PART 301—PROCEDURE AND ADMINISTRATION

Paragraph 1. The authority citation for part 301 continues to read in part as follows:

Authority: 26 U.S.C. 7805. * * *

Par. 2. Section 301.7701–2 is amended by:

1. Revising paragraphs (c)(2)(iii) and (c)(2)(iv)(B).
2. Redesignating paragraph (c)(2)(v)(B) as paragraph (c)(2)(v)(C) and adding new paragraph (c)(2)(v)(B).
3. In newly-designated paragraph (c)(2)(v)(C), Example (iv) is added.
4. Revising paragraphs (e)(2), (e)(5) and (e)(6).

The additions and revisions read as follows:

§ 301.7701–2 Business entities; definitions.

* * * * *

(c) * * *

(ii) [The text of this proposed amendment to § 301.7701–2(c)(2)(iii) is the same as the text of § 301.7701–2T(c)(2)(iii) published elsewhere in this issue of the Federal Register].

(iv) * * *

(B) [The text of this proposed amendment to § 301.7701–2(c)(2)(iv)(B) is the same as the text of § 301.7701–2T(c)(2)(iv) published elsewhere in this issue of the Federal Register].

* * * * *

(v) * * *

(B) [The text of this proposed amendment to § 301.7701–2(c)(2)(v)(B) is the same as the text of § 301.7701–2T(c)(2)(v) published elsewhere in this issue of the Federal Register].

(C) * * * (iv) [The text of this proposed amendment to § 301.7701–2(c)(2)(v)(C) Example (iv) is the same as the text of § 301.7701–2T(c)(2)(v)(C) Example (iv) published elsewhere in this issue of the Federal Register].

* * * * *

(e) * * *

(2) [The text of this proposed amendment to § 301.7701–2(e)(2) is the same as the text of § 301.7701–2T(e)(2) published elsewhere in this issue of the Federal Register].

* * * * *

(5) [The text of this proposed amendment to § 301.7701–2(e)(5) is the same as the text of § 301.7701–2T(e)(5) published elsewhere in this issue of the Federal Register].

* * * * *

(6) [The text of this proposed amendment to § 301.7701–2(e)(6) is the same as the text of § 301.7701–2T(e)(6) published elsewhere in this issue of the Federal Register].

* * * * *

L.E. Stiff,
Deputy Commissioner for Services and Enforcement.

[FR Doc. E9–21986 Filed 9–11–09; 8:45 am]

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910, 1926


RIN 1218–AB67

Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment; Limited Reopening of Record; Notice of Informal Public Hearing

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Proposed rule; limited reopening of the rulemaking record and notice of public hearing.

SUMMARY: On June 15, 2005, OSHA published a proposed rule to revise the general industry and construction standards for electric power generation, transmission, and distribution work and for electrical protective equipment. The proposed general industry and construction standards for electric power generation, transmission, and distribution work included revised minimum approach distance tables. Those tables limit how close an employee (or a conductive object he or she is contacting) may get to an energized circuit part. In light of recent changes to one of the consensus standards on which OSHA relied in formulating the proposed minimum approach distances, OSHA is reopening the record on this proposal to obtain additional comments related to the proposed minimum approach distances. The record will remain open on this limited basis until October 15, 2009. OSHA is also announcing a public hearing on the issues raised in this notice.

DATES: Comments: Comments must be submitted (transmitted, postmarked, or delivered) no later than October 15, 2009.

Notices of intention to appear: Interested persons who intend to present testimony or question witnesses at the public hearing must submit (transmit, postmark, or deliver) notices
of intention to appear no later than October 1, 2009.

Hearing testimony and evidence: Interested persons who request more than 10 minutes to present testimony or who intend to submit documentary evidence at the hearing must submit (transmit, postmark, or deliver) the full text of their testimony and all documentary evidence no later than October 15, 2009.

Public hearing: The informal public hearing will be held from 9:30 a.m. to 1:30 p.m. on October 29, 2009.

ADDITIONAL INFORMATION:

Technical information:

• Fax: If your comments, including attachments, do not exceed 10 pages, you may fax them to the OSHA Docket Office at (202) 693–1648.

• Mail, hand delivery, express mail, messenger, or courier service: You must submit two copies of your comments and attachments to the OSHA Docket Office. Docket No. OSHA–S215–2006–0063, U.S. Department of Labor, Room N–2625, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–2350 (OSHA's TTY number is (877) 889–5627). Deliveries (hand, express mail, messenger, and courier service) are accepted during the Department of Labor’s and Docket Office’s normal business hours, 8:15 a.m.–4:45 p.m., ET.

