OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
www.dir.ca.gov/oshsb

INITIAL STATEMENT OF REASONS

CALIFORNIA CODE OF REGULATIONS

TITLE 8: Section 8615(g) of the Telecommunication Safety Orders

Fall Protection in Telecommunications

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

The purpose of this rulemaking proposal is to amend the state standard for fall protection and point-to-point travel by qualified telecommunications workers on telecommunication poles, towers, or similar structures provided in Title 8 of the California Code of Regulations, Telecommunications Safety Orders (TSO), Section 8615(g).

Section 8615. Overhead Lines.
Subsection (g). Fall Protection.

The need for the proposed amendments arises from the following:

- Federal OSHA recently revised 29 Code of Federal Regulations (29 CFR), Part 1910, Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems) including Section 1910.268, Telecommunications. The new language in 29 CFR 1910.268(g)(1) adds a requirement for the personal fall arrest and positioning systems to meet the applicable requirements in Subpart I of 29 CFR 1910, the federal standard for personal protective equipment. The current counterpart state standard, Section 8615(g) does not have a reference to any equipment-specific requirements for the fall arrest and work positioning systems; and therefore, is not commensurate with the federal standard.

- Currently, Section 8615(g) provides an exception for point-to-point travel by a qualified person without fall protection equipment, unless conditions such as ice, high winds, design of the structure, or other conditions prevent the employee from gaining a firm hand or foothold while traveling. This exception is not commensurate with the federal standard, 29 CFR 1910.268(g)(1), because the exception does not adequately address the fall injury risk and fails to provide equivalent or better protection as compared to that provided by the federal standard.

- Section 8615(g) currently uses “equipment” as the terminology for the means of personal fall protection. This terminology is not consistent with “system”, the terminology used in both the Construction Safety Orders (CSO), Section 1670, and the new federal standard.

The specific amendments proposed for Section 8615(g) are the following:

- The deletion of the exception that allows for point-to-point travel without fall protection unless conditions are present that prevent the employee from gaining a firm hand or foothold while traveling.

- The addition of a new subsection (g)(2), that specifically requires the use of fall protection for qualified telecommunications workers climbing or changing locations on poles, towers, or similar structures.

- The addition of an exception recognizing that use of a personal fall protection system may not always be feasible during point-to-point travel, while expressly clarifying that equivalently effective fall injury risk control measures would be required. The proposed changes are necessary to allow employers to take alternative measures as effective as conventional fall protection methodologies to control fall injury risk. Alternatives to conventional fall protection methods that control the fall risk include, but are not limited to: use of a pole/tower climbing fall protection plan approved by the Division of Occupational Safety and Health; positive control for safe access as provided by General Industry Safety Orders, Section 3270.1, Rope Access standards; use of linemen's body belts; installation and use of sufficient hand and footholds; use of aerial devices; or any combination thereof.

- The addition of a requirement that personal fall protection systems meet the applicable requirements in Title 8, Section 1670 of the CSO. Requiring that personal fall protection systems meet the existing state standard in Section 1670 is necessary to ensure that only adequate and properly functioning personal fall protection systems and components are used by the employees. The use of linemen's body belts (typically designed with two attachment points) as described in Section 2940.6(c) of the Electrical Safety Orders are prescribed for climbing poles, towers and similar structures to ensure such equipment meets adequate safety standards. In addition, the labeling and inspection requirements in Section 1670 prevent the use of defective equipment. Use of adequate and properly functioning personal fall protection systems and components will result in improvement in fall safety and reduction in employee fall risk. This requirement will also make the California standard more clearly commensurate with the new federal standard.

- The use of the word "system" in place of the word "equipment", and the use of the phrase "fall restraint system" in place of the phrase "travel restricting equipment". This proposal is necessary to makes the terminology used for means of fall protection consistent with those in the CSO and the new federal standard. Such consistency will enhance safety communication and improve safety by having employees use the same fall protection systems, and follow similar practices in telecommunications or construction works.

- The relocation of the regulatory language prohibiting the use of body belts as part of a fall arrest system as a new subsection. This proposed relocation is necessary to add clarity to the requirement, making it more easily understandable.

