

**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](http://www.dir.ca.gov/oshsb)

**TITLE 8. CALIFORNIA CODE OF REGULATIONS**

Sections 2300 and 2305.2 of the Low-Voltage Electrical Safety Orders  
and  
Section 2940.2 and Appendix A to Article 36 of the High-Voltage Electrical Safety Orders

(Published on March 29, 2019)

**Electric Power Generation, Transmission, and Distribution;**  
**Electrical Protective Equipment: Final Rule - Corrections**

NOTICE IS HEREBY GIVEN that the Occupational Safety and Health Standards Board (Board) proposes to adopt, amend or repeal the foregoing provisions of Title 8 of the California Code of Regulations in the manner described in the Informative Digest, below.

**PUBLIC HEARING**

The Board will hold a public hearing starting at 10:00 a.m. on **May 16, 2019** in the **Auditorium** of the **Harris State Building, 1515 Clay Street, Oakland, California**. At this public hearing, any person may present statements or arguments orally or in writing relevant to the proposed action described in the Informative Digest.

**WRITTEN COMMENT PERIOD**

In addition to written or oral comments submitted at the public hearing, written comments may also be submitted to the Board's office. The written comment period commences on **March 29, 2019** and closes at 5:00 p.m. on **May 16, 2019**. Comments received after that deadline will not be considered by the Board unless the Board announces an extension of time in which to submit written comments. Written comments can be submitted as follows:

By mail to Sarah Money, Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; or

By e-mail sent to [oshsb@dir.ca.gov](mailto:oshsb@dir.ca.gov).

**AUTHORITY AND REFERENCE**

Labor Code Section 142.3 establishes the Board as the only agency in the State authorized to adopt occupational safety and health standards. In addition, Labor Code Section 142.3 requires the adoption of occupational and health standards that are at least as effective as federal occupational safety and health standards.

## **INFORMATIVE DIGEST OF PROPOSED ACTION/ POLICY STATEMENT OVERVIEW**

This rulemaking is to make technical and editorial corrections to the Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment: Final Rule, which became effective on April 1, 2018. The proposed amendments include changing the section titles, correcting technical formulas, and editorial and typographical corrections.

The proposed amendments will correct technical and editorial errors to the existing state regulations to be consistent with 29 CFR 1910.269(1)(3), Table R-3 for alternating current (AC) systems and Appendix B – Working on Exposed Energized Parts of 29 CFR 1910.269.

The Board evaluated the proposed regulations pursuant to Government Code section 11346.5(a)(3)(D) and has determined that the regulations are not inconsistent or incompatible with existing state regulations. This proposal is part of a system of occupational safety and health regulations. The consistency and compatibility of that system's component regulations is provided by such things as: (1) the requirement of the federal government and the Labor Code to the effect that the state regulations be at least as effective as their federal counterparts, and (2) the requirement that all state occupational safety and health rulemaking be channeled through a single entity (the Standards Board).

### **Anticipated Benefit**

This proposal will avoid confusion by making technical and editorial corrections to the existing state regulations to be consistent with 29 CFR 1910.269(1)(3), Table R-3 for AC systems and Appendix B – Working on Energized Parts of 29 CRF 1910.269.

The proposed amendments to Section 2940.2 will correct the formulas contained in Table 2940.2-1 for phase-to-phase exposure for voltages 630 kV or more. These equations calculate the minimum approach distances, which is the closest distance a qualified person, which includes qualified electrical worker, qualified tree worker, and qualified line clearance tree trimmer, may approach an energized or a grounded object.

The specific changes are as follows:

### **Section 2300. Scope.**

Section 2300 contains the definitions pertinent to the Low-Voltage Electrical Safety Orders. The existing section is entitled "Scope". This proposal is to revise the title of Section 2300 to "Definitions" to more accurately reflect the contents of this section.

### **Section 2305.2. Application.**

Section 2305.2 contains the scope and application of the Low-Voltage Electrical Safety Orders. The existing title of this section is "Application". This proposal is to revise the title of Section 2305.2 to "Scope and Application" to more accurately reflect the contents of this section.