InSTRUCTIONS: All submissions must include the agency name and the docket number (Docket No. OSHA–S215–2006–0063) or regulation identifier number (RIN 1218–AB67) for this rulemaking. All comments received will be posted without change to http://dockets.osha.gov, including any personal information provided.

Docket: To read or download comments and materials submitted in response to this Federal Register notice, go to Docket OSHA–S215–2006–0063 at http://www.regulations.gov or at the OSHA Docket Office at the previously listed address. All comments and submissions are listed in the http://www.regulations.gov index. However, some information (for example, copyrighted material) is not publicly available to read or download through that Web page. All comments and submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office.

Electronic copies of this Federal Register document are available at http://www.regulations.gov. This document, as well as news releases and other relevant information, also are available at OSHA’s Web page at http://www.osha.gov.

FOR FURTHER INFORMATION CONTACT:


Hearings: Ms. Veneta Chatmon, OSHA, Office of Communications, Room N–3647; 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–1999; e-mail chatmon.veneta@dol.gov.

SUPPLEMENTARY INFORMATION:

On June 15, 2005, OSHA issued a proposed rule to revise the general industry and construction standards for electric power generation, transmission, and distribution work for general industry and construction work for electric power generation, transmission, and distribution work and for electrical protective equipment (70 FR 34822).

The Agency solicited public comments, and held a public hearing on March 6 through 14, 2006. Administrative Law Judge William Colwell set a deadline of July 14, 2006, for filing written comments, summations, position statements, and briefs.

The proposed requirements for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively. Proposed § 1926.960(c)(1) would require employees to maintain minimum approach distances from exposed energized parts. The minimum approach distances for electric power generation, transmission, and distribution work for general industry and construction would be contained in 29 CFR 1910.269 and 29 CFR part 1926, subpart V (§§ 1926.950 through 1926.968), respectively.

The minimum approach distances for phase-to-phase exposures were calculated using an α factor corresponding to the phase-to-ground transient overvoltage rather than for the higher phase-to-phase transient overvoltage. Because the minimum approach distances in OSHA’s 2005 proposal were based on the same equations called into question by the IEEE technical committee, the same issue potentially affected the minimum approach distances in OSHA’s proposal. At the time the Agency published the reopening notice in October 2008, the IEEE committee was voting on a draft revised IEEE standard that would have

1 ANSI is the American National Standards Institute.

2 In promulgating the general industry standard at §1910.269 in 1994, OSHA used minimum approach distances that matched the corresponding values in the 1993 NESC. The NESC subcommittee subsequently revised their distances in a tentative interim amendment correcting the tables in the 1993 NESC. The minimum approach distances in the pending proposal for both subpart V and §1910.269 are identical to the minimum approach distances that appeared in the NESC through the 2002 edition. For the 2007 edition, the NESC adopted minimum approach distances that were the same for voltages of 72.5 kV and lower, but that were larger for voltages of 72.6 kV and higher. The increase in minimum approach distances for voltages of 72.6 kV and higher was due to the use of minimum tool insulation distance rather than minimum air insulation distance as described later in this notice.

3 IEEE is the Institute of Electrical and Electronics Engineers, Inc.

4 The graph, which was published in IEEE Committee Report, “Recommendations for safety in line maintenance” (IEEE T&D, vol. PAS–87, no. 2, pp. 346–352, Feb. 1968), was taken from test data. However, the underlying test data were lost. Consequently, the α factor had to be read from the published graph.

5 The graph, which was published in IEEE Committee Report, “Recommendations for safety in line maintenance” (IEEE T&D, vol. PAS–87, no. 2, pp. 346–352, Feb. 1968), was taken from test data. However, the underlying test data were lost. Consequently, the α factor had to be read from the published graph.
corrected the perceived error by (1) using a formula to calculate the α factor to avoid errors that could be made in reading values from the graph; and (2) extrapolating values for the α factor beyond the range of the underlying test data. In its reopening notice, OSHA asked for comments on the IEEE’s proposed approach for resolving this issue and raised several questions related to whether the final rule should reflect any elements of the draft IEEE standard. The reopening notice limited comments to issues related to minimum approach distances for voltages of 72.6 kV and higher (73 FR 62942).

OSHA received only eight responses to the 2008 reopening notice. Most commenters generally supported the idea of incorporating into the final rule IEEE’s proposed approach for calculating phase-to-phase minimum approach distances for voltages of 72.6 kV and higher. Two commenters, the International Brotherhood of Electrical Workers and Edison Electric Institute (EEI), recommended that OSHA open the record again when the IEEE committee adopted a final standard (see Document IDs: OSHA–S215–2006–0063–0526, OSHA–S215–2006–0063–0527). EEI also requested an extension of the comment period, an expansion of the scope of the reopening to cover minimum approach distances for voltages below 72.6 kV, and a public hearing (see Document ID: OSHA–S215–2006–0063–0530). This notice resolves all of EEI’s pending requests.

