.1 table below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter and Jurisdiction:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-555	6213 Montezuma, LLC	6213 Montezuma Rd. San Diego, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
3. The safety orders at issue are set out in below section C.1—C.4.

B. Process and Procedure:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Jennifer Linares, with the Schindler Elevator Corporation, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff, in a technical advisory role apart from the Board.
3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice is taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

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

Requested Suspension Means Related Variance:

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

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

Requested Car Top Railing Inset Variance:

2. As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 3300 elevator, each Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004, section:

section 2.14.1.7.1—Top of Car Perimeter Railing Placement

Requested Seismic Reset Switch Placement Variance:

3. As it pertains to installation of the requisite seismic reset switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, each Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code subsection:

Requested Transfer Switch Placement Variance:

4. As it pertains to installation of the requisite transfer switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, each Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:

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

Requested Governor Sheave to Rope Diameter Ratio Variance:

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

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

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

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter

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

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

6. Per the Application, the proposal is stated as follows: “The approved speed governor provided for this elevator has a sheave diameter-to-governor rope diameter ratio [D/d] of 33. This is not compliant with the current Group IV Elevator Safety Orders which require a [D/d] of 42-46. Equivalent safety will be attained by providing a governor rope with a breaking strength that provides a factor of safety greater than that required by the Elevator Safety Orders, and a governor sheave diameter which complies with the requirements of ASME A17.1-2010, section 2.18.5.1, and section 2.18.7.4, which, under certain conditions, permits the use of a governor rope and governor sheave ratio [D/d] of not less than 30.”
7. Having analyzed the request, as reflected in its Review of Application (Exhibit PD-4) Division is of the well informed professional opinion that the proposal, in as much as it

is to use a governor with sheave pitch diameter of not less than the product of the governor rope diameter and a multiplier of 30, in conjunction with a steel governor rope with a diameter of 6 mm (0.25 in.), 6-strand construction, and a factor of safety of 8 or greater, will provide safety, and workplace safety and health equivalent or superior to that of the ASME A17.1-2004, section 2.18.7.4. Division also correctly notes Applicant's proposed governor sheave pitch diameter, and reduced diameter governor rope installation is similar to installations for which a permanent variance has been previously conditionally granted. (e.g. OSHSB File No. 19-V-076)

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

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

Positions of Division, and Board Staff:

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

D. Conclusive Findings:

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

E. Decision and Order:

Each section A table identified Applicant is hereby conditionally GRANTED Permanent Variance as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, with respect to the section A specified number of Schindler Model 3300 elevator(s), at the specified location, each shall conditionally hold permanent variance from the following subparts of ASME A17.1-2004, currently incorporated by reference into California Code of Regulations, title 8, section 3141.

Suspension Members: Each Applicant shall conditionally hold permanent variance from the following title 8, section 3141, incorporated sections and subsections of ASME A17.12004, to the limited extent variance is necessary to provide for use of noncircular elastomeric-coated steel suspension members and concomitant components, and configurations— section 2.20.1; section 2.20.2.1; Subsection 2.20.2.2(a); Subsection 2.20.2.2(f); section 2.20.3; section 2.20.4: section 2.20.9.3.4; and section 2.20.9.5.4.

Inspection Transfer Switch: Each Applicant shall conditionally hold permanent variance from certain requirements of the following title 8, section 3141 incorporated section of ASME A17.1-2004, to the extent variance is necessary to having the requisite inspection transfer switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 2.26.1.4.4.

Seismic Safety Switch Placement: Each Applicant shall conditionally hold permanent variance from certain requirements of the following title 8, section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 8.4.10.1.1.

Car Top Railing: Each Applicant shall conditionally hold permanent variance from certain requirements of the following title 8, section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to provide for the below specified inseting of the subject elevator's top of car railing: section 2.14.1.7.1.

Governor Rope and Sheave: Each Applicant shall conditionally hold permanent variance from certain requirements of the following title 8, section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: section 2.18.7.4.

Further Conditions and Limitations:

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

- 2.20.4.3 – Minimum Number of Suspension Members
 - 2.20.3 – Factor of Safety
 - 2.20.9 – Suspension Member Fastening
- 1.1.1 Additionally, STMs shall meet or exceed all requirements of ASME 17.6-2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.
- 1.2. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Division of Occupational Safety and Health (Division) upon request.
- 1.3. STM member mandatory replacement criteria shall include:
- 1.3.1 Any exposed wire, strand or cord;
 - 1.3.2 Any wire, strand or cord breaks through the elastomeric coating;
 - 1.3.3 Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
 - 1.3.4 Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.
- 1.4. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
- 1.5. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- 1.6. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- 1.7. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be

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

- 1.8. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 1 (Division Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.
 - 1.9. Each elevator shall be provided with a device that electronically detects a reduction in residual strength of each STM member. The device shall be in compliance with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1, and incorporated herein by reference.
 - 1.10. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
 - 1.11. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
 - 1.12. Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 1.2 and 1.3 specified criteria, shall be conducted and documented every six months by a CCCM.
 - 1.13. The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 2, "Suspension Means Replacement Reporting Condition."
 - 1.14. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2, and 8.6.1.4, respectively.
2. Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:
 - 2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 2.26.1.4.4, does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

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

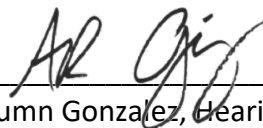
CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

- 3.6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).
4. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the Schindler Model 3300 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.
5. The speed governor rope and sheaves shall comply with the following:
 - 5.1. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6-strand, regular lay construction.

