# Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

July 16, 2020

Via teleconference / videoconference

Board Meeting Packet

OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
1017 L Street, PMB 254
Sacramento, CA 95814-3805
(916) 274-5721
FAX (916) 274-5743
Website address: 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.*

# July 16, 2020 at 10:00 a.m.
# TELECONFERENCE AGENDA

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

**PLEASE NOTE: In accordance with Executive Order N-29-20, and Executive Order N-33-20, the PHYSICAL meeting location has been cancelled for July.**

## 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.

**OR**

## 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.

**AND**

## Public Comment Queue:

**In advance of the meeting:** Stakeholders who wish to comment on agenda items may submit a request to be added to the public comment queue by emailing OSHSB@dir.ca.gov.
Please be sure to include your name, affiliation and comment topic within the email.

**During the meeting:** You can submit your name, affiliation and comment topic to OSHSB@dir.ca.gov, make a request to speak via WebEx "Chat" function, or dial 916-274-5721 to be placed in the queue for public comment.

**NOTE: In accordance with Executive Order N-29-20, Board Members will participate via Teleconference.**

I. **CALL TO ORDER AND INTRODUCTIONS**

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

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

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

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

A. 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. OTHER

1. Division Update

2. Legislative Update

3. Executive Officer's Report

4. Board Member Comments and Future Agenda Items

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

C. CLOSED SESSION

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

2. WSPA v. OSHSB, et al., County of Sacramento, CA Superior Court Case No. 34-2019-00260210.

3. Personnel

D. RETURN TO OPEN SESSION

1. Report from Closed Session

E. ADJOURNMENT OF THE BUSINESS MEETING

**Next Meeting:** August 20, 2020
(LOCATION PENDING REVIEW)
State Resources Building
Auditorium
1416 9th Street
Sacramento, CA 95814
10:00 a.m.

**CLOSED SESSION**

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

2. If necessary, consideration of pending litigation pursuant to Government Code section 11126(e)(1).

**PUBLIC COMMENT**

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 hearing.

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AND HEALTH STANDARDS BOARD
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# 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 **July 16, 2020,** at 10:00 a.m.
in the Council Chambers of the Santa Clara City Hall
1500 Warburton Avenue, Santa Clara, California.

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 **July 16, 2020,** at 10:00 a.m.
in the Council Chambers of the Santa Clara City Hall
1500 Warburton Avenue, Santa Clara, California.

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

## Variance Consent Calendar

**CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS**
**JULY 16, 2020, MONTHLY BUSINESS MEETING**
**OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

## A. OTIS ELEVATOR (GROUP IV) GEN2(O) AND/OR GEN2L ELEVATORS [W/VARIANT GOVERNOR ROPE/SHEAVE] —HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-104 | SKS/Prado 2130 Third LLC | Elevator | GRANT |

## B. OTIS GEN2S ELEVATORS (GROUP IV) —HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-130 | Hollywood Hillhurst, LLC | Elevator | GRANT |
| 20-V-133 | Alameda BTS EDP, LLC | Elevator | GRANT |
| 20-V-134 | Judicial Council of California | Elevator | GRANT |
| 20-V-135 | Buchanan Residential | Elevator | GRANT |
| 20-V-145 | City of Santa Monica | Elevator | GRANT |
| 20-V-153 | 3568 Motor LLC | Elevator | GRANT |
| 20-V-154 | Chapman University | Elevator | GRANT |
| 20-V-155 | Gemdale Aperture Phase 1, LLC | Elevator | GRANT |
| 20-V-156 | Gemdale Aperture Phase 1, LLC | Elevator | GRANT |
| 20-V-180 | Nook Valdez II, LLC | Elevator | GRANT |
| 20-V-181 | Palms Property No 20 LLC | Elevator | GRANT |
| 20-V-182 | Pierside Pavilion, LLC | Elevator | GRANT |
| 20-V-183 | Elements 1 Leasehold, LLC | Elevator | GRANT |
| 20-V-184 | California State University Long Beach | Elevator | GRANT |

| | | | |
|---|---|---|---|
| 20-V-185 | City and County of San Francisco | Elevator | GRANT |
| 20-V-202 | BS8 LLC & BS9 LLC | Elevator | GRANT |

**C. OTIS GEN2(O) AND/OR GEN2L ELEVATORS (GROUP IV) —HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-131 | Department of General Services | Elevator | GRANT |
| 20-V-179 | Entrada Owner, LLC | Elevator | GRANT |

**D. OTIS ELEVATOR (GROUP IV) GEN2(O) AND/OR GEN2L ALTERATIONS — HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-132 | 5M Project, LLC | Elevator | GRANT |

**E. SYMMETRY MODEL VPL/VPC SL-168 — HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-136 | The Nasa Group | Elevator | GRANT |

**F. GARAVENTA LIFT, MODEL GVL - 168 --HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-137 | James Huang DMD | Elevator | GRANT |

## G. SCHINDLER MODEL 3300 ELEVATORS (GROUP IV) —HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-141 | El Sendero, LLC | Elevator | GRANT |
| 20-V-142 | Sunnyvale HHG Hotel Development, LP | Elevator | GRANT |

## H. THYSSENKRUPP ELEVATORS (GROUP IV; WIRE ROPES AND SHEAVES) — HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-143 | Piedmont Unified School District | Elevator | GRANT |
| 20-V-197 | LMT Home Corp. | Elevator | GRANT |
| 20-V-198 | Kun Tian Corp. | Elevator | GRANT |
| 20-V-199 | Santa Cruz Pacific Associates | Elevator | GRANT |
| 20-V-200 | Sunrise of Redwood PropCO LLC | Elevator | GRANT |
| 20-V-201 | SHAC Del Medio Apartments LLC | Elevator | GRANT |

## I. SCHINDLER MODEL 5500 ELEVATORS (GROUP IV) —HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-149 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-150 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-158 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-159 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-160 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-161 | Los Angeles World Airports | Elevator | GRANT |
| 20-V-162 | Los Angeles World Airports | Elevator | GRANT |

| | | | |
|---|---|---|---|
| 20-V-163 | Los Angeles World Airports | Elevator | GRANT |

**J. MITSUBISHI ELEVATORS (GROUP IV) —HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-157 | Adobe, Inc. | Elevator | GRANT |

**K. KONE MONOSPACE 500 ELEVATORS —HEARD JUNE 24, 2020**

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-164 | The Board of Trustees of the Leland Stanford Junior University | Elevator | GRANT |
| 20-V-165 | STC Venture Block F1, LLC a Delaware Limited Liability Company | Elevator | GRANT |
| 20-V-166 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | Elevator | GRANT |
| 20-V-167 | 1140 Harrison Associates, LP, a Delaware Limited Liability Partnership | Elevator | GRANT |
| 20-V-168 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | Elevator | GRANT |
| 20-V-170 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | Elevator | GRANT |
| 20-V-171 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | Elevator | GRANT |
| 20-V-190 | 6041 Variel LLC | Elevator | GRANT |
| 20-V-191 | Cucamonga School District | Elevator | GRANT |

## L. SCHINDLER SLEEP MODE ESCALATORS —HEARD JUNE 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-177 | Los Angeles World Airports | Elevator | GRANT |
| 20-V0178 | Los Angeles World Airports | Elevator | GRANT |

## M. THYSSENKRUPP ELEVATORS (GROUP IV; WIRE ROPES) —HEARD June 24, 2020

| OSHSB FILE NUMBER | APPLICANT NAME | SAFETY ORDERS | PROPOSED DECISION |
|---|---|---|---|
| 20-V-192 | E.L. Lotus, LLC | Elevator | GRANT |