## **Section 2940.2. Minimum Approach Distances.**

Section 2940.2 contains the minimum approach distance requirements from energized lines or equipment. The proposal corrects typographical and formatting errors inadvertently made when duplicating Table R-3 of 29 CFR 1910.269 into Title 8. The proposal is to revise Table 2940.2-1 as follows:

- Row 2: To merge the existing two columns so that there is only one column containing “The minimum approach distance (MAD; in meters) shall conform to the following equations.”
- Rows 3, 7, and 12: To merge the existing two columns so that there is only one column containing the equations. It is proposed to bold the equations to clearly identify and separate the different minimum approach distance equations.
- Rows 7 and 12: Remove reference to Footnote 4, which is proposed to be deleted.
- Row 20: To merge the existing two columns so that there is only one column containing the heading. It is proposed to bold the heading to clearly separate the headings.
- Row 22: Column 1: To delete the upper case letter “A” and replace the letter with a lower case letter “a”.
- Row 23: To merge the existing two columns so that there is only one column containing the heading. It is proposed to delete the word “ground” and replace it with the word “phase” to read “Phase-to-Phase Exposure<sup>3</sup>”, which is the correct heading. It is proposed to bold the heading to clearly separate the headings.
- Row 25: Column 1: To delete the upper case letter “A” and replace the letter with a lower case letter “a”. Column 5: To correct the formula to include “153,846” that was inadvertently omitted to read  $(V_{Peak}-628)/153,846$ . Column 6: To add  $(V_{Peak} - 350.5)/203,666$ , a formula that was inadvertently omitted.
- To revise Footnote 2 to reference the renumbered Tables in Appendix A as a result of Legacy Tables 6 through 13 being no longer effective; and therefore, are proposed for deletion.
- To delete Footnote 4 as this footnote references Legacy Tables 6 through 13 in Appendix A which are no longer effective.

## **Appendix A. Working on Exposed Energized Parts.**

Appendix A contains explanatory text regarding Section 2940.2. The proposed editorial amendments are as follows:

- To delete the heading “A. Legacy Tables. Employers may use the minimum approach distances in Table 6 through 13 until October 1, 2018”. This heading is no longer necessary as Legacy Tables 6 through 13 are no longer effective and proposed for deletion.
- To delete Legacy Tables 6 through 13 and their associated “Note(s)” as the Legacy Tables were effective only until October 1, 2018; and are therefore no longer necessary.
- To revise the heading as follows: “~~B~~. *Alternative minimum approach distances.* Employers may use the minimum approach distances in Table ~~146~~ through Table ~~2413~~ provided that the employer follows the notes to those tables. The letter “B” is no longer

necessary as the preceding heading “A. Legacy Tables ...” is proposed for deletion. The references to the minimum approach distances Tables 14 through 21 are proposed to be renumbered to Tables 6 through 13, respectively, as a result of Legacy Tables 6 through 13 being proposed for deletion.

- To renumber the minimum approach distances Table 14 through Table 21 to Table 6 through Table 13, respectively, as a result of Legacy Tables 6 through 13 being proposed for deletion.
- To revise the headings of the third column of renumbered Table 6 through Table 13 from “Phase-to-ground exposure” to “Phase-to-phase exposure”.

### **DISCLOSURES REGARDING THE PROPOSED ACTION**

**Mandate on Local Agencies or School Districts:** None.

**Cost or Savings to State Agencies:** None.

**Cost to Any Local Government or School District Which Must be Reimbursed in Accordance with Government Code Sections 17500 through 17630:** None.

**Other Nondiscretionary Cost or Savings Imposed on Local Agencies:** None.

**Cost or Savings in Federal Funding to the State:** None.

**Cost Impact on a Representative Private Person or Business:**

The Board is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

**Statewide Adverse Economic Impact Directly Affecting Businesses and Individuals: Including the Ability of California Businesses to Compete:**

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.