- 5.2. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
- 5.3. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).
6. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.
7. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2, and 411.3.
8. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division, or by the Board on its own motion, in procedural accordance with title 8, sections 411, et. seq.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

In the Matter of Application for
Permanent Variance regarding:

KONE Monospace 300 Elevators (Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 300 Elevators (Group IV)	OSHSB File Nos.: see grid below <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-558	BRJE Phase 2 Housing Partners, L.P.	506 Renaissance Way Santa Rosa, CA	1
22-V-559	993 Laurel Street Associates	993 Laurel St. San Carlos, CA	1
22-V-578	Michael Seibert Successor Trustee of the Irrevocable Trust of Alice W H Yoon	501 Pine Ave. Long Beach, CA	1
22-V-612	Grand Pacific Carlsbad, L.P.	1585 MarBrisa Circle Carlsbad, CA	1
22-V-637	Choice DC, LLC	417 E. Merced Ave. West Covina, CA	1

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

B. Procedural:

- This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with

Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

- C. Findings of Fact—Based on the record of this proceeding, the Board finds the following:
1. Each respective Applicant intends to utilize the KONE Inc. Monospace 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 to Division and Board staff, 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 to Division approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from Title 8, Section 3141, incorporated ASME A17.1-2004, Section 2.18.5.1.
9. ASME A17.1-2004, Section 2.18.5.1, specifies, in relevant part:

2.18.5.1 Material and Factor of Safety.

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

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

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

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with Section 3141.7(a)(10), the specific parameters of which, being expressly set out within Title 8, Elevator Safety Orders, take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, Section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current Title 8, Elevator Safety Orders requirements, and therefore not be subject to issuance of permanent variance.

12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. OSHSB File Nos. 06-V-203, 08-V-245, and 13-V-303).
13. As noted by the Board in OSHSB File Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, as also noted by Board staff, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.
14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Both Board staff and Division safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).
15. The applicant supplies tabulated data regarding the "Maximum Static Load on All Suspension Ropes." To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, Section 2.20.3:

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

where

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

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

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 Sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher

minimum factor of safety than that proposed by Applicant, but a minimum recommended by both Board staff and Division as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.

17. Board staff and Division are in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

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

D. Conclusive Findings:

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

E. Decision and Order:

Each Application being the subject of this proceeding, per above Section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from California Code of Regulations, Title 8, Section 3141 incorporated ASME A17.1-2004, Section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 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 Division approval).
5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 Section 2.20.3.
10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division and a "Permit to Operate" issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, Title 8, Sections 411.2 and 411.3.
14. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety

and Health, or by the Board on its own motion, in accordance with procedures per Title 8, Division 1, Chapter 3.5.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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)
22-V-558	1	7	150	12247
22-V-559	1	7	150	12247
22-V-578	1	7	150	12247
22-V-612	3	7	150	12247
22-V-637	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 the Division within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, Section 8.6.3 involving the suspension means or suspension means fastenings. Further:

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

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

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

In the Matter of Application for
Permanent Variance regarding:

TK Elevator Evolution (Group IV)

OSHSB File No.: Per Section A.1 table
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance Regarding: TK Elevator Evolution (Group IV)	OSHSB File Nos.: Per Section A.1 table <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Procedural Matters

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-564	GS MP Portal Owner, LLC	110 Constitution Dr. Menlo Park, CA	4
22-V-565	Michaels Development	1990 3rd St. Sacramento, CA	2
22-V-566	YBI Phase 3 Investors, LLC	36 Meadow Drive San Francisco, CA	2
22-V-567	Anthem Cathedral Square Holdings Limited Partnership	1010 11th St. Sacramento, CA	2
22-V-572	Banner Catalina Storage, LLC	621 S. Catalina St. Los Angeles, CA	2
22-V-574	412 Madison LLC	412 Madison St. Oakland, CA	2
22-V-623	Cherokee Bliss LLC	1818 N. Cherokee Avenue Los Angeles, CA	1

2. These proceedings are conducted in accordance with Labor Code section 143, and section 401, et. seq.
3. This hearing was held on January 25, 2023, in Sacramento, California via teleconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and

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

hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

4. At the hearing, Justin Zoetewey with TK Elevator appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmda appeared on behalf of Board staff acting in a technical advisory role apart from the Board.
5. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Relevant Safety Orders

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

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

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

2.20.1 Suspension Means

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

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

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

2.20.2.1 On Crosshead Data Plate.

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

(a) the number of ropes

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

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

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

2.20.2.2 On Rope Data Tag.

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

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

[...]