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

| | |
|---|---|
| In the Matter of Application for Permanent Variance Regarding:<br><br>Otis Elevator (Group IV) Gen2(O) and/or Gen2L Elevators [w/variant Governor Rope/Sheave | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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:<br><br>Otis Elevator (Group IV)<br>Gen2(O) and/or Gen2L Elevators<br>[w/variant Governor Rope/Sheave] | OSHSB File Nos.: Per Section A.1 table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter:

1. Each applicant ("Applicant") listed in the table below has applied for permanent variances from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of 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 |
|---|---|---|---|
| 20-V-104 | SKS/Prado 2130 Third LLC | 2130 3rd Street<br>San Francisco, CA | 3 |

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

B. Jurisdiction:

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

C. Procedural:

1. This hearing was held on June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia, California, and via teleconference, by Occupational Safety and Health Standards Board ("Board") with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each respective permanent variance applications per Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking recordings and variance decisions concerning the safety order requirements at issue. At close of hearing on June 24, 2020, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings:

1. Each Applicant intends to utilize Otis Gen2(O) and/or Otis Gen2L elevators, with further variance as to governor sheave and rope diameter, at the location and in the numbers stated in the Section A.1 table (as used in this Proposed Decision, the term "Gen2(O)" refers to the original type of Gen2 elevator, as distinguished from other types with such designations as "Gen2L" or "Gen2S" or "Gen2 at 150").

2. The installation contract for these elevators was, or will be, signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.

3. The Board incorporates by reference the findings stated in: (a) Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" Section of the Proposed Decision adopted by the Board on February 19, 2009, 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.

4. Regarding requested variance in governor sheave diameter, and governor rope diameter, in variance from Title 8, Section 3141, incorporated ASME A17.1-2004, Section 2.18.7.4, and Section 2.18.5.1, respectively, the Board incorporates by reference the following previous findings of record: Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, in OSHSB File No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.

5. Both Board staff and Division safety engineers, and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as

limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings:

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

F. Decision and Order:

Each permanent variance application that is the subject of this proceeding is conditionally GRANTED, as below specified, and to the extent that, as of the date the Board adopts this Proposed Decision, each Applicant listed in the Section A.1 table of this Proposed Decision shall have a permanent variance from California Code of Regulations, Title 8, Section 3141 [ASME A17.1-2004, 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), 2.20.1, 2.20.2.1(b), 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, (only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts [the belts proposed for use on these Gen2(O) and/or Gen2L elevators] in lieu of conventional steel suspension ropes); 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); 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)], regarding car top railings, switches, and suspension ropes and connections; Section 2.18.7.4, with respect to conditioned variance in governor sheave diameter; and Section 2.18.5.1, with respect to below conditioned variance in governor rope diameter—for the location and number of elevators listed in the Section A.1 table (so long as the elevators are Gen2(O) or Gen2L Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master Files [referred to in previous Proposed Decisions as the “Gen2 Master File” or “Gen2S Master File”] maintained by the Board, as that file was constituted at the time of this hearing), subject to the following conditions:

The variance shall be subject to the following additional conditions:

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

2. The suspension system shall comply with the following:

    a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, Section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.

    b. Steel-coated belts that have been installed and used on another installation shall not be reused.

    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.

    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, Section 8.6.1.4).

    f. The coated steel belts used shall be accepted by the Division.

    g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.

3. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

4. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to the Division upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person who, or organization that, installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts;

    g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by Section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts,

    b. The belt width and thickness in millimeters or inches, and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

8. If the inspection transfer switch required by ASME A17.1, 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. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen2L elevator system the

Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.

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; that condition is incorporated herein by this reference.

17. The applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per California Code of Regulations, Title 8, Sections 411.2 and 411.3.

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

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

Dated: July 2, 2020

Christina Shupe, 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:<br><br>Otis Gen2S Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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:<br><br>Otis Gen2S Elevators (Group IV) | OSHSB File Nos.: Per Section A table, below<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter

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

| Variance No. | Applicant Name | Variance Location Address | No. of Elevators |
|---|---|---|---|
| 20-V-130 | Hollywood Hillhurst, LLC | 4531 W. Hollywood Blvd.<br>Burbank, CA | 4 |
| 20-V-133 | Alameda BTS EDP, LLC | 1951 Harbor Bay Parkway<br>Alameda, CA | 4 |
| 20-V-134 | Judicial Council of California | 1515 Court Street<br>Redding, CA | 8 |
| 20-V-135 | Buchanan Residential, LLC | 1805 Buchanan Street<br>San Francisco, CA | 1 |
| 20-V-145 | City of Santa Monica | City Yards - Fleet Building<br>2500 Michigan Ave.<br>Santa Monica, CA | 1 |
| 20-V-153 | 3568 Motor LLC | 10325 W. Tabor Street<br>Los Angeles, CA | 1 |
| 20-V-154 | Chapman University | Wilkinson Hall<br>1 University Ave.<br>Orange, CA | 1 |
| 20-V-155 | Gemdale Aperture Phase 1, LLC | 6027 Edgewood Bend Court<br>San Diego, CA | 3 |
| 20-V-156 | Gemdale Aperture Phase 1, LLC | 6029 Edgewood Bend Court<br>San Diego, CA | 3 |

| | | | |
|---|---|---|---|
| 20-V-180 | Nook Valdez II, LLC | 2415 Valdez Street<br>Oakland, CA | 1 |
| 20-V-181 | Palms Property No 20 LLC | 3408 S. Keystone Avenue<br>Los Angeles, CA | 1 |
| 20-V-182 | Pierside Pavilion, LLC | 300 Pacific Coast Highway<br>Huntington Beach, CA | 1 |
| 20-V-183 | Elements 1 Leasehold, LLC | 2000 Elements Way<br>Irvine, CA | 3 |
| 20-V-184 | California State University Long Beach | CSULB - Parkside North<br>Bldg #101<br>1250 N. Bellflower Blvd.<br>Long Beach, CA | 3 |
| 20-V-185 | City and County of San Francisco | 1995 Evans Ave.<br>San Francisco, CA | 3 |
| 20-V-202 | BS8 LLC & BS9 LLC | 11272 W Nebraska Ave.<br>Los Angeles, CA | 1 |

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

B. Procedural

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

2. This hearing was held on June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia, California, and via teleconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

4. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each respective permanent variance applications per Section A table as Exhibit PD-1; Notice of Hearing as Exhibit PD-2; Board staff Pending Application Memorandum as PD-3; Division Review of Application as PD-4; Review Draft 1 Proposed Decision as PD-5; and official notice taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on June 24, 2020, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings and Basis:

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

1. Each Applicant intends to utilize Otis Gen2S elevators at the locations and in the numbers stated in the above Section A table.

2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.

3. The Board incorporates by reference Items (i.e. Sections) D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 regarding OSHSB File No. 12-V-093 and Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 in OSHSB File No. 14-V-206.

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

D. Conclusive Findings:

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

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

E. Decision and Order:

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

- Car top railing: Sections 2.14.1.7.1 (only to the extent necessary to permit an inset car top railing, if, in fact, the car top railing is inset);

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

- Governor rope diameter: 2.18.5.1 (only to the extent necessary to allow the use of reduced diameter governor rope);

- Pitch diameter: 2.18.7.4 (to the extent necessary to use the pitch diameter specified in Condition No. 13.c);

- Suspension means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions are only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;

- Inspection transfer switch: 2.26.1.4.4(a) (only to the extent necessary to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and

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

These variances apply to the locations and numbers of elevators stated in the Section A table (so long as the elevators are Gen2S Group IV devices that are designed, equipped, and

installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the "Gen2 Master File") maintained by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

1. The suspension system shall comply with the following:

    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by Section 3141 [ASME A17.1-2004, Section 2.20.3] on wire rope suspended elevators.

    b. Steel coated belts that have been installed and used on another installation shall not be reused.

    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.

    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, Section 8.6.1.4).

    f. The coated steel belts used shall be accepted by the Division.

2. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to the Division upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person or organization that installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts; and

g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by Section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

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

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

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

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

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

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

11. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

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: July 2, 2020

Christina Shupe, 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
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| In the Matter of Application for Permanent Variance Regarding:<br><br>Otis Gen2(O) and/or Gen2L Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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| In the Matter of Application for Permanent Variance Regarding:<br><br>Otis Gen2(O) and/or Gen2L Elevators (Group IV) | OSHSB File Nos.: Per Section A.1 table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter:

1. Each applicant ("Applicant") listed in the table below has applied for permanent variances from provisions of the Elevator Safety Orders, found at Title 8 of the California Code of 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 |
|---|---|---|---|
| 20-V-131 | Department of General Services | 1021 O Street<br>Sacramento, CA | 7 |
| 20-V-179 | Entrada Owner, LLC | 6181 W. Centinela Ave.<br>Culver City, CA | 8 |

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

B. Jurisdiction:

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

C. Procedural:

1. This hearing was held on June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia, California, and via teleconference, by Occupational Safety and Health Standards Board ("Board") with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each respective permanent variance applications per Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking recordings and variance decisions concerning the safety order requirements at issue. At close of hearing on June 24, 2020, the record was closed, and the matter taken under submission by the Hearing Officer.

D. Findings:

1. Each Applicant intends to utilize Otis Gen2(O) and/or Otis Gen2L elevators at the location and in the numbers stated in the Section A.1 table (as used in this Proposed Decision, the term "Gen2(O)" refers to the original type of Gen2 elevator, as distinguished from other types with such designations as "Gen2L" or "Gen2S" or "Gen2 at 150").

2. The installation contract for these elevators was, or will be, signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.

3. The Board incorporates by reference the findings stated in: (a) Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" Section of the Proposed Decision adopted by the Board on February 19, 2009, regarding OSHSB File No. 08-V-247; (b) Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, regarding OSHSB File No. 09-V-042; (c) Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, regarding OSHSB File No. 10-V-029; (d) Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013 regarding OSHSB File No. 12-V-146; 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.

4. Both Board staff and Division safety engineers, and Division, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail

given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings:

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

F. Decision and Order:

Each permanent variance application that is the subject of this proceeding is conditionally GRANTED, as below specified, and to the extent that, as of the date the Board adopts this Proposed Decision, each Applicant listed in the Section A.1 table of this Proposed Decision shall have a permanent variance from California Code of Regulations, Title 8, Section 3141 [ASME A17.1-2004, 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), 2.20.1, 2.20.2.1(b), 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, (only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts [the belts proposed for use on these Gen2(O) and/or Gen2L elevators] in lieu of conventional steel suspension ropes), 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 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)], regarding car top railings, switches, and suspension ropes and connections, for the location and number of elevators listed in the Section A.1 table (so long as the elevators are Gen2(O) or Gen2L Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous Proposed Decisions as the "Gen2 Master File"] maintained by the Board, as that file was constituted at the time of this hearing), subject to the following conditions:

The variance shall be subject to the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator

Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.

2. The suspension system shall comply with the following:

    a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, Section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.

    b. Steel-coated belts that have been installed and used on another installation shall not be reused.

    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by the Division and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to the Division.

    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, Section 8.6.1.4).

    f. The coated steel belts used shall be accepted by the Division.

    g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to the Division.

3. With respect to each elevator subject to this variance, the applicant shall comply with Division Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

4. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to the Division upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person who, or organization that, installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts;

g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by Section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts,

   b. The belt width and thickness in millimeters or inches, and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

8. If the inspection transfer switch required by ASME A17.1, 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 elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen2L elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.

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. The elevator shall be inspected by the Division, and a Permit to Operate shall be issued before the elevator is placed in service.

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

16. The applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the

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

Dated: July 2, 2020

Christina Shupe, 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

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| In the Matter of Application for Permanent Variance Regarding:<br><br>Otis Gen2(O) and/or Gen2L Elevators Alterations (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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|---|---|
| In the Matter of Application for Permanent Variance Regarding:<br><br>Otis Elevator (Group IV)<br>Gen2(O) and/or Gen2L Alterations | OSHSB File Nos.: Per Section A.1 table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter:

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

| Variance No. | Applicant Name | Variance Location Address | No. of Elevators |
|---|---|---|---|
| 20-V-132 | 5M Project, LLC | 925 Mission Street<br>San Francisco, CA | 2 |

2. The subject regulatory requirements are as enumerated per the below Decision and Order.

B. Jurisdiction:

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

C. Procedural:

1. This hearing was held on June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia, California, and via teleconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each permanent variance application per Section A.1 table as Exhibit PD-1; Notice of Hearing as Exhibit PD-2; each respective Board staff Pending Application Memorandum as PD-3; Division evaluation as PD-4; Review Draft 1 Proposed Decision as PD-5; and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on June 24, 2020, the record closed, and the matter was 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 California Code of Regulation, Title 8, 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), 2.20.1 (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), 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.26.1.4.4(a) (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 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

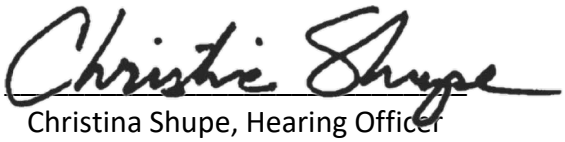
15. Each Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.

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

Dated: July 2, 2020



Christina Shupe, Hearing Officer

## ADDENDUM 1

October 6, 2010

**CIRCULAR LETTER E-10-04**

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

SUBJECT: Coated Steel Belt Monitoring

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

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

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

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

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

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

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

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

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

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

Debra Tudor
Principal Engineer
DOSH-Elevator Unit HQS

## ADDENDUM 2

### Suspension Means – Replacement Reporting Condition

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

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.

2. Each such report shall contain, but not necessarily be limited to, the following information:

    a. The State-issued conveyance number, complete address, and OSHSB file number that identifies the permanent variance.

    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).

    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.

    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.

    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.

f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

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

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

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

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

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

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

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

| | |
|---|---|
| In the Matter of Application for Permanent Variance by:<br><br>The Nasa Group | OSHSB FILE No. 20-V-136<br>Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

DAVID THOMAS, Chairman

Date of Adoption: July16, 2020

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

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

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

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

| | |
|---|---|
| In the Matter of Application for Permanent Variance by:<br><br>The Nasa Group | OSHSB File No.: 20-V-136<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Procedural Matters:

1. The Nasa Group ("Applicant") has applied for a permanent variance from provisions of Title 8 of the California Code of Regulations regarding vertical platform (wheelchair) lifts, with respect to one vertical platform (wheelchair) lift proposed to be located at:

   8539 Melrose Ave.
   West Hollywood, CA

2. The safety orders at issue are stated in the prefatory part of the Decision and Order. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

3. This hearing was held on June 24, 2020, in Sacramento, California and via audio conference link in Monrovia, California, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, 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, Melissa Neylon with Arrowlift of California, appeared on behalf of the Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.

5. At the hearing, oral evidence was received and by stipulation of all parties, documents were accepted into evidence: subject Application for Permanent Variance, as Exhibit PD-1, Notice of Hearing in this matter as PD-2, Board staff Pending Application for Permanent Variance memorandum as PD-3, Division evaluation as PD-4, Review-Draft-1 Proposed Decision as PD-5; and official notice taken of the Board's rulemaking records and variance decision concerning the Elevator Safety Order requirements at issue. On June 24, 2020, at close of hearing, the record closed and the matter was taken under submission on behalf of the Board.