Overall, the proposed amendments render the state requirements commensurate with the federal standard and are expected to improve fall safety by reducing employee falls due to climbing and descending.

REFERENCE TO COMPARABLE FEDERAL REGULATION

The Occupational Safety and Health Standards Board is proposing this rulemaking action pursuant to Labor Code Section 142.3, which mandates the Board to adopt regulations at least as effective as federal regulations addressing occupational safety and health issues.

In conformance with Government Code Section 11346.9(c), the Board provides the following information. Federal OSHA promulgated regulations addressing walking-working surfaces and personal protective equipment including fall protection systems on November 18, 2016, as 29 CFR, Part 1910. The Board is relying on the explanation of the provisions of the federal regulations in Federal Register, Volume 81, No. 223, pages 82494-83006, November 18, 2016, as the justification for the Board's proposed rulemaking action.

29 CFR 1910.268. Telecommunications.

29 CFR 1910.268(g)(1) of the federal telecommunications regulation requires use of a positioning system or a personal fall arrest system when work is performed at positions more than 4 feet above ground, on poles and towers, except as provided in its paragraphs (n)(7) and (n)(8). Paragraphs (n)(7) and (n)(8) require the use of safety belts and straps unless the work area is adequately guarded. 29 CFR 1910.268(g)(1) also adds a requirement for the personal fall arrest and positioning systems to meet the applicable requirements in Subpart I of 1910, the federal standard for personal protective equipment. The federal telecommunications regulation does not provide an exception for point-to-point travel on telecommunications poles, towers, or similar structures by qualified telecommunications workers without using fall protection equipment.

TECHNICAL, THEORETICAL AND/OR EMPIRICAL STUDIES, REPORTS OR DOCUMENTS RELIED ON BY THE BOARD

1. Petition by James F. Sherman, Area Steward, Communication Workers of America (CWA) Local 9400; Petition File No. 553, dated December 28, 2015. http://www.dir.ca.gov/oshsb/documents/petition-553.pdf
2. Decision of the Occupational Safety and Health Standards Board, Petition File No. 553, Proposed Decision, dated May 19, 2016. http://www.dir.ca.gov/oshsb/documents/petition-553-adopteddecision.pdf

3. Federal Register, Volume 79, No. 70, April 11, 2014, Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment, pages 20316 – 20743. This document is available online at the Federal OSHA website: https://www.gpo.gov/fdsys/pkg/FR-2014-04-11/pdf/2013-29579.pdf

4. Federal Register, Volume 81, No. 223, November 18, 2016, Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems), pages 82494 – 83006. This document is available online at the Federal OSHA website: https://www.gpo.gov/fdsys/pkg/FR-2016-11-18/pdf/2016-24557.pdf

5. U.S. Small Business Administration, Table of Small Business Size Standards Matched to North American Industry Classification System Codes, February 26, 2016. https://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf

6. California Public Utilities Commission, Communications Division; the Digital Infrastructure and Video Competition Act of 2006 (DIVCA); DIVCA Video, Broadband and Video Employment Report for the Year Ending December 31, 2015; Annual Report to the Governor and the Legislature; Submitted June 8, 2017. http://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Divisions/Office_of_Governmental_Affairs/Legislation/2017/Final_DIVCA_Video_Broadband_and_VideoEmployment_Report_6-6-17a.pdf

7. U.S. Bureau of Labor Statistics, Occupational Employment Statistics, Occupational Employment and Wages, May 2016, 49-0000 Installation, Maintenance, and Repair Occupations (Major Group). https://www.bls.gov/oes/current/oes490000.htm

8. United States Census Bureau at us_state_6digitnaics_2014.txt(us_state_6digitnaics_2014.txt). https://www2.census.gov/programs-surveys/susb/datasets/2014/

9. List of Occupations Employed in Cable and Other Subscription Programming, California Employment Development Department http://www.labormarketinfo.edd.ca.gov/iomatrix/Staffing-Patterns3.asp?IOFlag=Ind&SIC=515200

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

PETITION

This regulatory proposal is not the direct result of a petition; however, Board staff notes that Petition File 553, submitted by James F. Sherman, Area Steward, CWA Local 9400, addressed the issue of point-to-point travel in the telecommunication industry.