(f) whether the ropes were nonpreformed or preformed

[...]

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

2.20.3 Factor of Safety

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

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

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

where

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

S = manufacturer's rated breaking strength of one rope

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

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

2.20.4 Minimum Number and Diameter of Suspension Ropes

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

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

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

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

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

2.20.9 Suspension-Rope Fastening

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

Fastening shall be

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

(1) such fastenings conform to 2.20.9.2 and 2.20.9.3;

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

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

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

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

2.26.9.4 Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device

that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the driving-machine motor and brake shall not be solely dependent on software-controlled means.

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

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

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

2.26.1.4.1 General Requirements

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

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

8.4.10.1.1 Earthquake Equipment (See Also Fig. 8.4.10.1.1)

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

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

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

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

C. Findings

1. Applicant proposes to utilize inset car top railings and guards in compliance with ASME 17.1-2013, section 2.14.1.7.1 and the *Vivante Westside, LLC* File No. 18-V-364 (Nov. 20, 2020) decision (*Vivante*). Applicant further claims that the request is consistent with the *Vivante, the Mack Urban, LLC*, File No. 15-V-349 (Nov. 17, 2016), and the *Patton Equities, LLC* File No. 20-V-128 (Nov. 12, 2020) decisions (*Patton Equities*).
2. Applicant proposes to utilize noncircular elastomeric-coated steel belts (“ECSBs”)

rather than steel ropes in a machine room-less (“MRL”) elevator installation, with updated data plates, data tags, and wedge sockets designed for use with ECSBs, as well as the appropriate factor of safety criteria conforming to ASME 17.1-2013, with a continuous residual strength detection device (“RSDD”) compliant with the *San Francisco Public Works (File No. 21-V-061, et al.)* decisions.

3. The installation shall utilize the TK Elevator Model 104DP001 RSDD, accepted by the Division on May 4, 2021.
4. Applicant proposes to comply with ASME A17.1-2013 sections 2.26.9.3, “Protection Against Failures”, rather than the requirements of 2.26.9.3 and 2.26.9.4 in the ASME 2004 code.
5. Applicant proposes to use TKE’s control systems, using the TKE TAC32T Controller with SIL3 rated elements, to provide equivalent safety to ASME A17.1-2004, section 2.26.9.4 as a means to inhibit flow of Alternating Current to the Driving Motor in compliance with ASME A17.1-2013, section 2.26.9.6.
6. Applicant proposes to locate the Inspection Transfer Switch within the machinery/control room/space in the MRL installation, in compliance with ASME 17.1-2013, section 2.26.1.4.
7. Applicant proposes to locate the Seismic-Operation Reset Switch in the machinery/control room/space in the MRL installation.

D. Decision and Order

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

- Car-Top Railing: 2.14.1.7.1 (Limited to the extent necessary to permit the use of an inset car-top railing)
- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1 (Limited to the extent necessary to permit the use of the elastomeric-coated steel belts in lieu of circular steel suspension ropes)
- Inspection transfer switch: 2.26.1.4.4(a) (Limited to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room)
- Software Reliant Means to Remove Power: 2.26.9.4 (Limited to the extent necessary to permit the exclusive use of SIL-rated software systems as a means to

remove power from the driving machine motor and brake)

- SIL-Rated Circuitry to Inhibit Current Flow: 2.26.9.6.1 (Limited to the extent necessary to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive motor)
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Limited to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room)

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

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

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

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

Suspension Means (Variance Request No. 2):

- 2.0 The elevator suspension system shall comply with the following:
 - 2.1 The elastomeric coated steel belts (ECSBs) and their associated fastenings shall

conform to the applicable requirements of ASME A17.1-2013, sections:

2.20.4.3 – Minimum Number of Suspension Members

2.20.3 – Factor of Safety

2.20.9 – Suspension Member Fastening

- 2.2 Additionally, ECSBs shall meet or exceed all requirements of ASME A17.6 2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.
- 2.3 The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the ECSBs and fastenings and related monitoring and detection systems and criteria for ECSB replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Division of Occupational Safety and Health (Division) upon request.
- 2.4 ECSB mandatory replacement criteria shall include:
 - 2.4.1. Any exposed wire, strand or cord;
 - 2.4.2. Any wire, strand or cord breaks through the elastomeric coating;
 - 2.4.3. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
 - 2.4.4. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.
- 2.5 Traction drive sheaves must have a minimum diameter of 112 mm. The maximum speed of ECSBs running on 112 mm drive sheaves shall be no greater than 6.1 m/s.
- 2.6 If any one (1) ECSB needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed ECSB having been placed into service, it is permissible to replace the individual damaged suspension member. ECSBs that have been installed on another installation shall not be re used.
- 2.7 A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- 2.8 A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

- 2.9 An elevator controller integrated bend cycle monitoring system shall monitor actual ECSB bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the ECSB makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single ECSB member drops below (60%) sixty percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 2 (Division Circular Letter), the bend cycle monitoring system shall be tested semiannually in accordance with the procedures required per above Conditions 2.3 and 2.4.
- 2.10 The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- 2.11 A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- 2.12 Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 2.3 and 2.4 specified criteria, shall be conducted and documented every six (6) months by a CCCM.
- 2.13 The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 1, "Suspension Means Replacement Reporting Condition."
- 2.14 Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2, and 8.6.1.4, respectively.
- 2.15 The subject elevators(s) shall be equipped with a TK Elevator Model 104DP001 Residual Strength Detection Device accepted by the Division on May 4, 2021 or Division accepted equivalent device.