The proposed amendments are necessary to avoid confusion and to be consistent with 29 CFR 1910.269(l)(3), Table R-3 for AC systems and Appendix B –Working on Exposed Energized Parts of 29 CFR 1910.269.

**Significant Affect on Housing Costs:** None.

### **SMALL BUSINESS DETERMINATION**

The Board has determined that the proposed amendments will not impact small businesses. No economic impact is anticipated. This proposal affects power utility companies which are not small businesses.

## **RESULTS OF THE ECONOMIC IMPACT ASSESSMENT/ANALYSIS**

The proposed regulation will not have any effect on the creation or elimination of California jobs or the creation of new businesses or the elimination of existing California businesses or affect the expansion of existing California businesses. This proposal corrects technical and editorial inaccuracies that were inadvertently made in the Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment: Final Rule, which became effective on April 1, 2018.

## **BENEFITS OF THE PROPOSED ACTION**

The proposed amendments are necessary to avoid confusion by making technical and editorial corrections to the existing state regulations to be consistent with 29 CFR 1910.269(l)(3), Table R-3 for AC systems and Appendix B –Working on Exposed Energized Parts of 29 CFR 1910.269.

The proposed amendments to Section 2940.2 will correct the formulas contained in Table 2940.2-1 for phase-to-phase exposure for voltages 630 kV or more. These equations calculate the minimum approach distances, which is the closest distance a qualified person, which includes qualified electrical worker, qualified tree worker, and qualified line clearance tree trimmer, may approach an energized or a grounded object. The correct calculations of clearances will prevent electrocution. This proposal does not benefit or affect the state's environment.

## **CONSIDERATION OF ALTERNATIVES**

In accordance with Government Code Section 11346.5(a)(13), the Board must determine that no reasonable alternative it considered to the regulation or that has otherwise been identified and brought to its attention would either be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposal described in this Notice.

The Board invites interested persons to present statements or arguments with respect to alternatives to the proposed regulation at the scheduled public hearing or during the written comment period.

## **CONTACT PERSONS**

Inquiries regarding this proposed regulatory action may be directed to Christina Shupe (Executive Officer) or the back-up contact person is Michael Manieri (Principal Safety Engineer) at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; (916) 274-5721.

### **AVAILABILITY OF STATEMENT OF REASONS, TEXT OF THE PROPOSED REGULATIONS AND RULEMAKING FILE**

The Board will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at its office at the above address. As of the date this Notice of Proposed Action is published in the Notice Register, the rulemaking file consists of this Notice, the proposed text of the regulations, the Initial Statement of Reasons, supporting documents, or other information upon which the rulemaking is based. Copies may be obtained by contacting Ms. Shupe or Mr. Manieri at the address or telephone number listed above.

### **AVAILABILITY OF CHANGED OR MODIFIED TEXT**

After holding the hearing and considering all timely and relevant comments received, the Board may adopt the proposed regulations substantially as described in this Notice. If the Board makes modifications which are sufficiently-related to the originally proposed text, it will make the modified text (with the changes clearly indicated) available to the public at least 15-days before the Board adopts the regulations as revised. Please request copies of any modified regulations by contacting Ms. Shupe or Mr. Manieri at the address or telephone number listed above. The Board will accept written comments on the modified regulations for at least 15-days after the date on which they are made available.

### **AVAILABILITY OF THE FINAL STATEMENT OF REASONS**

Upon its completion, copies of the Final Statement of Reasons may be obtained by contacting Ms. Shupe or Mr. Manieri at the address or telephone number listed above or via the internet.

### **AVAILABILITY OF DOCUMENTS ON THE INTERNET**

The Board will have rulemaking documents available for inspection throughout the rulemaking process on its web site. Copies of the text of the regulations in an underline/strikeout format, the Notice of Proposed Action and the Initial Statement of Reasons can be accessed through the Standards Board's website at <http://www.dir.ca.gov/oshsb>.