The Occupational Safety and Health Standards Board received a petition on December 31, 2015 to amend Section 8615 of the TSO contained in Title 8 of the California Code of Regulations regarding the use of fall protection during point-to-point travel - exception. On May 19, 2016, the Occupational Safety and Health Standards Board granted the petition and directed Board staff to prepare rulemaking documents to amend the exception in Section 8615(g).

Subsequent to granting the petition request, changes were made to the federal telecommunication orders, necessitating further revision to Section 8615.

A copy of the petition and the Board's petition decision are included as Documents Relied Upon.

ADVISORY COMMITTEE

The proposal was developed without the assistance of an advisory committee.

FIRE PREVENTION STATEMENT

This proposal does not include fire prevention or protection standards. Therefore, approval of the State Fire Marshal pursuant to Government Code Section 11359 or Health and Safety Code Section 18930(a)(9) is not required.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment. The fall protection equipment required by the proposal is commonly used and commercially available off-the-shelf.

ECONOMIC IMPACT ANALYSIS/ASSESSMENT

The U.S. Bureau of Labor Statistics (BLS) provides employment data for several telecommunication occupations; however, it does not specify exactly how many employees climb poles, towers, or similar structures in telecommunications. Board staff believes the following occupations employ the majority of the climbers in California:

- Telecommunications Line Installers and Repairers
- Telecommunications Equipment Installers and Repairers, Except Line Installers
- Radio, Cellular, and Tower Equipment Installers and Repairers

Board staff asked several stakeholders for information needed to calculate the total number of potential climbers who do not use personal fall protection systems, but complete data could not be obtained. Employment data specific to climbing on telecommunications poles, towers, or similar structures is also not available at the BLS. Board staff is using available BLS data, the Federal Final Rule on Working/Walking Surfaces (Federal Register, Volume 81, No. 223,

November 18, 2016), and stakeholder information to estimate the number of climbers and the cost of the proposed rulemaking.

Almost all of the telecommunications line installers and repairers, and the radio, cellular, and tower equipment installers and repairers, and a percentage of the telecommunications equipment installers and repairers perform jobs that involve climbing. Most of these climbers climb the telecommunication poles and a small portion of climbers climb the towers. The tower climbers usually have the equipment and training for climbing, whereas the pole climbers may not have all of the necessary fall protection equipment, particularly the fall restricting pole straps or similar fall protection equipment. As a result, the telecommunications climbers impacted by the proposed rulemaking are primarily the pole climbers. Since the number of pole climbers could not be determined from the BLS data, Board staff contacted the stakeholders for the data.

Three employers, AT&T, Frontier, and Consolidated provided some employment data on the climbers. The Communications Workers of America (CWA) provided data for AT&T and Frontier and an estimate for the other California employers in telecommunications. According to CWA, AT&T has 11,500 climbers and 5,664 (49%) would still need to be provided with new fall protection training and equipment as a result of the proposed rulemaking. Frontier, another large employer, has over 1,300 climbers, and would need to provide training and equipment for approximately 1,200 (91%) climbers. Consolidated has approximately 75 climbers and all of their climbers already have the necessary fall protection training and equipment. Board staff estimates these three largest employers have approximately 12,935 potential climbers in total, and out of these climbers 6,864 climbers would need to be provided with training and new equipment. Using these numbers, staff calculates the percent of climbers needing training and new equipment to be approximately 53% (6,864 / 12,935, rounded.)

Board staff believes other California employers (e.g. Charter, CenturyLink, Verizon, Comcast) will also have climbers who need additional training and new fall protection equipment due to the proposed requirement. Board staff requested climber data from several employers and CWA, however; complete data was not available. CWA estimates the other employers (contractors for AT&T and Frontier) to have 5-10% of climbers that may need training and new equipment. In absence of complete data, it is estimated that the other telecommunication employers may have approximately 1,294 (10% of 12,935 which is the total for AT&T, Frontier, and Consolidated combined) pole climbers in total. Assuming that 53% of these climbers may need the training and new equipment, the estimated number of climbers needing the training and equipment is calculated to be 686 (53% of 1,294.)