Control and Operating Circuits

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

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

- 3.0 The SIL rated circuitry used to provide device/circuit redundancy and to inhibit electrical current flow in accordance with ASME A17.1-2004, sections 2.26.9.4 and 2.26.9.6.1 shall comply with the following:
- 3.1 The SIL rated systems and related circuits shall consist of:
 - 3.1.1. ELGO LIMAX33 RED, (aka LIMAX3R-03-050-0500-CNXTG-RJU), Safe Magnetic Absolute Shaft Information System, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/A 163), followed by the applicable revision number

(as in 968/A 163.07/19).

- 3.1.2 Printed circuit board assembly SSOA (6300 AHE001), labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1347), followed by the applicable revision number (as in 968/FSP 1347.00/16).
- 3.1.3 Two circuit board components (Serializer S3I and S3O), each labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization and the SIL certification number (968/A 162), followed by the applicable revision number (as in 968/A 162.04/18)
- 3.2 The software system and related circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
- 3.3 The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

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

ASME A17.1-2013, section 8.6.2.6.

- 3.10 Any space containing SIL rated circuits shall be maintained within the temperature and humidity range specified by TKE. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.
- 3.11 Field software changes to the SIL rated system are not permitted. Any changes to the SIL rated system's circuitry will require recertification and all necessary updates to the documentation and diagrams required by Conditions 3.4 and 3.5 above.

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

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

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

SUSPENSION MEANS REPLACEMENT REPORTING REQUIREMENTS

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

Further:

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

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

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

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

ADDENDUM 2

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

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQ

ADDENDUM 3

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

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

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

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

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

In the Matter of Application for
Permanent Variance regarding:

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

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 500 Elevators with Retractable Platform Guard (Group IV)	OSHSB File Nos.: see grid below <u>PROPOSED DECISION</u> Hearing Date: January 25, 2023
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A. Subject Matter:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-568	Stanford Health Care	200 Pasteur Dr. Palo Alto, 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, 2.20.4, 2.4.1.5 and 2.15.9.2.

B. Procedural:

1. This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by delegation of the Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
2. At the hearing, Fuei Saetern with KONE, Inc., appeared on behalf of each Applicant; Mark Wickens and Jose Ceja, appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmidia appeared on behalf of Board staff in a technical advisory capacity apart from the Board.

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

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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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

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

2.20.4 Minimum Number and Diameter of Suspension Ropes

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

5. An intent of the afore cited requirement of ASME A17.1-2004, Section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes’ foreseen service life.
6. KONE has represented to Division and Board staff, having established an engineering practice for purposes of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in

ASME A17.1-2010, Section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.

7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject to Division approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from title 8, section 3141, incorporated ASME A17.1-2004, Section 2.18.5.1.
9. ASME A17.1-2004, Section 2.18.5.1, specifies, in relevant part:

2.18.5.1 Material and Factor of Safety.

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

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

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

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

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

14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Both Board staff and Division safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).

15. The applicant supplies tabulated data regarding the “Maximum Static Load on All Suspension Ropes.” To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, Section 2.20.3:

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

where

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

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

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 Sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by both Board staff and Division as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.

17. Board staff and Division are in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

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

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

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

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

21. Section 3141 [ASME A17.1-2004, Section 2.4.1.5] states, in part:

2.4.1.5 When the car is resting on its fully compressed buffers or bumpers, no part of the car, or any equipment attached thereto or equipment traveling with the car, shall strike any part of the pit or any equipment mounted therein.

22. An intent of this code section is to prevent any equipment attached to the elevator car from striking any part of the pit. This could damage the elevator equipment, which may result in unsafe operation or injury.
23. Per Division's Review of Application (Exhibit PD-4) Applicant's proposed platform guard is similar in all material respects to installations for which a permanent variance previously has been granted. (e.g. 18-V-010M1).
24. Both Board staff, and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, are of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings:

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

E. Decision and Order:

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

Elevator Safety Orders:

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

Conditions:

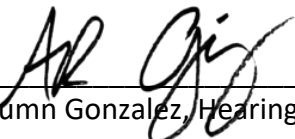
1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with “KONE Inc. Inspector’s Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators” (per Application Exhibit B, or as thereafter amended by KONE subject to Division approval).