B. Findings of Fact

Based on the record of this proceeding, and officially noticed Board records per (above Section A.5) stipulation of Applicant and Division—inclusive of below cited permanent variance file decisions—the Board finds the following:

1. The Applicant proposes to install one (1) vertical platform (wheelchair) lift at a location having the address of:

   8539 Melrose Ave.
   West Hollywood, CA

2. The subject vertical lift is proposed to be a Symmetry Model VPL/VPC SL-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12 foot maximum vertical rise allowed by ASME A18.1-2003, Section 2.7.1—the State of California standard in force at the time of this Decision.

3. The Division's evaluation in this Matter, states that the more recent consensus code ASME A18.1-2005 allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).

4. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, absent subsequent harm attributable to such variance being reported by Division. (E.g. OSHSB File Nos. 13-V-260, 15-V-097, 17-V-270, 18-V-278, 19-V-256).

5. With respect to the equivalence or superior of safety, conditions and limitations of the Decision and Order are in material conformity with findings and conditions of prior Board permanent variance decisions, including the above cited.

6. Per its written Review of Application for Permanent Variance, Exhibit PD-4, it is the informed opinion of Division that equivalent safety (at minimum) will be achieved upon grant of presently requested permanent variance, subject to conditions and limitations incorporated into the below Decision and Order. Per its written review memorandum (Exhibit PD-3), Board staff concurs with Division in recommending that such conditional grant will provide for safety equivalence.

C. Conclusive Findings

On the basis of the above procedural matters, legal authority, and findings of fact, the Board finds that Applicant has complied with the statutory and regulatory requirements that must be met before an application for a permanent variance may be granted and that a preponderance of the evidence establishes that the Applicant's proposal, subject to all limiting conditions set forth in the below Decision and Order, will provide for conveyance

safety, and employment and a place of employment that are as safe and healthful, as those that would prevail if the Applicant complied with the safety orders at issue.

D. Decision and Order

The Application for Permanent Variance of The Nasa Group, OSHSB File No. 20-V-136, is conditionally GRANTED to the limited extent, upon the Board's adoption of this Proposed Decision, The Nasa Group, shall have permanent variance from California Code of Regulations, Title 8, Sections 3142(a) and 3142.1 incorporating ASME A18.1-2003, Section 2.7.1, inasmuch as it restricts the vertical rise of a wheelchair lift to a maximum of 12 feet, with respect to one (1) Symmetry Model VPL/VPC SL-168 Vertical Platform Lift, to be located at:

8539 Melrose Ave.
West Hollywood, CA

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

1. This lift may travel up to 168 inches, unless the manufacturer's instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.

2. The wheelchair lift shall be installed and operated in accordance with the manufacturer's instructions, unless the provisions of this variance or applicable provisions of the law provide otherwise.

3. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.

4. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by Section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:

   (a) Platform driving means examination;

   (b) Platform examination;

   (c) Suspension means examination;

(d) Platform alignment;

(e) Vibration examination;

(f) Door/gate electrical; and

(g) Mechanical lock examination.

5. The lift shall be tested annually for proper operation under rated load conditions. The Division's Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.

6. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.

7. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.

8. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to the Division. The shutdown information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.

9. The Applicant shall provide training on the safe operation of the lift in accordance with Section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify the Division in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to the Division upon request.

10. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.

11. The Division shall be notified when the lift is ready for inspection, and the lift shall be inspected by the Division and a Permit to Operate shall be issued before the lift is put into service.

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

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

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

Dated: July 2, 2020

Christina Shupe, 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

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|---|---|
| In the Matter of Application for Permanent Variance by:<br><br>James Huang DMD | OSHSB FILE No. 20-V-137<br>Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

DAVID THOMAS, Chairman

Date of Adoption: July16, 2020

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

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

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

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

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| In the Matter of Application for Permanent Variance by:<br><br>James Huang DMD | OSHSB File No.: 20-V-137<br><br>Proposed Decision<br><br>Hearing Date: June 24, 2020 |

A. Procedural Matters

1. James Huang DMD ("Applicant") has applied for a permanent variance from provisions of Title 8 of the California Code of Regulations regarding vertical platform (wheelchair) lifts, with respect to one vertical platform (wheelchair) lift proposed to be located at:

   7046 Dublin Blvd.
   Dublin, CA

2. The safety orders at issue are stated in the prefatory part of the Decision and Order. This proceeding is conducted in accordance with Labor Code Section 143, and California Code of Regulations, Title 8, Section 401, et. seq.

3. This hearing was held on June 24, 2020, in Sacramento, California and via audio/video conference link in Monrovia, California, and via teleconference, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

4. Appearing at hearing were Craig Fiore with McKinley Elevator Corporation appearing on behalf of the Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"); and Michael Nelmida appeared on behalf of Board staff acting in a technical advisory role apart from the Board.

5. At the hearing, oral evidence was received and by stipulation of all parties, documents were accepted into evidence: subject Application for Permanent Variance as Exhibit PD-1, Notice of Hearing in this matter as PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review-Draft-1 Proposed Decision as PD-5; and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance has been requested. On June 24, 2020, at close of hearing, the record closed and the matter was taken under submission on behalf of the Board.

B. Findings of Fact

Based on the record of this proceeding, and officially noticed Board records per (above Section A.5) stipulation of Applicant and Division—inclusive of permanent variance file records of sworn testimony, findings and decisions in OSHSB File No. 15-V-297, the Board finds the following:

1. The Applicant proposes to install one vertical platform (wheelchair) lift at a location having the address of:

   7046 Dublin Blvd.
   Dublin, CA

2. Applicant requests variance solely from Title 8, Section 3142(a) and Section 3142.1.

3. The subject vertical lift is proposed to be a Garaventa Lift, Model GVL-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12-foot maximum vertical rise allowed by ASME A18.1-2003, Section 2.7.1—the State of California standard in force at the time of this Decision.

4. The Division's evaluation in this Matter, states that the more recent consensus code, ASME A18.1-2005, allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).

5. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, without subsequent safety problems attributable to such variance being reported. (e.g. OSHSB File Nos. 13-V-260, 15-V-097, 15-V-297, 18-V-069)

6. It is the well informed professional opinion of Board staff and Division (per Exhibits PD-3, and PD-4, respectively) that equivalent safety will be achieved upon grant of presently requested permanent variance, subject to conditions materially equivalent to those imposed by Board adopted Decision and Order, In Matters of Application for Permanent Variance Nos. 15-V-297, and 18-V-069. Board Staff concurs with Division (per Exhibit PD-3) in recommending such conditional grant.

7. With respect to the equivalence or superior of safety, conditions and limitations of the below Decision and Order are in material conformity with those of previously issued Permanent Variance Nos. 15-V-297, and 18-V-069.

C. Conclusive Findings

On the basis of the above procedural matters, legal authority, and findings of fact, the Board finds that Applicant has complied with the statutory and regulatory requirements that must be met before an application for a permanent variance may be granted and that a preponderance of the evidence establishes that the Applicant's proposal, subject to all limiting conditions set forth in the below Decision and Order, will provide both conveyance safety, and employment and a place of employment that are as safe and healthful as those that would prevail if the Applicant complied with the safety orders at issue.

D. Decision and Order

The Application for Permanent Variance of James Huang DMD, OSHSB File No. 20-V-137, is conditionally GRANTED to the limited extent, upon the Board's adoption of this Proposed Decision, James Huang DMD, shall have permanent variance from California Code of Regulations, Title 8, Sections 3142(a) and 3142.1 incorporating ASME A18.1-2003, Section 2.7.1, inasmuch as each restricts the vertical rise of a wheelchair lift to a maximum of 12 feet, with respect to one (1) Garaventa Lift, Model GVL-168 Vertical Platform Lift, to be located at:

7046 Dublin Blvd.
Dublin, CA

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

1. This lift may travel up to 168 inches, unless the manufacturer's instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.

2. The wheelchair lift shall be installed and operated in accordance with the manufacturer's instructions, unless the provisions of this variance or applicable provisions of the law provide or require otherwise.

3. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.

4. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by Section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:

   (a) Platform driving means examination;

   (b) Platform examination;

   (c) Suspension means examination;

   (d) Platform alignment;

   (e) Vibration examination;

   (f) Door/gate electrical; and

   (g) Mechanical lock examination.

5. The lift shall be tested annually for proper operation under rated load conditions. The Division's Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.

6. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.

7. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.

8. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to the Division. The shutdown information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.

9. The Applicant shall provide training on the safe operation of the lift in accordance with Section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify the Division in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to the Division upon request.

10. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.

11. The Division shall be notified when the lift is ready for inspection, and the lift shall be inspected by the Division and a Permit to Operate shall be issued before the lift is put into service.

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

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

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

Dated: July 2, 2020

Christina Shupe, 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

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| In the Matter of Application for Permanent Variance Regarding:<br><br>Schindler Model 3300 Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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| In the Matter of Application for Permanent Variance Regarding:<br><br>Schindler Model 3300 Elevators<br>(Group IV) | OSHSB File Nos.: Per Section A table, below<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

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 |
|---|---|---|---|
| 20-V-141 | El Sendero, LLC | 2660 Monterey Road<br>San Jose, CA | 2 |
| 20-V-142 | Sunnyvale HHG Hotel Development, LP | 830 East El Camino Real<br>Sunnyvale, 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 June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia California, and via teleconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, 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 Company, appeared on behalf of each Applicant; Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff, in a technical advisory role apart from the Board.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each respective permanent variance applications per Section A table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on June 24, 2020, the record was closed, and the matter taken under submission by the Hearing Officer.

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

Requested Suspension Means Related Variance:

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

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

Requested Car Top Railing Inset Variance:

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

    *Section 2.14.1.7.1—Top of Car Perimeter Railing Placement*

Requested Seismic Reset Switch Placement Variance:

3. As it pertains to installation of the requisite seismic reset switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model

3300 elevator, each Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code subsection:

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

Requested Transfer Switch Placement Variance:

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

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

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

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

Positions of Division, and Board Staff:

6. Having fully reviewed 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 the Division, Board staff, Applicant representatives, and refinement of recommended conditions and limitations.

D. Conclusive Findings:

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

E. Decision and Order:

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

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

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

Seismic Safety Switch Placement: Each Applicant shall conditionally hold permanent variance from certain requirements of the following Title 8, Section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to having the requisite seismic reset switch located elsewhere than a machine room, within a Security

Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 8.4.10.1.1.

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

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

7. This Decision and Order shall remain in effect unless modified or revoked upon application by 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: July 2, 2020

Christina Shupe, 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:<br><br>ThyssenKrupp Elevators<br>(Group IV, wire ropes and sheaves) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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:<br><br>ThyssenKrupp Elevators<br>(Group IV; wire ropes and sheaves) | OSHSB File Nos.: Per Section A.1 table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter:

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

| Variance No. | Applicant Name | Variance Location Address | No. of Elevators |
|---|---|---|---|
| 20-V-143 | Piedmont Unified School District | 800 Magnolia Ave.<br>Piedmont, CA | 1 |
| 20-V-197 | LMT Home Corp. | 1667 San Carlos Ave.<br>San Carlos, CA | 1 |
| 20-V-198 | Kun Tian Corp. | 1525 San Carlos Ave.<br>San Carlos, CA | 1 |
| 20-V-199 | Santa Cruz Pacific Associates | 350 Ocean St.<br>Santa Cruz, CA | 2 |
| 20-V-200 | Sunrise of Redwood PropCO LLC | 2991 El Camino Real<br>Redwood City, CA | 3 |
| 20-V-201 | SHAC Del Medio Apartments LLC | 2700 W El Camino Real<br>Mountain View, CA | 3 |

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

B. Procedural:

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

2. This hearing was held on June 24, 2020, in Sacramento, California and via audio/video conference link in Monrovia, California, and via teleconference, by delegation of the

Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

4. At the hearing, oral evidence was received and by stipulation of all parties, documents were accepted into evidence: each respective Section A.1 specified Application for Permanent Variance as Exhibit PD-1; Notice of Hearing in this matter as PD-2; Board staff Pending Application Memorandum as PD-3; Division Review of Application as PD-4; Review Draft 1 Proposed Decision as PD-5; and official notice taken of the Board's files, records, recordings and decisions regarding conveyances. At the close of the hearing on June 24, 2020, the record was closed, and matter taken under submission by the Hearing Officer.

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

1. Each Applicant intends to utilize ThyssenKrupp elevators in the numbers and at the locations stated in the above Section A.1 table.

2. The installation contracts for these elevators were, or will be, signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders (ESO).

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

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

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

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

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

b. Providing a 2:1 roping ratio;

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

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

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

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

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

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

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

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

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

6. With respect to the sheaves, the Board has made findings of fact to the following effect in prior, similar variance matters:

    a. Documentation has stated that similar Schwartz Optamid-6 thermoplastic cast sheaves "have been used successfully throughout the world since 1970."

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

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

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

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

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

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

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

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with

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

E. Decision and Order:

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

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

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

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

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

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

6. The elevator rated speed shall not exceed the rated speed specified in Appendix 1, attached hereto, and incorporated herein by this reference.

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

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

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

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

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

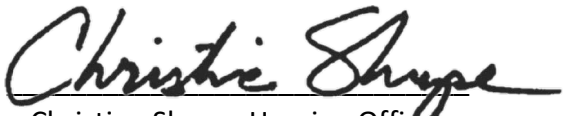
12. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Appendix 2; that condition is incorporated herein by this reference.

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

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

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

Dated: July 2, 2020



Christina Shupe, Hearing Officer

## APPENDIX 1

| OSHSB File Number | Car | Minimum Suspension Ropes per Elevator (per Condition No. 3) | Roping Ratio | Max. Rated Speed In Feet per Minute (per Condition No. 6) | Maximum Suspended Load per Elevator (+5%) (per Cond.No. 7) |
|---|---|---|---|---|---|
| 20-V-143 | T1 | 6 | 2:1 | 150 | 6,580 |
| 20-V-197 | 1 | 6 | 2:1 | 150 | 6,601 |
| 20-V-198 | 1 | 6 | 2:1 | 150 | 6,637 |
| 20-V-199 | 1 | 6 | 2:1 | 150 | 6,748 |
| 20-V-199 | 2 | 6 | 2:1 | 150 | 6,743 |
| 20-V-200 | 1 | 6 | 2:1 | 150 | 7,279 |
| 20-V-200 | 2 | 6 | 2:1 | 150 | 6,891 |
| 20-V-200 | 3 | 6 | 2:1 | 150 | 7,266 |
| 20-V-201 | 1 | 6 | 2:1 | 150 | 6,967 |
| 20-V-201 | 2 | 6 | 2:1 | 150 | 6,967 |
| 20-V-201 | 3 | 6 | 2:1 | 150 | 6,980 |

## 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 Section 2.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:<br><br>Schindler Model 5500 Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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:<br><br>Schindler Model 5500 Elevators (Group IV) | OSHSB File Nos. (See Section A.1 Table Below)<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

A. Subject Matter:

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

| Variance No. | Applicant Name | Variance Location Address | No. of Elevators |
|---|---|---|---|
| 20-V-149 | Los Angeles World Airports | T5.5 Project Terminal 6<br>600 World Way<br>Los Angeles, CA | 5 |
| 20-V-150 | Los Angeles World Airports | ITF West Parking<br>6101 W. 96th Street<br>Los Angeles, CA | 6 |
| 20-V-158 | Los Angeles World Airports | 251 Center Way<br>Los Angeles, CA | 10 |
| 20-V-159 | Los Angeles World Airports | 150 W Center Way<br>Los Angeles, CA | 7 |
| 20-V-160 | Los Angeles World Airports | 5815 W. 96th St.<br>Los Angeles, CA | 1 |
| 20-V-161 | Los Angeles World Airports | 351 World Way<br>Los Angeles, CA | 15 |
| 20-V-162 | Los Angeles World Airports | 9600 S. Aviation Blvd.<br>Los Angeles, CA | 4 |
| 20-V-163 | Los Angeles World Airports | 6001 W. 96th Street<br>Los Angeles, CA | 4 |

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

B. Process and Procedure:

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

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

3. This hearing was held on June 24, 2020, in Sacramento, California, and via audio/video conference link, in Monrovia, California, and via teleconference, by Occupational Safety and Health Standards Board ("Board") assigned Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: each respective permanent variance applications per Section A table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on June 24, 2020, the record was closed, and the matter taken under submission by the Hearing Officer.