A. Minimum Approach Distances for Phase-to-Phase Exposures for Voltages of 72.6 kV and Higher

The IEEE committee recently adopted and published a new edition of IEEE Standard 516. The revised standard adopts a new methodology, using a different set of formulas, for calculating phase-to-phase minimum approach distances for voltages of 72.6 kV and higher. These formulas are derived from testing for line configurations (that is, for system design) rather than for live-line work. In other words, the underlying formulas are intended to be used for determining appropriate conductor spacing rather than for determining minimum approach distances appropriate for employees performing live-line work. To account for the presence of the employee working in an aerial lift bucket within the air gap between the two phase conductors, the committee incorporated the concept of a floating electrode in the air gap. The committee’s approach to determining the electrical component of the minimum approach distance can be summarized as follows:

1. Start with a formula to calculate the critical sparkover voltage\(^9\) for the distance between two conductors.\(^5\)
2. Modify the formula to account for a 3.3-meter floating electrode to represent an employee working within an aerial lift bucket between the phase conductors.\(^6\)
3. Modify the formula to convert the critical sparkover voltage to a withstand voltage.\(^7\)
4. Determine the maximum transient overvoltage on the line and substitute that value for the withstand voltage.\(^8\)
5. Rearrange the equation to solve for distance.

In more technical detail, this approach is as follows:

1. The equation for calculating the critical sparkover voltage for a given distance between two conductors includes a gap factor, \(k\). This factor depends on several variables:
   \[ V_{50} = \frac{3400(k)}{1 + \frac{8}{D_{\text{gap}}}} \]
   Where:
   \(V_{50}\) = the critical sparkover voltage in kilovolts
   \(k\) = the gap factor from Table 1
   \(D_{\text{gap}}\) = the sparkover gap in meters
   \(\alpha\) = the proportion of the negative switching impulse voltage to the total phase-to-phase impulse voltage.

2. When live-line bare-hand work\(^{11}\) is performed, the employee is typically positioned between two or more phase conductors. The employee could be working, for example, from an aerial lift platform or a conductor cart. These devices and the worker are both conductive. The presence of a conductive object in the air gap reduces its dielectric strength. IEEE Standard 516–2009 introduces a constant, \(K_F\), to account for the presence of the employee and other conductive objects in the air gap. IEEE Standard 516–2009 uses \(K_F\) equal to 0.9 to accommodate a 3.3-meter conductive object in the air gap. This value is equivalent to a 10 percent reduction in the dielectric strength of the gap.

With this factor included, the equation for the critical sparkover voltage is:

\[ V_{50} = \frac{3400(k)(K_F)}{1 + \frac{8}{D_{\text{gap}}}} \]

3. IEEE sets the withstand voltage at a level that is 3\(\sigma\) lower than the critical

IEEE Standard 516–2009 uses the following equation to calculate the critical sparkover voltage for the designed gap between two phase conductors:

\[ V_{50} = \frac{3400(k)}{1 + \frac{8}{D_{\text{gap}}}} \]

Where:
\(V_{50}\) = the critical sparkover voltage in kilovolts
\(k\) = the gap factor from Table 1
\(D_{\text{gap}}\) = the sparkover gap in meters

\(^9\) The critical sparkover voltage, or \(V_{50}\), is the voltage that will sparkover a specified distance 50 percent of the time.

\(^{10}\) The withstand voltage is the voltage at which sparkover is not likely to occur across a specified distance. It is the voltage taken at the 36 point below the sparkover voltage, assuming that the sparkover curve follows a normal distribution.

\(^{11}\) This is work performed with the employee at the same potential as one of the phase conductors. The employee is insulated, by air or another insulating medium, from the other phase conductors and from ground.