5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 Section 2.20.3.
10. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
11. In lieu of the straight vertical face (one-piece) platform guards (aprons) required by Section 3141 [ASME A17.1-2004, Section 2.15.9.2], a two-section retractable platform guard consisting of a stationary, upper-section guard plate and a moveable, lower-section guard plate shall be installed to conform to the following:
 - a. The stationary, upper-section guard plate shall have a straight vertical face, extending below the floor surface of the platform; the height shall be not less than 920 mm (36.2 in).
 - b. The movable, lower-section guard plate shall:
 - i. Comply with ASME A17.1-2004, Section 2.15.9.3;
 - ii. Be provided a rubber bumper at the center of the bottom edge of the plate to absorb the impact when the toe guard strikes the concrete pit floor;
 - iii. Be provided with an electrical switch that indicates to the control system that the retractable platform guard is in its extended position (when car is away from the bottom landing), and be provided with a second electrical switch that indicates to the control system that the moveable lower section is in its retracted position (when the car is at the bottom landing), thereby overriding the first switch. Failure of either of these electrical switches or of the mechanical parts that activate these electrical switches shall cause the controller to remove power from the driving machine and brake.

- c. The two-section retractable platform guard shall be provided with smooth metal guard plates of not less than 1.5 mm (0.059 in) thick steel, or material of equivalent strength and stiffness, adequately reinforced and braced to the car platform and conforming to ASME A17.1-2004, sections 2.15.9.1 and 2.15.9.4.
 - d. The overall height of the two-section retractable platform guard shall be not less than 1220 mm (48 in) when the moveable lower section is in the fully extended (deployed) position.
 - e. The elevator rated speed shall be equal to or less than 200 feet per minute.
 - f. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
12. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
13. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division and a "Permit to Operate" issued before the elevator is placed in service.
14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
15. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per Title 8, Division 1, Chapter 3.5.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

Appendix 1

Monospace 500 Suspension Ropes Appendix 1 Table				
OSHSB File No.	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
22-V-568	78	7	150	12247
22-V-568	79	7	150	12247

Appendix 2

Suspension Means Replacement Reporting Condition

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

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

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

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

In the Matter of Application for
Permanent Variance regarding:

Otis Elevator Controller Alteration
(Group IV)

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Otis Elevator Controller Alteration (Group IV)</p>	<p>OSHSB File Nos.: see grid below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-602	SRI Ten 707 Wilshire LLC	707 Wilshire Blvd. Los Angeles, CA	2

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

B. Procedural

- This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, title 8, section 401, et. seq.
- This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
- At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of the Applicants’ representative, the Otis Elevator Company; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmda appeared on behalf of Board staff, in a technical advisory role apart from the Board.
- 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	Board Staff Review of Variance Application
PD-4	Division Review of Variance Application
PD-5	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 January 25, 2023, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

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

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

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

3. A principal intent of this code requirement is to avoid hazards that would be created by the failure of critical elevator safety circuits. Toward this purpose, use of software as the sole method of controlling such critical elevator safety circuits is prohibited.

4. Each Applicant proposes the use of a SIL rated software system and circuits consisting of three computer control boards that communicate on a Control Area Network (CAN) to monitor elevator safety devices and perform certain safety functions. Elevator electrical protective devices (EPDs) and other control devices are connected to these control boards. Software specifically designed for this SIL system would continuously monitor these devices and performs certain elevator safety functions. The design of this SIL rated software system and its related circuits includes a redundant (software) means to remove the power from the driving machine motor and brake under certain conditions.
5. The proposed Otis E2 elevator control system is to interface with a software system and related circuits having a certain Safety Integrity Level (SIL) rating, to monitor, process, and execute certain safety functions of the elevator, in a manner and configuration noncompliant with California ESO incorporated ASME A17.1-2004, Section 2.26.9.4, preclusion of safety system redundancy solely dependent upon a software controlled means.
6. The Applicant contends that the proposed SIL rated software system and its circuits conform to the relevant newer ASME A17.1 provisions—namely ASME A17.1-2013, Section 2.26.9.3.2.
7. ASME A17.1-2013, Section 2.26.9.3.2, states:

“2.26.9.3.2 Methods used to satisfy 2.26.9.3.1 using software systems are permitted, provided that (a) a non-software-controlled means is also used to remove power from the driving-machine motor and brake, or (b) the software system and related circuits are listed/certified to a SIL rating that is in accordance with the applicable requirements of IEC 61508-2 and IEC 61508-3. This software system and its related circuits shall have a SIL of not less than the highest SIL value of the safety function(s) in Table 2.26.4.3.2 used in the circuit. The software system and related circuits shall be identifiable on wiring diagrams (see 8.6.1.6.3) with part identification, SIL, and certification identification information that shall be in accordance with the certifying organization’s requirements.”

8. The Division has performed a safety analyzes of the proposed SIL rated software system and its related circuits, and determined the proposed system to be in conformity with relevant requirements of ASME A17.1-2013, Section 2.26.9.3.2, addressing safety issues associated with the proposed use of such a software system.