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

Requested Suspension Means Related Variance:

1. As each pertains to the non-circular elastomeric coated suspension means characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated

ASME Safety Code for Elevators and Escalators (ASME Code) A17.1-2004 sections and subsections:

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

Requested Car Top Railing Inset Variance:

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

*Section 2.14.1.7.1—Top of Car Perimeter Railing Placement*

Requested Seismic Reset Switch Placement Variance:

3. As it pertains to installation of the requisite seismic reset switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code subsection:

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

Requested Transfer Switch Placement Variance:

4. As it pertains to installation of the requisite transfer switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 subsection:

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

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

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

   Positions of Division, and Board Staff:

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

D. Basis of Decision:

The afore stated procedural, statutory, regulatory, and factual matters establish a substantive reasonable basis of conclusion that: (1) Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and (2) a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of California Code of Regulation, Title 8, Elevator Safety Orders from which variance is being sought.

E. Decision and Order:

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

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

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

Seismic Safety Switch Placement: Applicant shall conditionally hold permanent variance from certain requirements of the following Title 8, Section 3141 incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: Section 8.4.10.1.1(a)(2)(b).

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

Further Conditions and Limitations:

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

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

   - 2.20.4.3 – Minimum Number of Suspension Members
   - 2.20.3 – Factor of Safety
   - 2.20.9 – Suspension Member Fastening

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

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

1.4. STM member mandatory replacement criteria shall include:

1.4.1 Any exposed wire, strand or cord;

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

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

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

1.5. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

1.6. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.

1.7. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

1.8. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be

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

1.9. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 1 (Division Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.

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

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

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

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

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

1.15. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, Sections 8.6.1.2 and 8.6.1.4, respectively.

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

2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

2.2. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

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

3.1. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

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

3.3. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

3.4. The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

3.5. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

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

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

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

5. The Division shall be notified when the elevator is ready for inspection. The elevator shall be inspected by the Division, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Division.

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

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

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

Dated: July 2, 2020

Christina Shupe, 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:<br><br>Mitsubishi Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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|---|---|
| In the Matter of Application for Permanent Variance Regarding:<br><br>Mitsubishi Elevators (Group IV) | OSHSB File Nos.: See Section A.1 Table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

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 |
|---|---|---|---|
| 20-V-157 | Adobe, Inc. | 333 W. San Fernando St.<br>San Jose, CA | 22 |

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 June 24, 2020, in Sacramento, California and via audio/video conference link in Monrovia**,** California, and via teleconference, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

4. At the hearing, Carolina Castaneda, with Mitsubishi Electric, Elevator Division, appeared on behalf of each Applicant, Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Division"), and Michael Nelmida appeared on behalf of Board staff in a technical advisory role apart from the Board.

5. At the hearing, documentary and oral evidence was received, and by stipulation of all parties, documents were accepted into evidence: each permanent variance application per Section A table as Exhibit PD-1; Notice of Hearing as PD-2; Board staff Pending

Application Memorandum as PD-3; Division Review of Application report as PD-4; Review Draft 1 Proposed Decision as PD-5; and Official Notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is requested. At the close of hearing on June 24, 2020, 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: July 2, 2020

Christina Shupe, 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:<br><br>KONE Monospace 500 Elevators (Group IV) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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:<br><br>KONE Monospace 500 Elevators (Group IV) | OSHSB File Nos.: Per Section A.1 Grid Below<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

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 |
|---|---|---|---|
| 20-V-164 | The Board of Trustees of the Leland Stanford Junior University | 233 Bonair Siding Rd.<br>Stanford, CA | 1 |
| 20-V-165 | STC Venture Block F1, LLC, a Delaware Limited Liability Company | 333 West Iowa Avenue<br>Sunnyvale, CA | 2 |
| 20-V-166 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | 800 Sierra Point Parkway<br>Parking Structure<br>Brisbane, CA | 2 |
| 20-V-167 | 1140 Harrison Associates LP, a Delaware Limited Partnership | 1140 Harrison Street<br>San Francisco, CA | 3 |
| 20-V-168 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | 1800 Sierra Point Parkway<br>Building A<br>Brisbane, CA | 2 |
| 20-V-170 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | 1400 Sierra Point Parkway<br>Building C<br>Brisbane, CA | 2 |

| | | | |
|---|---|---|---|
| 20-V-171 | HCP LS Brisbane, LLC c/o Project Management Advisors, Inc. | 1600 Sierra Point Parkway Building B Brisbane, CA | 2 |
| 20-V-190 | 6041 Variel LLC | 6041 Variel Avenue Woodland Hills, CA | 4 |
| 20-V-191 | Cucamonga School District | 10022 Feron Blvd. Rancho Cucamonga, 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 June 24, 2020, in Sacramento, California and via audio/video conference link in Monrovia, California, and via teleconference, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: permanent variance applications per Section A.1 table as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records and variance decisions concerning the safety order requirements from which variance is sought. Upon close of hearing on June 24, 2020, the 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 x N)/ f*

    *where*

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

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

    *S = manufacturer's rated breaking strength of one rope*

    *f = the factor of safety from Table 2.20.3*

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

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

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

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Each Applicant has complied with

the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted; and (2) a preponderance of the evidence establishes that each Applicants proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of California Code of Regulation, Title 8, Elevator Safety Orders from which variance is being sought.

E. Decision and Order:

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

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).

2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.

3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.

4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with “KONE Inc. Inspector’s Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators” (per Application Exhibit B, or as thereafter amended by KONE subject to Division approval).

5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.

6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.

7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.

8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required.

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

9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 Section 2.20.3.

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

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

12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.

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

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

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

Dated: July 2, 2020

Christina Shupe, 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) |
| | | | | |

## 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

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| In the Matter of Application for Permanent Variance Regarding:<br><br>Schindler Sleep Mode Escalators | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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| In the Matter of Application for Permanent Variance regarding:<br><br>Schindler Sleep Mode Escalators | OSHSB File Nos.: Per Section A table, below<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

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 |
|---|---|---|---|
| 20-V-177 | Los Angeles World Airports | ITF West Parking<br>6101 W. 96th Street<br>Los, Angeles, CA | 12 |
| 20-V-178 | Los Angeles World Airports | Terminal 6<br>600 World Way<br>Los Angeles, CA | 7 |

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

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

B. Process and Procedure:

1. This hearing was held on June 24, 2020, in Sacramento, California, and via audio conference link, in Monrovia, California, via teleconference, by Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: Application for Permanent Variance as Exhibit PD-1, Notice of Hearing as Exhibit PD-2, Board staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5, and official notice taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested. At close of hearing on June 24, 2020, 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 $1ft/sec^2$.

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

6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in "sleep mode", an alarm will sound and the escalator will exit "sleep mode" and accelerate until it reaches normal operating speed at a rate no greater than $1ft/sec^2$. This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.