### Table 1—Recommended Gap Factors (k)

<table>
<thead>
<tr>
<th>Phase-to-phase voltage</th>
<th>(\alpha)</th>
<th>(D_{\text{design}} L+H)</th>
<th>(k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\leq 242) kV</td>
<td>0.33</td>
<td>0.8</td>
<td>1.451</td>
</tr>
<tr>
<td>(&gt; 242) kV</td>
<td>0.41</td>
<td>0.8</td>
<td>1.530</td>
</tr>
</tbody>
</table>
sparkover voltage, as indicated in the following equation:

\[ V_{\text{wr}} = (1 - 30\% \times 0.5) \times V_{50} \]

Where:

- \( V_{\text{wr}} \) = the withstand voltage
- \( V_{50} \) = the critical sparkover voltage

\[ \sigma = 5 \text{ percent for a normal distribution} \]

4. To solve for the electrical component of the clearance, the maximum transient overvoltage is substituted for the withstand voltage. The IEEE committee used the following equation to calculate the maximum transient overvoltage on the line:

\[ T_{L-G} = 1.35T_{L-G} + 0.45 \]

Where:

- \( T_{L-G} \) = the phase-to-phase maximum transient overvoltage in per unit
- \( T_{L-G} \) = the phase-to-ground maximum transient overvoltage in per unit

5. Substituting the values of the various constants and solving these equations for distance, IEEE Standard 516–2009 uses the following equations to calculate the minimum air insulation distance:

For voltages less than or equal to 242 kV:

\[ D_{L-L} = \frac{8}{4621} \times \frac{4621}{(1.35T_{L-G} + 0.45)} \times \frac{(1.35T_{L-G} + 0.45)}{V_{L-L}} \]

For voltages more than 242 kV:

\[ D_{L-L} = \frac{8}{4875} \times \frac{4875}{(1.35T_{L-G} + 0.45)} \times \frac{(1.35T_{L-G} + 0.45)}{V_{L-L}} \]

Where:

- \( D_{L-L} \) = the minimum air insulation distance (the minimum distance needed to prevent sparkover with air alone as the insulating medium)
- \( T_{L-G} \) = the phase-to-ground maximum transient overvoltage in per unit
- \( V_{L-L} \) = the rms phase-to-phase system voltage

Tools in the air gap. The presence of an insulated tool in the air gap reduces the air gap’s dielectric strength. IEEE Standard 516–2009 generally gives two values for the electrical component of the minimum approach distance: One in air (called MAID) \(^{12}\) and one with a tool in the air gap (called MTID) \(^{13}\). \(^{14}\) Unlike the most recent edition of the NESC, \(^{15}\)

which uses the tool distance plus an ergonomic component (0.31 or 0.61 meters) in setting minimum approach distances, IEEE Standard 516–2009 does not provide either the tool distance or a means of calculating it for phase-to-phase exposures. Section 4.5.2.3 justifies this as follows:

1. The definition of MTID applies only to line-to-ground application. It is rare that a worker would be at the potential of one phase while working on another phase. If a nonconductive object, such as an insulated tool, is placed in the air gap joining two phases, an engineering study should be performed. [Additional] testing is required to develop a line-to-line MTID. If a line-to-line MTID is required, the same factor as used in the line-to-ground distance may be used. Industry practices normally use an MTID that is the same as or greater than the MAID.

B. Minimum Approach Distances for Voltages Up to 72.5 kV

IEEE Standard 516–2009 contains a slightly revised methodology for calculating minimum approach distances for voltages up to 72.5 kV. In the past, IEEE Standard 516 calculated these distances using sparkover voltages in IEEE Standard 4–1995, which are based on 60-Hz rod-to-rod sparkover voltages. The IEEE committee identified, in its view, two problems with continuing to use these distances without further adjustment. First, the distances are based on testing with 60-Hz voltages, not transient impulses. The sparkover voltage for a given distance is higher for a transient overvoltage than for an equal 60-Hz voltage. Second, the voltages in IEEE Standard 4–1995 are sparkover voltages, not withstand voltages. The withstand voltage for a given distance is smaller than the corresponding sparkover voltage. Thus, the two problems identified by the IEEE committee work in opposite directions. The first one would decrease the minimum approach distance; the second would increase it. IEEE Standard 516–2009 resolves both problems with resultant minimum approach distances that are slightly smaller than those in earlier editions. To overcome the first problem, IEEE Standard 516–2009 applies an impulse test factor of 1.3 to convert 60-Hz sparkover voltage to the critical sparkover voltage for a transient overvoltage. The standard then uses a 36 mm (0.85) to convert the critical sparkover voltage to a withstand voltage. This addresses the second problem.