9. The equivalence of ASME A17.1-2013, Section 2.26.9.3.2, compliant control systems of the proposed type, with the safety of ASME A17.1-2004, Section 2.26.9.4, systems controlling the same critical safety functions, has been the subject of previous Division analyses, and Board decisions, concerning Otis Skyrise Elevators. In each of these prior matters, it was the recommendation of Division, with concurrence of Board engineering staff, and conclusion of the Board, that the type of ASME A17.1-2013, Section 2.26.9.3.2, compliant control system (as proposed in the present matter), subject to conditions in material conformity with those of the present Decision and Order, would provide for safety equivalent of superior to that of a ASME A17.1-2004, Section 2.26.9.4, compliant control system.
10. As provided per title 8, section 424.1, and as stipulated by the parties (see above Section B.4) The Board takes Official Notice of its decision, and respective Division and Board staff review of application, in the matters of OSHSB Permanent Variance File Nos. 14-V-090, 17-V-064, and 18-V-303. The permanent variances conditionally issued in the afore cited matters, exemplify numerous such previously issued variances providing for utilization of ASME A17.1-2013, Section 2.26.9.3.2, compliant control systems of the type presently proposed—absent known diminution in passenger or worker safety to date.
11. As to additional foundational evidence and findings concerning the essential safety rating and its indicative nomenclature to be labeled or marked on the subject software system and related circuits, as specified in the below Decision and Order, the Board also takes Official Notice of its Decision, and therein referenced exhibits, in OSHSB Permanent Variance File No. 15-V-397M1.
12. Both by way of its written evaluation (Exhibit PD-4), and statements at hearing, Division has taken the position that each Applicant’s proposal for permanent variance and means of safety equivalence, subject to conditions in material conformity with those found in the below Decision and Order, will provide safety equivalent to the Title 8 standards from which permanent variance is sought. Further, by way of written evaluation (Exhibit PD-3), and statements at hearing, Board staff concurs with Division in recommending that such conditional grant will provide for safety equivalence.

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

(1) each Applicant has complied with the statutory and regulatory requirements that must be met before an application for modification of permanent variance may be conditionally granted, and

(2) a preponderance of the evidence establishes that Applicant’s proposal, as below revised and subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon

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

E. Decision and Order

Upon adoption of this Decision and Order by the Board, each above Section A.1 table listed Applicant, with respect to the corresponding listed number of conveyances and variance location, is conditionally Granted permanent variance from California Code of Regulations, title 8, Elevator Safety Order (ESO), section 3141, incorporated ASME A17.1-2004, Section 2.26.9.4, as per Section 8.7.2.27.4(a), subject to all below enumerated limitations and conditions:

1. The SIL rated software system and its related circuits shall comply with the following:
 - a. The SIL-rated software system and related circuits shall consist of three circuit board components (SSIB, KSIB, and HSIB), each labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (AEB 012, EU-ESD 012 or both) followed by the applicable revision number (as in AEB 012/2, EU-ESD 012/1).
 - b. The software system and related circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013 Section 2.26.4.3.2.
 - c. The access doors or covers of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exteriors with the statement:

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

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

- g. Alterations to the SIL rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, Section 8.7.1.9.
 - h. Replacement of the SIL rated software system or its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, Section 8.6.3.14.
 - i. Repairs to the SIL rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, Section 8.6.2.6.
 - j. Any space containing SIL rated software or circuits shall be maintained within the temperature and humidity range specified by Otis Elevator Company. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.
 - k. Field software changes are not permitted. Any changes to the TUV certified SIL rated software will require updated documentation and recertification.
2. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the elevator system (including SIL 3-rated devices) in accordance with the written procedures and criteria required by Condition D.1(d), and other terms of this permanent variance.
 3. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
 4. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.
 5. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2 and 411.3.
 6. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with procedures per Title 8, Division 1, Chapter 3.5.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

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

In the Matter of Application for
Permanent Variance regarding:

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

OSHSB File No.: see grid in Item A of
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance Regarding:</p> <p>Otis Elevator Gen2(O) and/or Gen2L Alterations (Group IV)</p>	<p>OSHSB File Nos.: See Section A.1 table below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter:

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

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
22-V-603	Mason Sutter Place HOA	611 Mason St. San Francisco, CA	1
22-V-604	Sutter Health	Sutter Medical Center Sacramento 2800 L St. Sacramento, CA	3

- The subject regulatory requirements are as enumerated per the below Decision and Order.

B. Jurisdiction:

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

C. Procedural:

- This hearing was held on January 25, 2023, in Sacramento, California, and via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.