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

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

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

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

*(a) The acceleration and deceleration rates shall not exceed 0.3 m/s$^2$ (1.0 ft/sec$^2$).*

*(b) The rated speed is not exceeded.*

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

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

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

*(1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to*

*6.1.4.1.2(a) through (d)*

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

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

*(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. <u>Conclusive Findings:</u>

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

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

E. Decision and Order:

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

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

   (a) The rate of acceleration and deceleration shall not exceed 0.3 $m/s^2$ (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:

*$d = (V_f - V_s) \times (V_w / a)$ where*

*d = detection distance (ft)*

*$V_f$ = normal speed (ft/min) [not to exceed 100 ft/min]*

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

*$V_w$ = passenger walking speed (4.5 ft/sec)*

*a = acceleration/deceleration rate ($ft/sec^2$)[not to exceed 1 $ft/sec^2$]*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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: July 2, 2020

Christina Shupe, Hearing Officer

## Detection Distance Sleep Mode Operation

Accurate when applied to escalators with a rated speed of **100** ft./min.

| Acceleration Rate (ft./sec.$^2$) | 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 |

$$d = (V_f - V_s) \times (V_w / a)$$

d = Detection Distance (ft.)
$V_f$ = Escalator Rated Speed (ft./min.)
$V_s$ = Slow Speed ["Sleep Mode" Speed] (ft./min.)
$V_w$ = Passenger Walking Speed (ft./sec.) **4.5**
a = Acceleration/Deceleration Rate (ft./sec.$^2$)
1 ft./min. = **0.0167** ft./sec.

**EXHIBIT 1**

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

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|---|---|
| In the Matter of Application for Permanent Variance Regarding:<br><br>ThyssenKrupp Elevators<br>(Group IV, wire ropes) | OSHSB FILE No.: see grid in Item A of Proposed Decision Dated: July 2, 2020<br><br>DECISION |

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

DAVID THOMAS, Chairman

BARBARA BURGEL, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

LAURA STOCK, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: July 16, 2020

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

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|---|---|
| In the Matter of Application for Permanent Variance Regarding:<br><br>ThyssenKrupp Elevators<br>(Group IV; wire ropes) | OSHSB File Nos.: Per Section A.1 table<br><br>PROPOSED DECISION<br><br>Hearing Date: June 24, 2020 |

**A. Subject Matter:**

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

| Variance No. | Applicant Name | Variance Location Address | No. of Elevators |
|---|---|---|---|
| 20-V-192 | E.L. Lotus, LLC | 118 Astronaut Ellison S Onizuka St.<br>Los Angeles, CA | 2 |

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

B. Procedural:

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

2. This hearing was held on June 24, 2020, in Sacramento, California and via audio/video conference link in Monrovia, California, by delegation of the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Christina Shupe, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, Title 8, Section 426.

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

4. At the hearing, oral evidence was received and by stipulation of all parties, documents were accepted into evidence: each respective Section A.1 specified Application for Permanent Variance as Exhibit PD-1, Notice of Hearing in this matter as PD-2, Board

staff Pending Application Memorandum as PD-3, Division Review of Application as PD-4, Review Draft 1 Proposed Decision as PD-5; and official notice taken of the Board's files, records, recordings and decisions regarding conveyances. At the close of the hearing on June 24, 2020, the record was closed, and matter taken under submission by the Hearing Officer.

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

1. Each Applicant intends to utilize ThyssenKrupp elevators in the numbers and at the locations stated in the above Section A.1 table.

2. The installation contracts for these elevators were, or will be, signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.

3. Each Applicant proposes to diverge from the safety orders by using 8x19 suspension ropes that are 8 mm in diameter (9.5 mm is the minimum diameter allowed by ASME A17.1-2004, Section 2.20.4) and that have outer wires that are 0.36 mm in diameter (0.56 mm is the minimum diameter allowed by ASME A17.1-2004, Section 2.20.4).

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

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

    b. Providing a 2:1 roping ratio;

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

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

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

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

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

b. Tests performed on Drako brand 8 mm diameter rope generated data to the effect that "the breaking force applied in single bend for failure of the rope resulted in" forces of 7,910 to 9,550 pounds for the Drako rope; the breaking force when new and when using production rope shackles was calculated as 9,740 pounds for the Drako rope. As to Gustav Wolf brand 8 mm diameter wire rope (part number 80-056SC, 8X19 Warrington), test data include the following: cycling tests disclosed that the breaking force applied in single bend for failure of the rope resulted in a force of 8,360 pounds, and that the breaking force when new was calculated at 9,919 pounds using production rope shackles.

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

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

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

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

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

8. Safety is enhanced by the conditions set forth in the Decision and Order.

D. Conclusive Findings:

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

E. Decision and Order**:**

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

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

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

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

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

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

6. The elevator rated speed shall not exceed the rated speed specified in Appendix 1, attached hereto, and incorporated herein by this reference.

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

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

the system goes into operation when the tension discrepancy is between "±40%" and "±45%."

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

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

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

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

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

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

Dated: July 2, 2020

Christina Shupe, Hearing Officer

**APPENDIX 1**

| OSHSB File Number | Car ID | Minimum Suspension Ropes per Elevator (per Cond. No. 3) | Roping Ratio | Max. Rated Speed In Feet per Minute (per Condition No. 6) | Maximum Suspended Load per Elevator (+5%) (per Cond.No. 7) |
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## APPENDIX 2

Suspension Means Replacement Reporting Condition

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

1. A separate report for each elevator shall be submitted, in a manner acceptable to the Division, to the following address (or to such other address as the Division might specify in the future): DOSH Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.

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

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

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

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

# Occupational Safety and Health Standards Board

## Business Meeting

## Legislative Update

**Legislative Update, July 16, 2020**
**Meeting of the Occupational Safety and Health Standards Board**

**AB 2043**

**AB-2043 Occupational safety and health: agricultural employers and employees: COVID-19 response.**
(Rivas-Garcia-Gonzalez/Bonta)

| Date | Action |
|---|---|
| 07/01/20 | Referred to Com. on L., P.E. & R. |
| 06/11/20 | In Senate. Read first time. To Com. on RLS. for assignment. |
| 06/11/20 | Read third time. Passed. Ordered to the Senate. (Ayes 55. Noes 15.) |
| 06/10/20 | Read third time and amended. Ordered to third reading. |
| 06/08/20 | Read second time. Ordered to third reading. |
| 06/04/20 | Read second time and amended. Ordered returned to second reading. |

Summary:
Previously introduced as AB-2915

Requires the Occupational Safety and Health Standards Board (standards board), by February 1, 2021, to develop standards for coronavirus infection prevention in agriculture and directs the Division of Occupational Safety and Health (division) to disseminate health and safety guidance to agricultural employers and conduct a targeted outreach campaign to employees.

**AB 2092**

**AB 2092 - Emergency ambulance employees: *safety devices and safeguards.***
(Rodriguez)

| Date | Action |
|---|---|
| 06/23/20 | Referred to Com. on L., P.E. & R. |
| 06/09/20 | In Senate. Read first time. To Com. on RLS. for assignment. |

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| 06/08/20 | Read third time. Passed. Ordered to the Senate. (Ayes 57. Noes 15.) |

Summary:
Existing law establishes a statewide system for emergency medical services and establishes the Emergency Medical Services Authority, which is responsible for establishing training, scope of practice, and continuing education for emergency medical technicians and other prehospital personnel.

This bill would require an emergency ambulance provider to inform each emergency ambulance employee, upon initial employment and subsequently on an annual basis, of the employee's right to request safety devices and safeguards, as defined, at the beginning of the employee's shift. By creating a new duty for emergency ambulance providers, a violation of which would be a crime, the bill would impose a state-mandated local program. The bill would not apply to the state or a political subdivision of the state.