Table 2 shows a comparison of the 60-Hz sparkover voltage with the transient overvoltage withstand voltages for different rod-to-air gaps. This table shows that a given air gap can withstand a somewhat higher transient overvoltage than it can a 60-Hz voltage. The relationship between the electrical component of the minimum approach distance and the maximum transient overvoltage in this range is linear and, in IEEE Standard 516–2009, is represented by the following linear formula for phase-to-ground exposures: \(^{16}\)

\[ D_M = \left( \frac{\text{TOV} - 36.7}{5.6} + 2.75 \right) \]

Where:

- \( D_M \) = Distance in meters
- \( \text{TOV} \) = Maximum phase-to-ground transient overvoltage (peak)

The corresponding formula for phase-to-phase exposures is:

\[ D_M = \left( \frac{\text{TOV} - 63.6}{5.15} + 5.65 \right) \]

Where:

- \( D_M \) = Distance in meters
- \( \text{TOV} \) = Maximum phase-to-phase transient overvoltage (peak)

\[ \begin{array}{ccc}
\text{Impulse transient} & \text{60-Hz} & \text{Gap spacing from} \\
\text{rod-to-rod withstand} & \text{rod-to-rod} & \text{IEEE Std 4–1995} \\
(kV peak)* & \text{sparkover} & (cm) \\
\text{(kV peak)} & \text{(kV peak)} & \\
27.6 & 25 & 2 \\
39.8 & 36 & 3 \\
50.8 & 46 & 4 \\
58.6 & 53 & 5 \\
66.3 & 60 & 6 \\
77.4 & 70 & 8 \\
87.3 & 79 & 10 \\
95 & 86 & 12 \\
105 & 95 & 14 \\
115 & 104 & 16 \\
123.8 & 112 & 18 \\
132.6 & 120 & 20 \\
158 & 143 & 25 \\
184.5 & 167 & 30 \\
212.2 & 192 & 35 \\
240.9 & 218 & 40 \\
268.5 & 243 & 45 \\
298.4 & 270 & 50 \\
355.8 & 322 & 60 \\
\end{array} \]

* The voltage in this column equals the voltage in the second column \( \times 1.3 \times 0.85 \).

\(^{12}\) MAID is the minimum air insulation distance.

\(^{13}\) MTID is the minimum tool insulation distance.

\(^{14}\) IEEE Standard 516–2009 increases the electrical component of the minimum approach distance by 10 percent (6 percent for the tool and 4 percent for insulators) before the saturation factor is applied.

\(^{15}\) This document, NESC, ANSI C2–2007, is available for inspection and copying in the Docket Office at the address listed in the ADDRESSES section of this notice.

\(^{16}\) IEEE Standard 516 uses this equation for voltages more than 27.00 kV but less than or equal to 72.5 kV. For voltages less than 27.00 kV, IEEE Standard 516 uses a distance of 0.02 meters, with the following explanation: “When the TOVpeak is less than 27.00 kV, sufficient test data are not available to calculate the MAID, which is less than 2 cm or 0.06 ft.”
C. Comparison of the Revised IEEE Minimum Approach Distances With OSHA’s Proposed Minimum Approach Distances

Table 3 compares OSHA’s proposed minimum approach distances with distances resulting from the application of the changes described earlier in IEEE Standard 516–2009.

### Table 3—Comparison of Minimum Approach Distances

<table>
<thead>
<tr>
<th>Nominal voltage in kilovolts phase to phase*</th>
<th>Distance (m)</th>
<th>Phase-to-ground exposure</th>
<th>Phase-to-phase exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.051 to 0.300</td>
<td>0.051 to 0.300</td>
<td>Avoid contact</td>
<td>Avoid contact</td>
</tr>
<tr>
<td>0.301 to 0.750</td>
<td>0.64</td>
<td>0.65</td>
<td>0.67</td>
</tr>
<tr>
<td>0.751 to 15.0</td>
<td>0.73</td>
<td>0.77</td>
<td>0.84</td>
</tr>
<tr>
<td>15.1 to 36.0</td>
<td>0.79</td>
<td>0.84</td>
<td>0.94</td>
</tr>
<tr>
<td>36.1 to 46.0</td>
<td>0.89</td>
<td>1.00</td>
<td>1.15</td>
</tr>
<tr>
<td>46.1 to 72.5</td>
<td>1.01</td>
<td>0.95</td>
<td>1.37</td>
</tr>
<tr>
<td>72.6 to 121</td>
<td>1.15</td>
<td>1.09</td>
<td>1.62</td>
</tr>
<tr>
<td>138 to 145</td>
<td>1.29</td>
<td>1.22</td>
<td>1.88</td>
</tr>
<tr>
<td>161 to 169</td>
<td>1.71</td>
<td>1.59</td>
<td>2.77</td>
</tr>
<tr>
<td>230 to 242</td>
<td>2.75</td>
<td>2.59</td>
<td>4.32</td>
</tr>
<tr>
<td>345 to 362</td>
<td>3.61</td>
<td>3.42</td>
<td>6.01</td>
</tr>
<tr>
<td>500 to 550</td>
<td>4.82</td>
<td>4.53</td>
<td>8.87</td>
</tr>
<tr>
<td>765 to 800</td>
<td>5.04</td>
<td>4.75</td>
<td>9.37</td>
</tr>
</tbody>
</table>

* The voltage ranges correspond to those of OSHA’s 2005 proposal. IEEE Standard 516–2009 has additional voltage ranges below 72.5 kV and has one additional higher voltage range, 362.1 to 420 kV. The distances shown in this table for IEEE Standard 516–2009 correspond to the minimum approach distance for the highest voltage in the range.