Staff learned from CWA that cable companies may also have pole climbers that may need to be provided with training and new equipment. The List of Occupations Employed in Cable and Other Programming provided on the California Employment Development Department (EDD) website shows the number of telecommunications line installers and repairers in California cable companies and other subscription industries to be around 300. Staff considers these employees as potential climbers, and assuming 53% of these climbers may need the training and new equipment, calculates the number of climbers needing training and new equipment to be 159 (53% of 300.)

Using the above estimates and calculations, Board staff estimates the total number of pole climbers in California to be approximately 14,500 and those needing training and new equipment for climbing to be approximately 7,700 (6,864 for AT&T, Frontier and Consolidated + 686 for other telecommunications employers + 159 for cable companies = 7,700, rounded). As a result, staff uses 7,700 as the number of impacted employees for the calculation of the cost of the proposed rulemaking.

Line workers must be adept at climbing poles when necessary and training on the use of personal fall protection equipment during pole climbing is typically provided to all line workers. CWA and AT&T stated that training is required for all pole climbers and one set of personal fall protection equipment needs to be provided to each climber. Due to changing job sites and conditions, individual fall protection equipment is provided to all employees who work on poles.

The cost of the rulemaking will be comprised of the costs for new equipment and training. Board staff estimates the cost of new equipment to be approximately $2,849,000 (7,700 x $370). The cost of training is estimated using information provided in the Federal Final Rule (FFR) on electric power generation, transmission, and distribution (Federal Register, Vol. 79, No. 70, Friday, April 2014, page 20591) because the hazards encountered during point-to-point travel on telecommunication poles and towers are similar to those encountered on electrical poles and towers. The FFR used $52 per impacted employee as the cost of training for fall protection during point-to-point travel. Using the consumer price index (16.6% for 2009-2017), and an adjustment for higher California wages (106.065%) obtained using BLS data, Board staff estimates the cost per employee for the training to be approximately $64 ($52 x 116.6% x 106.065%). Thus, the total cost of training is estimated to be $492,800 (7,700 x $64), and the total cost of the proposed regulation is estimated to be $3,341,800 ($2,849,000 + $492,800) for California employers.

The Federal Register containing the Final Rule on Working/Walking Surfaces and Personal Protective Equipment (Fall Protection Systems), Volume 81, No. 223, November 18, 2016, indicates on page 82873 that compliance is economically feasible in every affected industry sector and it is not expected to threaten viability, existence, or competitiveness of entities. As the telecommunication industry is within the scope of the Final Rule, Board staff expects this proposal to be economically feasible for California employers.

Board staff also believes the proposed changes for Section 8615(g) do not significantly impact the following:

- The creation or elimination of jobs within the State of California.
- The creation of new businesses or the elimination of existing businesses within the State of California, and
- The expansion of businesses currently doing business with the State of California.

Additionally, the Federal Register containing the Final Rule for Electric Power Generation, Transmission, and Distribution (Volume 79, No. 70, April 11, 2014) mentions on page 20582 that the estimated monetized benefit associated with the climbing fall protection part of the Final Rule is higher than the cost associated with it. As the workers performing point-to-point travel on electrical and telecommunications structures are exposed to similar hazards, Board staff estimates the monetized benefit and cost associated with the fall protection for point-to-point travel in telecommunications to follow a similar pattern; therefore, this proposal is not expected to have any negative economic/cost impact on California employers.

BENEFITS OF THE PROPOSED ACTION

This proposal is expected to reduce catastrophic falls of employees who climb poles, towers, or similar structures to perform telecommunication works. A reduction in falls leads to fewer serious injuries and fatalities among employees. When the employers ensure the use of properly functioning personal fall protection systems, or take measure to control employee fall risk when the personal fall protection system is not feasible or hazard creating, the employee fall risk is further reduced.

EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESSES

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses/individuals, including the ability of California businesses to compete with businesses in other states. Evidence supporting non-significant economic impact to state businesses is provided under the "ECONOMIC IMPACT ANALYSIS/ASSESSMENT".

REASONABLE ALTERNATIVES TO THE PROPOSAL AND THE BOARD'S REASONS FOR REJECTING THOSE ALTERNATIVES

No reasonable alternatives to the proposal were identified or brought to the Board's attention. The proposal is the best alternative because it renders the state standard commensurate with the federal standard and also complies with the Board's direction.