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

2. At the hearing, Wolter Geesink, with Otis Elevator, and Dan Leacox of Leacox & Associates, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja appeared on behalf of the Division of Occupational Safety and Health (“Division”); and Michael Nelmidia appeared on behalf of Board staff in a technical advisory role apart from the Board.
3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Official notice is taken of the Board’s rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings and Basis:

1. Each Applicant intends to alter elevators at the locations, and in the numbers, stated in the Section A.1 table such that each elevator becomes (or incorporates features of) an Otis Gen2(O) and/or Otis Gen2L elevator.
2. The belts and connections that each Applicant intends to install are the same as are used on new Otis Gen2(O)/Gen2L installations.
3. 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. The Board incorporates by reference the findings stated in: (a) Items 3 through 5.c, 5.e, and 5.f of the “Findings of Fact” section of the Proposed Decision adopted by the Board on February 19, 2009, regarding OSHSB File No. 08-V-247; (b) Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, regarding OSHSB File No. 09-V-042; (c) Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, regarding OSHSB File No. 10-V-029; and (d) Items D.4, D.5, and D.7 of the proposed decision adopted by the Board on July 18, 2013, regarding OSHSB File No. 12-V-146.

E. Conclusive Findings:

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

F. Decision and Order:

Each permanent variance application that is the subject of this proceeding is conditionally GRANTED, as specified below, to the extent that, as of the date the Board adopts this Proposed Decision, each Section A.1 table listed Applicant, at the specified variance location, and as to specified number of conveyances, shall have a permanent variance regarding switches, suspension rope and connection retrofits, (so long as the elevators are Gen2 (O) or Gen2L Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous Proposed Decisions as the "Gen2 Master File"] maintained by the Board, as that file was constituted at the time of this hearing). The variance shall be from California Code of Regulations, title 8, sections 3141 and 3141.2(a), and shall only be to the extent necessary to allow variances from the following provisions of ASME A17.1-2004 made applicable by those title 8 provisions:

- Sections 8.7.1.1(b), 8.7.2.21.1, and 8.7.2.25.1(c) (to the extent necessary to permit variance from the ASME A17.1-2004 provisions listed in the next bullet point);
- 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),
- Sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, (only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts [the belts proposed for use on these Gen2(O) and/or Gen2L elevators] in lieu of conventional steel suspension ropes),
- Sections 2.26.1.4.4(a) (only to the extent necessary to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room) and

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

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

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

monitoring device, and criteria for belt replacement, and the Applicant shall make those procedures and criteria available to the Division upon request.

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

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

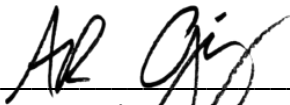
CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected by Certified Competent Conveyance Mechanics who have been trained, and are competent, to perform those tasks on the Gen2(O) and/or Gen2L elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and all other terms and conditions of this permanent variance.
13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
14. The Division shall be notified when the elevator is ready for inspection. No elevator shall be placed in service prior to it being inspected and issued a Permit to Operate by the Division
15. Each Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
16. Each Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance per sections 411.2 and 411.3.

17. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with the Board's procedural regulations.

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

Dated: January 26, 2023



Autumn Gonzalez, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

ADDENDUM 2

Suspension Means – Replacement Reporting Condition

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

Further:

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

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

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

In the Matter of Application for
Permanent Variance regarding:

Schindler Sleep Mode Escalators

OSHSB File No.: See section A.1 table
Proposed Decision Dated: January 26, 2023

DECISION

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: February 16, 2023

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

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

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

<p>In the Matter of Application for Permanent Variance regarding:</p> <p>Schindler Sleep Mode Escalators</p>	<p>OSHSB File Nos.: See section A.1 table below</p> <p><u>PROPOSED DECISION</u></p> <p>Hearing Date: January 25, 2023</p>
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A. Subject Matter and Jurisdiction:

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

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
22-V-630	Los Angeles World Airports	400 World Way Los Angeles, CA	17
22-V-639	Los Angeles World Airports	380 World Way Los Angeles, CA	6

- This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.
- The safety orders at issue are California Code of Regulations, title 8, section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1., and 6.1.6.4,

B. Process and Procedure:

- This hearing was held on January 25, 2023, in Sacramento, California, via teleconference, by Occupational Safety and Health Standards Board (“Board”), with Hearing Officer Autumn Gonzalez, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.
- At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health (“Division”), and Michael Nelmda appeared on behalf of Board staff, in a technical advisory role apart from the Board.

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

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

Official notice is taken of the Board’s rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on January 25, 2023, the record was closed, and the matter taken under submission by the Hearing Officer.

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

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

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

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

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

Mode,” a signal will be sent to the controller to “wake up” resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec².

5. Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.
6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in “sleep mode”, an alarm will sound and the escalator will exit “sleep mode” and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec². This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.
7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, “sleep mode” would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents “sleep mode” activation if the wiring is cut or disconnected.
8. The Division notes in its Review of Application (Exhibit PD-4) that the Applicant proposed “sleep mode” function meets the requirements of ASME A17.1-2010, section 6.1.4.1 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, the Division advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.
9. ASME A17.1-2010, section 6.1.4.1.2, states:

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

- (a) *The acceleration and deceleration rates shall not exceed 0.3 m/s² (1.0 ft/sec²).*
- (b) *The rated speed is not exceeded.*
- (c) *The minimum speed shall be not less than 0.05 m/s (10 ft/min).*
- (d) *The speed shall not automatically vary during inspection operation.*

- (e) *Passenger detection means shall be provided at both landings of the escalator such that*
- (1) *detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)*
 - (2) *detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate*
 - (3) *passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate*
- (f) *Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.*
- (g) *Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only."*

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

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

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

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

13. The proposed “sleep mode” system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. OSHSB File No. 13-V-153, 15-V-236, 16-V-069), absent, to the Division’s reported knowledge, adverse effect upon passenger or workplace safety or health.
14. Both Division and Board staff recommend that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that would otherwise prevail per the subject Elevator Safety Order requirements.

D. Conclusive Findings:

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

E. Decision and Order:

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

1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:
 - (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s^2 (1 ft/sec^2) when transitioning between speeds.
 - (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s^2 (1 ft/sec^2).
 - (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.

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

$$d = (V_f - V_s) \times (V_w / a) \text{ where}$$

d = detection distance (ft)

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

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

V_w = passenger walking speed (4.5 ft/sec)

a = acceleration/deceleration rate (ft/sec²) [not to exceed 1 ft/sec²]

- (f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.
- (g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.
- (h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.
- (i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:
1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.
 2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than

ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

- (j) The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.
2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.
 3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.
 4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).
 5. Whenever practicable, as determined by the Applicant and subject to the concurrence of the Division, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.
 6. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.
 7. The Division shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by the Division and a "Permit to Operate" issued before the escalator may be placed in service.
 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, title 8, sections 411.2, and 411.3.
 9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division, or by the Board on its own motion, in procedural accordance with title 8, section 411, et. seq.

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

DATED: January 26, 2023



Autumn Gonzalez, Hearing Officer

*Proposed Variance Decision
Schindler Sleep Mode Escalators
Hearing Date: January 25, 2023*

APPENDIX A

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

Variance No.	Escalator ID
22-V-630	T4-ES-01
22-V-630	T4-ES-02
22-V-630	T4-ES-03
22-V-630	T4-ES-04
22-V-630	T4-ES-05
22-V-630	T4-ES-06
22-V-630	T4-ES-07
22-V-630	T4-ES-08
22-V-630	T4-ES-09
22-V-630	T4-ES-10
22-V-630	T4-ES-11
22-V-630	T4-ES-12
22-V-630	TE-ES-13
22-V-630	TE-ES-14
22-V-630	TE-ES-19
22-V-630	TE-ES-20
22-V-630	TE-ES-21
22-V-639	C14ES01
22-V-639	C14ES02
22-V-639	C14ES03
22-V-639	C14ES04
22-V-639	C14ES05
22-V-639	C14ES06

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

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

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

d Detection distance (ft.)

V_f Elevator Rated Speed Escalators with rated speeds of 100 ft./min.

V_s Slow Speed["Sleep mode" Speed] (ft./min.)

V_w Passenger Walking Speed of 4.5 ft./sec.

a Acceleration/Deceleration Rate (ft./sec.²)

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

Occupational Safety and Health Standards Board

Business Meeting
Legislative Update

Legislative Update
Prepared February 6, 2023 for the February 16, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-1 Oil refineries: maintenance.(2023-2024)

AB-1	AB-1 Oil refineries: maintenance.(2023-2024)	
	(Ting)	
	Date	Action
	12/05/22	Read first time. To print.
<p><u>Summary:</u></p> <p>AB 1, as introduced, Ting. Oil refineries: maintenance.</p> <p>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.</p> <p>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.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>		

Legislative Update
Prepared February 6, 2023 for the February 16, 2023
Meeting of the Occupational Safety and Health Standards Board

AB-316 Vehicles: autonomous vehicles.(2023-2024) - **NEW**

AB-316	AB-316 Vehicles: autonomous vehicles.(2023-2024)	
	(Kalra and Lackey)	
	Date	Action
	01/27/23	From printer. May be heard in committee February 26.
	01/26/23	Read first time. To print.
	<p><u>Summary:</u></p> <p>AB 316, as introduced, Aguiar-Curry. Vehicles: autonomous vehicles.</p> <p>Existing law authorizes the operation of an autonomous vehicle on public roads for testing purposes by a driver who possesses the proper class of license for the type of vehicle operated if specified requirements are satisfied. Existing law prohibits the operation of an autonomous vehicle on public roads until the manufacturer submits an application to the Department of Motor Vehicles, as specified, and that application is approved.</p> <p>This bill would prohibit the operation of an autonomous vehicle with a gross vehicle weight of 10,000 pounds or more on public roads for testing purposes, transporting goods, or transporting passengers without a human safety operator physically present in the autonomous vehicle at the time of operation.</p> <p>Board staff is monitoring for potential impacts on Board operations.</p>	

Occupational Safety and Health Standards Board

Business Meeting Executive Officer's Report