† See 70 FR 34822, June 15, 2005.

As can be seen from Table 3, the IEEE’s approach in the new version of Standard 516 results in the following relative differences in minimum distances:

1. **Phase-to-ground and phase-to-phase exposures at voltages from 751 volts to 72.5 kV.** The minimum approach distances in IEEE Standard 516–2009 for voltages from 751 volts to 72.5 kV are approximately 10 percent smaller than the corresponding values in OSHA’s 2005 proposal. It should be noted that, at these voltages, the minimum approach distances in both OSHA’s proposal and IEEE Standard 516–2009 reflect minimum air insulation distances, not minimum tool insulation distances.

2. **Phase-to-phase exposures at 72.6 kV and higher.** The revised IEEE standard results in increases in minimum approach distances compared to OSHA’s 2005 proposal, with substantial increases at voltages of 230 kV and higher.

3. **Phase-to-ground exposures at 72.6 kV and higher.** Smaller increases in the revised IEEE standard compared to OSHA’s 2005 proposal are evident for phase-to-ground exposures at voltages of 72.6 kV and higher. The increased minimum approach distances are due to the IEEE’s use of minimum tool insulation distance rather than minimum air insulation distance as the electrical component in determining the minimum approach distance for phase-to-ground exposures.

### D. Issues on Which Comment Is Requested

OSHA continues to support the text of its 2005 proposal and has not yet come to any conclusions as to whether the minimum approach distances in that proposal are based on faulty principles or calculations. In light of IEEE’s recently published revisions, OSHA is reevaluating the record on the electric power generation, transmission, and distribution standard to invite additional comments, evidence, and data on the minimum approach distances proposed in 2005. In light of the changes made in the new IEEE standard, OSHA is now seeking additional public comment on the proposed minimum approach distances for all voltages. OSHA is interested in public feedback on the proposed minimum approach distances insofar as any party has specific comments about perceived problems or concerns with the calculation methods described in the 2005 proposal. The Agency strives to adopt a final rule that is based on sound and up-to-date engineering and scientific principles. Therefore, in developing the final rule based on these principles, OSHA will review the comments received in response to this notice, as well as evidence and other information gathered at the public hearing, and in any posthearing comment period, including information provided in response to the following questions:

1. Should OSHA adopt minimum approach distances that are different from those proposed in subpart V Tables V–2 through V–6 and proposed §1910.269 Tables R–6 through R–10 and, if so, what criteria and methodology are reasonably necessary to protect employees from hazards associated with sparkover?

2. Is there any scientific basis for not extrapolating the saturation factor, α, beyond the limits of the test data on which earlier (that is, pre-2009) versions of IEEE Standard 516 relied? Is there any test data that can be used to validate or invalidate the use of extrapolated values for α?

3. Does the new IEEE methodology for calculating minimum approach distances for phase-to-phase exposures at voltages of 72.6 kV and higher represent employee exposure conditions better than the methodology OSHA used to generate the minimum approach distances?
distances in the 2005 proposal? In particular, is the use of conductor-to-conductor test data modified with the use of a 3.3-meter floating electrode preferable to the use of rod-to-rod test data for representing the range of employee exposure conditions?

4. All of the minimum approach distances in the 2005 proposed rule are based on the minimum air insulation distance. Should the minimum approach distances for voltages of 72.6 kV and higher be based on the minimum tool insulation distance, as is the case in the 2007 NESC? Should the minimum approach distances for voltages of 72.5 kV and lower also be based on the minimum tool insulation distance?

5. IEEE Standard 516–2009 does not provide minimum tool insulation distances for phase-to-phase exposures. Using an insulated boom on the top or middle conductor in a vertical configuration and using a live-line rope in a similar position involve the use of an insulated rope across the air gap between two phases. Are there any other situations in which an insulated or a live-line tool is used between two phase conductors during live-line work? If, in the final rule, OSHA bases minimum approach distances on minimum tool insulation distances, but adopts IEEE’s methodology to calculate phase-to-phase minimum approach distances, how, if at all, should the final rule address situations in which insulation is present across the air gap?