**AB 2028**

**AB-2028 - State agencies: meetings.** (Aguiar-Curry)

| Date | Action |
|---|---|
| 06/03/20 | From committee: Amend, and do pass as amended. (Ayes 18. Noes 0.) (June 3). |
| 06/02/20 | In committee: Set, first hearing. Referred to APPR. suspense file. |

Summary:
Existing law, the Bagley-Keene Open Meeting Act, requires that all meetings of a state body, as defined, be open and public, and that all persons be permitted to attend any meeting of a state body, except as otherwise provided in that act. Existing law requires the state body to provide notice of its meeting, including specified information and a specific agenda of the meeting, as provided, to any person who requests that notice in writing and to make that notice available on the internet at least 10 days in advance of the meeting.

This bill would, except for closed sessions, require that this notice include all writings or materials provided for the noticed meeting to a member of the state body by staff of a state agency, board, or commission, or another member of the state body, that are in connection with a matter subject to discussion or consideration at the meeting. The bill would require these writings and materials to be made available on the internet website, and to people who so request in writing, on the same day as they are provided to members of the state body or at least 48 hours in advance of the meeting, whichever is earlier. The bill would provide that a state body may only distribute or

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<tr><td></td><td>discuss these writings or materials at a meeting of the state body if it has complied with these requirements. The bill would except writings or materials relating to matters to be discussed in a closed session from its requirements and would authorize a state body to post and provide additional time-sensitive materials related to certain active legislation, as specified, as they become available, after the prescribed deadlines. The bill would specify that its provisions do not authorize a state body to remove writings and materials from an internet website.<br><br>Existing law requires that a state body provide an opportunity for members of the public to directly address the body on each agenda item. Existing law exempts from this requirement, among other things, an agenda item that has already been considered by a committee composed exclusively of members of the state body at a public meeting where members of the public were afforded an opportunity to address the committee on the item.<br><br>This bill would delete this exception, thereby making the requirement to provide an opportunity to address the state body applicable to an agenda item for which the public had an opportunity to address it at a public meeting of a committee of the state body.</td></tr>
<tr><td>AB 2537</td><td>AB-2537 - Personal protective equipment: health care employees. (Rodriguez)<br><br>
<table>
<tr><th>Date</th><th>Action</th></tr>
<tr><td>06/29/20</td><td>From committee chair, with author's amendments: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on L., P.E. & R.</td></tr>
<tr><td>06/23/20</td><td>Referred to Com. on L., P.E. & R.</td></tr>
<tr><td>06/09/20</td><td>In Senate. Read first time. To Com. on RLS. for assignment.</td></tr>
<tr><td>06/08/20</td><td>Read third time. Passed. Ordered to the Senate. (Ayes 57. Noes 14.)</td></tr>
<tr><td>06/08/20</td><td>Assembly Rule 63 suspended. (Ayes 59. Noes 17.)</td></tr>
<tr><td>06/08/20</td><td>Read second time. Ordered to third reading.</td></tr>
<tr><td>06/04/20</td><td>Read second time and amended. Ordered returned to second reading.</td></tr>
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| | Summary:<br><br>This bill would require public and private employers of workers who provide direct patient care in a hospital setting to supply those employees with the personal protective equipment necessary to comply with the regulations described above, as specified. The bill would also require an employer to ensure that the employees use the personal protective equipment supplied to them. The bill would further require that an employer in this context maintain a supply of unexpired personal protective equipment *that is new and not previously worn or used* in an amount equal to 6 months of normal consumption and to provide an inventory of its stockpile to the Division of Occupational Safety and Health upon request.<br><br>The bill would authorize the assessment of a civil penalty of up to $25,000 for each violation to maintain the required stockpile. |
| **AB 3056** | **AB-3056 Warehouse distribution centers. (Gonzalez)**<br><br>**Date** / **Action**<br>07/01/20 — Referred to Com. on L., P.E. & R.<br>06/16/20 — In Senate. Read first time. To Com. on RLS. for assignment.<br>06/15/20 — Read third time. Passed. Ordered to the Senate. (Ayes 52. Noes 20.)<br>06/10/20 — Read third time and amended. Ordered to third reading.<br>06/04/20 — Read second time. Ordered to third reading.<br><br>Summary:<br><br>This bill would enact prescribed protections for certain warehouse and distribution center employees. The bill would prohibit an employer from imposing a quota upon an employee under which reasonable amounts of time that the employee spends on any of the specified activities is counted toward the time required for completing the quota, or results in the employee having less time to complete the quota. The bill would define terms for its purposes.<br><br>This bill, except as specified, would require the Division of Labor Standards Enforcement to enforce its provisions. The bill would authorize the commissioner to adopt regulations to implement its provisions. |

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| | This bill would require an employer to pay each employee who works under a quota during the workday and who is assigned or required to perform work in excess of the- previously established quota during that workday a wage premium of 1 ½ times the employee's regular rate of pay for any hour during which the employee was assigned or required to perform work in excess of the quota.<br><br>This bill would subject an employer who violates the quota prohibition to civil penalties. |
| **SB-275** | **SB-275 Health Care and Essential Workers Protection Act: personal protective equipment.**<br><br>**Date** / **Action**<br>06/26/20 — Re-referred to Com. on RLS. pursuant to Assembly Rule 96.<br>06/17/20 — From committee with author's amendments. Read second time and amended. Re-referred to Com. on B. & P.<br><br>Summary:<br><br>SB 275, as amended, Pan. Health Care and Essential Workers Protection Act: personal protective equipment.<br>Existing law establishes the State Department of Public Health to implement various programs throughout the state relating to public health, including licensing and regulating health facilities and control of infectious diseases.<br><br>This bill, the Health Care and Essential Workers Protection Act, would require the State Department of Public Health to establish a personal protective equipment (PPE) stockpile to ensure an adequate supply of PPE for health care workers and essential workers, as defined, and would require the stockpile to be at least sufficient for a 90-day pandemic or other health emergency. The bill would require the department to establish guidelines for the procurement of the PPE stockpile, taking into account, among other things, the amount of each type of PPE that would be required for all health care workers and essential workers in the state during the pandemic or other health emergency, which would represent the amount of PPE to be maintained in the stockpile.<br><br>The bill would require providers, including clinics, health facilities, and home health agencies, to maintain a stockpile of unexpired PPE for use in the event of a declared state of emergency and would require the stockpile to be at least sufficient for a 90-day pandemic or other health emergency. The bill would assess a civil penalty on a |

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| | provider who violates that requirement of up to $25,000 for each violation. The bill would declare a provider's failure to provide PPE to its health care workers upon reasonable request to be an independent violation of the bill's requirements.<br><br>The bill would require the Department of Industrial Relations to adopt regulations, in consultation with the State Department of Public Health, setting forth requirements for the PPE stockpile, and would authorize the Department of Industrial Regulations to incorporate by reference existing guidance from the department and from the federal Occupational Safety and Health Administration regarding standards for PPE usage. The bill would require a provider to procure at least 25% of its PPE from in-state manufacturers, to the extent permitted by federal law, as specified.<br><br>Existing law establishes the Made in California Program within the Governor's Office of Business and Economic Development, to encourage consumer product awareness and to foster purchases of high-quality products made in California. Existing law creates the Made in California Fund within the State Treasury, consisting of donations and other moneys to be used for the purposes of the Made in California Program, as specified.<br><br>This bill would require the office, as a part of the Made in California Program, to encourage in-state production of PPE in order to assist the State Department of Public Health and providers in complying with the bill's requirements. The bill would create the Health Care Workforce Protection Account within the Made in California Fund, consisting of donations and other moneys, for the exclusive purpose of promoting the production of PPE. The bill would continuously appropriate the donated moneys in the account for the purpose of implementing those provisions, thereby making an appropriation. The bill would require any other funds deposited and maintained in the account to be available for the same purpose, upon appropriation by the Legislature. The bill would declare that its provisions are severable. |

# Occupational Safety and Health Standards Board

## Business Meeting

## Executive Officer Report