6. Existing § 1910.269 and OSHA’s 2005 proposal set maximum transient overvoltages of 3.0 per unit for voltages up to 362 kV, 2.4 per unit for voltages in the 552-kV range, and 2.0 per unit for voltages in the 800-kV range. The committee and the electric utility industry, as reflected in the NESC and earlier editions of IEEE Standard 516, believed that these were the highest possible transient overvoltages. However, IEEE Standard 516–2009 now recognizes that even higher maximum per-unit transient overvoltages can exist. How, if at all, should the final rule address the possibility of higher maximum transient overvoltages given that the proposed rule did not address this possibility?

7. In drafting the final rule, should OSHA include the 362.1- to 420-kV voltage range appearing in IEEE Standard 516–2009 in addition to the voltage ranges in the proposed rule? Do any existing systems operate at these voltages?

8. OSHA does not anticipate that revising the minimum approach distances using one of the methods outlined in this notice will have a substantial impact on compliance costs. However, the Agency realizes that some companies might be affected by revised minimum approach distances. Would revised minimum approach distances in accordance with one or more of the methods described in this notice impose additional compliance costs? If so, explain the reasons for these costs and the frequency with which they will be incurred.

OSHA is reopening the record solely on issues related to minimum approach distances. The record is not being reopened on any other issue.

E. Informal Public Hearing

As previously noted, OSHA received a request to conduct a public hearing from EII in response to the October 2008 reopening notice (see Document ID: OSHA—S215–2006–0063–0530). Based on this request, the Agency is scheduling an informal public hearing to address the limited issues related to the minimum approach distances described in this notice. OSHA will make witnesses available at the hearing to provide testimony and to take questions about the minimum approach distances proposed in 2005. The Agency is relying on the public to provide testimony and evidence on the strengths and weaknesses of the principles, calculations, and minimum approach distances set forth in IEEE Standard 516–2009. The public must use the following procedures to participate in the hearing.

Informal public hearings—purpose, rules, and procedures. Pursuant to section 6(b)(3) of the Occupational Safety and Health Act of 1970 (OSH Act) (29 U.S.C. 655), OSHA invites interested persons to participate in this rulemaking by attending the public hearing and providing oral testimony and documentary evidence on the limited issues related to minimum approach distances raised in this notice. OSHA also welcomes any data or other evidence that will assist the Agency in developing a complete and accurate record on these issues.

The informal public hearing on minimum approach distances will be held on October 28, 2009, from 9:30 a.m. to 1:30 p.m., ET, in Room N3437A, B, and C at the U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. An administrative law judge (ALJ) will preside over the hearing and will be responsible for resolving any procedural matters that arise.

The legislative history of Section 6 of the OSH Act, as well as OSHA’s rules governing public hearings (29 CFR 1911.15), establish the purpose and procedures of informal public hearings. Although the presiding officer of such hearings is an ALJ and questioning witnesses is allowed on crucial issues, the proceeding is largely informal and essentially legislative in purpose. Therefore, the hearing provides interested persons with an opportunity to make oral presentations in the absence of procedural restraints or rigid procedures that could impede or protract the rulemaking process. In addition, the primary purpose of the hearing is to gather information and clarify the record; the hearing will be an informal administrative proceeding rather than an adjudicative one in which the technical rules of evidence apply. OSHA’s rules governing public hearings and the prehearing guidelines that the ALJ issues for the hearings will ensure fairness and due process for participants, as well as facilitate the development of a clear, accurate, and complete record. Accordingly, application of these rules and guidelines will be such that questions of relevance, procedure, and participation generally will be resolved in favor of development of the record.

The conduct of the hearing will conform to OSHA’s Rules of Procedure for Promulgating, Modifying, or Revoking Occupational Safety and Health Standards (29 CFR part 1911). The rules also specify that the Assistant Secretary may, on reasonable notice, issue additional or alternative procedures to expedite the proceedings, to provide greater procedural protections to interested persons or to further any other good cause consistent with applicable law (29 CFR 1911.4). Although the ALJs who preside over the hearings make no decisions or recommendations on the merits of OSHA proposed rules, they do have the responsibility and authority necessary to ensure that the hearing progresses at a reasonable pace and in an orderly manner and to ensure that interested persons receive a full and fair hearing. Accordingly, ALJs have the power to regulate the course of the proceedings; dispose of procedural objections, and comparable matters; confine presentations to matters pertinent to the issues this reopening notice raises; use appropriate means to regulate the conduct of persons present at the hearing; question witnesses and permit others to do so; limit the time for such questioning; and leave the record open for a reasonable time after the hearing for the submission of additional data, evidence, comments and arguments (29 CFR 1911.16).

Notice of intention to appear at the hearing. Interested persons who intend
to participate in and provide oral testimony or documentary evidence at the hearing must file a written notice of intention to appear by October 1, 2009. To testify or question witnesses at the hearing, interested persons must submit (transmit, postmark, or deliver) a notice by October 1, 2009, providing the following information:

- Name, address, and telephone number of each individual who will give oral testimony;
- Name of the establishment or organization each individual represents, if any;
- Occupational title and position of each individual testifying;
- Approximate amount of time required for each individual’s testimony;
- A brief statement of the position each individual will take with respect to the issues identified in this notice; and
- A brief summary of documentary evidence each individual intends to present.

OSHA emphasizes that the hearings are open to the public; however, only individuals who file a notice of intention to appear may question witnesses and participate fully at the hearing. If time permits, and at the discretion of the ALJ, an individual who did not file a notice of intention to appear may be allowed to testify at the hearing, but for no more than 10 minutes.

Hearing testimony and documentary evidence. Individuals who request more than 10 minutes to present their oral testimony at the hearing or who will submit documentary evidence at the hearing must submit (transmit, postmark, or deliver) the full text of their testimony and all documentary evidence no later than October 15, 2009.

The Agency will review each submission and determine if the information it contains warrants the amount of time the individual requested for the presentation. If OSHA believes the requested time is excessive, the Agency will allocate an appropriate amount of time for the presentation and will notify the individual of that action, and the reasons for that action, before the hearing. The Agency may limit to 10 minutes the presentation of any participant who fails to comply substantially with these procedural requirements, and may request that the participant return for questioning later.

Before the hearing, OSHA will notify all participants of the time the Agency is allowing for their presentations and will provide them with prehearing guidelines and a hearing schedule. Certification of the hearing record and Agency final determination. Following the close of the hearing and any posthearing comment periods, the ALJ will certify the record to the Assistant Secretary of Labor for Occupational Safety and Health. The record will consist of all of the written comments, oral testimony, and documentary evidence received during the proceeding. The ALJ, however, will not make or recommend any decisions as to the content of the final standard. Following certification of the record, OSHA will review the record and issue the final rule based on the record as a whole.

List of Subjects in 29 CFR Parts 1910 and 1926


Authority and Signature

This document was prepared under the direction of Jordan Barab, Acting Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. It is issued pursuant to sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657), Secretary’s Order 5–2007 (72 FR 31160), and 29 CFR part 1911.

Signed at Washington, DC, this 8th day of September 2009.

Jordan Barab,
Acting Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. E9–22002 Filed 9–11–09; 8:45 am]
BILLING CODE 4510–26–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 151
46 CFR Part 162

[USCG–2001–10486]

RIN 1625–AA32

Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters

AGENCY: Coast Guard, DHS.

ACTION: Notice of public meetings.

SUMMARY: The Coast Guard announces a series of public meetings to receive comments on a notice of proposed rulemaking (NPRM) entitled “Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters” that published in the Federal Register on Friday, August 28, 2009.

DATES: Public meetings will be held in the Seattle, WA (September 28, 2009), New Orleans, LA (September 30, 2009), Chicago, IL (October 2, 2009), Washington, DC (October 8, 2009), Oakland, CA (October 27, 2009), and New York, NY (October 29, 2009) areas to provide opportunities for oral comments. Written comments and related material may also be submitted to Coast Guard personnel specified at those meetings for inclusion in the official docket for this rulemaking. The comment period for the NPRM closes on November 27, 2009. All comments and related material submitted after the meeting must either be submitted to our online docket via http://www.regulations.gov or before November 27, 2009 or reach the Docket Management Facility by that date.

ADDRESSES: The public meetings will be held in the Seattle, WA (September 28, 2009), New Orleans, LA (September 30, 2009), Chicago, IL (October 2, 2009), Washington, DC (October 8, 2009), Oakland, CA (October 27, 2009), and New York, NY (October 29, 2009) areas. The specific locations and details will be announced in the Federal Register when they are finalized.

You may submit written comments identified by docket number USCG–2001–10486 before or after the meetings using any one of the following methods:

(2) Fax: 202–493–2251.
(4) Hand delivery: Same mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

To avoid duplication, please use only one of these four methods. Our online docket for this rulemaking is available on the Internet at http://www.regulations.gov under docket number USCG–2001–10486.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rulemaking, call or e-mail Mr. John Morris, Project Manager, Environmental Standards Division, U.S. Coast Guard Headquarters, telephone 202–375–1433, e-mail: John.C.Morris@uscg.mil. If you have questions on viewing or submitting material to the docket, call Ms. Renee V. Wright, Program Manager, Docket Operations, telephone 202–366–9826.